



**LA4**  
LANDSCAPE  
ARCHITECTS



## **WAIHOEHOE ROAD PLAN CHANGE**

Landscape and Visual Effects Assessment

September 2019

## Document History and Status

Revision	Date	Reviewed by	Status
Draft	07/05/19	R Pryor	Draft
A	02/09/19	"	For circulation

File Number/Name	19 759 LVA01
Author	J Hogan
Client	OYSTER CAPITAL

## 1.0 INTRODUCTION

- 1.1 This landscape and visual effects assessment has been prepared by LA4 Landscape Architects for Oyster Capital. Oyster Capital (“Oyster”) is applying to Auckland Council for a Plan Change to the Auckland Unitary Plan (Operative in Part) (AUP) to rezone 48.9 hectares of Future Urban land in Drury East. It is proposed to rezone the land to a mix of residential zones (Terraced Housing and Apartment Buildings and Mixed Housing Urban) with provisions for drainage reserves. The rezoning proposal provides capacity for up to 1054 dwellings. Additionally a precinct is proposed with trigger rules that stage the release of the development capacity with the delivery of the required infrastructure.
- 1.2 Oyster has an interest in 18.4 hectares of land on the northern side of Waihoehoe Road as outlined in Figure 1 below. Oyster are experienced residential and land developers in Auckland and are currently undertaking large scale and high quality housing developments in Whenuapai and Beachlands.

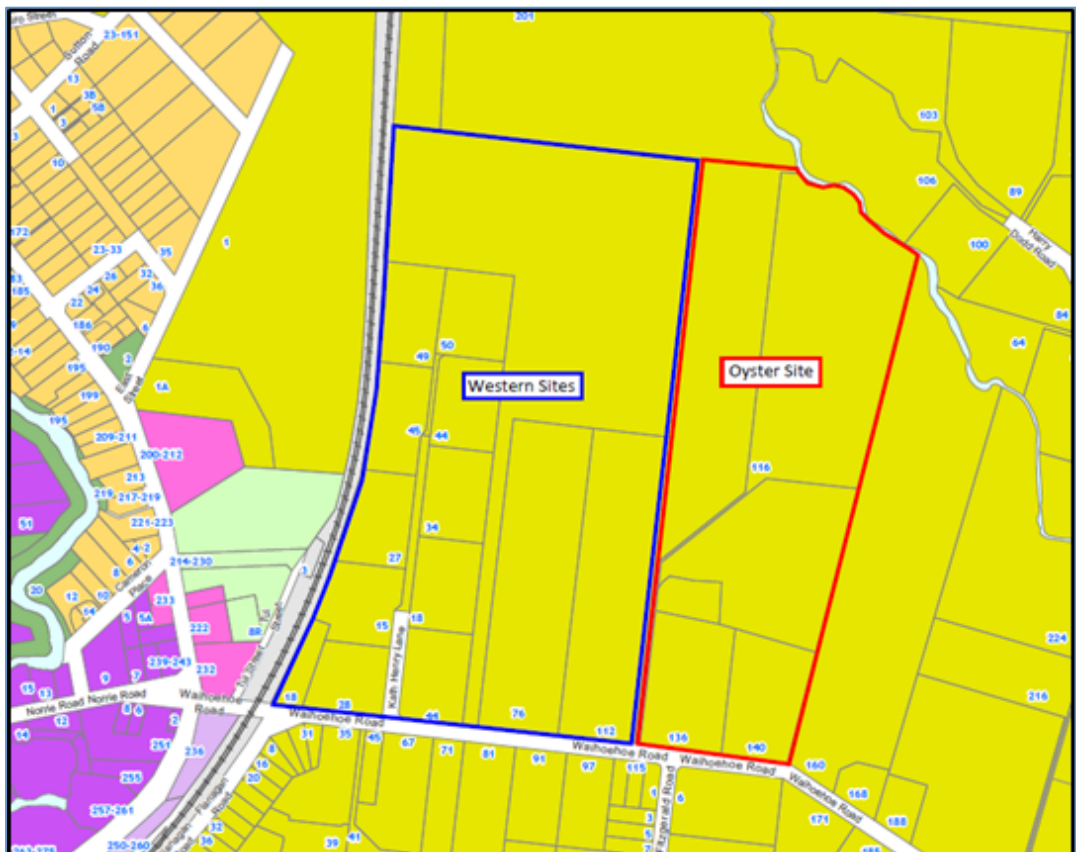


Figure 1. Showing the Plan Change Area and the Oyster Capital land holdings

- 1.3 The scope of this assessment is to determine the likely landscape and visual effects of the proposed development of the site for residential purposes under the PPC. The report is structured into the following sections:

- **Landscape Context**
  - A detailed description and evaluation of the site and wider landscape setting with an emphasis on landscape and visual amenity considerations.
- **Description of the Proposal**
  - Description of the landuse proposal associated with the PPC.
- **Planning Context**
  - Description of the relevant statutory context of the site and surrounding area
  - Overview of relevant non-statutory studies/assessments that have relevance to the site.
- **Evaluation of the Proposal**
  - a detailed assessment of the landscape and visual effects of the proposal and their significance
  - consideration of the proposal in relation to key relevant statutory planning considerations applicable to this assessment.
- **Summary and Conclusions**
  - Conclusions in relation to the key landscape and visual amenity effects.

1.4 Investigations of the site and surrounding area as part of this assessment were carried out during the period March–May 2019. The assessment of the site was undertaken by a combination of site investigations and a desktop analysis. Comprehensive access was only available to 116, 136 and 140 Waihoehoe Road, which occupy around of one-third of the site along the eastern boundary. Limited access to the western portion of the site was gained via Kath Henry Lane and the associated right of way.

## 2.0 LANDSCAPE CONTEXT

- 2.1 This section describes the wider landscape setting and the development site and considers the landscape values, character and quality of the landscape.

