



Hastings Medium Density Housing Strategy

Prepared for Hastings District Council

December 2013





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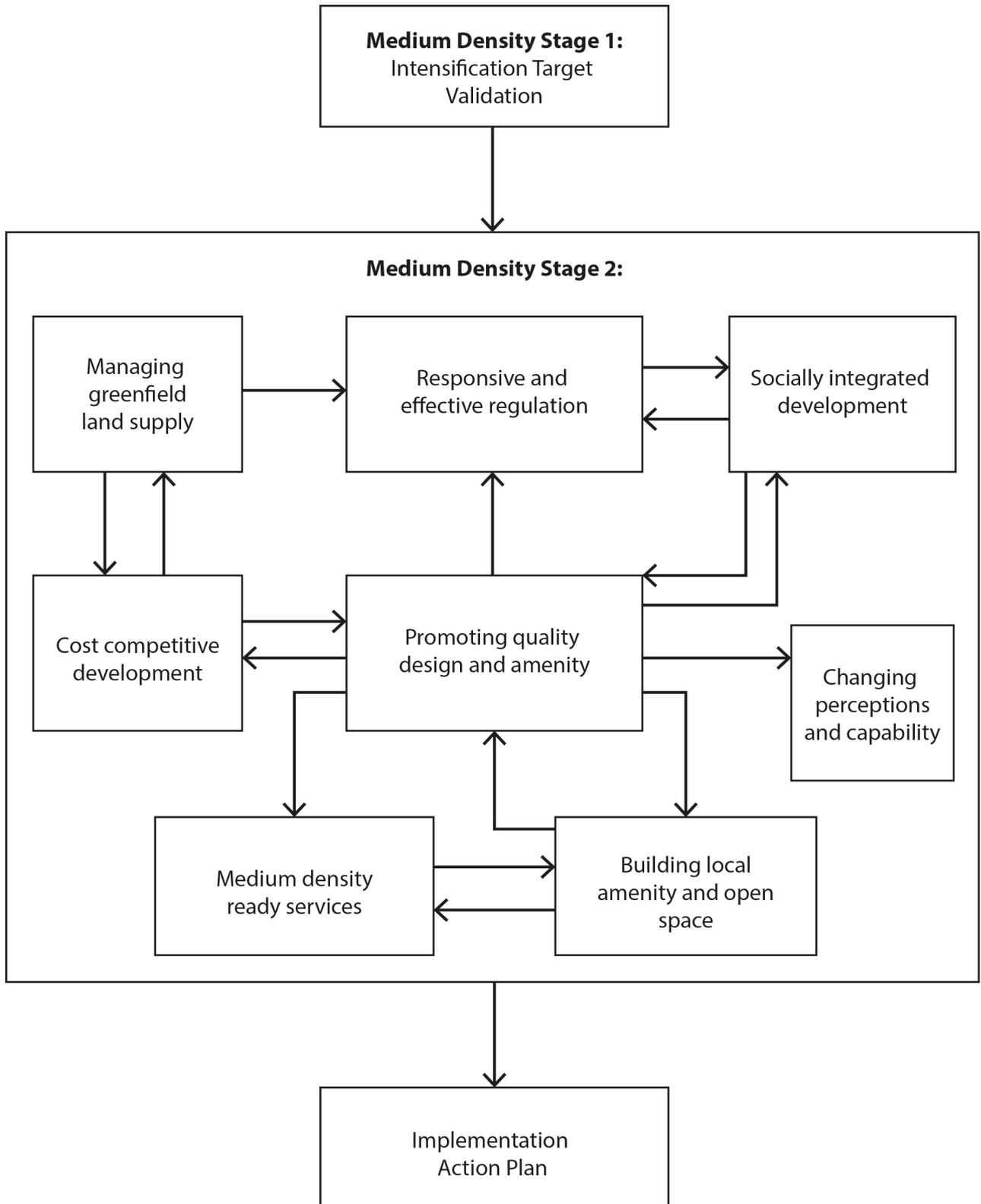
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Executive Summary

This document summarises the Hastings District Council's Medium Density Housing Strategy. The larger strategy document is based on extensive national, international and local research in order to promote housing intensification that is appropriate in size, scale and character for Hastings. The larger document also provides a sufficiently detailed basis for focusing and coordinating the Council's short, medium and long term investment and programmes in support of more compact and efficient urban growth and development. This summary document is intended to be used by a wider audience than just Council, but more detail is readily available from the main document if desired. Stage 1 of the strategy development validated the achievability of the Heretaunga Plains Urban Development Strategy intensification targets. Stage 2 concentrates on creating the environment in which the targets can be achieved in practice, focused around eight individual yet integrated work streams described below:

- **Changing perception and capability** – explores perceptions of medium density housing and providing recommendations of how to manage negative perceptions and build capability and confidence within the development community.
- **Promoting quality design and amenity** – assessing the character values of the host neighbourhoods and developing design guides which recognise and respond to existing character and promote quality outcomes in general.
- **Responsive and effective regulation** – reviewing and modifying the district plan to better provide for medium density housing, while ensuring quality development.
- **Building local amenity and open space** – reviewing public open space provision servicing the host neighbourhoods and considering whether it is suitable to provide for anticipated intensification.
- **Medium density ready services** – explores infrastructure capacity within host neighbourhoods to ensure there is capacity to support intensification.
- **Cost competitive development** – exploring the potential levels of demand for medium density housing and looking at what interventions are available to Council to make medium density housing more competitive within the general housing market.
- **Managing greenfields land supply** – exploring the relationship between greenfields residential development and intensification. In particular, the effects on housing affordability caused by restricting greenfields development.
- **Socially integrated development** – explores the social and demographic structures of likely medium density housing developments and provides recommendations of what facilities are required to support them and help assimilate them into the host neighbourhoods.

All of these to some degree affect the market and therefore viability and community acceptance of medium density housing development and are interrelated. The following diagram reflects the inter-relationships between these work streams and how this strategy aligns in the context of previous and future work:



Hastings District Council

Medium Density Housing Strategy

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1 Strategic Context

1.1 Background

The Hastings District Council, Napier City Council, and Hawke's Bay Regional Council jointly adopted the Heretaunga Plains Urban Development Strategy (HPUDS) in August 2010. HPUDS is a strategy for the integrated management of urban development on the Heretaunga Plains for the years 2015 to 2045. It takes a long term integrated view of land use and infrastructure through a preferred settlement pattern that seeks to move towards a more compact approach to development that:

- Promotes a major shift in approach to ensure long term sustainability for the Heretaunga Plains versatile soils by controlling the outward expansion of existing urban areas and new greenfields development.
- Advocates for a clear recognition by all sectors of the community that the versatile soils are a valued natural resource.
- Provides for housing choice but recognises that densities need to be higher to accommodate growth whilst ensuring the protection of versatile soils.

A key component of this future development vision is the achievement of identified residential density targets in order to achieve a more compact growth pattern. HPUDS allocates a growth target for intensification within existing urban boundaries of 4,048 households across the Heretaunga Plains (through infill, site redevelopment and brownfields¹). Achieving these targets will require some intensification of the existing Hastings urban area. There are however, risks associated with urban intensification if poorly conceived and executed.

To achieve the intensification targets whilst ensuring appropriate residential amenity is provided requires a change in development methods towards a more comprehensive design approach to intensification, rather than traditional infill. In this regard, Hastings District Council have determined that to achieve the HPUDS density targets in a manner that ensures appropriate residential amenity, medium density housing development should be encouraged within identified areas of Hastings District, through multi-site redevelopment of older housing stock.

The Hastings Urban Issues project was initiated in August 2009 in order to generate new approaches to urbanism that more closely reflect the shifting priorities and challenges associated with achieving more sustainable urban growth. The aim of the project was to outline an urban design framework for Hastings that can coordinate future streams of work within HDC as they respond to current and future urban issues. Relevant to this project, the Urban Design Framework (UDF) provided a number of further specific recommendations:

- Reduce expansion into versatile soils.
- Enable residential intensification of the CBD, and large parts of Heretaunga St East and Mahora.
- Provide for intensification in pockets of Raureka and Parkvale (around Windsor Park).
- Support medium density residential in parts of Flaxmere and Havelock North.
- Assess development economics and market conditions of residential intensification.
- Assess infrastructure in intensification areas.

¹ The term "Brownfield" typically refers to land or premises which has previously been used or developed for urban purposes. Brownfield land is not fully in use, although it may be partially occupied or used. It may also be vacant, derelict or contaminated.

1.2 Purpose of This Strategy

The purpose of this strategy is to articulate a comprehensive and coherent approach to the intensification (through medium density housing development) of a number of identified “host neighbourhoods” identified through the UDF, namely parts of:

- Heretaunga Street East;
- Raureka;
- Havelock North;
- Parkvale; and
- Mahora.

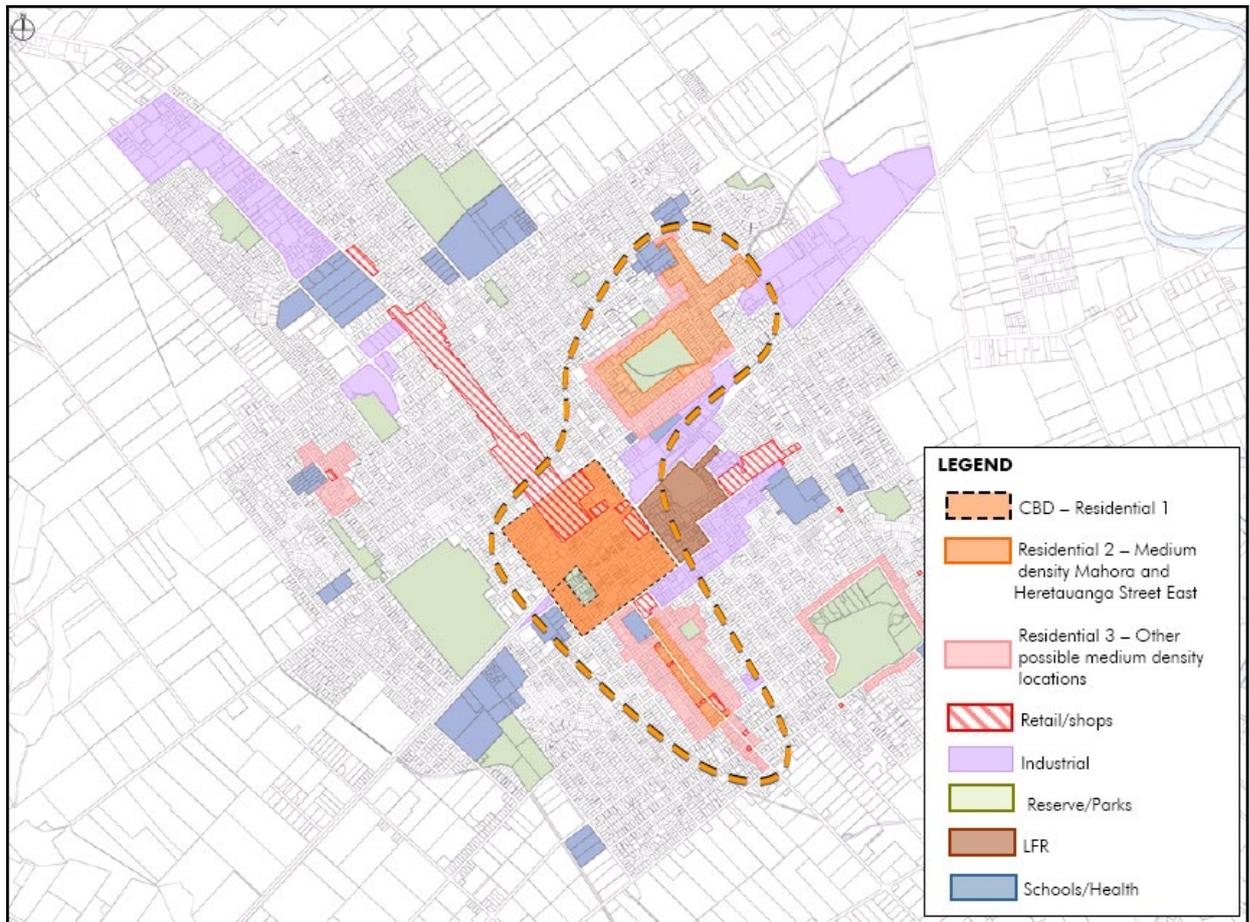


Figure 1-1 Map Urban Design Framework Recommended Intensification Areas

It provides guidance to the community, developers and other agencies and has been developed to assist in the achievement of the intensification targets of HPUDS. It is anticipated that this strategy will be utilised to inform future district plans, long term plans and asset management plans reviews and will provide guidance to the Hastings development community. The strategy does not focus on residential intensification in the CBD’s as these are covered by other comprehensive planning approaches.

The medium density strategy project was advanced in two stages. Stage 1 was designed to establish whether the HPUDS targets were capable of being met with or without Council intervention or proactive encouragement. The key findings of the Medium Density Strategy – Stage 1 are:

- The intensification targets set out by HPUDS can be met via a mixture of infill and comprehensive site redevelopment; but
- The conditions do not currently exist to warrant the market (unaffected) to facilitate the composition and location by which medium density housing is achieved. The market for medium density housing is currently constrained by differential land values that favours fringe or greenfields locations which are **perceived** to exhibit higher amenity, create greater efficiencies and have a higher degree of desirability.
- Intervention of the residential housing market will be required to achieve the intensification targets set out by HPUDS. Intervention will need to focus on restricting land supply in the short to medium term to improve the relative value of developing and living in identified urban locations, thereby forcing the market to use existing residential land in a more efficient way.
- An appropriate activity status for medium density residential development (including comprehensive and master planned residential development) and associated development standards and assessment criteria needs to be developed to carry into the District Plan Review.

Stage 2 of the strategy (this stage) looks to build upon this and provide the basis for an “implementation toolkit” to ensure that the HPUDS intensification targets can be achieved.

1.3 Definition of Medium Density Housing

It is necessary to adopt a definition of medium density housing for this Strategy. The most common definition (or variants hereof) of medium density housing in current use in New Zealand (used by Housing New Zealand and a number of District and City Councils) is: *Housing at densities of more than 150m²/unit and less than 350m²/unit*. Building on the work of Stage 1 and HPUDS (which establishes the necessary densities to ensure achievement of density targets) and through consultation with relevant Council staff, medium density housing in the Hastings District context is considered to be densities of more than 250m² and less than 350m² gross area of land per unit². It is considered that this density range is both adequate to achieve the HPUDS density targets whilst being acceptable to the Hastings housing market.

In this regard, and for the purpose of this Strategy, Hastings District Council has adopted the following definition of medium density housing: *Housing at densities of more than 250m² and less than 350m² gross area of land per unit*.

1.4 Benefits and Risks of Medium Density Housing

The aim of the strategy is to create the conditions that maximise the benefits of more compact housing development, while addressing the risks and in particular any negative perceptions of higher density living environments.

The following provides a summary of some of the key perceived benefits of housing intensification.

- **Protection of Valuable and Sensitive Land Resources** - In the case of Hastings District, encouraging intensification will reduce the pressure to develop the highly productive land of the Heretaunga Plains.
- **Reduced Reliance on Private Transportation and Reduced Pollution** - Globally a key driver for intensification is to reduce dependence on private transport. Higher densities are

² Higher densities of around 150m² in terraced housing or apartment formats may however be appropriate in or near CBDs and other locations with special amenity value.

usually encouraged in areas that have good access to services, employment and public transport, which provides opportunities for residents to walk or cycle and increasing the sustainability and in some cases feasibility of public transport. Intensification can produce less pollution (e.g. as a result of a reduction in single person car journeys) and reduced travel costs (construction on roading and daily household income).

- **Greater Opportunities for Social Interaction and Support** - A higher density neighbourhood can potentially establish a greater variety of leisure, shopping, amenities, work, and travel options and increased opportunities for social interaction. Greater social interaction inevitably leads to greater opportunities to develop relationships and to build support networks. Children and young people are likely to find a greater catchment of peers to play and associate with within walking distance of their home.
- **More Efficient Provision of Social Infrastructure** - Higher density areas can be provided with social infrastructure (parks, community facilities etc.) in a more efficient manner than lower density areas as there is a concentration of people within a smaller geographical area. In this regard, Councils are able to provide a more cost efficient level of service.
- **Public Investment Benefits** - The cost of intensification versus the cost of new infrastructure within greenfield areas suggests that infrastructure, such as roads and street lighting, can be offered more cost-effectively per capita within a more densely developed area than greenfield development. Larger and more equitable distribution of services such as, schools, and many other public services and institutions is possible in centrally located intensification areas compared to an outlying greenfields area.
- **Greater Housing Choice** - For potential purchasers the introduction of well-designed medium density housing provides a greater range of housing choice, which is better able to meet people's lifestyle and life stage choices and needs.

