

Drury East Plan Change

Landscape and Visual Effects Assessment Prepared for Fulton Hogan Land Development Ltd 31 March 2020



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CONTENTS

1.0	Introduction	1
2.0	The Site and Its Landscape Setting	1
3.0	Drury – Opāheke Structure Plan	6
4.0	Drury Structure Plan, Landscape and Visual Assessment Report	9
5.0	Proposed Drury East Plan Change	14
6.0	Assessment of Landscape and Visual Effects	20
7.0	Conclusion	23

Appendices

Appendix 1: Overlays Maps

Figures

Figure 1: Exert from Woods Urban Design Report - Figure 2 – Drury East Precinct and its immediate surrounding context.	2
Figure 2: Aerial with site and immediate context	2
Figure 3: Aerial Contour Diagram.	3
Figure 4: Site Photo: Example of low ridgeline – Gossey Road (looking south)	3
Figure 5: Site Photo from Waihoehoe Road looking east towards Hunua foothills. Note area of Puriri forest in midground	4
Figure 6: Site Photo from MacWhinney Drive looking North west. Drury plan change area in the midground	5
Figure 7: Site Photo from MacWhinney Drive looking South west. Industrial area under construction	6
Figure 8: Exert from Figure 8 Drury – Opāheke Structure Plan Blue- Green Network Map. The Hingaia Stream corridor is in the centre right with the Fitzgerald Stream aligned east / west across the top of the site.	7

Figure 9: Southern portion of the Drury – Opāheke Structure Plan, noting no requirement for neighbourhood or suburb parks indicated within the area of the site
Figure 10: Exert Map 05 Opus report, Drury Structure Plan, Landscape and Visual Assessment
Figure 11: Exert from Map 02, Topographical Map, Opus report, Drury Structure Plan, Landscape and Visual Assessment
Figure 12: Exert from Woods Urban Design Report - Figure 5 – Proposed zoning from various Drury Developers15
Figure 13: Drury East Plan Change Zoning Plan16
Figure 14: Drury East Plan Change Precinct Plan 1 Road Network17
Figure 15: Proposed plan change / Road alignment overlay on aerial image. Alignment of road will reinforce views to Hunua Ranges when travelling18
Figure 16: Exert from Woods Urban Design Report - Figure 6 – Existing natural features18
Figure 17: Exert from Woods Urban Design Report – Indicative Structure Plan20

1.0 Introduction

Boffa Miskell has been requested by Barker & Associates and Fulton Hogan Land Development ('FHLD') Ltd to undertake a Landscape and Visual Effects Assessment for the proposed Drury East Plan Change. This plan change is being brought privately by Fulton Hogan Land Development in respect of a 184 ha landholding at Fitzgerald Road, Drury Hills Road and Waihoehoe Road south of the existing Drury settlement (the Site).

The land is currently zoned 'Future Urban' and is subject to Auckland Council's Drury – Opāheke Structure Plan.

This assessment:

- Briefly describes the site and its landscape setting, recognising that a number of other documents supporting the plan change set out comprehensive descriptions of both;
- Places the proposed plan change in the context of the Council's Drury Opāheke Structure Plan, and in particular the supporting landscape report prepared for the structure plan;
- Describes the nature of the plan change and the ways in which landscape attributes and visual amenity are provided for;
- Sets out an assessment of landscape and visual effects in respect of the plan change.

FHLD have engaged Woods & Partners Consultants Ltd (Woods) to provide urban design input to the precinct provisions and undertake an Urban Design report that provides analysis of the existing environment which has set the underlying precinct structure and design principles.

This analysis has informed the plan change but is not fully representative of the provisions of the plan change request, this assessment, whilst referring to precinct provisions and Urban Design Report, provides an assessment in respect of the plan change provisions including the relevant zones and location specific precinct plan provisions.

The site sits within a larger area of Future Urban zoned land in the south of Auckland which, along with Takanini and Pukekohe – Paerata, is planned to accommodate the majority of Auckland's southern growth. In addition to the Fulton Hogan Land Development Limited private plan change two further contiguous plan changes are proposed adjoining to the north – 'the Oyster site' and the 'Kiwi Property Group Limited Site'. This assessment addresses only the Fulton Hogan Land Development - Drury East Plan Change.

2.0 The Site and Its Landscape Setting

The site comprises some 184 ha and is located within Drury East, on the southern edge of the Auckland metropolitan area. The wider surrounding context includes the Hunua foothills to the east, the Drury South Business area to the south, State Highway 1 to the west and Papakura urban area to the north.

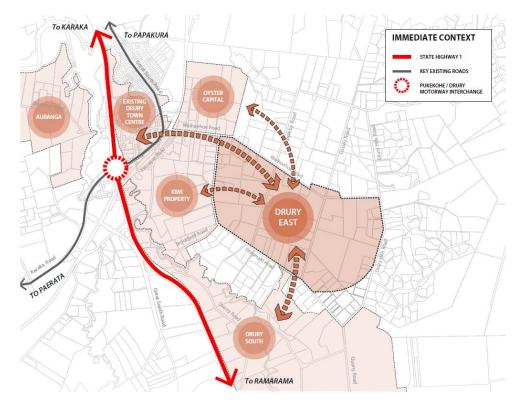


Figure 1: Exert from Woods Urban Design Report - Figure 2 – Drury East Precinct and its immediate surrounding context.