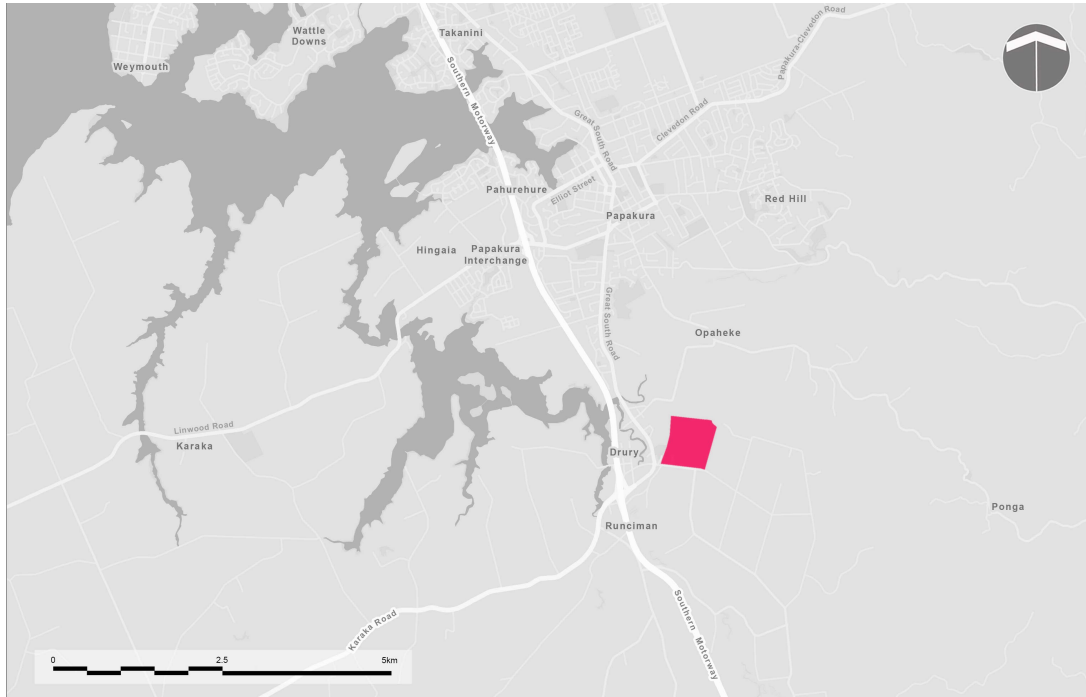


Figure 2. Site Location

(Source: GeoMaps)

### **The Landscape Setting**

- 2.2 The subject site is located to the east of Drury Township on the flat to gently undulating land that extends eastward to the edge of the Hunua Foothills. The Drury East area is broadly defined by the Auckland Southern Motorway (SH1) to the west, Papakura urban area to the north, the Hunua foothills to the east, and the Drury South Industrial precinct (currently in early stages of development) to the south.
- 2.3 Drury and nearby Runciman are the first main areas of concentrated settlement and development along SH1 to the north of the Bombay Hills. Drury township is located in close proximity to the motorway interchange which links with Great South Road to connect with Papakura approximately 5km to the north, and to Waiuku and Pukekohe to the west and south-west along Karaka Road.
- 2.4 Drury township has traditionally functioned as a small rural service centre. The township is strongly defined and contained to the west by SH1, to the south by Great South Road and the motorway interchange, and to a lesser extent the Auckland main trunk railway line to the east. The Hingai Creek meanders through the centre of the town from south to north. To the west of the watercourse in the area between the motorway, the landuse is dominated by smaller scale industrial activity. A modest commercial hub occupies the southern portion of the settlement. On the eastern side of the Hingai Creek further north



*Photo-series 1 – Drury East Countryside*

suburban density residential development is clustered along a narrow band extending either side of Great South Road and continuing northward to merge with the Papakura urban area. Although the rail corridor passes through the township, currently there is no railway station. The township itself has relatively low amenity with the influence of the industrial landuse and transport-dominated main street detracting considerably from the overall character and ambience.

- 2.5 Immediately to the east of Drury township the low-lying terrain is largely comprised of flood plains formed by of alluvium deposited by streams flowing from the Hunua Ranges westward to the Manukau Harbour. Apart from the rising land associated with the nearby Hunua foothills the only topographical feature of note locally is a low lying ridge spur that extends westward from the foothills to the south of Waihoehoe Road to end just to the south of Drury Township. This provides some localised topographical variation and interest. This aside, the only other distinguishing features of the landform are the narrow sinuous network of local watercourses traversing through the landscape toward the Drury Creek.
- 2.6 The main perennial watercourses locally include the Hingaia, Waihoihoi and Symmonds Streams. These are often reinforced visually by fragmented ribbons of associated vegetation. In addition, there are numerous higher order ephemeral and intermittent watercourses that often present as no more than depressions across the landscape. The network of watercourses in combination with the relatively flat low-lying topography combine to create a system of flood plains, particularly in the area to the north of the subject site, along the alignments of the main stream corridors.

#### *Vegetation*

- 2.7 The vegetation associated with the land between Drury Township and the foothills is largely characterised by assemblages of lineal hedgerows and shelterbelts interspersed with more organic fragmented ribbons of vegetation along riparian corridors. These vegetation patterns create a nucleus of compartmentalised landholdings that contrast with the more wider open areas of pasture particularly to the north of the subject site. The vegetation on the flats is largely dominated by exotic vegetation commonly found in rural areas, as well as established mixed planting associated with rural residential gardens. Native vegetation is limited and is largely confined to small clusters associated with the stream corridors wet depressions and as use for farm shelter and garden specimens. Ascending the foothills to the east vegetation patterns change considerably with comparatively large areas of indigenous vegetation often associated with gullies, contrasting with more open areas along ridgelines, spurs and highpoints.