Many residents of higher density developments also report their satisfaction with a small yard or garden, having found a large garden a burden and older people have noted an appreciation for locations close to services and facilities, reducing the stress of travel. Many case study examples have also alluded to a sense of personal safety and security of property as a result of living in closer proximity to their community.

In addition, many residents have also suggested that smaller housing forms and associated outdoor spaces reduce both the effort and cost of maintenance. Well-designed smaller dwellings can be easier and less expensive to heat and cool and clever innovative use of space can provide many of the benefits of larger building footprints.

There are however, a number of risks associated with medium density housing, many of which are associated with people's perceptions of such housing, which is discussed in the next section. It is important to recognise these so they can be effectively managed in the design and execution of medium density housing development.

Perceptions of medium density housing are generally derived from past experiences of unsuccessful poor quality intensification often through third parties such as the media. In this regard, there is a risk that these perceptions are further perpetuated through the development of poor quality medium density housing, in which case the perceptions can become the reality.

These perceptions raise a number of often inter-related risks for a range of stakeholders:

- A risk that potential house buyers will not view medium density housing as an acceptable housing choice.
- A risk than developers will not view medium density housing as a viable product.
- A risk that banks and investors will not view medium density housing as a viable investment.

- A risk that potential neighbours and host communities will view medium density housing as an unacceptable neighbour.
- A risk that councillors will view supporting medium density housing as politically sensitive and thus subsequently that Council will view medium density housing as an unacceptable development form.

Accordingly addressing perceptions is an important first step minimising risk, although there are signs (nationally) of greater market acceptance beginning to emerge. If these perceptions are not taken into account and addressed through further development of well-designed and located medium density housing there is a risk that medium density housing will not be accepted by the community and the benefits will be lost.

2 Changing Perceptions, Removing Barriers and Building Capacity

This section looks at addressing negative perceptions toward medium density housing and other barriers to building industry capacity to deliver it.

From the perspective of the development community, developers will generally not opt to supply medium density housing unless they are sure of a market and the ability to minimise their risk. In this regard, their engagement is highly dependent on the perspective of purchasers and the involvement of purchasers is often influenced by a range of perceptions both economic and non-economic.

New Zealand research (interviews with prospective buyers active in the housing market in 2011) of perceptions of medium density housing identified that the following descriptions were commonly used to describe medium density housing: characterless, drab, monotonous, cramped, leaky, subject to complications of body corporates, lacking privacy, noisy, insecure, lacking an outlook, lacking hobby and storage space, having parking problems, not allowing pets, poor prospects for capital gains and associated with a high proportion of rental occupiers. These perceptions do not need to be, and increasingly are not, the reality with careful site selection and good quality design approaches as discussed later. Interviews with residents within a case study of more recent medium density development in Waitakere indicate a quite different reality.

In addition to the above, international research concluded that perceptions of medium density housing tended to be more negative when:

- Development or redevelopment was undertaken on a large scale;
- Building design was considered to be of poor quality or monotonous;
- There had been a large amount of redevelopment as opposed to new buildings on un-built land (e.g. greenfield);
- It involves the loss of historic or traditional buildings;
- It involves the loss of land considered to be of value to the community (e.g. recreation land);
- It changes the social character of an area (e.g. different demographic groups or types of tenure);
- It involves significant amounts of non-residential activities (i.e. mixed use);
- It is not located in close proximity to necessary services (shops, community facilities etc.) and public transport.

The UDF and this strategy attempt to deal with all of these through good location and design, through the district plan, design guidance and education, and supported by appropriate investments in targeted amenity and infrastructure investment).

Relevant to this the research suggests that the people that medium density housing may appeal to are generally more likely to:

- Not want to spend time gardening or on house maintenance;
- Like something new and modern;
- Like the idea of living in a community where friends are made and people look out for one another;
- Like the orderliness of style that accompanies medium density housing (in contrast to the traditional “haphazard” development in typical NZ suburbs);
- Accept constraints on personal freedoms in return for a better communal environment and the prospect of secure or rising property values.
- Trade off capital gains for lifestyle benefits.

Analysis of the above findings leads to the following conclusions:

- Many prospective house buyers have negative perceptions of the term medium density housing which means that they are less likely to consider medium density housing as a viable housing choice. In this regard the label of “medium density housing” is likely to be a deterrent and a more descriptive and positive term should be used in promoting the emergence of newer higher density housing products.
- Prospective house buyers suggest that separation from neighbours, clever and innovative building design and areas of open space may lead to greater acceptance³.
- Residents of medium density housing identify convenience (e.g. low maintenance gardens, proximity to services,) as a key reason for why they chose medium density housing. In this regard, it is worth considering how this (desire for convenience) likely relates to demographic groups in terms of likely housing markets.
- Many of the perceptions and factors that may lead to greater acceptance can be addressed through selective location and good design, such as smaller scale developments, variety in building design, private open space, adequate garaging and sufficient parking, sunny aspect, personal safety, inside storage and consideration to maintenance and rubbish collection. This conclusion will be discussed in more detail in other work streams

There are however, also perceptions and possible barriers on the supply side that need to be addressed. As part of the development of this Strategy a series of workshops and interviews were also held with representatives of the Hastings development community focussing on their views and what they perceived to be barriers to the building and development industry in engaging in medium density housing. The following provides a summary of some of the Hastings development community's feedback:

- Margins are tight and there are many layers and groups involved in developing housing.
- The cost of land in Hastings is too high.
- The market range is broader in Havelock North than it is in Hastings, however so is the competition.
- Hastings District has historically developed in an ad-hoc manner, particularly so in terms of building design. This needs to be recognised in building design for medium density housing.

³ At \$1,200-1,400/m² building rates, clever use of seemingly expensive technologies and design approaches such as cavity sliding doors, fold/pull/slide furniture and cabinetry, and spacer appliances can often pay for themselves if integrated into the design at the outset through the reduced building footprint achieved. This also helps with buyer appeal as being “clever and compact”.

- New developments need to be supported by established vegetation to ensure the impact of new development is softened. This is costly.
- Good marketing and being able to demonstrate quality (e.g. show homes and demonstrations) are very important and are costly.
- Very important to consider who the potential market is. In a place like Hastings this is even more difficult as the potential market is small and thus to be viable any housing product needs to be marketable to all people.
- No particular demographic group to focus on in Hastings due to the scale of the market.
- Must be of a high quality whilst fitting into the market. This comes at a cost.
- Open space needs to be orientated towards the sun. This is difficult to achieve on smaller lots.
- Council processes are inefficient which leads to significant cost. A specific account manager should be provided to fast-track the consenting process.
- The current District Plan does not provide for medium density housing development.

In addition according to developers involved in a 2001 Waitakere study;

- The role of real estate agents in identifying the likely market and levels of affordability was a critical factor in investing in the development and should be engaged in promoting higher density housing choices;
- The location of the site is very important. Good access to shops, transport options etc. is fundamental. In Hastings this has largely been addressed through the UDF;
- The key issue is the tension between providing quality housing and maintaining profitability, which require clever design, innovation and flair amongst designers and developers.
- Designers, architects and developers all pointed at costly and difficult resource consent processes as being a big deterrent to undertaking further medium density housing development.

Building on the above (leaving aside design elements) the following barriers to the development community regarding medium density housing are identified:

A Lack of Understanding/Education - There is a need for a range of stakeholders, including real estate agents, in medium density housing to actively promote different housing styles and communicate the benefits to residents and the wider community. Better education and access to information regarding medium density housing is required to achieve greater levels of acceptance and demand within the market.

Relative Competitiveness with Other Housing Choices - Whilst the trend for quarter acre blocks is reducing, there is still a trend towards larger (e.g. 650m²) sites. In addition to larger sites, there has traditionally been a preference in the New Zealand development community for greenfields development as opposed to brownfield or redevelopment. There is a general developer perspective that greenfields development is cheaper and easier and likely to be more acceptable to the market and the community. To build capacity within the development community to develop medium density housing, efforts must be undertaken to address the lack of relative competitiveness and risks of medium density housing compared with other more traditional housing typologies (e.g. Greenfield development) as discussed in Sections 7 and 8 below.

Timing and Planning Delays – The time required for consenting (often complex and/or controversial) medium density housing projects can often span more than one property cycle, adding significantly to development cost and risk, negatively impacting on the cost of development and it's

financing. As a result, procedural delays are likely to reduce the range of developers in the market, favouring those with substantial financial backing which increases their access to and reduces their dependence on loan capital. At the same time, the potential reduction in returns associated with higher holding, planning and development, and construction costs reduces the attractiveness of large scale development as an equity investment. One possible response may be a move towards smaller scale developments involving less capital and less risk, but more likely to be acceptable to the community and market.

Given the emphasis on public benefits of intensification, many stakeholders feel the public sector (local council or central government) should take a lead in promoting such developments. To build capacity within the development community to develop medium density housing, Hastings District Council should look to make the resource consenting process as simple, flexible and certain as possible, within the need for a design based assessment process to ensure quality outcomes, including assigning key account managers.

District Plan Issues - The prescriptive nature of district plan rules can deter innovation in medium density housing as well as pushing up the costs of execution. Developers have reported that designs may simply be modified to meet the planners' requirements to avoid delays. Where expediency has ruled, there is a tendency to do the minimum.

The Council must be seen to allow (e.g. through appropriate planning provisions) appropriately located and designed development to provide the community with exposure to quality medium density housing to facilitate these changes. Council as part of the development of this strategy has looked at current district plan objectives, policies and methods to and promoted changes through the Proposed District Plan to provide for the development of medium density housing (e.g. positive policy framework, appropriate rules) discussed in Section 4 below.

Council should as part of this change also look at methods to facilitate the resource consenting process through early input (e.g. pre-lodgement of resource consents) from senior planners to ensure developers do not meet unexpected design related difficulties further into the consent process and assess whether staff capability is sufficient or if further staff training is required. Further, consideration should also be given to the role of the Hastings urban design panel to facilitate the resource consent process through, for example providing pre-application design advice.

A Lack of Public Infrastructure, Development Contributions and Other Costs - In addition to costs associated with delays, developers often cite high fees for development contributions as a deterrent to the development community. Areas suited to intensification may have poor infrastructure and the full costs of upgrading may be levied on developers well before returns are realised, or preventing an otherwise viable development from being able to proceed at all. This is discussed in Section 6 below.

In addition to development contributions, developers have identified a range of further costs which they may incur in order to facilitate the development of medium density housing (e.g. a developer having to purchase adjoining properties to remove objections from neighbours or a requirement to install infrastructure well beyond the boundary of the property). Consideration should be given to whether the current development contributions policy can be modified to better facilitate medium density housing. This is discussed further in Section 7.

Development Finance - Interviews with trading banks identified challenges for medium density housing. Generally a maximum of 65% of the completed market value would be available for the developer, provided the developer was able to demonstrate a market for the finished product. This provision leaves around 10% of the cost to be found elsewhere from equity investors or mezzanine finance, both of which are in short supply at present. Banks reluctance to lend at higher debt ratios are considered to be a result of the risk involved in the resale of the product due to existing perceptions about the product in the market.

It is important, though, to differentiate between a lack of finance due to market imperfections and a lack of finance due to the poor credit risk of the proposal. Banks will lend across a range of credit risks but will vary the collateral, covenants and price requirements. In the case of market imperfections then a range of financial assistance policies could be used (e.g. cash grants, loans and tax incentives), but financial assistance has not been generally used in Australia and New Zealand by local authorities, suggesting that finance is either not the core constraint for developers or that credit risk is likely to be significant for liabilities assumed by the council. Given the strategic importance of protecting high quality soils through intensification, consideration should, be given to whether Hastings District Council can provide alternative development financing options to assist in the reduction of developer risk and on what basis (e.g. short term equity investor), land acquirer.

Taking the above discussion into account, a number of recommendations have been identified below and, some later on in this strategy:

- 1) When referring to housing typologies (e.g. in district plans, growth strategies etc.) avoid the use of terms such as medium density housing. Consider using terms such as comprehensive housing development and compact housing.
- 2) Initiate early engagement of real estate agents to assist in determining likely markets and suitable levels of affordability.
- 3) Develop an education strategy targeted at the community and development community to address negative perceptions of medium density housing. This strategy should include:
 - a. Identification and responses to common misconceptions.
 - b. Demonstrations and examples of good practice. Preferably within a local context (i.e. Hastings / Hawkes Bay) or if not available, national context.
- 4) Undertake a business case for the development (e.g. through a joint venture partnership) of a demonstration model to provide evidence to stakeholders that medium density housing can be successful.
- 5) Review resource consent requirements for medium density housing to ensure they are as efficient and relatively risk free (e.g. potential of non-notification clauses, enabling activity status in appropriate locations) as possible. Consideration should also be given to:
 - a. Opportunities for reducing consent requirements for medium density housing;
 - b. Other methods of enabling the development of medium density housing (e.g. case officers, use of design panels etc.
- 6) Ensure that the development community and other stakeholders are well aware of any design guidance through good education programmes and consultation. For example, consider providing “how to” guides and development checklists.
- 7) Investigate and adopt potential fast track consent processes for medium density housing proposals based on a pre-approved Council accredited applicant process.
- 8) Explore and adopt other ways of reducing the risk and increasing the certainty of consent processes associated with medium density housing development.
- 9) Facilitate the early input (e.g. pre-lodgement of resource consents) from senior planners in consent processes.
- 10) Investigate development finance options (e.g. cash grants, tax incentives and other financial assistance) to understand whether further financial assistance can be provided to developers of medium density housing.

- 11) Review the potential role of Council as a landowner and acquirer to de-risk the development of medium density housing.

3 Promoting Quality Design and Amenity

As discussed above, the successful delivery, acceptance and uptake of medium density housing will depend heavily on the indoor and outdoor functionality and aesthetic quality of the development as well as its ability to assimilate into and enhance existing neighbourhood character.

Ensuring medium density housing development demonstrably achieves and reflects appropriate urban amenity values (within the Hastings context) should go some way (in addition to education etc.) towards minimising negative perceptions of medium density housing and ensuring the acceptance of medium density housing as a viable housing option.

In 2000, the Ministry for the Environment (MfE) undertook a research project to explore what contributes to, or comprises urban amenity. The research concluded that, because urban amenity has the greatest meaning locally it is difficult to develop a national set of urban amenity indicators, however the research did recommend twelve core areas that are commonly referred to as being of significance to the management of urban amenity. The twelve core areas being (in no order): noise and vibration, nuisance effects, open space, urban density (including population and housing density), vegetation, landscape, urban design, cultural and heritage features, character of neighbourhoods, visual amenity and views, public and person safety and accessibility and sense of well-being.

The MfE research concluded that a suite of indicators used to manage these key attributes can then be applied at a local level in relation to the vision and values of the local community (i.e. many of the above indicators are subjective and responsive to local characteristics). To ensure the achievement of appropriate urban amenity, it is best practice to consider design at a range of scales:

- Neighbourhood context
- Site context
- Streetscape
- Site layout
- Building form and appearance
- Internal configuration

These MfE indicators were assessed at these context scales to arrive at design attributes and guidelines relevant to Hastings in Appendix 1. In addition a host neighbourhood character assessment was undertaken to identify particular characteristics and specific opportunities to account for in designing medium density developments at the local scale based on the following:

- Work undertaken as part of the Urban Issues project (now Urban Development Framework - UDF), report March 2010.
- Medium Density Strategy - Stage 1, by Beca and others for HDC, report July 2011.
- Hastings Residential Character Area Assessment, September 2012
- Observations during site visits on 10 October 2012.

Together the guidelines and host neighbourhood assessment (Appendix 2) provide comprehensive guidance for developers and their designers to ensure good quality design outcomes.

In order to provide guidance on the preferred outcomes for medium density housing within the host neighbourhoods, a series of illustrative typical development models, or *site typologies*, have been designed using a range of interchangeable dwelling typologies (but not architectural styles). These

site typologies provide a wide variety of examples of the many ways of how intensification within the boundaries of the design guidelines could take place.



Figure 3-1: Sample of dwelling typologies

The design rationale is then given relative to the design guides and how it responds to the specific host neighbourhood recommendations is assessed. Real sites within the host neighbourhoods (but not specifically identified) are used to give greater credibility in the application of the design guides and character assessments. In some instances a balance has been struck between seemingly conflicting guidelines (e.g. fronting onto the street and orientation of private open space) and this is considered to be a fair reflection of the reality of development. In this regard, it is recommended that a degree of flexibility is needed in the consideration of design guidelines.



Figure 3-2: Sample of site layouts

This therefore provides the basis for a comprehensive “how to” process for developers and designers to evaluate and design development to a stage where financial and consenting feasibility can be undertaken, but short of full architectural design. It is proposed that this chapter be developed further into a stand-alone design guideline for use by developers and builders wishing to undertake medium density developments, within and beyond the identified intensification areas.