The proposed plan change area is defined by Waihoehoe Road to the north, Fitzgerald Road to the south, Drury Hills Road to the east and the Mill Road alignment¹ to the south-east as illustrated in Figure 2 below.



Figure 2: Aerial with site and immediate context

¹ The Mill Road alignment as shown in Council's Drury – Opāheke Structure Plan August (2019) and the NZTA South Indicative Strategic Transport Network (2019).

The overall topography of the site is gently undulating to flat with several low ridgelines and knolls. The topography of the land is steeper towards the stream edges, with a gradient steeper than 1:5. Very broadly speaking the land lies at around RL25 but features a number of small knolls and a low east west ridgeline at an approximate height of RL35 (Refer Figure 4 below). The base of the Hunua foothills to the east of the site sits at approximately RL 80 to 100 and rises up significantly to a high point of RL 329, forming the predominate ridgeline in the area. Refer Figures 3 and 5 below.



Figure 3: Aerial Contour Diagram.



Figure 4: Site Photo: Example of low ridgeline – Gossey Road (looking south).

There are three unnamed tributaries of the Hingaia Stream that traverse the site and drain into the Manukau Harbour via Otuwairoa (Slippery Creek). It is understood these habitats are severely degraded².

The site is generally comprised of rural residential lifestyle blocks, within larger blocks of horticulture and pastoral farming. The site landcover comprises exotic pasture, arable crops with a range of exotic trees and shrubs for shelter and amenity for residential. The only example of indigenous vegetation is a small area of forest located near the corner of Waihoehoe Road and Drury Hills Road. This consists of mature Pūriri (approximately 0.43 ha) with several isolated single trees spread over approximately 2 ha of the land in the north-east corner of the site. Refer Figure 5 below



Figure 5: Site Photo from Waihoehoe Road looking east towards Hunua foothills. Note area of Puriri forest in midground.

In a wider context the Hunua foothills define the landscape to the east providing a well-defined landscape and visual backdrop to the generally lower lying land of the surrounding Drury area including the site. The hills defining the skyline to the Drury area rise to a high point of 329m, being the peak called Opāheke, and extend south to the Bombay Hills.

Roads surrounding the site are orientated, when driving toward the east with clear views of the Hunua ranges as a backdrop. Further views of the ranges are available within the site when not screened by intervening topography, built form and existing vegetation. At highpoints within the site distant views can be obtained towards the Bombay hills.

To the east of the site the Hunua foothills are extensively developed for rural residential / lifestyle living³. Macwhinney Drive provides access to this area and has a number of rural

² Refer Appendix 9 Ecological Assessment 'The Ecology Company'

³ Zoned Countryside Living under the AUP(OP).

residential properties on the foothills of the ranges with elevated views out west / northwest across the site and Drury area. Refer Figure 6 below.

There are also two rock aggregate quarries, the Winstone Quarry in the north, accessed from Hunua Road, and the former Stevenson Quarry in the south, accessed via Quarry Road.



Figure 6: Site Photo from MacWhinney Drive looking North west. Drury plan change area in the midground.

Land to the immediate west of the former Stevenson Quarry on the flats between the toe of the foothills and SH1 has been subject to earlier plan changes (to the then Franklin and Papakura District Plans) to zone the land for both heavy and light industrial purposes. Earthworks, flood and stormwater management and riparian enhancement works long the Hingaia and Maketu Streams is underway associated with this development. Refer Figure 7 below. Part of this land to the southwest on the west side of the Hingaia Stream adjacent to SH1 has also been consented as a Special Housing Area with earthworks and roading access underway. This area is serviced by both the Ramarama and Drury SH1 off / on ramps.



Figure 7: Site Photo from MacWhinney Drive looking South west. Industrial area under construction.

In the northwest the Manukau Harbour extends up Drury Creek with the Hingaia and Fitzgerald Streams providing tributaries to this upper arm of the harbour. Drury Creek feeds into the Pahurehure Inlet north of the Hingaia Peninsula which is rapidly urbanising including the Karaka Harbourside and Karaka Lakes residential areas.

The Papakura metropolitan centre lies some 5km to the north and Pukekohe 10km to the southwest. There are extensive areas of land use change associated with greenfield urban development in the wider context of the site much of which is apparent from SH1 and SH22, which accesses Pukekohe.

3.0 Drury – Opāheke Structure Plan

Auckland Council has consulted widely in respect of the city's planned southern growth and associated structure plans. The Drury – Opāheke Structure Plan was released in August 2019. The stated vision for Drury – Opāheke is:

"Drury - Opāheke is a sustainable, liveable, compact, and accessible place with successful centres and residential options close to a variety of employment opportunities. It is well connected to the wider Auckland region through the rail and road networks. Cultural and heritage values are respected."

Six key outcomes are identified the sixth of which is:

"6. The natural environment

- a. Management of the natural environment in a way that respects and is guided by Māori tikanga.
- b. Freshwater quality within the catchment is improved.
- c. The quality of the marine receiving environment is maintained or improved.
- d. The freshwater management functions of riparian margins are improved.
- e. Protect and improve biodiversity."

Under the "Quality- built environment" key outcome there are two further outcomes that relate broadly to landscape being:

- *"c.* Integrated open space and parks in urban residential areas, linked by transport networks (roads, cycleways and footpaths). And
- e. Drury Opāheke is a place that respects and celebrates its relationship with mana whenua and protects its historic heritage and character."