*Photo-series 2 – Drury Town*



### *Landuse*

- 2.8 Although most of the local land currently remains in some form of productive landuse, relatively concentrated rural residential development is also a notable feature of the Drury East lowlands and the western slopes of the nearby Hunua foothills. There is also a considerable amount of other types of built development associated with productive landuse, including a relatively high concentration of glass houses and other large structure associated with horticultural production locally.
- 2.9 To the west of Drury the nearby SH1 motorway corridor creates a strong linear feature within the landscape separating the foothills and the Drury lowlands from broad expanse of rural Franklin to the west. This division is further reinforced by the 220kV AC transmission line (Huntly to Otahuhu line), which runs parallel with the motorway creating an omnipresent infrastructure corridor through the countryside. The North Island Main Trunk (NIMT) railway crosses over from the west side of SH1 to the south of the Drury interchange bypassing Drury township along its eastern edge continuing northward toward Papakura.
- 2.10 Despite the pervasive influence of these significant infrastructural features and the relatively high level of rural residential settlement, the established rural landuse to the east of the township continues to have a pronounced influence on the character and visual amenity of the area. Pastoral landuse, cropping, horticulture and lifestyle development continue to be the predominant uses in the local and wider area. Apart from the localised compartmentalisation and enclosure within the landscape created by shelterbelts and hedgerows on a local level, generally an overall relatively open spatial character prevails.
- 2.11 Considerable landscape change is however anticipated in the wider area. The Auckland Plan 2050 is a long term spatial plan prepared to ensure Auckland grows in a way that will meet the opportunities and challenges of the future. Part of this is a development strategy for future growth. Within the Auckland Plan 2050 much of the wider area around Drury is identified as FUZ land that has been carried over into the AUP OP. The site is located in the Drury-Opaheke Structure Plan Area. The Structure Plan is a spatial planning tool to provide a framework for future growth and development of a particular area.
- 2.12 Landuse change is already underway locally beyond the Structure Plan area currently with rural areas being developed residential and other mixed use on a significant scale. These areas include (refer to Figure 2):

#### *Hingaia Precinct*

Located to the northwest of Drury the Hingaia Special Housing Area (SHA) or Hingaia 1-3 incorporate almost the entire Hingaia Peninsula excluding the land already developed at Karaka Lakes and Karaka Harbourside. This area is currently being developed for

comprehensive integrated residential development.

*Drury 1 Precinct*

Also known as Auranga, this area is located immediately to the west of Drury Township and is bordered by Drury Creek to the north, the southern motorway to the east, Karaka Road to the south, and Jesmond Road to the west. Currently consent has been approved for 167ha of land for development for mixed residential development and a local centre. Consent is currently being sought for an additional stage (B2) which includes a further 33.65 ha.

*Drury South Industrial Precinct*

Also known as Drury South Crossing this area encompasses 361 ha of former rural and quarry land that is currently being developed for mixed industrial/business and residential use.

*Drury South Residential Precinct*

This area is located in between of Drury South Crossing and the southern motorway. It includes 101ha of land that is being developed for mixed residential purposes.

Table 1. Local Greenfield Sites Currently Undergoing Development



Photograph 1- View from the nearby Hunua foothills to the south showing current land development associated with Drury South Crossing