The Stage1 Report suggested that one method for addressing perception barriers to the delivery of medium density housing is for the Council to undertake a demonstration medium density housing project to provide a repeatable model for private sector developers and showcase the benefits of medium density housing to the market. It should be stressed at this point that a demonstration model, while using real sites, is a theoretical demonstration model and does not signal an intention for the Council to acquire specific properties and undertake a development. The intention is to demonstrate what is achievable in a real situation today. It is also noted that the Council’s Property Company in conjunction with a local developer is currently developing a 12 unit brownfields development at the lower end of the medium density range on surplus land in Fitzroy Avenue. This

will showcase a medium density sustainable housing development, which will help to change market perceptions and stimulate more interest in medium density, but as a brownfields development it does not entirely represent a replicable model of comprehensive redevelopment of existing residential housing stock.

In the context of articulating what a demonstration model could look like a range of options were explored and are illustrated within the full strategy document. The following key criteria were regarded relevant:

- Likely economic feasibility – How financially viable the development would be. This is based on a basic feasibility assessment. It takes into account, among many other things, acquisition, construction and other costs, and possible sales results. The current RVs for the sites have been used as the acquisition costs, which in the current market is considered reasonable.
- Location – How the site is located relative to nearby amenities, such as public open space, community, commercial and employment facilities.
- Ability to be successfully integrated – What passers-by would experience of the development. The key consideration is how the development would fit into the existing urban fabric, also taking into consideration the host neighbourhood character assessment.
- Effects on immediate neighbours – How much impact the development would have on the neighbouring sites. The key consideration is how the proposed activities impact on the neighbours. For example, buildings and driveways located in close proximity to the external boundaries of the site would be seen as a negative attribute.
- Residents' overall amenity – What the residential amenity of the development would be. The key consideration is how much common and private open space as well as built space there is for possible prospective residents. Issue such as extensive terracing, inappropriately located backyards, and smaller dwellings were regarded to be seen as negative attributes.
- 'Replicability' – How easy it would be to replicate the model and apply it to other sites. The key consideration pertains to the dimensions and shape of the site. A rectangular site with a width and depth common to the host neighbourhoods is therefore preferred.

The concept design for a site consisting of three properties on the south-eastern side of Nelson Street was considered most favourable for a variety of reasons. The Nelson Street site was the largest of the sites tested, containing three dwellings with each site comprising 1033m² and so is less typical of the majority of potential redevelopment sites, but was also at the upper level of the Improved Value to Land Value Ratio of 70% identified in the Stage 1 work as the average trigger level for viability.

Mahora and Parkvale sites were also able to demonstrate the required feasibility, although the margins were smaller and retention of one of the dwellings potentially more critical to achieving the necessary trigger feasibility. Having said that, developers may be more likely to accept a lower profit and risk requirement on the smaller developments than the minimum 30% used in the test feasibilities, than would be the case with the larger Nelson Street development.

Against this background the Nelson Street site was selected for further exploration as it represented a likely upper range of redevelopment intensity which might be expected on a single development within a neighbourhood (with the exception of specific brownfields sites) and better able to demonstrate the variety of design approaches that can be applied to ensure acceptable levels of on-site and neighbourhood amenity values can be achieved at that scale. Two different layout options are shown and each has then been worked out into two sub-options, providing variation in roof shape and other architectural elements. This is intended to show that monotonous and repetitious development within sites and neighbourhoods can be easily avoided with care in design and sensitivity to context (i.e. the design of other medium density developments in the neighbourhood).

These are shown in a series of birds-eye, oblique and street view sketch-up images to get a sense of scale, proportion, open space and access and parking arrangements identified earlier as critical success factors for medium density development.



Figure 3-3: Sample of Oblique Images



Figure 3-4: Street View Example Images

To determine the financial feasibility of demonstration model 1, a detailed feasibility assessment has been undertaken and identifies that the project may be feasible based on the following key assumptions:

- Acquisition of the three properties for a total of \$830,000 (based on current RVs).
- Construction of 14 dwellings.
- Mixture of single (3) and double-storey (11) dwellings.
- Average GFA of 130m².
- Building cost per m²: \$1,575 (averaged to include both single and double storey dwellings).
- All single garage with single driveway.
- 13 three-bedroom dwellings, 1 two-bedroom dwelling.
- Average sale price: \$383,000 each (15% below a full site⁴).

⁴ As per Stage 1 Report, it is assumed that a 130m² dwelling will sell at 15% less than the local average sale price for a similar sized traditional dwelling.

Based on the assumptions above, the development delivers a 30% (of equity) profit.

One of the street view images has been further developed to provide an architectural standard of image. The following image articulates what one of the options (that being demonstration model 2 with hipped roof viewed from street view looking south) taken to a more detailed architectural design (e.g. colour, textures etc.) would look like. The architectural style chosen for this image is deliberately neutral to demonstrate that medium density housing can be assimilated into many Hastings residential environments. Heritage, traditional, contemporary/modern and emerging/futurist styles can also be used to suit individual and neighbourhood contexts.



Figure 3-5: Example Street View Architectural Image

The information contained in this section could be adapted for inclusion in the stand-alone developers design guide recommend above.

Bearing in the foregoing it is recommended the Council:

- 1) Develop and adopt design guidelines for medium density housing and ensure that compliance with them is a statutory requirement of the development process to ensure that appropriate amenity values are achieved.
- 2) Ensure the Hastings design panel are informed of the adopted medium density guidelines and are able to give pre-application advice and to assist in fast-tracking the processing of medium density housing proposals

4 Responsive and Effective Regulation

To date the amenity outcomes achieved by intensification under the current rules have tended to be poor quality with the majority being in the form of infill housing development (putting an additional house or houses behind an existing house). Those that have been successful in providing a quality residential environment have employed a more comprehensive approach to development. Comprehensive residential development did occur in Hastings the 1970s and 80s under more supportive District Plan provisions, but has not been a common development type over the past 25 years. To re-establish this type of development as a preferred and desirable option, not only does the regulatory environment need to change, but also new examples need to be designed to provide quality residential environments for occupants and to positively contribute to the existing character of the neighbourhood and City as a whole.

Therefore, in order to meet the goals of HPUDS the existing regulatory provisions and framework needs change in order to:

- encourage compact housing development within the existing urban area in a form that provides quality residential environments for occupants and neighbours alike;

- address how existing built and streetscape and neighbourhood character will be maintained while moving to a more compact residential environment;
- encourage the concept of mixed use (commercial and residential) development in major local shopping centres that have the potential to be a catalyst for comprehensive residential development in the surrounding residential area; and
- promote low impact design solutions for the management of increased stormwater runoff to ensure there are no adverse effects on the existing stormwater network.

The recommended regulatory framework reflects the importance of location by providing for comprehensively designed medium density housing developments (termed Comprehensive Residential Development) in discrete areas that have been identified in the Hastings Urban Design Framework (UDF) as first order preferences for higher density developments. By zoning these areas specifically for such developments the District Plan signals that these locations are considered the best and most appropriate for medium density housing developments in the Hastings District.

In the Hastings context Comprehensive Residential Development is a form of development that incorporates the design of buildings, infrastructure and landscaping together with any proposed subdivision that usually comprises a minimum of 3 residential dwellings (including any existing dwellings on the site) at a density of between 20-40 residential buildings per hectare. The premise of this type of development is that subdivision occurs either at the same time or after the approval of the resource consent for the design and layout of the dwellings rather than prior to the design of the houses.

This form of intensification results in a better development layout and design due to factors such as; the residential units, access, outdoor living, landscaping and subdivision layout being designed as a complete package with greater certainty of outcome in terms of onsite and neighbourhood amenity. This design approach enables consideration of aspects such as residential privacy between units and external boundaries, streetscape appearance and overall amenity.

In the areas identified as UDF second tier preference locations, the District Plan identifies these as suitable for Comprehensive Residential Development through an Appendix map. Council may need to have greater control over decisions to grant resource consent to such developments in these areas. To encourage more compact and efficient development there should be a presumption that consent would be granted unless the development fails to address the relevant assessment criteria. In all other residential areas (i.e. that are not specifically identified as suitable for such development) the Council should have full discretion in the assessment of applications for comprehensive residential development. The scale and intensity of comprehensive residential development however, needs to be compatible with and complimentary to the surrounding residential area

Infill development means subdividing and putting an additional house or houses (generally behind an existing house) on a site. Traditional infill subdivision and development in Hastings tends to occur on long narrow sites which restrict the configuration or layout of dwellings to one behind the other accessed via a long driveway with less than ideal amenity outcomes. For these reasons the regulatory framework should promote comprehensive residential developments over smaller traditional infill subdivision and development.

Some traditional infill housing development and subdivision will still need to occur in the General Residential Zones as a Permitted Activity to meet the intensification targets, however it should be subject to additional standards including outdoor living areas, fence height limits, the location and size of garages and the need to consider the impacts of the proposed development on the stormwater system.

The proposed zone structure for the Hastings Residential Environment promotes medium density development in three zones as compared to the current zoning structure which has one General Residential Zone across the whole city.

A Hastings City Living Zone will cover two primary locations:-

- Centred on the Mahora shops and School and opposite the Duke St Reserve. Also along the Roberts St edge of Cornwall Park; and
- Heretaunga Street East (between Hastings Street and Park Road) and around Queen's Square.

The purpose of this zone is to provide an environment where comprehensive redevelopment of large or multiple existing sites is encouraged to produce attractive Comprehensive Residential Developments. Residents in these areas will have walking access to shops and services. Comprehensive Residential Developments are to be Controlled Activities in this zone subject to site size and shape requirements as well as specific standards and terms. Assessment criteria should be specific and tailored to include urban design principles. In these areas it is intended that the character will evolve into a higher density, high amenity area, with multiple comprehensive developments displaying best practice urban design and planning principles.

The use of Controlled Activity status provides certainty and relatively smoother consenting processes for developers, but reinforces the need for design capability to be developed within the Council (including the possible use of external design specialists or review panels) discussed earlier to ensure appropriate conditions are applied to achieve good outcomes.

Traditional infill development in this zone will be a Non-Complying Activity and is discouraged to avoid further land fragmentation which would make agglomeration of existing sites to undertake a comprehensive residential development more difficult. It is very important that the limited land resource of the City Living Zone is not eroded by infill residential activities or other non-residential activities over time. Future-proofing the zone to ensure there is a potentially viable land supply available for comprehensive residential development now and into the future is fundamental to achieving the Council's strategic direction of a more compact settlement.

A Hastings General Residential Zone will cover the majority of the existing residential area. Comprehensive Residential Development in this Zone would be a Restricted Discretionary Activity (non-notified) in specific areas identified under the UDF as second tier preference areas for medium density housing development. These areas being located around the Raureka Shops and the edge of Windsor Park as well as specific sites identified in the HPUDS Stage 1 Brownfields Sites Study

Comprehensive Residential Development outside these specified areas would be a Discretionary Activity. Such developments may require public notification to ascertain whether the site and wider location is suitable from a community perspective as well as consideration of access to local amenities – parks, transport links and shopping services.

A Hastings Character Residential Zone covers 13 individual areas which exhibit special characteristics relating to built heritage and streetscape character.

There are some parts of these areas which have also been identified as potential locations for comprehensive residential development as they correspond with first order preference areas for medium density housing identified in the UDF. Comprehensive residential development could therefore still take place, but as a Restricted Discretionary Activity, subject to Specific Performance Standards and Terms, and Assessment Criteria.

The attached table in Appendix 3 summarises the activity status for Comprehensive Residential Development, Infill development and comprehensive residential development of Brownfields sites within the residential zones of Hastings and Havelock North. All Comprehensive Residential Developments would also be subject to specific Performance Standards and Terms, and Assessment Criteria, which are based on best practice urban design principles consistent with the guidelines established in this strategy in Section 5.

It is therefore recommended that Council

- Promote positive (in terms of policy framework) and appropriate (in terms of methods) district plan provisions for medium density housing as described above.

5 Building Local Amenity and Open Space

The provision of sufficient and quality open space (both private and public) is a key requirement of ensuring an appropriate level of urban amenity. Insufficient provision or access to open spaces can lead to both negative perceptions of an area and poor amenity values. Where housing density increases, it is likely that there will be a correlating reduction in the provision/availability of private open space and greater need and demand for public open space. Residential Intensification can have a number of implications including:

- Increased pressure on existing public open spaces and their facilities
- Demand for a greater quantity of public open spaces which can be difficult to provide in fully developed urban centres
- Demand for improved quality of public open spaces and their facilities

The provision of good quality and quantity public open space is necessary to ensure the achievement of appropriate levels of amenity. With regards to the provision of public open space, the vision for Hastings District is that:

'The needs of the community for open space and recreation opportunities are met through the provision of a variety of open space, which includes high quality gardens and active recreation uses; coastal and river access and protection; and local neighbourhood and amenity areas.'

At present, the Hastings District Plan does not set any private open space requirements within the residential zones beyond those associated with retaining streetscape characteristics (building setbacks) and open character (site coverage). It is noted that no provisions focus on the provision of recreation (either passive or active) opportunities. The Proposed District Plan however, includes minimum levels of private open space provision and Open Space Zones with Objectives, Policies and Methods for open space and recreation.

The Reserves Strategy, adopted in 2006 identified a total of 720ha of reserve land equating to 10.05ha/10000. This provided Council with a measure in which to estimate how much reserve land would be needed as a result of the growth of an area. It was recommended that the Hastings District aim to maintain this minimum level of provision into the future.

However, as noted in the Stage 1 report, Council is in the process of moving away from this 'ha/1000' measure, given its inability to accurately reflect the distribution, function and usability of areas of public open space. In addition, it does not include the significant tracts of non-Council owned open space land available to the community.

The Stage 1 report states that: An approach which Council have indicated they may be moving towards is a catchment based approach which defines a 500m 'walking circle' around reserve and open space with play equipment (i.e. every resident should have a good level of 'local' reserve and open space provision within 500m of their residence). Council have also noted that as part of the overall strategy, focus should be placed on the need for improving and/or upgrading the accessibility, quality and safety of the existing reserve and open space network.

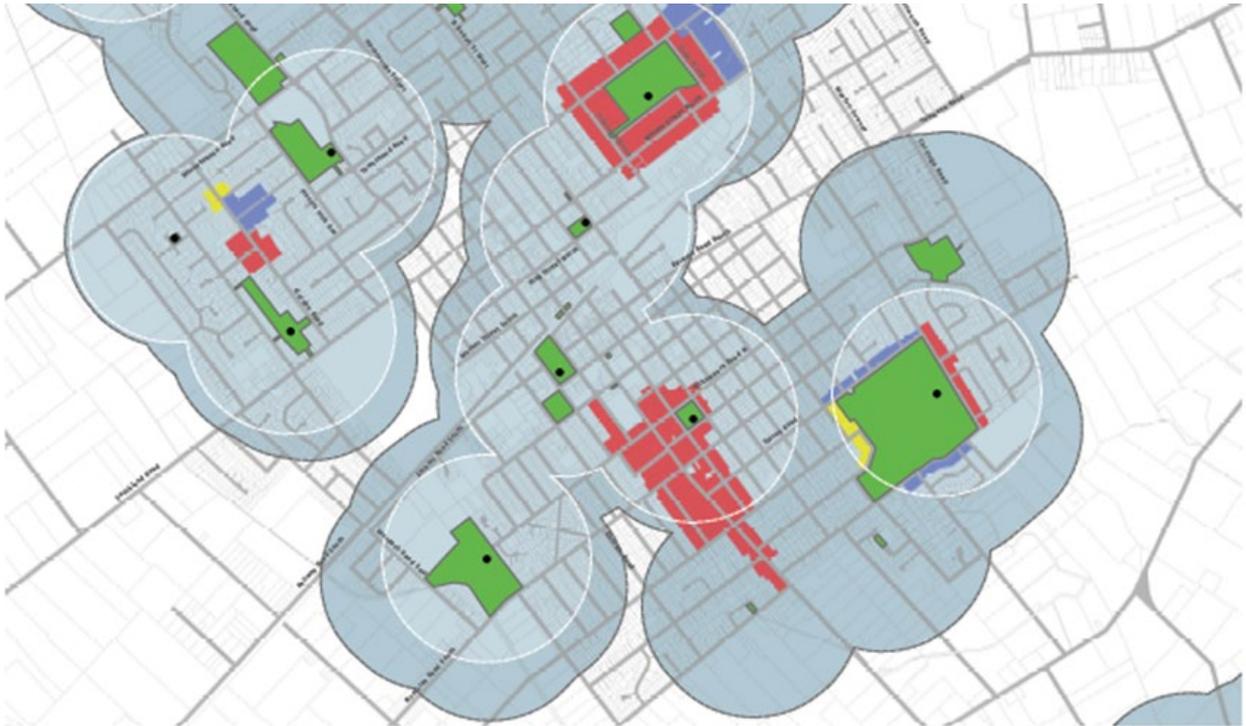


Figure 5-1: Map 500m Circle from Existing Reserves

The 2013 Draft Reserves Strategy categorises the 177 reserves into 8 categories (largely based on NZRA national standards): Sport and Recreation, Community, Public Gardens, Open Space (Natural and Maintained), Linkages (Ecological and Urban), Cultural Heritage or Civic Space.