Landscape per se does not feature strongly in the vision and / or key outcomes for the Drury – Opāheke Structure Plan with section 3.7, the Blue-green network, providing the greatest specific direction. The 'blue' aspects relate to the streams, rivers, floodplains and coastal environments and the 'green' to areas of indigenous biodiversity and ecological significance as well as the parks and reserves. Figure 8 of the structure plan maps permanent and intermittent streams with a 20m riparian margin, the exert, Figure 8 below, shows the portion of the Structure Plan's Figure 8 incorporating the site.

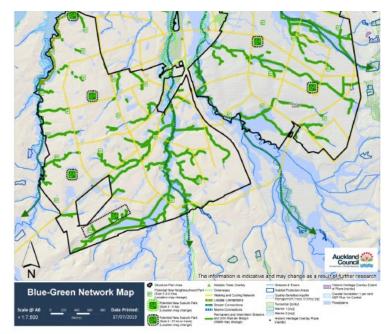


Figure 8: Exert from Figure 8 Drury – Opāheke Structure Plan Blue-Green Network Map. The Hingaia Stream corridor is in the centre right with the Fitzgerald Stream aligned east / west across the top of the site.

Whilst the structure plan identifies streams it is noted that these are indicative with the final extent of permanent and intermittent streams to be determined at the resource consent stage. The Structure Plan outlines aspirations for a 20m riparian restoration margin along permanent and intermittent streams again noting that this will require more detailed investigation at the plan change stage and may differ from 20m.

It is an aspiration that local paths, providing walking, cycling and ecological connectivity will follow esplanade reserves linking areas of housing and employment, open spaces, town centres, recreational facilities, places of interest and transport hubs.

There are no outstanding natural landscapes or features (ONL or ONF), significant indigenous vegetation areas (SEA) or notable trees identified within the site area, refer Appendix 1 for relevant AUP OP overlay maps.

In terms of public open space aspirations, the need for open space provision is set out at 3.8 and 4.2.7 of the Structure Plan. It is recognised that in areas of higher residential density there is greater need for well-integrated open space / parks. The types of open space identified include; coastal esplanade reserves; stream esplanade reserves; neighbourhood parks (0.3 to 0.5ha within walking distance of all residential areas); suburban parks and sports parks (3 to 5ha including sports parks up to 10ha) and civic parks (small parks associated with town centres).

The Structure Plan (Figure 1 in the Structure Plan) indicatively locates neighbourhood and suburban parks, the exert below includes the area of the site, which identifies the potential for two new suburb parks within the Plan Change area. The size and location of these open spaces would be determined through future resource consent processes in consultation with the Council's Parks Department.

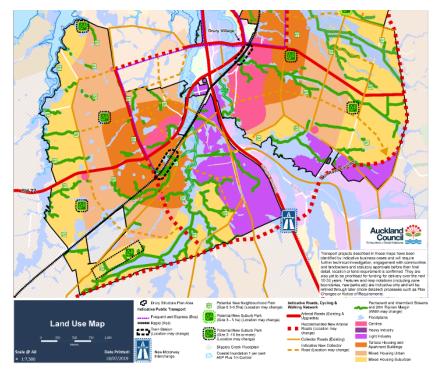


Figure 9: Southern portion of the Drury – Opāheke Structure Plan, noting no requirement for neighbourhood or suburb parks indicated within the area of the site.

4.0 Drury Structure Plan, Landscape and Visual Assessment Report

Opus International Consultants Ltd (Opus) prepared a Landscape and Visual Assessment report for Auckland Council (final dated 04 August 2017) in respect of the Council's Drury – Opāheke Structure Plan (August 2019). The Opus report provided landscape input to the Drury - Opāheke Structure Plan (Structure Plan) and set out an assessment of landscape and visual effects in respect of the associated change from rural to urban landuses.

This report acknowledges that the locality has been identified as suitable for urbanisation over the next 30 years and seeks to identify "ways in which the landscape can positively contribute to the area's future urbanisation"⁴. The main purpose is to recommend landscape areas and features to be protected, opportunities to enhance landscape character and visual amenity and opportunities for new landscape interventions to help shape a quality urban environment.

The key outcomes sought are to⁵:

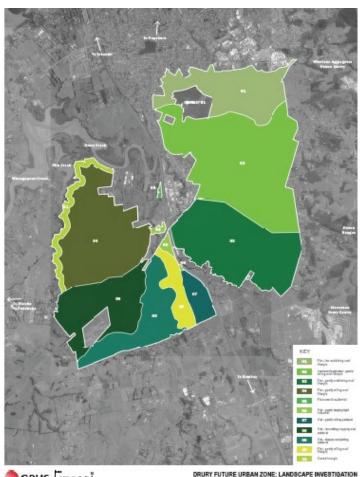
- Identify ways in which the future urban form might reflect the underlying land-shaping processes, particularly the volcanic features, which give the landscape its unique identity
- Strengthen the natural character of the landscape by retaining and enhancing patterns, processes and elements such as streams corridors and forest tracts as part of an open space network
- Contribute to a high level of amenity, beauty and a quality lifestyle for future communities.

Broadly the Opus report delineates east and west landscape sub-areas with the proposed Drury East Plan Change located in the east (east of SH1). A further delineation of Landscape Character Areas is mapped⁶ (refer Figure 10 below) with three sub-areas identified in the east. The Drury East plan change area lies within the southern landscape character area in the east, Area 03, described as 'Flat – gently undulating rural lifestyle'.