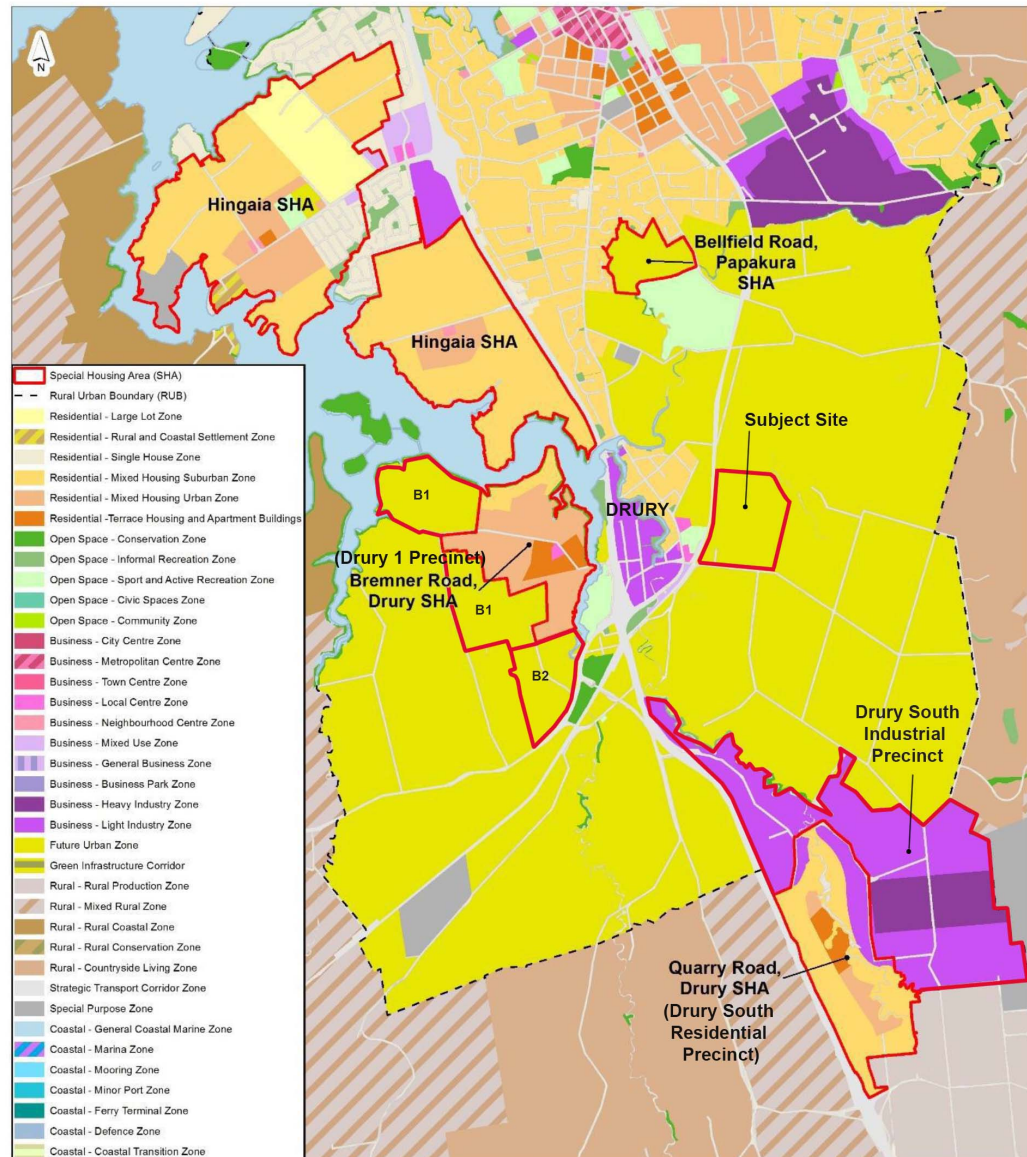


Figure 3. Local Greenfield Site Currently Undergoing Development

Source: GeoMaps

### Landscape Character

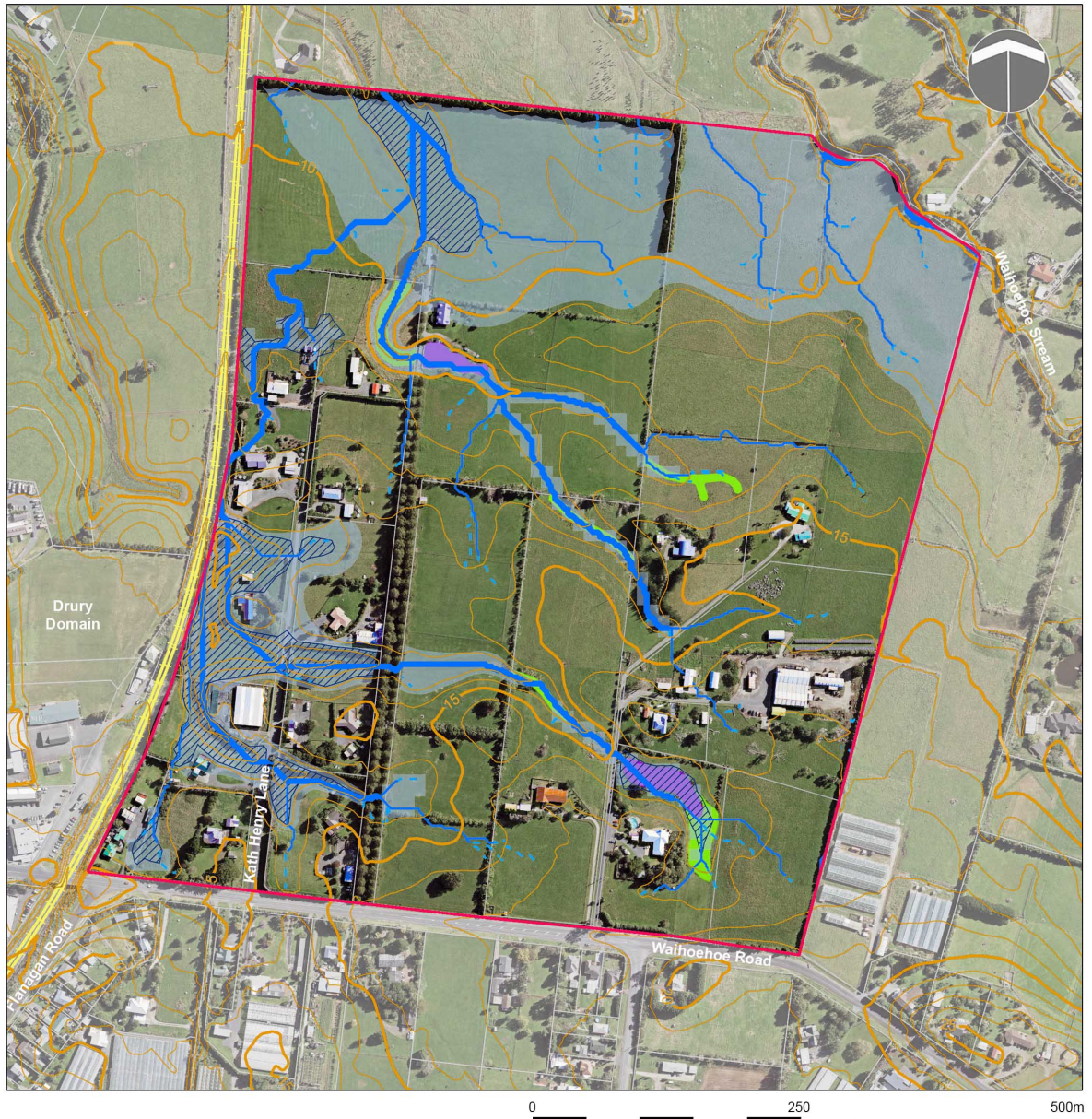
2.13 Apart from the backdrop of the Hunua foothills, which are the main landscape feature of the area, the local landscape to the east of Drury has no particularly distinguishing characteristics that set it apart or elevates its value from the wider area. Although much of this area currently remains in rural land use, the rural character is strongly influenced by the proximity to greater metropolitan Auckland, the significant infrastructure, widespread rural residential settlement and lifestyle development, and the extensive tracts of formerly rural land currently being transformed for urban use. Consequently, although variable depending on the location, rural amenity values associated with the Drury lowlands in the vicinity of the subject site are moderate at best, and there is a general impression that the wider area is in a general state of transition.