In addition to the Reserve Strategy, HDC have also adopted the Play Strategy. It is noted that the Play Strategy identifies the following minimum level of service for 'local neighbourhood' playgrounds:

- Local Neighbourhood playgrounds should serve a local area (500m radius) that are well within walking distance of the local neighbourhood and include:
- Playground surfacing that allows access to inclusive activities/equipment; 4 plus play pieces utilising play equipment that addresses: physical motor skill development, social interplay and creative and imaginative development;
- Barrier-free seating;
- Shaded areas.

This level of service has been adopted for this strategy, and based on this level of service, analysis has identified that:

- 94% of households within the proposed intensification areas are located within 500m of an existing area of public open space
- 78% of households within the proposed intensification areas are located within 500m of an existing public playground.

The 6% of proposed households within the intensification areas outside a 500m catchment of a public open space are those on the southern side of the Heretaunga Street East. While it is within the 500m catchment provided by Norton Road Reserve, this is only 1,100m² in size with no playground. It therefore does not meet the proposed policy above, and relates to an existing level of service deficit (not related to growth).

The 22% of proposed households within the intensification areas outside a 500m catchment of a public playground include all of the proposed areas except Raureka (which is well supplied by 3

playgrounds in different areas of public open space). While all of these relate to an existing level of service deficit (not related to growth), the growth community should provide a contribution to the increase in service level provision (i.e. provide a contribution to additional play pieces required to meet the playground pieces/household threshold). Therefore in summary:

- There is no requirement to acquire any additional areas of public open space as a result of the increase in number of households in the intensification areas.
- There is a requirement to improve the level of service with regard to playground facilities on the existing areas of public open space within the 500m buffer areas.

The increased costs associated with intensification and therefore recoverable from development contributions is shown in Appendix 4

Streets are valuable public open space and, where appropriate, traffic calming measures and landscaping can assist to mitigate effects of intensification and improve the streetscape and maximise its public use. A Draft 'Green Streets' Strategy has recently been prepared, to enable the realisation of Council's vision to strengthen the District's street tree infrastructure by consolidating and extending a relatively well established existing street tree network. Part I focuses on the key route ways into the district's urban areas, with Part II focusing on the neighbourhood streetscapes. Part II is yet to be produced however the objectives of this section are identified below.

Greening initiatives within the Neighbourhood Streetscapes are based on analysis of existing street tree frameworks, understanding of local environmental conditions, and appropriate species selection for urban situations, appropriate scale, and minimising on-going maintenance requirements. These initiatives are presented as colour coded maps for the individual neighbourhoods. The social benefits of 'Greening Streets' include:

- pedestrian and vehicular 'way-finding' by creating focal points and landmarks;
- active and passive recreation;
- maintaining historical associations;
- fostering community identity;
- increased safety;
- positive experiential values;
- increased urban amenity;

One of the key objectives of the Greening Streets Strategy is to improve residential amenity, including:

- enhance the public domain by creating visually pleasing spaces for pedestrians, cyclists and drivers;
- slow traffic speeds by reducing the perceived width of streets;
- balance typical urban infrastructure and green infrastructure initiatives;
- improve environmental amenity by providing shade and shelter within streets;
- enhance the legibility of the district using vegetation, tree lined streets provide orientation;
- ensure the district's streets are safe places to be through the use of CPTED principles.

These are all important ingredients in making residential intensification attractive to the market. Part II of the Greening Streets Strategy should give priority consideration to the intensification areas and alignment with road network and underground infrastructure upgrades discussed in Section 6 below.



Figure 5-2: Example of Integrated Transport Streetscape Approach

In this regard, the following recommendations are made:

- 1) Provide additional pieces of playground equipment on Ebbett Park, St Leonards Park, Queens Square, Havelock North Domain and Windsor Park in order to cater for the increase in household numbers in the residential intensification areas (alternatively for Windsor Park contribute to the development of a new playground on the southern side of Windsor Park to address an existing level of service deficit with regard to playground provision plus growth).
- 2) Consider providing additional entry points to Ebbett Park should the opportunity arise in the future, particularly along the northern end of Gordon Road.
- 3) Prioritise the development of a new playground in Duke Street Reserve in the Reserves Strategy as part of addressing an existing level of service deficit (funded by the general rate and a contribution from growth funded by growth).
- 4) Require the growth community in the intensification areas to contribute \$79 each toward the increased provision of play pieces.
- 5) Prioritise the provision of a playground in the existing Norton Road Reserve, or new reserve acquired as above, to meet the existing level of service deficit relating to playground facilities (funded by the general rate);
- 6) Prioritise the acquisition of a new reserve on the southern side of the Heretaunga Street East intensification area in the Reserves Strategy as part of addressing an existing level of service deficit (funded by the general rate);
- 7) Contribute to additional pieces of playground equipment to the new playground being provided on either Norton Road Reserve, or the new reserve as acquired above, in order to cater for the increase in household number in the residential intensification area;
- 8) Consider improving the accessibility of Anderson Park to better serve the southern extremity of the Havelock North intensification area.
- 9) Part II of the Greening Streets Strategy should give priority to amenity upgrades in the intensification areas, in conjunction with roading and infrastructure upgrade

6 Medium Density Ready Services

If medium density development is to be promoted and facilitated, the necessary infrastructure services need to be planned for and provided in an efficient and cost effective manner. This means ensuring network capacity is available ahead of time where it can be integrated into existing work programmes. This includes transportation infrastructure such as street configuration, traffic management, parking, public transport and walking and cycling infrastructure and networks.

A high level assessment of the existing water, sewer and stormwater infrastructure currently servicing those areas identified for medium density housing has been undertaken. The assessment included identifying any existing network constraints and identifying any issues or constraints that will occur as a result of medium density development in the area.

The proposed host neighbourhoods have been identified and divided into appropriate sub catchments based on the existing sewer and stormwater infrastructure. The existing sewer infrastructure downstream of the host neighbourhoods to the first trunk sewer or pump station servicing each catchment has then been identified.

The existing stormwater infrastructure downstream of the host neighbourhoods has also been considered through to the discharge point into the receiving open drain. Capacity of the open drainage system has not been considered as these impacts are felt at a network wide level (i.e. irrespective of the local distribution of development). Both existing catchment and proposed host neighbourhood catchment design flows were then compared against the existing pipe capacity. From this comparison any constraints have been identified. HDC have used their existing water network model to assess the impact of the host neighbourhoods on both pressure and flow.

An Integrated Transport Assessment for the host neighbourhoods has also been undertaken. The aim of the assessment was to assess the impact of the proposed intensification on the road network and identify accessibility to each site by all transport modes. Predominantly the ease of connectivity of the development sites has been assessed to ensure all developments are sustainable in the long term. In addition, access by private motor vehicles has been considered in terms of determining any operational impacts. The accessibility of the sites by each transport mode was assessed as follows following:

- Connectivity to walking and cycling networks
- Proximity to Public Transport infrastructure and services
- Accessibility to recreational areas and spaces
- Operational implications on road network
- Road safety deficiencies on road network
- Barriers to sustainable transport use in this area

The assessment of each transport mode has identified a number of issues specific to each development site. The report details these issues and identifies suitable mitigation measures to reduce or remove these deficiencies. In addition, suitable mechanisms are identified which could be utilised to implement these mitigation measures at reduced cost by merging with existing works. The mechanisms considered are as follows:

- Forward Works Programme
- Corridor Management Plans
- Strategic Programmes (I-Way etc.)
- Stand-alone project

- Development Contributions

A very rough order cost has been provided for each work item. The work items have been collated as an entire programme with suitable implementation dates identified. In addition, the costs which should lie directly against the developments (i.e. development contributions) have been provided as a total costs specific to each development area. These are shown in Appendix 5. These costs have been factored into the higher level review of the impact of changing the development contributions approach referred to in section 7.0.

In general, the assessments have shown that the proposed sites are positioned in very sustainable locations and are served well by all transport modes. The vast walking, cycling and public transport network already proficient around Hastings means that the development sites have direct access to all transport modes. The proximity of the sites to local centres and sustainable transport links will ensure all residents of the new developments will have opportunity to use adopt sustainable travel choices.

The anticipated impact of the Mahora and Heretaunga Street East medium density developments on traffic operation is expected to result in some operational issues on the network. As these impacts have not been fully modelled at present, it is difficult to quantify these issues. Nonetheless, there is opportunity to address these issues through the adoption of measures already being considered by HDC through various local strategies and works programmes.

Although the assessments have confirmed the accessible nature of the sites, a number of deficiencies have been identified which should be addressed prior to completion of the developments to ensure accessibility and connectivity is maximised. Failure to do this may result in some of the sustainable transport objectives not being fully realised.

The deficiency analysis has identified a programme of suitable transportation works across all modes with a value of approximately \$6.0m over the 30 year period and at least some of the works will already be in the ten year Long Term Plan. However, not all of this work is attributable to the proposed intensification and the majority will provide benefit to the larger population and would most likely be required regardless of the proposed intensification. As such, the contribution required from the proposed developments has been determined by attributing a percentage requirement to each cost. The result is a development contribution requirement of \$464,250 which can be split for each area as follows:

- Havelock North - \$124,000
- Heretaunga Street East - \$228,250
- Parkvale - \$40,500
- Mahora - \$71,500
- Raureka - \$0

Within the next LTP period of 2015-2025 however, this would require a commitment of \$219,750 over the ten year period and factored into the development contributions policy.

The analysis has shown that for water and sewer services addressing existing network deficiencies in a timely way will accommodate the medium density development in the identified areas with little additional cost. Only one sewer pipe upgrade in Havelock North is required as a result of the medium density development at a marginal cost of \$22,000 when the existing service is renewed. Accordingly the medium density can be accommodated simply through factoring this consideration into the normal prioritisation programmes for these services. No upgrades to the existing water infrastructure network are required as a result of medium density development however Council need to be aware that

- Overall medium density development will cause a small pressure drop (between 2m and 7m) during peak demand periods. The Raureka medium density area is the only area to fall below HDCs minimum level of service of 30m, however
- HDC have committed works to install a new bore at Frimley and there are plans to construct a 300mm diameter link from Stock Road to Wall Road via Irongate Road and Maraekakaho Road at some time in the next 10 years. When these works are completed the pressure in the Raureka medium density zone will increase to approximately 40m which is deemed sufficient.

Stormwater is more problematical as might be expected with increasing density. Concentrating development has a direct effect on some local stormwater networks. Existing level of service deficiencies exist within and beyond the intensification areas (the latter having yet to be fully assessed and the remedial costs identified).

Some existing deficiencies will need prioritisation within the overall service level upgrade programme, once that has been determined, to resolve existing deficiencies in time for medium density development to occur in the intensification areas. While the assessment indicates that some stormwater renewals and upgrades may need to occur earlier than otherwise planned, there is also a direct effect on pipe capacity in many cases. These pipe upsizes to provide sufficient capacity come with a marginal extra cost.

In both the Heretaunga Street East and Havelock North intensification areas however, new infrastructure will be needed to support medium density where there are no existing levels of service deficiency. These become a direct cost to these developments, which should be recovered through development contributions. The extra stormwater cost to meet the demands of intensification within the identified areas could amount to around \$1m over the HPUDS period to be recovered from development contributions.

Summary tables in Appendix 6 indicate the works and indicative timing for the water services and transportation works. While there are some costs associated with intensification in identified areas, if Council is to achieve its strategic objective of protecting versatile, upgrades to service areas where medium density is encouraged should be afforded a high level of priority. In addition, concentrating intensification in a few areas, rather than dispersed infill may reduce pressure and priority to undertake infrastructure upgrades within other parts of the existing network, although these are more difficult to quantify.

It should also be recognised that the medium density programmed date however, is a highly indicative commencement date only with the actual capacity trigger date being determined by the market as growth occurs. If the intensification occurs at a slower rate some work can be delayed. If these triggers are being met as planned for, then that indicates the HPUDs strategy and this current work to stimulate medium density development is proving successful. This means less land is being lost to production and the likely greater servicing (capital and operational) costs of expanding beyond the planned greenfields growth areas are avoided in the future.

It is therefore recommended that at each LTP, all of these works be considered specifically for prioritisation depending upon medium density uptake, after consulting with the development community over their forward development intentions so the works are not committed too early. This should include canvassing local developers on their intention for medium density development, ideally annually, but not less than three yearly (to tie into the LTP process), as currently occurs for greenfields development to optimise the timing of the infrastructure provision.

Accordingly it is recommended that Council:

- 1) Ensure provision is made for medium density housing in the intensification areas when undertaking works between now and 2015.
- 2) Undertake the further investigations identified in this report to better inform the 2015-2025 Long Term Plan and to optimise the investment required.

- 3) Prioritise and make provision for the works identified in this report in the 2015-2025 Long Term Plan.
- 4) Advocate for the planning for and prioritisation of public transport services provided by the Hawke's Bay Regional Council that support medium density intensification areas.

7 Cost Competitive Development

Research undertaken in New Zealand exploring the motivations that influence housing choices noted a number of factors are at play the most obvious and influential being cost. Generally, Councils have little control over cost, their influence generally being limited to land price (through scarcity or lack of it) zoning management, and its own charges for infrastructure through development contributions. However cost is not the only factor in competitive housing decisions as people will also consider value for money in terms of their own lifestyle and life stage preferences. In terms of influencing a change in preferences away from greenfields land to medium density development, cost competitiveness should not be considered in isolation from these "value for money" factors.

Council can have a further role to play in terms of these other value for money considerations, particularly in terms of location of medium density housing, design quality and neighbourhood amenity as discussed elsewhere in the strategy. In terms of the decision making process, people may have some ability to pay more for something they really want (and they do), but the range from which they can choose is usually limited. People make trade-offs in the housing choice decision making process and how these trade-offs are made will reflect the values placed on the different attributes by different households.

The distribution of household types across trade-offs is not obvious given the potential variations of attributes and the ways in which they might be combined in trade-offs, and evidence of considerable diversity in them. The difference between apartment dwellers and others is perhaps the most pronounced. Apartments (particularly small apartments) close to city or central suburbs probably have the clearest demographic target in young professionals, singles, and couples with their preferences for accessibility and their low commitment to particular place or style of housing. The remainder of the housing stock, including medium density housing has proven to be highly flexible, appealing to a wide range of groups and making it difficult to identify specific target demographics.

It is considered that the most appropriate response to the complexity of trade-offs is to ensure reasonable flexibility in housing typology, design and functionality regardless of setting, or in other words, provide for housing choice. Given sufficient flexibility, medium density housing stock can appeal to a wide range of people, and cannot be identified exclusively with any particular demographic, cultural or social group. This supports social variety and reduces risk to developers and investors.

Evidence suggests that within Hastings there is a clear penchant at present within the residential market for decentralised greenfields development sites. Over the 6 years since the 2005 HUDS review, greenfields development continued to grow at a rate inconsistent with the targets of HPUDS for the future and without some form of intervention it is unlikely that HPUDS targets will be achieved. There has been little infill development in Hastings over the entire period.

In terms of cost it is suspected that greenfields development is currently paying less than its full share of costs relative to infill development, so therefore enjoys a competitive advantage over infill development. In terms of demand, infill areas do not currently exhibit levels of residential intensity that create amenities and other factors that would encourage residents to locate there. As such, without clear signals to the market (i.e. Council leadership and intervention) the targets of HPUDS are unlikely to occur within the target timeframes.

It is considered that that there is some validity in advocating for Council intervention (i.e. review of development contributions policy) in order to make the development of medium density housing a

more attractive proposition (to a developer) than it currently is in Hastings. HDC undertook a desktop analysis that simulated a change in policy based on the current 2012-2022 LTP and DC model, by creating a greenfields catchment and an Infill catchment to apportion growth projects and capital cost where they lie. The objective of the analysis was:

- To provide a rough estimate of the likely differential of development contributions payable on greenfield, infill and medium density intensification areas; and to subsequently
- Provide an indication of whether a full review of the Council’s development contributions model to create separate catchments for greenfields areas, infill development and medium density housing intensification areas (i.e. is the differential sufficient to warrant undertaking this substantial piece of work) was required.

The analysis went one step further to see if there could be a case for further separating out the medium density intensification areas from the general infill. A number of different time period assumptions were modelled and a scenario where recovery for past project cost were spread under the existing (In Base) or a possible new policy approach (Not in Base). The assessment supported the intrinsic view that greenfields development did indeed place higher costs for infrastructure on the rest of the community. In an undifferentiated market these costs would be unfairly borne by other forms of residential development (infill) thus skewing demand and supply.