⁴ Opus, Drury Structure Plan, Landscape and Visual Assessment Report, 04 August 2017, Executive Summary paragraph 1

⁵ Opus, Drury Structure Plan, Landscape and Visual Assessment Report, 04 August 2017, Executive Summary paragraph 1

⁶ Opus, Drury Structure Plan, Landscape and Visual Assessment Report, 04 August 2017, Map 5 Appendix B



OPUS

Figure 10: Exert Map 05 Opus report, Drury Structure Plan, Landscape and Visual Assessment

Appendix B 'Landscape Character Area Tables' of the Opus report sets out a description of each of the Character Areas. In summary for Area 03 this identifies:

Area 03 Description: "Defined to the north by Waihoehoe Road which follows a low spur, eroded to form a separated knoll. Defined by the toe of the Hunua Ranges foothills. Defined to the south by Hingaia Stream. The west is defined by State Highway 1 and the North Island Main Trunk Rail corridor."

Existing Landscape Character: Landform characterised by a low spur extending from the Hunua foothills with perennial stream corridors on either side flowing west to the Hingaia Stream. An upper portion of Drury Creek flows north. Stream corridors modified by grazing. "No stands of significant mature vegetation or areas of contiguous native vegetation." Predominantly rural lifestyle landuse with some glasshouses, some taller shelterbelts.

Potential effect on landscape character from urbanisation:

- Sensitivity of drainage patterns including overland flow paths.
- Degradation of landform, especially secondary ridge and knoll.

Existing Visual Landscape:

The Hunua foothills, located to the east, are the most distinctive external landmark. Distant localised views west to the Waitakere Ranges in more elevated locations where vegetation doesn't preclude longer distance views. Southerly views, from elevated spur locations to the Bombay Hills and Pukekohe Hill. The area is viewed from external locations on SH1 and Quarry Road and roads accessing the Hunua foothills notably Macwhinney Drive / the rural residential properties on the foothills. Views from many of the internal roads are restricted by the flat topography and vegetation. The area has moderate to strong visual coherence due to its rural / rural residential character and amenity. There are low levels of both indigenous and perceived natural character.

Potential effect on visual values from urbanisation:

- Change to coherence of rural landscape character
- Potential loss of strong visual connection to Hunua Foothills and distant views of Waitakere Ranges which provides context for landscape setting.
- Change to visual amenity values associated with localised landform.

Sensitivity to change rating: Medium

Opportunities for landscape protection, enhancement and new interventions:

- Protect views to Hunua Ranges and Waitakere Ranges, Bombay Hills and Pukekohe Hill.
- Keep built form off top knoll and side spur.
- Create contiguous tract of vegetation along streams, reinforcing natural landscape pattern.
- Enhance riparian edges and recreation opportunities along streams.
- Create connected network of parks and public open space.
- Road alignments to harness scenic views of hills beyond scenic amenity, distinctive sense of place, quality public realm.
- Integration of landscape and public open space with Stevenson's future urban development to the south.
- Views to the Hunua Ranges have been identified as important. The foreground to this landform is important as a result. There is opportunity for amenity enhancement at the edge of the transition to the foothills.

The Opus report Executive Summary identifies:

"The main potential landscape character effects from urbanisation are:

Drury East

- Sensitivity of drainage patterns including the major low-lying flood plains and overland flow paths
- Change from rural patterns that distinguish the rural landscape and express the human processes associated with productive landscapes
- Sensitivity of the meagre remnant native bush patches that have ecological / biodiversity values. These are highly valuable due to their scarcity and highly vulnerable to edge effects and changes to the water table

- Severance of the natural patterns associated with the stream flow paths from the Hunua Ranges
- Changes to the topography associated with the second order spurs extending into the area
- Change from the distinctive, intimate scale of settlement at the tow of the Hunua Ranges.

The main potential effects on visibility and visual amenity from urbanisation are:

Drury East

- Change to visual cohesion associated with the strongly rural character
- Change to scenic amenity associated with views across the flood plains to the distinctive Hunua Ranges backdrop
- Change to views from the southern area to the Bombay Hills
- Change to long views to the Waitakere Ranges
- Potential for visual dominance and overlooking effect if the ridges of the side spurs are built on
- Potential loss of visual landmarks in relation to high topography, views to the Hunua Ranges and the remnant patches of kahikatea.

The general opportunities across all Landscape Character Areas to protect and enhance natural landscape character and landscape amenity values are:

- Retain and reinforce the natural drainage patterns as the key organising element of the landscape framework
- Establish wide and contiguous esplanade plantings and a network of public open space reserves along stream corridors
- Protect public views to Hunua Ranges, Bombay Hills, and Waitakere Ranges. Careful block layout and road alignments are fundamental to protecting views and enhancing quality public realm and distinctive sense of place
- Adopt 'roads as places' approach to all new roads, to provide enhanced landscape amenity, public use and enjoyment and ecological corridors
- Potential to retain some shelterbelt planting, amenity tree stands, and elements associated with rural landscape as an historic trace and memory of past settlement."

Figure 11 below is extracted from Map – 02 Topographical Map in the Opus report it illustrates the 'major' and 'minor' ridgelines, watercourses and contours at a high level within and surrounding the Drury East plan change area. The "spur / major ridgeline" extending west from the Hunua foothills is located to the east of the proposed plan change area. As identified in section 2.0 of this report this ridgeline is a low east west ridgeline at an approximate height of RL35 and is a subtle change in height from the surrounding area. The general alignment of the defined road along the ridge will assist in retaining this legibility as part of the future urban form.