***The Site and Immediate Surroundings (Refer to Figure 3 and Photo-series 1-3)***













- 2.14 The subject site comprises 49 ha and is located immediately to the east of Drury Township bounded on the western boundary by the NIMT, to the south by Waihoehoe Road, and productive pastoral land to the north and east.
- 2.15 The site is consistent with the general character of the wider Drury east flatlands with a mixture of areas wide open pasture in combination with more smaller landholdings compartmentalised by geometric assemblages of planting that create a more intimate scale locally.
- 2.16 The topography of the site is flat to gently undulating traversed by a series of generally unfenced intermittent and ephemeral watercourses. All of the watercourses are located within area open pasture/grassland and have generally been degraded by grazing. These combine with the low-lying nature of the site create a succession of flood plains. The only perennial watercourse associated with the site is the Waihoihoi Stream that meanders along a short section of the northeastern boundary. There are two small wetland areas on the site both located at 116 Waihoehoe Road. The southern-most is associated with a shallow pond, the other is characterised by a wet localised depression with a scattering of hardy rushes and weeds commonly associated with damp areas. There are also three small constructed ponds on the site, all on-line with watercourses.
- 2.17 On-site vegetation is comprised mainly of coniferous and broadleaf exotic species. The most significant vegetation in landscape terms are the shelterbelts and boundary planting and the established oak (*Quercus* spp) avenue running south to north through the centre of the site to form an impressive entrance to at 76A Waihoehoe Road. From on-site observations there appears to be relatively limited indigenous vegetation, with that present largely confined to the areas around the ponds, garden specimens, and a some of the shelterbelts. As noted there is no significant vegetation associated with the watercourses, with that present appearing to be limited to a mixture of grassland, exotic herbaceous weeds and rushes and sedges. An Ecological Assessment prepared for the site determined that:
- “All watercourses (A-J) originate within the site and are highly modified and have minimal natural character and low ecological value in their current state...”<sup>1</sup>*
- 2.18 Landuse associated with the site mainly includes low intensive pastoral grazing and rural residential/lifestyle development. In the southeastern part of the site there is small commercial operation (health and fitness) and a light industrial (metal forging) operation. Combined the dwellings, businesses and rural ancillary buildings collectively generate a relatively high intensity of built development in the southern part of the site. The central and northern parts in contrast are more open and unencumbered by structures.

---

<sup>1</sup> Bodley. R, 4 March 2019. Waihoehoe Road Drury Ecological Assessment Page 13 para 8



KEY

	Site Boundary		Pond		Railway Line
	1m Contour		Flood Prone Areas		Existing Cadastral Boundaries
	Pasture/Grassland		Flood Plain		
	Vegetation		Intermittent Stream		
	Wetland		Ephemeral Stream		

\* Selected data from Auckland Council Geomaps

Figure 4. Site Analysis Plan



*Photo-series 3 – Site*

2.19 The key landscape attributes that influence the character, quality and visual amenity of the site include:

- the wide open areas of pasture
- the more prominent vegetation which provides a sense of scale and enclosure, establishment and connection to the historic rural landuse
- distant views to the surrounding rural landscape and the nearby Hunua foothills
- the landform, in particular, the natural drainage patterns.

Consequently, these are characteristics that are most sensitive to change from the influence of development. Even so, none of the attributes listed above is unique or particularly notable on a local or wider scale.



*Photograph 2. Oak Avenue 76A Waihoehoe Road*

### **3.0 DESCRIPTION OF THE PROPOSAL**

---

- 3.1 The applicant seeks to rezone the land from the underlying FUZ to residential zone split between Terrace Housing and Apartment Building (THAB) zone (adjacent to, and up to a depth of 260m from the boundary with Waihoehoe Road), and with Mixed Housing Urban (MHU) zone across the remainder of the subject site area.
- 3.2 The plan change proposal also commits to the delivery of key roads, open spaces, and streams through a series of precinct plans and provisions. Each of these elements has been considered in a logical and sensible manner that ensures the appropriate and

effective delivery of superblocs that respect existing land ownership patterns, natural features such as watercourses and drainage patterns and other relevant constraints that have been identified and/or managed appropriately at this level. Each superbloc has been designed to enable the delivery of a connected and resilient community, through the careful consideration of their orientation, size, and their ability to be sensibly broken up into smaller development parcels with corresponding minor local roads and house lots as part of a separate Resource Consent application process in the future.

- 3.3 This Urban Design Statement discusses these key elements, the superbloc development layout, and how they together will deliver an integrated, connected and resilient urban community. The proposal is broadly outlined in Appendix 1 which depicts the general intensity and distribution of development to be undertaken under the PPC.
- 3.4 The development would necessitate widespread vegetation clearance and extensive earthworks for road construction, drainage and establishing suitable gradients for building platforms. Over one-third of the site (18.2 ha) would be retained as open space (drainage reserve). The open space network would be based around the stream corridors and floodplains. These areas would be subject to limited modification to the existing landform as part of the site development.
- 3.5 Site works would also necessitate the comprehensive removal of existing site vegetation. The existing oak avenue could not be retained in its current form as the PPC is limited to two roading connections onto Waihoehoe Road, and they have to be equidistant between Fitzgerald and Kath Henry Lane. This arrangement does not align with the oak avenue. Further, the rows are not adequately spaced to accommodate the construction of a carriageway and would limit the necessary earthworks unless all retained as part of an additional area of reserve.
- 3.6 Nonetheless, it is intended that a significant amount of at least one of the rows that make up the avenue could be retained and incorporated into future site development. The final extent of tree retention would be determined at the time of resource consent. To offset this loss and as part of the PPC it is intended that the extensive open space network would be comprehensively planted with indigenous riparian species along watercourses and specimen trees throughout grassed open space areas. The extensive reserves and associated planting would provide the following benefits:
- retain and reinforcing the natural drainage patterns associated with the site
  - provide large areas of public open space for passive recreation and enhancement of amenity values
  - assist in fragmenting and visually integrating future built development with the site and surrounds; and
  - significant environmental enhancement and habitat enrichment.



## 4.0 PLANNING CONTEXT

### RELEVANT STATUTORY DOCUMENTS

#### *The Auckland Plan 2050*

- 4.1 The Auckland Plan was adopted in June 2018. It provides a long term, high-level strategy addressing the challenges of future growth and development in the Auckland Region.

#### *Auckland Future Urban Land Supply Strategy (FULSS)*

- 4.2 This strategy became effective in July 2017 and identifies a programme to sequence future urban land in the Auckland region over the next 30 years. It sits alongside the AUPOP. Its purpose is to provide certainty around the release of land and the timing of provision for bulk infrastructure to allow areas to be developed for urban use. Within the programme for sequencing of future urban areas, the area in which the subject site is located (Opaheke-Drury) is timed to be ready for future urban development within the period 2028 -2032.