Table 7-1: Example Summary Results of Testing a Policy Shift

MDH IAs Test	Factor	Infill	MDH IAs	Greenfields	Diff Greenfields Infill	Diff Greenfields MDH IAs	Diff Infill MDH IAs
2031 in base	0.91	12,659		25,577	12,918		
Not in Base	0.80	10,942		27,452	16,510		
2031 in base	0.89	12,982	13,349	25,063	12,081	11,714	-367
Not in Base	0.78	16,794	5,787	26,939	10,145	21,152	11,007

The resulting assessment undertook two development scenarios with and without “past projects” (which have not yet been fully recovered from contributions) being apportioned under the proposed policy shift, or spread evenly over all development as is the case under the current policy. The differential was found to be approximately \$13,000 and \$16,500 per site respectively, with greenfields rates rising from around \$19,000 per site to \$25-\$27,000 per site. Where Medium Density Intensification Areas were further split out the differential was in the order of a further \$10,000 if past projects were not included in the base infrastructure costs (i.e. not spread evenly as per the current policy) mainly at the expense of the remaining infill, but insignificant if they were.

It is considered pertinent to have an understanding of how such a change is likely to influence the housing market in Hastings prior to recommending such action. Analysis suggests that:

- The relative change in price for medium density housing and greenfields development is likely to have an immediate impact on prices and viability for both forms of development.
- This change will have a small short-term impact as the market adjusts the existing development stock and undertakes an evaluation of the markets potential (i.e. it empirically weighs up the risk in the two markets).
- It is the medium term that the real change occurs. The market for greenfield development has not yet had sufficient time to ‘crowd out’ the price differential and so demand and supply for medium density housing are driven by price. This in turn will have an increasing effect on preferences.

- Longer term the price differential is likely to be 'crowded out' as greenfields sites become cheaper prior to development contributions to offset the increase. However the level of environmental change is likely to be sufficient after 10 years to have shifted preferences proportionately towards medium density housing. This occurs as the benefits of medium density housing become more evident to the market given the increased market size.
- Ultimately there is a greater level of efficiency and equity as infrastructure costs are appropriately distributed and are essentially borne through greenfields profit reductions.

In terms of the quantum of affect, currently the average cost for a site of less than 400m² is \$120,000. The overall impact on price of a \$20,000 differential (as a result of an amended development contribution policy) is likely to be in the order of 5%. This does not factor for the influence of raising the price of alternative (greenfields) housing. Given the current price bands and demand levels that exist in Hastings, the price differential alone is likely to shift up to 4% of the market towards medium density housing. Coupled with the existing market propensity for this product type, the change alone has the potential to move over 1,400 households into medium density housing by 2045. This coupled with the sustainable change in the environment through this critical mass generation, should be sufficient to meet (HPUDES) targets of over 2,000 households.

Based on the results of the analysis of the HDC approach to development contributions and taking into account the findings of Property Economics, it is clear that the current development contributions approach:

- Constitutes an uneven distribution (between intensification and greenfield) of infrastructure costs in favour of greenfield development; and
- Inhibits the development of medium density housing by inhibiting profit margins.

It is anticipated that a change to the development contributions policy in line with what has been discussed above is justified will result in:

- A proportional shift in housing preferences towards medium density housing;
- Positive environmental benefits as the growth of the urban footprint is slowed; and
- A greater level of efficiency and equity of infrastructure costs.

As such, it is recommended that Hastings District Council undertake a review of its current development contributions policy with a view to "evening the playing field" between greenfield and brownfield development whereby the costs of servicing greenfields areas and intensification/infill areas are charged where they fall, rather than the single averaged catchment approach currently employed. A particular focus for the review will be on the legality and fairness considerations of including past project costs in the policy shift.

- 1) Undertake a review of the current development contributions policy in accordance with the analysis and recommendations of this strategy and amend development contributions policy to ensure the distributions of costs of greenfields development (both local and external) are fairly distributed.
- 2) Revise the current approach to development contributions to identify other options for potentially:
 - Reducing the contribution required for medium density housing; and/or
 - Enabling the delay of payment until such time as the developer has acquired financial return for investment in medium density housing.

8 Managing Greenfield Land Supply

The preferred HPUDS growth scenario is for compact (medium density housing) development within existing boundaries in a manner that does not reduce residential housing options, but provides a range of housing options at appropriate levels. This approach recognises that some residential options generate much greater costs that are often borne by the community as a whole. Often, the argument relating to infill residential development over greenfields development is one of efficiency.

Unplanned and poorly planned greenfields development can lead to what is known as urban sprawl. Urban sprawl is generally defined as the increased development of land in suburban and rural areas outside of their respective urban centres. Urban sprawl constitutes an inefficient use of resources and often leads to urban places that are underutilised and unattractive for residents and businesses alike.

As noted above HPUDS targets are unlikely to be met without Council leadership, planning, investment in infrastructure and amenity, and education/demonstration and intervention (adjusted development contributions and managing greenfields land supply) to improve medium density value for money and cost competitiveness respectively.

Justification for intervention in the location and type of residential development is based around the external costs of allowing dispersed activity (which can result in urban sprawl) which are significant and are generally not considered by the market.

The external benefits of greenfields development include generally lower-than-otherwise local housing costs and higher-than-otherwise land prices around the fringe of the city (benefit to land owners near the fringe but only if further expansion is possible).

The external costs of greenfields development include:

- The loss option of rural production (beyond payment received by incumbent farmer) which is a cost borne by the local economy and employment market;
- Higher infrastructure costs created by the need to provide, operate, maintain and renew new infrastructure, which is generally shared across the wider community
- The extra vehicle congestion, emission and accident costs, and
- The lower amenity value of the rural environment.

The benefits of intensification have been discussed at length elsewhere in this strategy, however in summary:

- The external benefits of intensification include the lower-than-otherwise infrastructure costs resulting from greater capacity usage, the potential for more public transport, and the potential for greater social interaction.
- The internal costs of intensification also stem from greater social interaction (some people prefer privacy and less noise), plus the loss of space experienced by incumbent neighbours.

It should also be noted that the facilitation and encouragement of medium density housing and conversely managing the release of greenfields land is not about reducing residential housing options, but is about providing these options at appropriate levels. This includes clear recognition that some residential options generate much greater costs that are often borne by the community as a whole.

The continued expansion of the “free market approach” to housing in Hastings will inevitably result in a degree of externalities and loss of efficiencies. If the market is left to determine the level of greenfields development to infill (or medium density housing) it will only consider the private costs associated with greenfields development. The costs of controlling greenfields development are

potentially increased residential prices and potentially reduced development; however it is considered that these costs are likely to be by far outweighed by the benefits of intensive land utilisation.

It is not the role of the Council to restrict competition or protect commercial interests, it is however its role to protect and enhance the community's social and economic wellbeing. There is an important balance to be maintained between protecting community benefits and potentially stifling positive growth. Given the levels of residential development in Hastings however it is more likely that the former will occur with a more managed approach to greenfields land supply. Due to the fact that the potential losses to the community of allowing continued decentralisation are so great, and the likely risks to the economy and community are so limited, it is entirely prudent to assume a less unconstrained stance on greenfields development. Methods of intervention to better allocate the localised and external costs and benefits of greenfields development should therefore be considered.

Hastings District Council currently controls greenfield land supply through structure plan requirements and deferred zoning (in accordance with HPUDS recommendations), This allows for the long term identification and sequencing of land for development and minimises the risk to ratepayers of too much upfront Council investment in infrastructure on too many fronts relative to expected development contributions payments. Deferments are uplifted when infrastructure is in place, which is installed based on the rate of uptake within the new growth areas, i.e. largely driven by market demand for greenfields development.

HPUDS and this strategy however, seek to affect a change to housing supply and housing preferences in order to minimise the loss of productive land. Sequencing should align with this objective by not providing so much land that greenfields sites are cheaper to build on than redevelopment of existing sites. Given the levels of development evident in Hastings this should not have a significant effect on housing prices across the board, but nevertheless the supply of land should be responsive to fluctuating housing demand overall.

This means that brining forward or pushing back greenfields land to meet demand should be tied to increases or decreases in the overall housing demand, rather than for a preference for greenfields sites alone. This may mean that short term scarcity of greenfields sites may be evident at from time to time if buyer preferences are out of proportion to the HPUDS target allocations and therefore consume the available land available ahead of schedule. This necessary tension is needed to affect a change in preferences over time, but in the medium term land prices and housing choice should remain relatively stable as the scheduled land releases take place.

If the land supply is simply set to meet the market demand preference for greenfields sites (in the absence of other drivers affecting a change in preferences), the urban area will continue to expand over the productive land and HPUDS objectives and targets will likely not be met.

For this approach to be appropriate (e.g. without adverse effects on housing prices across the board) robust monitoring is required. Where issues are identified, consideration can be given to either releasing or not releasing additional land to the market (i.e. ability to respond to market fluctuations and or effects on overall housing prices). The ability to respond quickly to demand fluctuations is important, so supportive District Plan policies, completed structure plans and deferred zoning triggers need to be in place ahead of demand.

It is recommended that local housing market conditions be monitored closely and that HDC ensure they have the means available to either facilitate or provide significant (and appropriate) greenfields sites if signs of relative house price inflation begin to emerge in Hastings. Factors to monitor would include:

- Immediate supply of vacant greenfields sections.
- Near-term potential supply of vacant greenfields sections (land zoned residential but not yet with infrastructure in place i.e. no s224).

- Medium-term potential supply of vacant greenfields sections (land identified as target for re-zoning to residential).
- Immediate supply of vacant brownfield sections.
- Near-term supply of vacant brownfield sections (those housed sites that are feasible for small-scale site redevelopment).
- Other potential supply of vacant brownfield sections (large sites currently used for other purposes that can be redeveloped).
- The relative difference between local and national section and dwelling sale prices and volumes and relativity between section prices availability and house sale prices.

In addition, regular developer forums facilitated by Council can provide a means of gaining anecdotal information from local industry participants.

In order to be able to respond quickly to changes in demand or price tensions, HDC should continue with its programme to complete structure planning for the identified greenfields sites ahead of predicted demand. In addition the District Plan should contain has sufficient notice of the areas suitable for residential development as identified in HPUDS and include enabling provisions to allow rezoning to occur without undue litigation and delay. Taking the above into account, the following recommendations are made:

- 1) Review the current approach to the management of greenfields land to ensure it aligns with HPUDS development targets and develop methods to constrain the supply of greenfields development land to increase the relative competitiveness of urban intensification.
- 2) Develop monitoring programmes for the uptake of greenfield land focussed on monitoring:
 - a) Immediate supply of vacant greenfield sections
 - b) Near-term potential supply of vacant greenfield sections (land zoned residential but not yet with infrastructure in place (i.e. no s224))
 - c) Medium-term potential supply of vacant greenfield sections (land identified as target for re-zoning to residential)
 - d) Immediate supply of vacant brownfield sections
 - e) Near-term supply of vacant brownfield sections (those sites that are feasible for small-scale site redevelopment)
 - f) Other potential supply of vacant brownfield sections (large sites currently used for other purposes that can be redeveloped)
 - g) The relative difference between local and national section and dwelling sale prices and volumes.
- 3) Continue with structure planning and enabling District plan provisions to allow the supply of greenfields land to aligned with fluctuating overall housing demand
- 4) Be cautious of releasing more greenfields land than is dictated by overall housing demand.

9 Socially Integrated Development

This section of the Strategy concentrates on the social aspects of intensification and medium density housing relative to the identified host neighbourhood areas within Hastings District.

9.1 Demographic Profile

At the District level the following observations are of significance:

- The proportion of the Hastings District community within the 65+ age group, and the median age of the Hastings community are marginally higher than the New Zealand average.
- The majority of the Hastings community are of European descent; however the proportion of people who belong to the Māori ethnic group is higher than the New Zealand average.
- Hastings generally has a lower proportion of Asian and other ethnic groups than the New Zealand average.
- The 65+ age group accounts for approximately 95% of population growth in Hastings between 2011 and 2031.
- The average age of the Hastings resident is therefore likely to increase from 37.7 in 2011 to 41.2 in 2031.

According to the census area unit data for Havelock North a typical Havelock North resident is likely to be mid-forties, of European descent, married with children, a home owner and on a relatively high income. Those that don't fit into this description are likely to be older single persons/couples.

A typical Heretaunga Street East (Akina) or Mahora resident is likely to be early to mid-thirties, of European descent, married with or without children, and a home owner and on a relatively low income. Those that are not are likely to be older single person households or older couples.

A typical Parkvale resident is similar but more likely to be mid to late thirties and those that are not are more likely to be older single person households.

A typical Raureka resident is on the other hand more likely to be early to mid-thirties and married with children. Those that are not are likely to be older single person households or couples, but also more likely to be single parent households than in the other neighbourhoods.

In addition to the above, socio-economic analysis of a number of medium density housing developments throughout New Zealand was also undertaken. Key points identified include:

- The majority of medium density housing developments have a higher proportion of households without children (i.e. singles and couples) than with children. 58% of households in the Auckland specific case study do not house children.
- Across all case studies, the most common ethnicities of residents of medium density housing are European and Asian.
- Across all case studies, the majority of residents are employed.
- Excluding one case study, the proportion of renters is either equal to or higher than the proportion of owner-occupiers.

Taking the above into account and discounting the Asian and student population in the major centres, it is considered that there are areas of significant consistency in terms of demographics and socio-economics between the host neighbourhoods and the medium density housing case studies. For example:

- All the host neighbourhoods and medium density housing case studies have a majority of residents or a median age between 30 and 40. However it is considered likely that this has

been influenced by high proportions of students in some case studies, so in the Hastings context medium density households may be older.

- All the host neighbourhoods have a high proportion of the 65+ age group. This is also a characteristic of some of the case studies. It is assumed that these case study examples were specifically marketed at such markets and that (given population projections for Hastings) this approach should be considered by Hastings District Council.
- The majority of households in all host neighbourhoods comprise couples with or without children and the average household size in the host neighbourhoods is lower than the district average which suggests smaller families. This is also a common characteristic of the medium density housing case studies.
- The majority ethnic group in all host neighbourhoods is European and there is generally an under representation (compared to district averages) of Maori and Pacific peoples and a high representation of Asian residents. Again, this is a trend common to the medium density housing case studies.
- All but one (Havelock North) of the host neighbourhoods are relatively low income areas (i.e. income below the district average). This is also a common characteristic of the medium density housing case studies. However, it is noted that the income statistics of the case studies are probably influenced by higher numbers of full time student residents.

In conclusion, the host neighbourhoods and medium density housing case studies, whilst quite different in terms of geography and intensification drivers share significant common factors in terms of demographics and socio-economics. In particular:

- A high proportion of 30 – 40 year olds.
- High proportions of older people (with Hastings population projected to get older).
- Mainly European and low representation of Maori and Pacific peoples.
- Generally smaller household sizes.
- Lower income households (with some notable exceptions)

In Hastings the likely smaller scale of developments and the absence of commercial investors underpinned by an Asian/student market, suggests the proportion of renters and lower incomes in new medium density housing developments could be much closer to the host neighbourhoods, if not much lower. For example in the Christchurch and Tauranga case studies the ownership rate is 100% and 60% respectively.

In this regard, it is considered that the host neighbourhoods are likely to be able to assimilate medium density housing within them without any significant impact on their socio-demographic profiles providing that the form of medium density housing takes into account local differences.

9.2 Facilities to Support Medium Density Housing

For medium density housing to be successful, it is important to ensure it is supported by the right types of services and facilities, taking into account the likely socio-economic makeup of residents. Housing New Zealand note in their higher density guidelines that, higher-density housing needs to provide easy access to local amenities such as shops, public transport, parks, schools, and community facilities. Access to public transport and parks is covered elsewhere in this strategy. For the purpose of this section of the strategy, community facilities are considered to constitute:

- Shops (i.e. supermarkets, dairies and other commercial activities necessary to service a household's daily needs).
- Schools; and

- Community facilities (excluding recreation centres etc. which are assessed as reserves).

It is recommended that, when considering the future provision of facilities within the proximity of the host neighbourhoods, consideration should be given to the likely demographic structure of those communities, noting that residents of medium density housing within Hastings are likely to be:

- Of European descent; and
- Smaller households (e.g. older couples and small families).
- Increasingly older

Analysis of the current levels of service of the host neighbourhoods identified that Havelock North, Heretaunga Street East and Raureka are reasonably well serviced by commercial facilities. Small areas within, but at the fringes of both the Mahora and Parkvale intensification areas are less well served. Consideration should be given to improving the situation if and when demand can sustain further provision, but this is not likely to be the case prior to the next review of the District Plan (10 years). Overall, the following recommendations were identified:

- 1) Identify sites within a 5 minute walk of the northern portion of the Parkvale host neighbourhood that could be rezoned to suburban commercial in the future to better provide for the future needs of the intensification area as it develops.
- 2) Identify sites within a 5 minute walk of the southern portion of the Mahora host neighbourhood that could be rezoned to suburban commercial in the future to better provide for the future needs of the intensification area as it develops.
- 3) Consult with the Ministry of Education and relevant private school providers regarding the potential implications of intensifying the host neighbourhoods, particularly so for the northern portion of the Heretaunga Street East intensification area.