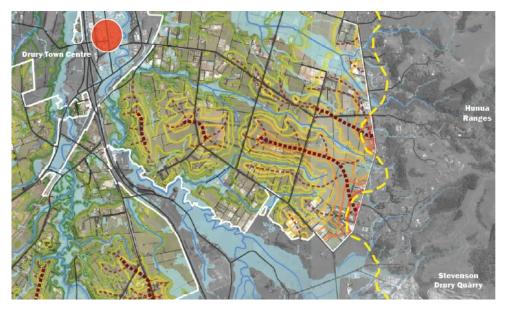


Figure 11: Exert from Map 02, Topographical Map, Opus report, Drury Structure Plan, Landscape and Visual Assessment

Under Section 9 of the Opus Report 'Landscape Opportunities and Constraints' a further identification of opportunities in respect of Character Area 03 is identified as below:

- "Landscape capacity for urban development to integrate with the Drury South Business Project on the southern boundary. Opportunity to manage the interface though transition of scale, coordinated layout and integrated landscape framework
- Greater capacity for urban development as less impacted by major floodplains
- Harness amenity values relating to varied terrain and more intimate landscape scale at the transition between the flatlands and the foothills
- Provide open space link along distinctive knoll and side spur, connecting hills to Drury Centre
- Create ecological wild links between the hill country natural areas and coast/lowlands using the natural drainage patterns
- Create connected network of parks and public open space between the hill country natural area, coast/lowlands and Drury Urban centre and major transport network."

The overall Conclusions – Section 11 - of the Opus report are set out below:

"This assessment of the Drury structure plan area concludes that the landscape and visual effects of urbanisation will predominantly be low to medium, with the exception of the coastal edge and Ngakaroa Valley which are assessed as high. It is concluded that all areas can accommodate urban development with the appropriate mechanisms to mitigate adverse effects on the landscape.

Furthermore, there is an opportunity to significantly improve the natural landscape character from the current quality derived from agriculture, lifestyle and intensive cropping activities. This can be achieved by establishing an urban forest and open space network that will result in ecological and landscape amenity benefits through public use and enjoyment of an integrated open space network.

In summary, the following key landscape opportunities are identified:

- Retain the reinforce the natural drainage patterns as the key organising element of the landscape framework
- Establish wide and contiguous esplanade plantings and a network of public open space reserves along stream corridors
- Protect public views to Hunua Ranges, Bombay Hills, and Waitakere Ranges. Careful block layout and road alignments are fundamental to protecting views and enhancing quality public realm and distinctive sense of place
- Adopt 'roads as places' approach to all new roads, to provide enhanced landscape amenity, public use and enjoyment and ecological corridors
- Potential to retain some shelterbelt planting, amenity tree stands and elements associated with rural landscape as an historic trace and memory of past settlement
- Establishing an urban forest green network throughout the entire structure plan area and connecting to the wider landscape to support broad sustainability objectives including wild links, community and individual wellbeing, and global sustainability."

5.0 Proposed Drury East Plan Change

Kiwi Property, FHLD, Oyster Capital and Fletcher Living ("the Drury East developers"), collectively have an interest in land within Drury East. They have worked together since 2017 in order to develop a common vision for the Drury East area in the form of an agreed structure plan that was used to inform Council's Structure Plan process. This structure plan includes the Kiwi Property proposed Metropolitan centre and Oyster Capital land that includes a mix of THAB and MHU zoning (Refer Figure 12 below). Subsequently three private Plan change requests⁷ have been prepared concurrently to allow a wider consideration of the future land use pattern proposed within Drury East and an integrated approach to planning.

⁷ Kiwi Property (Metropolitan Centre), Oyster Captial (MHU / THAB zoning) and FHLD Drury East (MHU / THAB / MHS and Mixed Use).

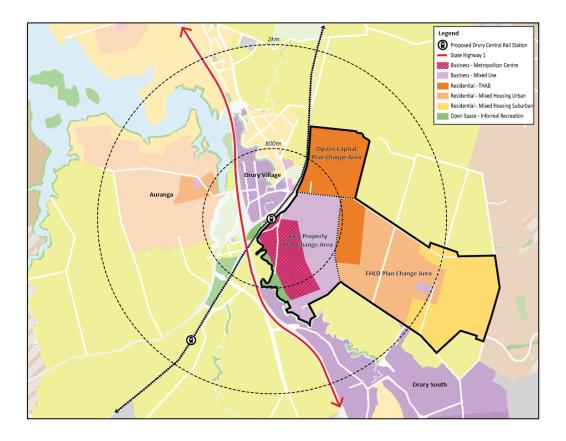


Figure 122: Exert from Woods Urban Design Report - Figure 5 – Proposed zoning from various Drury Developers

The FHLD proposed Drury East Plan Change requests to rezone 184 hectares of Future Urban zoned land in Drury East to a mix of residential zones (Terrace Housing and Apartment Building (THAB), Mixed Housing Urban (MH-U) and Mixed Housing Suburban (MH-S) serviced by a limited area of business zoning (Mixed Use (B-MU)). The proposed zoning pattern is generally consistent with the Council's Drury-Opāheke Structure Plan; however, the B-MU zone is to be located within the centre of the plan change area to more effectively service the proposed future residential areas.