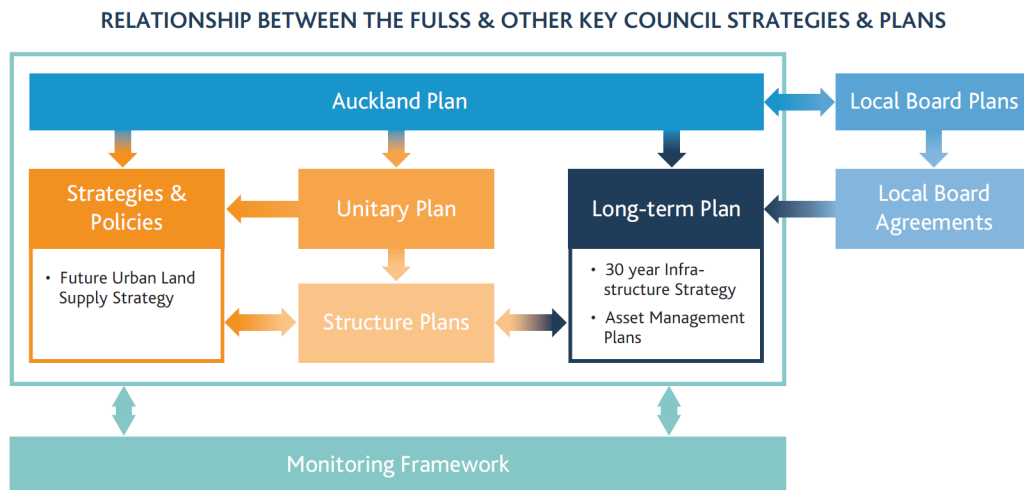


Figure 5. <sup>2</sup>

#### *Auckland Unitary Plan (Operative in Part)*

- 4.3 Under the AUP OP the subject site and much of the surrounding area is located within the Future Urban Zone (FUZ). This zoning is applied to greenfield sites that have been identified as suitable for future urbanisation. Under this zoning urban development is not permitted until the area is re-zoned for urban use. The AUPOP requires that a Structure Plan is in place before any future urban zone is re-zoned for urban development.

#### *Drury - Opaheke Structure Plan 2019*

- 4.4 Structure Plans are a planning tool used to guide the pattern of future land use in combination with transport and infrastructure within a defined area. The Structure Plan for the Drury- Opaheke was adopted in August 2019. The associated *Land Use Map* identifies the subject site as being suitable for medium to high residential use. (Refer to Appendix 2)

<sup>2</sup> Auckland Council. July 2017. Auckland Future Urban land Supply Strategy. page 5.

## RELEVANT NON-STATUTORY DOCUMENTS

### Drury Structure Plan Landscape and Visual Assessment Report<sup>3</sup>

- 4.5 This was prepared as part of the background investigations in support of the Drury Opakeke Structure Plan. Its purpose was:

*“to identify and provide an evaluation of existing landscape attributes and the likely effects of urbanisation on landscape character and visual amenity within the study area”*

- 4.6 The report also sought to identify landscape areas and features for protection, opportunities to enhance landscape character and visual amenity and opportunities for new landscape interventions to help shape a quality urban environment. Within the report the site is located within Landscape Character Area 02 – Lowland Flood Plains (gently rolling rural lifestyle) and is identified as having a medium sensitivity to modification.

- 4.7 The main potential landscape character effects identified from urbanisation for Drury East in this assessment are:

- *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 down 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 toe of the Hunua Ranges.*

- 4.8 The main potential effects on visibility and visual amenity for Drury East from urbanisation in this assessment are:

- *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.*

---

<sup>3</sup> Opus International Consultants Ltd 2017

4.9 The general opportunities across all Landscape Character Areas to protect and enhance natural landscape character and landscape amenity values identified in this assessment 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.*

***Landscape Review of Outstanding Natural Landscapes (2008)<sup>4</sup>***

4.10 During 2003-2004 as part of the *Auckland Regional Policy Statement Proposed Plan Change 8*, a Regional Landscape Assessment was undertaken for the Auckland Regional Council. This updated the earlier assessment prepared a decade earlier. The new assessment adopted a public preference methodology and a focus on identifying Outstanding Natural Landscapes (ONL's) within the region. This involved determining representative examples of regional landscape types, followed by a public preference survey of a photographic database of the representative landscape types. The results of the survey were then used in combination with fieldwork and desktop analysis to delineate *Outstanding Natural Landscapes* of the region. During 2008 a second landscape review was undertaken, which applied nationally accepted landscape assessment criteria (WESI criteria)<sup>5</sup> to the study area. No part of the site or the surrounding area is identified as being located within an ONL. The nearest ONL is Site 60 - *Ponga Road*, located in the Hunua foothills approximately 3km to the east of the site.

---

<sup>4</sup> ARC. Landscape Review of Outstanding Natural Landscapes . 2008

<sup>5</sup> Wakatipu Environmental Society Inc and others vs Queenstown Lakes District Council C180/99{2000} NZRMA 59

## 5.0 EVALUATION OF THE PROPOSAL

---

5.1 The Resource Management Act (1991) outlines in the Fourth Schedule a number of matters that should be considered when preparing an assessment of effects on the environment, including:

(7)(1)(b) Any physical effect on the locality including landscape and visual effects.

LA4's Assessment of effects uses the recognised NZILA<sup>6</sup> 7 point scale assessment rating, as follows:

Negligible - Very Low - Low - Moderate - High - Very High - Extreme

The Best Practice Guide does not comment on how the suggested NZILA effects ratings relate to RMA terminology, however for the purposes of this assessment, the following are proposed with respect to the RMA sections 95A(a) and 104D. Effects Moderate or greater would be considered more than minor, Low to moderate would be minor, and Low or Negligible less than minor.