9.3 Socially Balanced Development

The achievement of a socially balanced community is considered to be a desirable outcome of urban planning and is often entrenched within planning strategies and planning policy. To achieve a socially balanced community requires:

- A safe and healthy local environment with well-designed public and green space;
- Sufficient size, scale, affordability and density of the built form to support basic amenities whilst minimising the use of land
- A well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes;
- Dwellings that can adapt to changing household needs.

To achieve socially balanced communities requires the provision of housing choice and opportunities for all aspects of a community. This means ensuring affordable housing options for a range of socio-economic groups. Within New Zealand (and certainly elsewhere throughout the world) the issue of a lack of housing affordability and large portions of communities unable to access housing that is affordable is increasing.

In this regard, there is a growing concern among New Zealand councils (both local and regional) about how they might best respond to housing issues and whether they should actively facilitate access to affordable and/or social housing. Hastings District Council recognises a housing affordability issue in New Zealand, but does not currently believe that the solution to the issue is for territorial authorities to take on the responsibility for the provision of affordable and/or social housing.

Medium density housing however, may have a potential role in addressing the housing affordability issue within Hastings District. More dwellings per hectare mean lower land costs per dwelling and smaller dwellings are generally cheaper to build and maintain than larger dwellings (assuming similar building standards). However, it is important to recognise that this does not mean that all medium density housing is affordable to all income groups.

Medium density housing constitutes another housing choice in the market. Where medium density housing is seen as a housing preference for current home owners, they may choose to move out of their current dwelling to medium density housing; thus placing older (and potentially more affordable and appropriate) housing into the housing market. This makes the existing home more affordable to larger lower income families. Council may have role in facilitating this process.

Many Councils in the UK require a portion of all residential developments (over a certain threshold) to provide a proportion (e.g. 25% of all developed units) of a development as affordable (e.g. as defined by an affordable housing policy). This approach has been followed in Queenstown where provisions put forward through Plan Change 24 require the provision of affordable housing by requiring a proportion of a development to be 'affordable housing' (cost to rent or own generally does not exceed 30% of the income of low to moderate income households) through district plan provisions. Queenstown's housing pressures are quite different to Hastings' and the approach is rare in New Zealand. It is unlikely that at least initially medium density developments will of a size or financial viability to sustain such an approach for at least ten years and the approach should be re-considered at the next review of the District Plan (ten years)

In the context of the above, it is important to note that excessive clustering of public/social housing can adversely affect a neighbourhood, particularly from a social well-being perspective. While HNZ's approach in Hastings is not to building large new housing estates this may change in the future. A common approach to avoiding public/social housing clustering is the adoption of 'pepper potting' policies in District Plans. In simple terms, pepper potting means the dispersal of public/social housing within traditional residential developments as a method of promoting mixed, sustainable communities that minimise social exclusion.

Another approach to avoiding clustering of housing typologies is for the developer to place encumbrances on titles to avoid private sector medium density housing projects being sold to a social housing provider (e.g. Housing New Zealand) for rent to low income households. Where this occurs on a relatively large scale (relative in terms of socio-economic balance of the area) it can lead to adverse effects in terms of the socio-economic profile of the local community e.g. unbalanced communities. Whilst clearly a method available to developers, it is questionable whether a Council could enforce such a method through conditions, however it would certainly be within the Councils powers to encourage developers to adopt such a method where creating unbalanced communities may be a concern.

Taking the above into account, it is recommended that the Council develop an affordable housing strategy that determines whether a greater level of Council intervention (e.g. affordable housing policy) is required in the housing market to ensure housing affordability. This strategy should recognise the role of medium density housing in affordable housing and consider at the next District Plan Review the costs and benefits of the approaches to avoiding social housing clusters as described above, or sooner if Government's social housing policies change dramatically in the Hastings context.

- 1) Promote housing supply that reflects the demographic and socio-economic profiles of likely future residents within the Hastings context
- 2) Develop an affordable housing strategy that determines whether greater level of Council intervention (e.g. affordable housing policy) is required in the housing market to ensure housing affordability. This strategy should recognise the role of medium density housing in

affordable housing and consider the costs and benefits of the approaches to avoiding social housing clusters.

- 3) Investigate options for freeing up under-utilised housing stock. For example, the development of further retirement villages may encourage elderly, smaller households occupying traditional large sites to relocate thus freeing inefficiently used resources for more efficient uses.

Appendix 1 – Design Guidelines

Neighbourhood Context

Design Indicator	Design Attributes	Guidelines
Whether the development is in the appropriate location to meet residents' needs.	<ul style="list-style-type: none"> Proximity to community facilities 	<ul style="list-style-type: none"> The development should be well connected (within a 500m walk) with necessary community facilities such as schools, community halls, libraries etc.
	<ul style="list-style-type: none"> Proximity to places of employment 	<ul style="list-style-type: none"> The development should be well connected (e.g. located close to public transport options) with areas of employment.
	<ul style="list-style-type: none"> Proximity to commercial facilities 	<ul style="list-style-type: none"> The development should be well connected (within a 500m walk) to commercial facilities that will provide for the daily needs of residents e.g. dairies, supermarkets etc.
	<ul style="list-style-type: none"> Proximity to recreational facilities 	<ul style="list-style-type: none"> The development should be well connected (within a 500m walk) to a public park and/or other recreational facilities.
	<ul style="list-style-type: none"> Proximity to public transport 	<ul style="list-style-type: none"> The development should be well connected (within a 500m walk) to public transport opportunities (e.g. bus stop).
	<ul style="list-style-type: none"> Ensuring socially integrated development 	<ul style="list-style-type: none"> The scale of any development or the combination of medium density housing developments within a neighbourhood should not create a socially unbalanced community. Medium density housing development should be limited in scale to reflect the host neighbourhoods' ability to assimilate it. Where larger scale medium density housing developments are proposed or where several medium density housing developments are proposed in a single neighbourhood, Council may require a social impact assessment. Medium density housing developments should be 'pepper potted' within a neighbourhood to ensure they do not become the dominant housing typology.

Site Context

Design Indicator	Design Attributes	Guidelines
Whether the development is well integrated into the existing local context of the development.	<ul style="list-style-type: none"> Sunlight 	<ul style="list-style-type: none"> The design elements should be oriented in such a way that important internal (e.g. habitable rooms) and outdoor spaces are sunny, while at the same time ensuring that negative aspects of the sun can be easily dealt with. The design should include principles of passive solar design;
	<ul style="list-style-type: none"> Wind 	<ul style="list-style-type: none"> The design should ensure that important outdoor spaces are sheltered against the negative effects of wind (e.g. avoid creating wind tunnels), by taking into account the prevailing wind directions.
	<ul style="list-style-type: none"> Views 	<ul style="list-style-type: none"> Where relevant, the design should capitalise on the opportunities that the site offers in terms of views to public and communal spaces. Opportunities for views include those onto public parks or hills (e.g. Te Mata Peak).
	<ul style="list-style-type: none"> Landform 	<ul style="list-style-type: none"> Where relevant, the design should both address the challenges resulting from a sloping site, whilst also endeavouring to utilise it to its advantage. Examples of the former include the minimisation of large retaining walls and creation of open spaces that are walkable. An example of the

Design Indicator	Design Attributes	Guidelines
		latter includes the use of the slope for semi-basement parking.
	• Vegetation	• Where possible, existing valuable vegetation should be retained on the site and integrated into the design.
	• Heritage buildings	• Where possible valuable buildings that exist on the site should be retained and celebrated as features that provide character to the development. At the same time, where heritage buildings are found within the immediate context of the site, development should look to complement the heritage buildings, particularly in terms of bulk and location and should consider replicating the heritage building design in terms of the use of materials and other architectural elements.
	• Materials	• Where there is a predominant trend of building materials present within the proximity of the site, the development should, if possible look to follow this.

Streetscape

Design Indicator	Design Attributes	Guidelines
Whether the development makes a positive contribution to the public streetscape.	• Street boundary treatment	• Physical and visual separation between the public realm and private property should ensure the protection of residents' privacy.
	• Public safety	<ul style="list-style-type: none"> • The development should contribute to the safety and perceived safety of the adjacent public street. This could be achieved in the following ways: <ul style="list-style-type: none"> ▪ At least one of the indoor living spaces (lounge, kitchen, dining) should be located on the ground floor and to the front of the dwelling with windows facing the street. In accordance with CPTED-principles. This will provide opportunities for residents to overlook the street, which contributes to the perception of safety whilst also being a real deterrent for crime. ▪ Front fences, walls or hedges should be kept low in order to allow for overlooking from the indoor living spaces. In order to avoid conflict with the objective of the residents' privacy, the primary private open space should not be located between the dwelling and the public street.
	• Attractive ness for walking	<ul style="list-style-type: none"> • Development should make walking along the adjacent street more attractive in many ways, including: <ul style="list-style-type: none"> ▪ Measures aimed at promoting public safety (see above) ▪ By avoiding dominance of garage doors by recessing garages behind the main front of the dwelling. ▪ High quality design (see below).
	• Legibility (how easy it is to find your way)	• Building entrances should be placed in locations that are visible from the public street in order to connect new development with the street and avoid confusion about how dwellings are laid out relative to the public realm.

Site Layout

Design Indicator	Design Attributes	Guidelines
Whether the development is fitting with the size and proportions of the site.	• Bulk and location	<ul style="list-style-type: none"> • Buildings should be arranged on the site with consideration of: <ul style="list-style-type: none"> ▪ The minimisation of overshadowing effects; ▪ The promotion of the privacy of residents both within the site and living adjacent to it; and ▪ The promotion of the feeling of spaciousness.
	• Public vs.	• For security, privacy and legibility purposes a clear

Design Indicator	Design Attributes	Guidelines
	private	distinction should be made between what is public and what is private. This could be achieved by separating the public sides of dwellings from the private sides of dwellings as much as possible. Fronts should be turned towards fronts (or sides) across public or common spaces; backs should be turned toward other backs (or sides) and, should not about the public realm or common spaces.
	<ul style="list-style-type: none"> Private open space 	<ul style="list-style-type: none"> Each dwelling should be provided with sufficient and quality private open space. In this respect the following should be considered: <ul style="list-style-type: none"> Provision of the space – This could be in the form of a garden and/or a balcony. Quantity and dimensions – The space should be large enough and have the right proportions for it to be useable. Location relative to indoor living spaces – The primary portion of the private open space should be directly accessible from one of the main indoor living spaces (lounge, dining or kitchen), as opposed to being accessible only via a bedroom, bathroom, study etc. Quality – The private open space should be demonstrably sunny for a large proportion of the day throughout the year, it should be private, sheltered, and flat enough for it to be useable. Public open space – whether the development is well serviced by sufficient quality public open space and the degree to which this provision is considered to offset any lack of private open space provision.
	<ul style="list-style-type: none"> On-site landscaping 	<ul style="list-style-type: none"> There should be sufficient space to integrate attractive, high quality landscaping in common spaces including space to grow vegetables and fruit trees.
	<ul style="list-style-type: none"> Stormwater management 	<ul style="list-style-type: none"> There should be sufficient space to appropriately manage stormwater. Design should seek to reduce the reliance on council stormwater facilities.
	<ul style="list-style-type: none"> Car parking and access 	<ul style="list-style-type: none"> Development should be laid out with consideration of the safety and practicality of car parking and vehicle access. This includes visibility around garages and car ports. There should also be a clear distinction between resident and visitor parking if the latter is accommodated on the site.
	<ul style="list-style-type: none"> Service areas and utilities 	<ul style="list-style-type: none"> Development should be laid out with consideration of residential service areas and utilities. This includes at least the following: <ul style="list-style-type: none"> Washing lines – Residents should be able to use washing lines and other ways of drying clothes naturally. Visibility of utilities – Utilities such as air conditioning units, meter boxes, satellite dishes etc. should be designed in such a way that they do not detract from the visual appearance of the development. Visibility (i.e. avoiding visibility) from the public realm should be a particular consideration. There should be space on site to allow for the house number/name to be easily visible from the road in case of emergencies.

Design Indicator	Design Attributes	Guidelines
		<ul style="list-style-type: none"> • There should be space on site for the provision of efficient and adequate facilities for household waste and recycling storage and collection as part of the development, including methods employed (particularly if collection is proposed within the site) to: <ul style="list-style-type: none"> ▪ Manage ongoing waste and recycling, including the size, design and location of any combined storage facility and where appropriate a waste management plan or private waste management contract (depending on the scale of development); ▪ Avoid visual detracting and positively contribute to the amenity context of the site, neighbouring uses and residential street appearance, and; ▪ Minimise odour and to keep the area hygienic, free from vermin, infestations and protected from theft and vandalism

Building Form and Appearance

Design Indicator	Design Attributes	Guidelines
Whether the development is of an appropriate architectural quality and is aesthetically pleasing.	• Mass and proportions	<ul style="list-style-type: none"> • The building masses should be well-proportioned to ensure they are fitting for their context and provide a sense of spaciousness and visual interest. In the Hastings context this also means that terraced dwellings should be expressed as separate entities to generate a greater sense of ownership and 'street appeal'.
	• Diversity and repetition	<ul style="list-style-type: none"> • Development should avoid excessive repetition. Varying dwelling types should be considered, however, minor architectural variations (e.g. building form, secondary design elements, colour and materials) in development that contains the repetition of one dwelling design can present significant benefits.
	• Roofs and floors	<ul style="list-style-type: none"> • The form of roofs should be of a high quality and fitting with the rest of the dwelling and with the dwellings surrounding the site (taking into account the above design indicator). The slope and eaves of roofs should be designed with consideration of overshadowing effects on neighbouring dwellings and private open spaces. Eaves can also be used to block the high sun in summer, whilst letting in the low sun in winter. • Quality ceiling and floor insulation should be provided, without gaps, holes or tucks visible. • Traditional, wooden floors should be damp proofed;
	• Windows and doors	<ul style="list-style-type: none"> • Proportions and sizes of façade openings should add to the visual character of the building, and be logical and reflective of their function. Front doors should also provide good shelter for visitors, be well lit at night, allow for the convenient movement of furniture, and be designed with the location of mailboxes in mind. • Windows should be double glazed with thermally broken timber or PVC frames. • Provide secure locks and catches on all ground floor doors and windows;
	• Façade detailing and materials	<ul style="list-style-type: none"> • Careful consideration should be given to building materials for each development. Durable materials and simple structures should be used. The visual character and overall success of a development often relies on the care and attention for building design at a detailed level.

Design Indicator	Design Attributes	Guidelines
	<ul style="list-style-type: none"> • Energy efficiency 	<ul style="list-style-type: none"> • Options to enable renewable energy to be generated on site should be considered. E.g. photovoltaic solar panels on the roof; • All lighting should be efficient bulbs, either compact fluorescent or LEDs; • Provide a heat pump water heater or ENERGY STAR qualified solar water heating system to reduce the reliance on electricity. • Include adequate space to separate and collect recyclable materials for council collection and compost green waste.
	<ul style="list-style-type: none"> • Water efficiency 	<ul style="list-style-type: none"> • The design should allow for the easy installation of water efficient products such as: <ul style="list-style-type: none"> ▪ Dual flush toilets; ▪ Efficient shower that use less than 9 litres per minute; ▪ Water efficient kitchen and bathroom taps; ▪ Water efficient dishwasher and washing machine; ▪ Large size rain water tanks that can plumb into the house for reuse.

Internal Configuration

Design Indicator	Design Attributes	Guidelines
Whether the internal arrangement of spaces and functions in the dwellings of the development is useable, efficient and pleasant.	<ul style="list-style-type: none"> • Internal / external relationship. 	<ul style="list-style-type: none"> • There shall be a direct connection between the main private open space and one of the key indoor living spaces (e.g. living room, dining room). Also important is the connection between a possible upstairs balcony and how it relates to space indoors.
	<ul style="list-style-type: none"> • Size of rooms and spaces. 	<ul style="list-style-type: none"> • Rooms and spaces shall be: <ul style="list-style-type: none"> ▪ Of sizes and proportions that make them useable for the activity that they are intended for; ▪ Appropriately proportioned to allow for ease of movement from room to room. ▪ Provided with appropriate space to allow for sufficient storage for the likely household size.
	<ul style="list-style-type: none"> • Layout 	<ul style="list-style-type: none"> • Rooms and spaces should be intelligently laid out to ensure liveability and appropriate amenity. E.g. bathrooms should not be located adjacent to kitchens or habitable rooms.
	<ul style="list-style-type: none"> • Visual and aural privacy both within the dwelling and between neighbouring dwellings 	<ul style="list-style-type: none"> • This should include: <ul style="list-style-type: none"> ▪ Careful placement and proportioning of windows in order to avoid overlooking of neighbours' private open spaces and habitable rooms. ▪ Sufficient insulation of party walls as well as indoor walls. ▪ Locating neighbouring dwellings with similar functions abutting each other (e.g. a garage next to a garage, a kitchen next to a kitchen etc.).
	<ul style="list-style-type: none"> • Orientation / passive solar energy. 	<ul style="list-style-type: none"> • Dwellings should be laid out in such a way that key living spaces will generally receive direct sunlight. This means that where possible the living room, dining room, kitchen and possibly the main bedroom should be located to the north, west or east, while a garage, storage room, study or bathroom could be located on the southern side of the dwelling.
	<ul style="list-style-type: none"> • Natural ventilation. 	<ul style="list-style-type: none"> • Dwellings should be designed in such a way that windows in opposite or different sides of the rooms can be opened for natural cross ventilation.