With the zoning proposed, the land will have capacity to accommodate at least 2,800 dwellings. The AUP(OP) zone provisions for these zones apply except where amended through the plan change provisions. These amendments include; transport staging, building line restriction along Waihoehoe Road, Riparian planting (10m buffer) and additional assessment criteria and indicative cross sections for roads to ensure they integrate with the wider Drury East area. The Drury Hills Road / new arterial route and upgrade (Mill Road) is proposed to the eastern edge of this plan change area.

Drury East - Zoning Plan

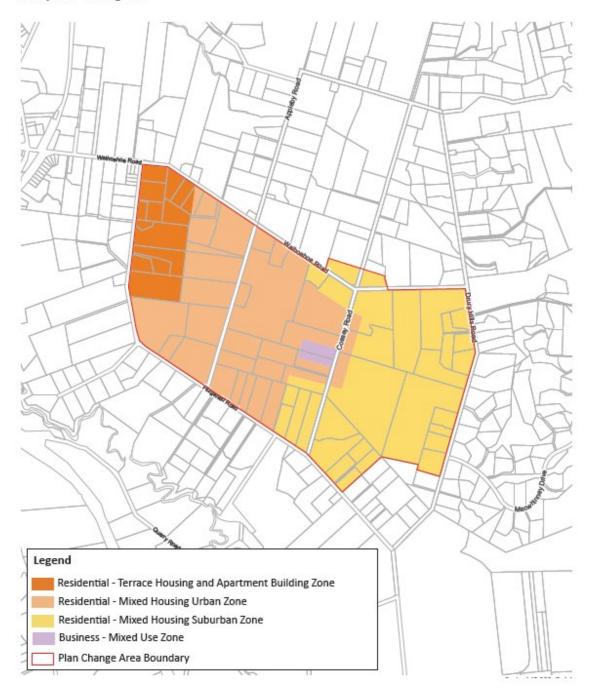
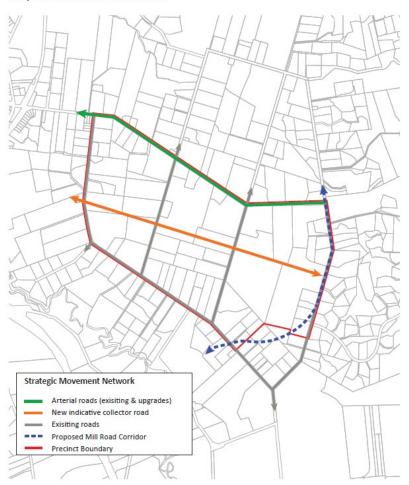


Figure 133: Drury East Plan Change Zoning Plan

The Plan Change also includes a precinct plan (Precinct Plan 1 – Road Network) which details the indicative collector road which provides access east to west through the length of the site linking to the wider road network and ensuring that development capacity is staged with the release of infrastructure.

Two precinct plans comprise part of the plan change provisions. These detail the road network (Drury East Precinct Plan 1) and the proposed transport staging boundary (Drury East Precinct Plan 2). Precinct Plan 1 is relevant to landscape matters. This precinct plan (refer below figure 14) indicates in orange the proposed location of the new indicative collector road. This responds to the underlying topography of the site, reinforcing the low ridgeline within the site previously identified in the Opus report. The alignment of this road will also reinforce views (travelling east) towards the Hunua ranges and foothills (Refer figure 15 below).



Drury East Precinct Plan 1 - Road Network

Figure 144: Drury East Plan Change Precinct Plan 1 Road Network



Figure 15: Proposed plan change / Road alignment overlay on aerial image. Alignment of road will reinforce views to Hunua Ranges when travelling.

The Urban Design Report prepared by Woods has informed the masterplan and Plan Change. The analysis in this report includes the site topography, ridgelines, streams (permanent and intermittent).

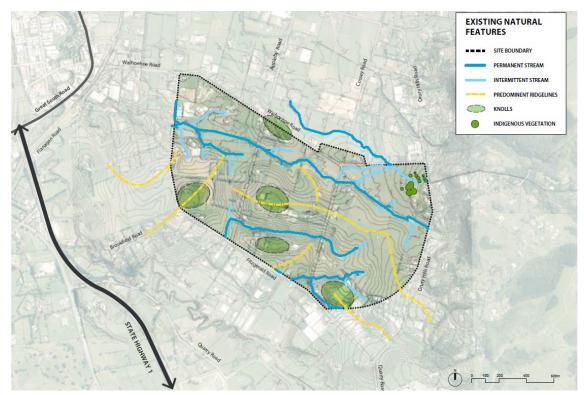


Figure 16: Exert from Woods Urban Design Report - Figure 6 – Existing natural features

The Urban Design Report identifies the opportunities and constraints presented by the Plan Change area and develops five project goals and specific design principles which the zoning pattern responds to.

Within these principles there is one which relates directly to landscape being:

Goal 5: Provide quality public spaces easily accessible to residents;

- Protect and enhance existing stream networks and native vegetation.
- Create key ecological corridors that offer visual and recreation amenity.

In addition, the principles relate to 'Neighbourhood communities for people of all ages', a 'focus on pedestrians, cyclists and integration with public transport' support urban amenity outcomes for the plan change area.