The extent of adverse effects are described as follows on the *Quality Planning Website*.<sup>7</sup>

***Nil Effects***

- *No effects at all.*

***Less than Minor Adverse Effects***

- *Adverse effects that are discernible day-to-day effects, but too small to adversely affect other persons.*

***Minor Adverse Effects***

- *Adverse effects that are noticeable but will not cause any significant adverse impacts.*

***More than Minor Adverse Effects***

- *Adverse effects that are noticeable that may cause an adverse impact but could be potentially mitigated or remedied.*

***Significant Adverse Effects that could be remedied or mitigated.***

- *An effect that is noticeable and will have a serious adverse impact on the environment but could potentially be mitigated or remedied.*

***Unacceptable Adverse Effects***

---

<sup>6</sup> NZILA Best Practice Guide 10.1– Landscape Assessment and Sustainable Management

<sup>7</sup> <http://www.qualityplanning.org.nz/index.php/consents/environmental-effects>

The Quality Planning website (QP) was launched in 2001 to *'promote good practice by sharing knowledge about all aspects of practice under the RMA'* among resource management practitioners, council planners, private practitioners, consultants and environmental managers among others.

The successful partnership includes Ministry for the Environment, New Zealand Planning Institute, Resource Management Law Association, New Zealand Institute of Surveyors, Local Government New Zealand and New Zealand Institute of Architects.

- 5.2 This assessment process has involved field investigations, photographic recording of the site and surrounding environment, a desktop assessment utilising aerial photographs/maps, and a landscape character analysis and visibility assessment.

#### **A. Landscape Effects**

- 5.3 The assessment of landscape effects takes into consideration physical changes to the landscape as a resource which may give rise to changes to its character and in turn the perceived value of the landscape.
- 5.4 The assessment of landscape effects therefore considers the sensitivity of the landscape (receiving environment) and the type and magnitude of change the proposal will bring. Landscape sensitivity is influenced by landscape quality and vulnerability, or the extent to which the biophysical (natural science), landscape character and values are at risk to change. Landscape values relate to peoples perceptions and the importance that they place on particular attributes of a landscape.
- 5.5 Landscape character results from a combination of physical elements together with aesthetic and perceptual aspects that combine to make an area distinct. Landscape character is influenced by natural and built elements as well as types, patterns and intensity of landuse, historic, cultural and other intangible qualities.
- 5.6 Sensitivity to change considers not only the receiving environment but also the nature and characteristics of the proposal. A landscapes ability to accommodate change is dependent on a variety of considerations such as the:
- existing landuse and resultant landscape patterns,
  - physical characteristics of the landscape,
  - scale of the landscape, the quality and values placed on a landscape
  - the ability to mitigate any effects.
- 5.7 The magnitude of change considers the type and scale of change to key landscape features and characteristics in relation to its area of influence.

- 5.8 Widespread modification of the site would be required to make it suitable for residential subdivision. This would involve general re-contouring to achieve suitable gradients for building platforms, stormwater discharge and road construction. However as the site is already relatively flat the earthworks are likely to have limited implications for the overall natural 'lie of the land', or character of the existing landform, particularly as the landform associated with the network of watercourses will largely remain as is. In this respect the site is considered appropriate for the type of development proposed, as suitable levels can be achieved without significant modification to the landform or the necessity for extensive use of retaining structures.
- 5.9 Similarly site development would necessitate the removal of most of the existing site vegetation. The applicant has noted the desirability of retaining a significant portion of at least one of the rows of oaks for the provision of amenity and a sense of establishment for the site. The extent of this will not be clear however until more developed proposals, for the site are prepared following the PPC.
- 5.10 The clearing of most of the existing vegetation will significantly alter the landscape character of the immediate area, however, this is largely unavoidable if the site is to be developed for urban-type residential use. Also, even though this vegetation currently makes a positive contribution to the character and quality of the area, none of it apart from the oak avenue is of particular note either in landscape or ecological terms. Furthermore, the extensive planting and riparian restoration proposed as part of the site development would result in a substantial enhancement to the site and surrounding area. It would also contribute significantly in mitigating many of the negative effects of urbanisation by re-establishing a strong landscape framework, and thereby ensuring a suitable level of amenity, while assisting in integrating the built development into the setting and offsetting the loss of rural character that cannot be avoided when such a change in landuse is proposed. It is also of relevance that no part of the site is identified as incorporating an outstanding natural feature or being within an outstanding natural landscape.
- 5.11 Extensive built development as proposed in a rural landscape will invariably have an adverse effect on rural amenity values, which are derived largely from the open spatial characteristics of pastoral activities, the predominance of natural elements, and the absence of urban-type development. However, as noted the wider landscape is already undergoing rapid change with existing development just beyond the Drury Structure Plan area to the northwest and south. This development is transforming the previously rural landscape to one of highly modified characteristics through current earthworks and the provision of infrastructure and roading to facilitate future urban development.
- 5.12 The attributes that contribute to the semi-rural lifestyle character of the wider area will become progressively less pervasive as the surrounding area develops as proposed by the relevant planning documents. Development enabled by the PPC will inevitably transform the local rural character to that of intensive and mixed urban, which will also have an influence

on the surrounding area. It is important to note however that this type of development has been advanced by a number of planning strategies as discussed, and the AUPOP identifies the site and surrounding environs as one of the key areas to accommodate future urban growth requirements in this part of the city.

- 5.13 It is also of significance that although the site and local area currently exhibit semi-rural characteristics, neither display a high degree of 'ruralness' due to a combination of the size of landholdings, the patterns of rural-residential/countryside-living, significant infrastructure, and the adjoining Drury township to the west.

#### *Landscape Effects Analysis*

- 5.14 Based on the preceding description and analysis of the site and surrounds it is clear that there are relatively low landscape values and sensitivity associated with the site and local area. The PPC site is a relatively degraded, modified, rural lifestyle environment lacking any significant landscape features and generally relatively low-moderate visual amenity. Therefore, the only negative outcomes in landscape terms will be the loss of vegetation the remaining rural character, the latter of which is anticipated by the relevant planning strategies for the area.
- 5.15 The key methods of mitigating for this loss are to retain and enhance where possible existing landscape features and create a quality urban development. Although the proposal will result in the loss of rural character there are a number of positive landscape outcomes associated with the development. The site will be comprehensively planted with street trees, rain gardens, and extensive riparian planting and specimen trees along the watercourses. This will enhance its overall amenity and assist in its integration within the changing landuse and evolving landscape character of the wider area, as it becomes progressively more urban over the next 30 years.
- 5.16 Inevitably the PPC development would result in a change in landscape character, but the proposal would also enable a suitable level of amenity, albeit an urban, rather than a rural in character is achieved.