Design Indicator	Design Attributes	Guidelines
	<ul style="list-style-type: none"> Views 	<ul style="list-style-type: none"> Dwellings should be designed in such a way that views that provide visual benefit (e.g. onto open space or distant landscape features) from key indoor living spaces are provided.
	<ul style="list-style-type: none"> Parking and garaging 	<ul style="list-style-type: none"> Where possible, access from the garage or other parking space to the dwelling should be direct (i.e. without the requirement to be outdoors).

Appendix 2 - Host Neighbourhood Character Assessments

Host Neighbourhood Character Assessment - Havelock North

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Village is orientated towards the village centre. Radial structure. 	8	6	8	<ul style="list-style-type: none"> Good access to the village centre is important.
<ul style="list-style-type: none"> Predominately single storey buildings. Single storey character. 	4			<ul style="list-style-type: none"> Multi-storey development should be sensitive to its context.
<ul style="list-style-type: none"> Gently sloping topography. 	6			<ul style="list-style-type: none"> Re-contouring of development sites should be limited on sloping sites.
<ul style="list-style-type: none"> Garages generally set back from street frontage. Not dominant features. 	4			<ul style="list-style-type: none"> Continue pattern of garages away from street frontage. Dwelling should be dominant building on site.
<ul style="list-style-type: none"> Wide range of architectural styles. Ad-hoc building design. No dominant style. 	8			<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Wide range of front fence styles and heights. Generally low/no front fencing on arterial roads. 	8			<ul style="list-style-type: none"> Fences on road frontages should be low or not provided.
<ul style="list-style-type: none"> Street tree planting very prominent on arterial roads. 	6			<ul style="list-style-type: none"> Street tree planting should be retained.
<ul style="list-style-type: none"> Private landscaping very prominent on local roads. 	4			<ul style="list-style-type: none"> Development on local roads should provide private landscaping.
<ul style="list-style-type: none"> No consistent building 	6			<ul style="list-style-type: none"> Development should

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
setback from the road. Generally 3m or greater. Very few buildings built to road boundary.				be setback from road frontage (at least 3m).
<ul style="list-style-type: none"> Most dwellings are stand-alone structures. No consistent distances between buildings. 	8			<ul style="list-style-type: none"> Each medium density housing development should look to provide a mix of detached, semi-detached and terraced dwellings (dependant on scale of development etc.) Avoid the creation of unusable space between buildings.
<ul style="list-style-type: none"> Where buildings are attached, they are generally perpendicular to the road. 	6			<ul style="list-style-type: none"> Building design variation (e.g. differing setbacks, bay windows, roofline variations) of attached buildings should be adopted particularly at the public street frontage.

Host Neighbourhood Character Assessment - Heretaunga Street East

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Ad-hoc building design. No distinctive style or character. 	4			<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Busy arterial road with a mix of uses. 	9	4	8	<ul style="list-style-type: none"> Maximising the potential to support intensification provided by proximity to the CBD (e.g. access to the public transport route, cycle ways, supermarkets etc.). Walkability to the commercial facilities and bus stops on Heretaunga Street East should be promoted. Redevelopment on Heretaunga Street could include a mix of uses,

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
				including commercial where the development involves existing non-residential buildings.
<ul style="list-style-type: none"> Wide road corridor. 	4			<ul style="list-style-type: none"> Formalised, strategically located pedestrian crossings should be considered.
<ul style="list-style-type: none"> Residential buildings predominantly free standing. Some commercial buildings attached. No consistent distances between buildings. 	4			<ul style="list-style-type: none"> The potential for limited terracing along Heretaunga Street East should be considered. Avoid the creation of unusable space between buildings.
<ul style="list-style-type: none"> Some commercial buildings. 	6			<ul style="list-style-type: none"> Potential for mixed use (both vertical and horizontal) development should be provided for through the redevelopment of existing non-residential buildings.
<ul style="list-style-type: none"> Garages generally set back from street frontage. Not dominant features. 	4			<ul style="list-style-type: none"> Continue pattern of garages away from street frontage. Dwelling should be dominant building on site.
<ul style="list-style-type: none"> Where residential buildings are attached, they are generally perpendicular to the road. 	2			<ul style="list-style-type: none"> Building design variation (e.g. differing setbacks, bay windows, roofline variations) of attached buildings should be adopted particularly at the public street frontage.
<ul style="list-style-type: none"> Some commercial buildings built to road boundary. 	4			<ul style="list-style-type: none"> The potential for building to road boundary should be considered.

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Fence height in Heretaunga Street East is predominately high. 	7			<ul style="list-style-type: none"> Maximise privacy of private open space at the rear of lots to allow for the reduction of fence heights.
<ul style="list-style-type: none"> A mix of 1 and 2 storey buildings. 	4			<ul style="list-style-type: none"> Multi-storey development is considered appropriate.

Host Neighbourhood Character Assessment - Streets off Heretaunga Street East

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Predominately post war buildings. 	4	4	8	<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Ad-hoc building design. No distinctive style or character. 	6			<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Quiet, less busy streets and residential in character. 	8			<ul style="list-style-type: none"> Retain residential character.
<ul style="list-style-type: none"> Grid street layout... Long, straight streets. 	7			<ul style="list-style-type: none"> Retain grid layout of public streets. Traffic calming measures should be considered. On street parking arrangement should be considered.
<ul style="list-style-type: none"> Garages generally set back from street frontage. Not dominant features. 	4			<ul style="list-style-type: none"> Continue pattern of garages away from street frontage. Dwelling should be dominant building on site.
<ul style="list-style-type: none"> Significant street tree planting. 	8			<ul style="list-style-type: none"> Street tree planting should be retained and continued.
<ul style="list-style-type: none"> Wide road corridors. 	6			<ul style="list-style-type: none"> Traffic calming measures should be considered. On street parking arrangement should be considered.
<ul style="list-style-type: none"> Predominantly free 	4			<ul style="list-style-type: none"> The extent of attached

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
standing buildings. No consistent distances between buildings.				dwellings should be limited. <ul style="list-style-type: none"> Avoid the creation of unusable space between buildings.
<ul style="list-style-type: none"> Where buildings are attached, they are generally perpendicular to the road. 	4			<ul style="list-style-type: none"> Building design variation (e.g. differing setbacks, bay windows, roofline variations) of attached buildings should be adopted particularly at the public street frontage.
<ul style="list-style-type: none"> No consistent building setback from the road. Generally 3m or greater. Very few buildings built to road boundary. 	4			<ul style="list-style-type: none"> Development should be setback from road frontage (at least 3m).
<ul style="list-style-type: none"> No distinct pattern of fencing style or height. 	2			<ul style="list-style-type: none"> Maximise privacy of private open space at the rear of lots to allow for the reduction of fence heights.
<ul style="list-style-type: none"> A mix of 1 and 2 storey buildings. 	2			<ul style="list-style-type: none"> Multi-storey development should be sensitive to its context.

Host Neighbourhood Character Assessment – Parkvale

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Predominately post war buildings. 	4			<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Ad-hoc building design. No distinctive style or character. 	6	4	8	<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Long, straight streets. 	4			<ul style="list-style-type: none"> Traffic calming measures should be considered. On street parking arrangement should

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
				be considered.
<ul style="list-style-type: none"> 2 dominant, busy roads (Grove Road and Windsor Avenue). Act as a barrier between residential areas and the park. 	8			<ul style="list-style-type: none"> Traffic calming measures should be considered. Formalised, strategically located pedestrian crossings should be considered.
<ul style="list-style-type: none"> Garages generally set back from street frontage. Not dominant features. 	4			<ul style="list-style-type: none"> Continue pattern of garages away from street frontage. Dwelling should be dominant building on site.
<ul style="list-style-type: none"> Little public planting on residential sides of the main roads. 	6			<ul style="list-style-type: none"> Consider the development of a footpath running parallel with main roads on park side. Increase public planting on residential side of the main roads. Encourage private planting on residential side of the roads.
<ul style="list-style-type: none"> Significant trees around the park. 	8			<ul style="list-style-type: none"> Planting should be retained and continued. Consider the development of a footpath running parallel with main roads on park side.
<ul style="list-style-type: none"> Wide road corridors. 	4			<ul style="list-style-type: none"> Traffic calming measures should be considered. On street parking arrangement should be considered.
<ul style="list-style-type: none"> Predominantly free standing buildings. No consistent distances between buildings. 	2			<ul style="list-style-type: none"> The extent of attached dwellings should be limited. Avoid the creation of unusable space between buildings.
<ul style="list-style-type: none"> Where buildings are 	2			<ul style="list-style-type: none"> Building design

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
attached, they are generally perpendicular to the road.				variation (e.g. differing setbacks, bay windows, roofline variations) of attached buildings should be adopted particularly at the public street frontage.
<ul style="list-style-type: none"> No consistent building setback from the road. Generally 3m or greater. Very few buildings built to road boundary. 	4			<ul style="list-style-type: none"> Development should be setback from road frontage (at least 3m).
<ul style="list-style-type: none"> No distinct pattern of fencing style or height. 	2			<ul style="list-style-type: none"> Maximise privacy of private open space at the rear of lots to allow for the reduction of fence heights.
<ul style="list-style-type: none"> A mix of 1 and 2 storey buildings. 	2			<ul style="list-style-type: none"> Multi-storey development should be sensitive to its context.
<ul style="list-style-type: none"> Focussed around Windsor Park, however the park has very few public facilities. 	6			<ul style="list-style-type: none"> Capitalise views into Windsor Park. Consider the provision of additional public facilities within Windsor Park.

Host Neighbourhood Character Assessment – Mahora

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Predominately post war buildings. 	2			<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Ad-hoc building design. No distinctive style or character. 	6	5	8	<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Long, straight streets. 	4			<ul style="list-style-type: none"> Traffic calming measures should be considered. On street parking arrangement should

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
				be considered.
<ul style="list-style-type: none"> • Tomoana Road is a barrier to access to Cornwall Park 	2			<ul style="list-style-type: none"> • Consider provision of additional strategically located formal crossings of Tomoana Road.
<ul style="list-style-type: none"> • Garages generally set back from street frontage. Not dominant features. 	4			<ul style="list-style-type: none"> • Continue pattern of garages away from street frontage. Dwelling should be dominant building on site.
<ul style="list-style-type: none"> • Little public planting on residential sides of the roads on the park edges. 	4			<ul style="list-style-type: none"> • Continue with minimal public planting on the residential sides of the roads on the park edges. • Where there are building setbacks, ensure a proportion of the setback is landscaped.
<ul style="list-style-type: none"> • Limited public planting in streets away from Cornwall Park. 	4			<ul style="list-style-type: none"> • Consider the addition of further street tree planting on roads away from Park edge.
<ul style="list-style-type: none"> • Significant public planting on park side of the roads on the park edge. 	8			<ul style="list-style-type: none"> • Planting should be retained and continued.
<ul style="list-style-type: none"> • Wide road corridors. 	4			<ul style="list-style-type: none"> • Traffic calming measures should be considered. • On street parking arrangement should be considered.
<ul style="list-style-type: none"> • Predominantly free standing buildings. No consistent distances between buildings. 	2			<ul style="list-style-type: none"> • The extent of attached dwellings should be limited. • Avoid the creation of unusable space between buildings.
<ul style="list-style-type: none"> • Where buildings are attached, they are generally perpendicular to the 	2			<ul style="list-style-type: none"> • Building design variation (e.g. differing setbacks, bay windows, roofline

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
road.				variations) of attached buildings should be adopted particularly at the public street frontage.
<ul style="list-style-type: none"> No consistent building setback from the road. Generally 3m or greater. Very few buildings built to road boundary. 	4			<ul style="list-style-type: none"> Dwellings should be setback from road frontage at least 3m. Where dwellings face the park, building setbacks of 0m – 3m should be considered where it can be undertaken in an appropriate manner.
<ul style="list-style-type: none"> No distinct pattern of fencing style or height. 	2			<ul style="list-style-type: none"> Maximise privacy of private open space at the rear of lots to allow for the reduction of fence heights.
<ul style="list-style-type: none"> Dwellings facing Cornwall Park generally have low or no front fencing. 	6			<ul style="list-style-type: none"> Continue this theme to utilise visual amenity of Cornwall Park.
<ul style="list-style-type: none"> A mix of 1 and 2 storey buildings. 	2			<ul style="list-style-type: none"> Multi-storey development should be sensitive to its context.
<ul style="list-style-type: none"> Strong focus on Cornwall Park 	8			<ul style="list-style-type: none"> Capitalise views into Cornwall Park.
<ul style="list-style-type: none"> Trees within the Park are visible several blocks away from the Park. 	5			<ul style="list-style-type: none"> Utilise visual amenity of Cornwall Park. Consider benefits of multi storey units to take advantage of visual amenity provided by the Park.
<ul style="list-style-type: none"> Significant employment source within the local area. 	4			<ul style="list-style-type: none"> Consider who would benefit from proximity to employment sources. Manage the interface with employment uses.

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Some commercial services within the local area. 	4			<ul style="list-style-type: none"> Consider who would benefit from proximity to commercial services. Manage the interface with commercial uses. Consider potential of vertical mixed uses.

Host Neighbourhood Character Assessment – Raureka

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
<ul style="list-style-type: none"> Predominately post war buildings. 	2	3	8	<ul style="list-style-type: none"> Repetitive building design should be avoided.
<ul style="list-style-type: none"> Ad-hoc building design. No distinctive style or character. 	6			<ul style="list-style-type: none"> Repetitive building design should be avoided. Building design variation (e.g. differing setbacks, bay windows, roofline variations) of attached buildings should be adopted particularly at the public street frontage.
<ul style="list-style-type: none"> Gordon Road is the focus of the area. 	4			<ul style="list-style-type: none"> Traffic calming measures should be considered. On street parking arrangement should be considered.
<ul style="list-style-type: none"> Garages generally set back from street frontage. Not dominant features. 	4			<ul style="list-style-type: none"> Continue pattern of garages away from street frontage. Dwelling should be dominant building on site.
<ul style="list-style-type: none"> Little public planting. 	4			<ul style="list-style-type: none"> Consider additional public planting. Where there are building setbacks, ensure a proportion of the setback is landscaped.
<ul style="list-style-type: none"> Significant private 				<ul style="list-style-type: none"> Encourage private

Character Principles	Character Principle Value	Overall Character Value	Assimilative Capabilities	Recommendations
planting.				planting.
<ul style="list-style-type: none"> Predominantly free standing buildings. No consistent distances between buildings. 	2			<ul style="list-style-type: none"> The extent of attached dwellings should be limited. Avoid the creation of unusable space between buildings.
<ul style="list-style-type: none"> No consistent building setback from the road. Generally 3m or greater. Very few buildings built to road boundary. 	4			<ul style="list-style-type: none"> Dwellings should be setback from road frontage at least 3m. Where dwellings face Gordon Road, building setbacks of 0m – 3m should be considered where it can be undertaken in an appropriate manner.
<ul style="list-style-type: none"> No distinct pattern of fencing style or height. 	2			<ul style="list-style-type: none"> Maximise privacy of private open space at the rear of lots to allow for the reduction of fence heights.
<ul style="list-style-type: none"> Predominately single storey buildings. 	2			<ul style="list-style-type: none"> Multi-storey development should be sensitive to its context.
<ul style="list-style-type: none"> Some commercial services within the local area. 	4			<ul style="list-style-type: none"> Consider who would benefit from proximity to commercial services. Manage the interface with commercial uses. Consider potential of vertical mixed uses.
<ul style="list-style-type: none"> Some community facilities within the local area. 	4			<ul style="list-style-type: none"> Consider who would benefit from proximity to community services. Manage the interface with community uses.