The indicative structure plan illustrated in the Woods urban design report, refer Figure 17 below, incorporates the open space corridors of the streams / waterways with potential new suburban parks generally located connected to these linear corridors to service the residential community and access to open space. However, these are not carried forward into Precinct specific provisions / a precinct plan relying instead on the AUP provisions and future resource consent stages for their further detailed identification and provision / design. The final location and extent of open space is therefore a matter that will be determined through future more detailed masterplanning / design, including agreement with Council's Open Space / Parks personnel and the related resource consent processes. The open space policy in the Plan Change, together with Policy 18 of the subdivision provisions, enables consideration of the following:

(a) providing open spaces which are prominent and accessible by pedestrians;

(b) providing for the number and size of open spaces in proportion to the future density of the neighbourhood;

(c) providing for pedestrian and/or cycle linkages;

(d) integrating with the stream network; and

(e) incorporating distinctive site features, where relevant.

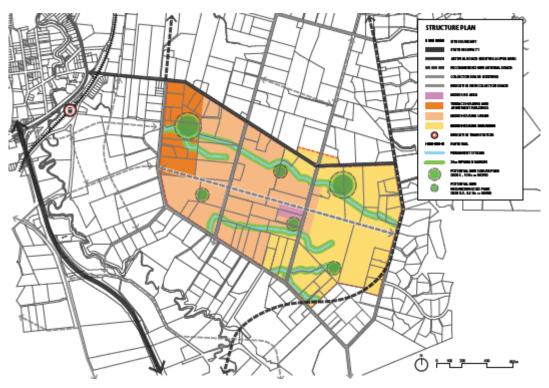


Figure 17: Exert from Woods Urban Design Report – Indicative Structure Plan.

The FHLD plan change sets out additional precinct specific provisions but otherwise all relevant overlay, Auckland-wide and zone provisions of the AUP apply. Under IX.2 Objectives, objective 3 states:

(3) Development reflects Drury's sense of place by incorporating distinctive natural and built site features, responding to landform and respecting Mana Whenua values.

Policy IX.6.4 (1) requires the margins of permanent or intermittent streams to be planted to a minimum width of 10m either side, measured from the top of the bank. A 20m esplanade reserve would be required for all streams measuring 3m or more in width and a building setback in the precinct is proposed to support this subdivision requirement. Together, along with the AUP(OP) provisions, these mechanisms seek to ensure that future development is responsive to these landscape attributes of the site.

6.0 Assessment of Landscape and Visual Effects

Landscape and visual impacts result from natural or induced change in the components, character or quality of landscape. When plan changes are proposed the inevitable consequence is a transition of the landscape to a new form of landuse with its consequent changed character and amenity.

The landscape and visual effects generated as a result can be perceived as:

• Positive (beneficial), contributing to the visual character and quality of the environment.

- Negative (adverse), detracting from existing character and quality of environment; or
- Neutral (benign), with essentially no effect on existing character or quality of environment.

The degree to which landscape and visual effects are generated depend on a number of factors, these include:

- The degree to which the outcomes of the plan change contrasts, or is consistent, with the qualities of the surrounding landscape.
- The way in which the plan change area is observed and experienced, determined by the observer's position relative to the area and its extent.
- The distance and context within which the proposal is viewed / experienced.
- The area or extent of visual catchment.
- The number of viewers, their location and situation static, or moving.
- The backdrop and context within which the area is viewed.
- The predictable and likely known / expected future character of the locality.
- The quality of the resultant landscape, its aesthetic values and contribution to the wider landscape character to the area.

Change in a landscape does not of itself, constitute an adverse landscape or visual effect.

When assessing the potential effects arising from a plan change current land ownership should be ignored, as the plan change affects zoning and the land can be sold with the provisions of the zone prevailing. Furthermore, the assessment should consider the nature of maximised potential future development enabled by the provisions of the plan change.

Landscape Effects

The conversion of the 184-ha site from a rural, allbeit in parts relatively urbanised for rural living, land use to a residential urban form of development comprising the three higher intensity residential zones of the AUP(OP) – being THAB, MH-U and MH-S - will lead to a complete change to the nature of the landscape. This change has long been signalled and foreshadowed including through Council's extensive Structure Planning processes.

Future earthworks across the site, to establish the street network and land suitable for urban development, will reduce the more intimate rolling nature of the topography whilst at the same time generally retaining the general topography of the site. The positioning of the new indicative collector road along the main east / west ridgeline will further reinforce the original underlying topography, acknowledging at the same time that earthworks will be required, and the ridgeline lowered.

Whilst substantial landscape change will occur provisions of the AUP(OP) and Precinct provisions will provide for the retention, restoration and enhancement of the site's main watercourses. These will read as natural features of the urban landscape that will structure the form of development, be a key organising element of the landscape framework and enable a sequence of connected open space to be positioned along these routes.

To facilitate the urban development, some intermittent stream removal is likely to be required. The effects of reclamation and the adequacy of the mitigation or compensation proposed will be considered as part of the resource consent process under the standard AUP(OP) provisions within Chapter E3 Lakes, rivers, streams and wetlands to ensure that there is not net loss of stream habitat.

The extensive nature of earthworks will mean that little vegetation will be retained other than in close proximity to the retained waterways. However, the site does not include vegetation identified to be significant either in respect of ecological values – SEA – or as notable trees. Potential to retain the small cluster of trees located in the north-east corner of the site by Drury Hills Road, as identified in the ecological report is acknowledged and endorsed as these also have landscape and visual amenity values. However, it is also recognised that these trees are likely to be impacted by the proposed Mill Road arterial alignment and therefore formal protection is not proposed as part of the private Plan Change.