Appendix 3 Proposed District Plan Activity Statuses

Land Use Activities

	Comprehensive Residential Development (CRD) –	Infill Development (one additional dwelling or 2 new dwellings)	Brownfields Development (e.g. Angus Inn Site, existing motel sites in Pakowhai Rd etc.)
Hastings City Living Zone	Controlled	Non-complying	n/a – no identified sites
Hastings General Residential Zone (HGRZ)	Discretionary	Permitted subject to standards incl. density	Specific brownfields sites are identified in Appendix 27 and 27a of the Hastings Proposed District Plan. CRD in these areas is a Restricted Discretionary Activity
HGRZ identified for CRD (refer Proposed District Plan Appendix 27 above)	Restricted Discretionary (non-notified)	Permitted subject to standards incl. density	
Hastings Character Residential Zone (HCRZ)	Non-complying	Permitted subject to standards incl. density	
HCRZ identified for CRD (refer Proposed District Plan Appendix 28 above)	Restricted Discretionary	Permitted subject to standards incl. density	
Havelock North General Residential Zone (HNGRZ)	Discretionary	Permitted subject to standards incl. density	
HNGRZ identified for CRD (Refer Proposed District Plan Appendix 29 above)	Restricted Discretionary (non-notified)	Permitted subject to standards incl. density	
Havelock North Character Residential Zone	Non-complying	Controlled subject to standards incl. density	
Havelock North Character Residential Toop St Overlay	Non-complying	Restricted Discretionary (non-notified)	

Appendix 4 Open Space Improvements

Open Space Provision in Residential Intensification Areas – Costs to meet shortfall

Intensification Area	Increase No. Households (2015-2045)	Additional playground pieces required (LoS= 1/186 households)	Total contribution for play piece (\$15,000)	Total contribution/ household
Raureka	66	0.35 pieces	\$5,250	\$78.
Parkvale	145	0.78 pieces	\$11,700	\$79.
Heretaunga Street E	516	2.77 pieces	\$41,550	\$79.
Mahora	370	2 pieces	\$30,000	\$79.
Havelock North	98	0.53 pieces	\$7,950	\$79.
TOTAL	1195	6.42 pieces	\$96,300	\$79

Appendix 5 – Transportation Upgrades

Walking
Cycling
Operational
Public Transport

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
Havelock North	Te Mata Road/Karane ma Drive	Footpath link from Duart Road to Karanema Drive is disjointed.	\$10,000	None	No opportunity to include in FWP. Needs to be progressed as stand-alone project.	2020	10% \$1,000
	Te Mata Road (nr Chambers Street)	Absence of pedestrian crossing opportunity on Te Mata Road.	\$20,000	None	Nature of FWP does not enable this work to be included without additional cost. Needs to be progressed as stand-alone project.	2015	10% \$2,000
	Te Mata Road / Napier Road	Potential operational issues at this road in future years.	\$100,000	Issue identified within Havelock North Plan Change assessments.	Stand-alone project required to widen	2025	5% \$5,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
				The MDHS development is expected to contribute to this issue only marginally but nonetheless, operational enhancements will be required at some point.	roundabout and facilitate numerous approach lanes. Further monitoring, assessment and design is required prior to implementing any scheme here.		
	Campbell Street	No footpaths provided along the northern side of Campbell Street and limited parking opportunity.	\$25,000	None	It is recommended that this is included in rehab works to enable comprehensive redesign of full road width at this time.	2018	100% \$25,000
	Middle Road	No footpath on the north-western side of Middle Road.	\$15,000	None.	Given current demands due to surgery on Middle Road, this should be progressed prior	2013	\$0

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
					to rehab works and implemented at earliest opportunity.		
		No cycle provision on this collector route.	\$30,000	i-Way programme could address this requirement should sufficient funds exist to address the issues identified.	Should be progressed as stand-alone project prior to rehab works and through i-Way project.	2013	\$0
	Middle Road/Porter Drive	No crossing provision on Middle Road at intersection.	\$10,000	None	It is recommended that this is included in rehab works to enable comprehensive redesign of full road width at this time.	2018	50% \$5,000
	Te Aute Road	Absence of crossing opportunities to and from recreational land.	\$20,000	None	Opportunity to include in reseal works but some costs will still be incurred for build-	2015	80% \$16,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
					out or island provision.		
		No cycle provision on this collector route.	\$30,000	i-Way programme could address this requirement should sufficient funds exist within project.	It is recommended that this is either implemented through i-Way programme or combined with reseal project to minimise construction costs.	2015	\$0
	Te Aute Road / Porter Drive	Potential operational issues at intersection in future years	\$100,000	Issue identified within Havelock North Plan Change assessments and as such any development contributions could be combined for both developments to aid implementation of required works.	This should progress as a stand-alone project. However, prior to implementation, further investigation, assessment and design is required to determine suitable	2020	10% \$10,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
	Havelock Road (urban)				treatment.		
		No crossing opportunity at Karanema Drive intersection	\$10,000	None	Include in rehab works to minimise costs and construction impact.	2018	80% - \$8,000
		Provide bus shelters.	\$20,000	None	Suggested that this is progressed as stand-alone project.	2020	50% - \$10,000
		Absence of cycle network severs links to southwest area of Havelock North.	\$15,000	i-Way programme could address this requirement should sufficient funds exist.	Suggested to include in rehab works to minimise costs. This will enable all conflicts to be fully assessed prior to works being implemented.	2018	\$0
		Road width, private access and parking results in increased conflict on this road section. Some redesign is required to manage and	\$600,000	Havelock Road Corridor Management Plan.	It is recommended that this is addressed	2018	5% - \$30,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
		minimise these conflicts accordingly.			through the 2018-19 rehab works. This will minimise costs associated to the works and will enable future requirements from the CMP to be fully considered.		
	Karanema Drive	No footpath exists on the southern side of the road between Havelock Road and Donelly Street	\$120,000	None	Suggested this is progressed as low priority. No opportunity to include in current FWP. Needs to progress as stand-alone project. Anticipated to be expensive due to existing trees requiring removal or kerb/channel relocation.	2025	10% \$12,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
	Porter Drive	Absence of cycle network severs links to southwest area of Havelock North.	\$35,000	i-Way programme could address this requirement should sufficient funds exist to address the issues identified.	Opportunity to include road markings in FWP with some additional works to facilitate off-road access at roundabouts etc.	2016	\$0
Heretaunga Street East	Heretaunga Street East	Provide bus shelter for westbound traffic.	\$10,000	None	Should progress as stand-alone project.	2020	50% \$5,000
	Heretaunga Street East / Norton Road	Lack of pedestrian footpath and crossing facility.	\$50,000	CMP will provide suitable footpath provision. Crossing locations are not shown on CMP scheme options and should be included in detail design.	Include requirements in detail design works for stage 2 and 3 of CMP or alternatively progress scheme as stand-alone project.	2015	15% \$7,500
	Heretaunga Street East / Windsor Avenue	Traffic movement restrictions will reduce accessibility of development sites and result in additional travel time on the network for some movements.	\$300,000	CMP will address this through provision of kidney shaped roundabout.	Should be implemented through Havelock Road CMP.	2030	30% \$90,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
	Heretaunga Street East / Sylvan Road	Operational issues expected in future years.	\$50,000	CMP proposes minor changes.	Future monitoring is required and measures adopted through CMP may need to be amended to ensure suitable operation is maintained. It is suggested that a roundabout here may not be an appropriate solution long term and an alternative to provide a roundabout at Riverslea Road should be considered.	2030	30% \$15,000
		Insufficient pedestrian crossing facilities.	\$20,000	No details contained within CMP relating to pedestrian connections.	Ensure adequate pedestrian linkages are provided within CMP designs. Works may need	2015	50% \$10,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
					to progress as stand-alone project.		
	Heretaunga Street East between Sylvan Road and Willowpark Road	No pedestrian crossing provision.	\$40,000	No details contained within CMP relating to pedestrian connections.	Ensure adequate pedestrian linkages are provided within CMP designs. Works may need to progress as stand-alone project.	2015	50% \$20,000
	Heretaunga Street East / Willowpark Road	Unsuitable pedestrian facilities.	\$20,000	No details contained within CMP relating to pedestrian connections.	Ensure adequate pedestrian linkages are provided within CMP designs. Works may need to progress as stand-alone project.	2015	25% \$5,000
	Heretaunga Street / Riverslea Road	Operational issues are expected in future years.	\$250,000	CMP proposes to remove right turn facilities at intersection	Future monitoring is required to ensure CMP designs address	2030	30% \$75,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
	Riverslea Road South				operational issues. In addition, the design will need to consider how cycle connectivity can be maintained north-south. It is suggested that a roundabout provision may be appropriate at this location.		
		Insufficient pedestrian crossing facilities.	\$5,000	No details contained within CMP relating to pedestrian connections.	Ensure adequate pedestrian linkages are provided within CMP designs. Works may need to progress as stand-alone project.	2015	15% \$750
		No cycle provision on this collector route.	\$30,000	i-Way programme could address this requirement should	Opportunity to include road markings in FWP	2013	\$0

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
				sufficient funds exist to address the issues identified.	with some additional works to facilitate off-road access at roundabouts etc.		
	Riverslea Road North	No cycle provision on this collector route.	\$10,000	i-Way programme could address this requirement should sufficient funds exist to address the issues identified.	Opportunity to include road markings in FWP with some additional works to facilitate off-road access at roundabouts etc.	2013	\$0
	Willowpark Road North	No cycle provision on this collector route.	\$10,000	i-Way programme could address this requirement should sufficient funds exist to address the issues identified.	Opportunity to include road markings in FWP with some additional works to facilitate off-road access at roundabouts etc.	2020	\$0
	Willowpark Road South	No cycle provision on this collector route.	\$10,000	i-Way programme could address this requirement should sufficient funds exist to	Opportunity to include road markings in FWP with some	2020	\$0

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
				address the issues identified.	additional works to facilitate off-road access at roundabouts etc.		
Parkvale	Grove Road	Lack of pedestrian crossing opportunities.	\$40,000	None	Should be progressed as stand-alone project.	2015	10% \$4,000
	Sylvan Road	Lack of pedestrian crossing opportunities.	\$20,000	None	Should be progressed as stand-alone project.	2025	10% \$2,000
	Windsor Avenue	Lack of pedestrian crossing opportunities near Haig Street.	\$20,000	None	Should be progressed as stand-alone project.	2035	10% \$2,000
		No public transport route exists here presently.	\$?	None	Consider extending public transport network to cover this road.	2020	\$0

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
	Terrace Road	Although sufficient for development, the layout could be improved significantly to integrate better with Windsor Park.	\$400,000	None	Should be addressed through AWPT works to minimise costs.	2016	\$0
	Windsor Avenue/St Aubyn Street	Potential operational issues at intersection in future years.	\$250,000	St Aubyn Street Corridor Management Plan will consider operation of this intersection and confirm suitable improvements.	This should be considered through proposed St Aubyn Street CMP and addressed accordingly.	2030	10% \$25,000
	Grove Road/Karamu Road	Some operational issues expected in future years.	\$150,000	Karamu Road Corridor Management Plan will consider operation of this intersection and confirm suitable improvements.	This should be considered through proposed Karamu Road CMP and addressed accordingly.	2030	5% \$7,500
Mahora	Frederick Street / Tomoana Road	Lack of cycle detection at intersection.	\$15,000	None	Should be addressed through reseal programme and general maintenance	2014	0%

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
					works at traffic signals.		
		Operational issues possible in future years.	\$100,000	None	Future monitoring is required to determine if phasing amendments or redesign is required.	2030	20% \$20,000
	Tomoana Road / St Aubyn Street	Lack of cycle detection at intersection.	\$15,000	St Aubyn Street CMP will consider this intersection.	Opportunity to address within future maintenance programmes for traffic signals and/or St Aubyn CMP.	2020	0%
		Operational issues possible in future years.	\$100,000	St Aubyn Street Corridor Management Plan will consider operation of this intersection and confirm suitable improvements.	Opportunity to address through St Aubyn CMP.	2030	10% \$10,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
	Frederick Street / Karamu Road	Lack of cycle detection at intersection.	\$15,000	None	Should be addressed through reseal programme and general maintenance works at traffic signals	2014	\$0
	Frederick Street / Pakowhai Road	Potential operational issues in future years.	\$150,000	Pakowhai Road Corridor Management Plan	Monitor intersection operation in future years. It is anticipated within the CMP that no improvements are required due to the proposed north-eastern alignment but monitoring is still required to ensure this is appropriate.	2025	\$0
	Tomoana Road	Provide 2no. bus shelters in vicinity of Mahora Shops.	\$20,000	None	Should be implemented as stand-alone	2020	50% \$10,000

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
					project.		
		Extend cycle link north to Williams Street.	\$10,000	None	Progress as stand-alone project in future years.	2020	25% \$2,500
	Nelson Street North	Extend cycle link north to Williams Street.	\$30,000	None	Progress as stand-alone project in future years.	2025	10% \$3,000
	Norrie Street	Pedestrian paths obstructed and road width restricts available parking options.	\$250,000	None	Likely to be stand-alone project as road requires full redesign of cross section. May be an opportunity to combine with reseal works to minimise costs. If all development fronting this road is progressed as single scheme	2025	\$25,000 Relates to road widening and footpath provision only.

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
					there may be an opportunity to achieve improvements as part of development works.		
	Rangiora Street	Road width restricts traffic movements and power poles currently obstruct pedestrian footpaths.	\$400,000	None	Combine with rehab works to minimise costs.	2017	\$0
	Mairangi Street	Road cross section does not conform with best practice design guide and lacks visual amenity aspects.	\$300,000	None	Combine with rehab works to minimise costs.	2017	\$0
	Roberts Street	Road cross section does not conform to best practice design guide and footpaths obstructed along length.	\$500,000	None	Low priority given acceptable widths of current road but should be considered with any future rehab works here.	None	\$0
	Kitchener Street	Road cross section does not conform to best practice design guide and footpaths obstructed along length.	\$250,000	None	Low priority given acceptable widths of current	None	\$0

Development Site	Location	Deficiency	Total cost to address deficiency	Other HDC Strategies which could be used to address deficiency	Proposed implementation method	Earliest Expected Date	MDHS Share
					road but should be considered with any future rehab works here.		
	Fitzroy Avenue	Road cross section does not conform to best practice design guide but is sufficient to accommodate development demands.	\$500,000	N/A	Low priority given acceptable widths of current road but should be considered with any future rehab works here.	None	\$0
	Gordon Road	Provide bus shelter in vicinity of shops on Gordon Road.	\$10,000	None	Should be implemented as stand-alone project.	2020	10% \$1,000
Raureka	Cornwall Road	Road cross section does not conform to best practice design guide and footpaths obstructed along length.	\$400,000	N/A	Low priority given acceptable widths of current road but should be considered with any future rehab works here.	None	\$0

Appendix 6 Water Infrastructure Upgrades

Medium Density Upgrades Required – Sewer Infrastructure

Area	Issue Resulting from Medium Density Development	Estimated		
		Year Required	Total Cost	Estimate
Havelock North	100m of 150mm concrete pipe needs to be upsized with 200mm diameter pipe and upstream manhole re-launched.	2018	\$80,000	\$22,000

Note: The total and marginal cost estimates in the above table do not allow for the cost to write off the remaining asset value to renew the asset prior to the end of its useful life.

Medium Density Upgrades Required – Stormwater Infrastructure

Area	Issue Resulting from Medium Density Development	Estimated		
		Year Required	Total Cost	Marginal Cost
Heretaunga Street East	Willowpark Road requires pipe upsize to 600mm or duplication with 450mm	2015	\$105,000	\$25,000
	172m of 450mm pipe requires upsize to 525mm or duplication with 300mm on Heretaunga Street West	2019	\$115,000	\$115,000
	300m of 525mm pipe requires upsize to 600mm or duplication with 375mm on Heretaunga Street West	2016	\$225,000	\$225,000
Mahora	Fredrick Street East requires pipe upsize to 525mm or duplication with 300mm	2025	\$80,000	\$25,000
	Frederick Street East requires pipe upsize to 600mm or duplication with 375mm	2025	\$118,000	\$32,000
	Further investigate need to install stormwater infrastructure in Burnett Street if overland conveyance is unacceptable. Cost estimate based on extension of 300mm pipe and sumps.	2025	\$90,000	\$90,000
Havelock North	If medium density development discharges to the existing 600mm pipe no further upgrade will be required. If this is not possible, duplication with a 375mm will be required.	2015	\$225,000	\$52,000

	Required upsize should have available capacity to allow for development. Contribution of flow from proposed medium density area equates to approximately 8%	2015	\$380,000	\$30,000
	63m of 225mm pipe requires upgrading to 300mm on Te Mata Road	2015	\$46,000	\$46,000
	Duplication of existing 525mm (112m) with a 375mm pipe.	2015	\$500,000	\$80,000
	Minimal – existing capacity issue	2015	\$140,000	Nil
Parkvale	67m of 375mm pipe requires upgrading to 450mm on Windsor Ave	2028	\$61,000	\$61,000
	Need to extend stormwater infrastructure in Grove Road from Sussex Ave. Cost estimate based on 300mm pipe and sumps.	2020	\$114,000	\$66,000
	Need to extend stormwater infrastructure in Grove Road from Jellicoe Street. Cost estimate based on 300mm pipe and sumps.	2020	\$144,000	\$79,000
	73m of 450mm pipe requires upgrading on Sylvan Road or provide an overland flow path with appropriate inlet and outlets within the park. Cost estimate based on duplication with 300mm diameter.	2026	\$43,000	\$43,000
	Total		\$2,386,000	\$969,000
	Total 2015-2020		\$1,994,000	\$865,000
	Total end of 2015-2025 LTP		\$288,000	\$147,000
	Beyond 2025		\$104,000	\$104,000