The majority of the vegetation that will be removed relates to the present day rural / rural lifestyle use of the site including shelter belts and planting around established low density housing / rural sheds. The pattern of such planting does not relate to the intended future residential urban use or amenity and is not of sufficient value to warrant protection / retention. It is considered that in respect of the site itself the AUP(OP) and Precinct provisions sufficiently provide for the landscape attributes of the site.

Immediately east of the plan change area is the Rural Countryside living zone and rural residential properties at the foothills of the Hunua Ranges. The underlying zoning proposes a transition down to Mixed Housing Urban and Suburban east towards the ranges. This alongside the proposed Mill Road arterial road upgrade in this location is anticipated to provide a natural delineation between the rural and urban areas.

In summary therefore, whilst a substantial change will be introduced over time to the landscape the future form of the Drury East will retain a response to the site's natural landscape – both in terms of topography and streams / waterways - and connect future residents to the natural environment.

Although the proposal will result in a loss of rural character there will be a number of positive landscape elements that are associated with the development. These include the retention and enhancement of streams, the general overall landform and the provision of connected open space. The potential development outcomes are considered to be in line with the expectations of the Drury – Opāheke Structure Plan and to sufficiently address the more detailed commentary of the Opus report in support of the Structure Plan.

Visual Effects

The specific nature of visual effects will depend considerably on the future more detailed masterplanning and design of specific development proposals. Each of such proposals will require resource consent and be subject to a range of assessment criteria including those that address visual amenity and interface outcomes.

The visual catchment of the plan change area will include;

- Users of local roads views from local roads are likely to be only glimpsed due to speed and sequence of movement, being seen for a short timeframe or obstructed by intervening buildings and vegetation;
- Occupiers of rural residential properties and workers within the wider rural landscape their views towards the plan change area are likely to be partially or fully screened by intervening landform, vegetation or distance from the area; and
- Elevated residential on the west facing slopes of the Hunua Ranges (Macwhinney Drive).

The context of these views will however encompass a much wider changing landscape with the full Drury – Opāheke Structure Plan area, including that of the Drury Centre. The plan changes of which proposes Metropolitan Centre and Business zones with potential future development up to 72.5m in height as well as the more advanced Drury South plan change area comprising both industrial (light and heavy zones), some commercial and medium density residential (SHA) housing activities.

The location, layout and concentration of the proposed development will have a noticeable visual effect in respect of the surrounding rural / rural lifestyle character. This is due to the introduction of an urban form of development including roads and a range of forms of residential housing / a small commercial centre as well as corridors and pockets of open space.

Within the proposed plan change area there are views out east towards the Hunua Ranges, albeit these views are interrupted at times by landform and above ground elements such as vegetation and buildings. As the surrounding area develops the intervening land will be built out as the zoning anticipates development up to 16m in places (THAB zone). This together with the low-lying nature of the land will result in the screening of many views to the Hunua Ranges from within the plan change area. Roads that are orientated in an east west direction termination on the Hunua Ranges will reinforce a visual connection to this landform backdrop. In this respect the alignment of the defined east / west arterial – Precinct Plan 1 - will maintain and visually reinforce the presence of the Ranges defining the eastern edge to the future urban area. From further afield the proposed height of the anticipated built form will not visually interrupt these more distant views or the presence of the Hunua Ranges in the wider landscape.

The primary established viewing audience with the potential to be adversely affected by the introduction of buildings up to the heights enabled by the MH-U/ THAB and Business – Mixed Use zones are those people living in elevated rural residential properties on the west facing slopes of the Hunua Ranges including those on Macwhinney Drive and to a lesser extent in Drury Heights and properties located on Taraire Drive. The future urban zone extends to the base of the Hunua foothills and through to the Drury metropolitan centre to the north and west of the site such that views from these properties can be anticipated to change from their current rural / rural residential outlook to one encompassing an urban middle-ground.

7.0 Conclusion

The Future Urban nature of the site and the wider area along with the structure planning process has forecast the impending change to this landscape including the FHLD lands and areas adjacent. The FHLD proposed Drury East Plan Change will rezone 184 hectares of Future Urban zoned land in Drury East to a mix of residential zones (Terrace Housing and Apartment Building, Mixed Housing Urban and Mixed Housing Suburban) serviced by a limited area of business zoning (Mixed Use). This will establish a core component of the Drury area's immediate residential catchment supporting the surrounding development at Drury Central and south to the industrial area. The proposed zoning pattern is generally consistent with the Council's Drury-Opāheke Structure Plan.

In conclusion, from a landscape and visual effects perspective it is considered that the residential zones (THAB, MH-U, MH-S and B-MU) are appropriate in respect of the landscape and visual attributes of the Drury – Opāheke local area and the specific site. No areas of identified / protected landscape value will be affected.

The Precinct specific provisions are considered to appropriately complement the AUP(OP), enabling a more refined consideration of site-specific landscape features and amenity outcomes at future resource consent phases of development. As such it is considered that the future urban form of the FHLD Plan Change area will respond to and maintain a connection with the natural landscape attributes of the site and lead to the creation of a quality form of urban development.

Appendix 1: Overlays Maps



About Boffa Miskell

Boffa Miskell is a leading New Zealand professional services consultancy with offices in Auckland, Hamilton, Tauranga, Wellington, Christchurch, Dunedin and Queenstown. We work with a wide range of local and international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, cultural heritage, graphics and mapping. Over the past four decades we have built a reputation for professionalism, innovation and excellence. During this time we have been associated with a significant number of projects that have shaped New Zealand's environment.

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