#### **Natural Character Effects**

- 5.17. Natural character in landscape terms relates to the degree of 'naturalness' of a landscape. Natural character is primarily determined by the nature and extent of modification to a landscape and comprises natural elements appearing in natural patterns, underpinned by natural processes.
- 5.18 The highest levels of natural character are where there is the least modification. Natural character effects relate to the degree to which a proposal alters the biophysical and/or perceived naturalness of a landscape.
- 5.19 As discussed the site is highly modified as the result of the historic landuse. It has no significant indigenous vegetation. The only remaining attributes that actually contribute to

the natural character are the landform, which retains its overall integrity, and the processes that have shaped it, namely the watercourses and natural drainage patterns.

5.20 In determining the likely effects on the natural character of the site the following are the key relevant considerations:

<b>Consideration</b>	<b>Comment</b>
<p><u>Status of the Resources</u></p> <p><i>The importance of the area—locally and regionally. (Effects on rare or limited resources are usually considered more significant than impacts on common or abundant resources).</i></p>	<p>The site has limited natural character values, even on a local scale.</p>
<p><u>Sensitivity of Resources</u></p> <p><i>The effect on the area and its sensitivity to change. (Impacts to sensitive resources are usually more significant than impacts to those that are relatively resilient to impacts).</i></p>	<p>The drainage network and associated landform are sensitive to change. However, the development will necessitate limited modification of most of these areas.</p>
<p><u>Area Affected</u></p> <p><i>The proportion of resource affected/area of influence. The size of the area affected by the activity often influence the degree of impact (i.e. affecting a large area will generally be significant). Affecting a large proportion of a limited area or resource will tend to be significant resources).</i></p>	<p>The main parts of the site associated the watercourses and drainage network constitute a significant portion of the site. The proposal for the site retains most of the key parts of the drainage network within drainage reserves. These areas constitute approximately 37% of the total site areas. Consequently, only a relatively small amount of the natural drainage network would be affected.</p>
<p><u>Degree of Change &amp; Magnitude of Effect</u></p> <p><i>The character and degree of modification, damage, loss or destruction that will result from the activity. Activities that result in a high degree of change are generally more significant.</i></p> <p><i>The scale and extent of possible effects caused by an activity (for example on the number of sites affected, on spatial distribution etc). Activities that have a large magnitude of effect are generally more significant</i></p>	<p>The main parts of the site associated the existing watercourses and drainage network would not be altered significantly either in character or extent by the proposed site development. Following site works the open space network associated with the areas retained would be significantly enhanced through by extensive planting of indigenous species.</p>

Table 2. Natural Character Analysis



- 5.22 Based on the consideration of these criteria, I consider that any adverse effects of the proposal on the remaining natural character of the site would be very low. Indeed, the extensive planting proposed would inevitably result in significant enhancement of these areas by re-establishing natural processes associated with the drainage network and reinforcing the associated natural patterns within the landscape.

### **B. Visual Effects**

- 5.23 The assessment of visual effects analyses the perceptual response that any of the identified changes to the landscape may have in relation to visual amenity or peoples visual appreciation of the surrounding landscape. Visual effects are influenced by the sensitivity of the receiving environment combined with the type and magnitude of visual change associated with a proposal.
- 5.24 Visual sensitivity is influenced by a variety of factors including visibility of a proposal, the nature and extent of the viewing audience, the visual qualities of the proposal, and the ability to integrate any change within the landscape setting where applicable. The nature and extent of visual effects are determined by a systematic analysis of the visual intrusion and qualitative change that a proposal may bring, specifically in relation to aesthetic considerations and visual character and amenity.

#### *Methodology*

- 5.25 The methodology used to determine the nature and extent of visual effects involves:
- a) identification of the physical area or catchment from which the proposed development would be visible;
  - b) identification of the different viewing audiences within this area that would be affected by the development, followed by the allocation of viewpoints to positions that capture those audience's perspectives;
  - c) the preparation of photographs from the representative viewpoints;
  - e) evaluation of the effects taking into account the preceding analysis based on the following base criteria:
    - i) *Sensitivity of the view* – the relative quality of the views, values attached to a view, and their vulnerability to change.
    - ii) *Viewpoint / perceptual factors* – the type and size of the population exposed to views, including the viewing distance, focus and level of exposure, and context from which they experience the view.
    - iii) *Context* – the degree to which the proposed development would fit into the existing rural and future urban context (amenity/form)

- iv) *Extent and Magnitude of Change* – including consideration relating to prominence and legibility, size/scale, visual intrusion/contrast, the impact upon key landscape elements and patterns, geographical extent and duration.
- v) *Mitigation potential* – the extent to which any potential adverse effects of the development could be mitigated through integration into its surrounds by specific measures.

#### *Visual Catchment & Audience*

- 5.26 The visual catchment is the area from which noticeable visual effects of the development are likely to be evident to any significant degree. Visual catchments are determined by a combination of the scale of a proposal, viewing distance, and screening elements within the landscape. In this instance, the visual catchment is defined in the east by the Hunua foothills. From other directions, the catchment is less well defined. Nonetheless, because of the flat nature of the topography, views are generally limited to the immediate surrounds due to screening provided by existing vegetation (particularly shelterbelts and hedgerows) and built development.
- 5.27 Based on the visual catchment described, the potential viewing audience is comprised of the following main groups:
- i. Residents and occupiers of neighbouring properties
  - ii. Passengers on trains using the adjacent rail line
  - iii. Users of Drury Domain
  - iv. Users of the local roading network (in particular, Waihoehoe Road, Fitzgerald Road, Young Crescent and Sutton Road)
  - v. Residents living in elevated locations on the slopes of the nearby Hunua foothills to the east.
- 5.28 For the purposes of analysis of effects on visual amenity these audiences can be combined into the following categories:
- Immediate adjoining areas (groups i- iii)
  - Surrounding road network (group iv)
  - Wider surrounding area (group v).
- 5.29 Various viewpoints have been selected to present a suitable representative of views over the site for the various audiences within the visual catchment area described (Refer to Appendix 3 for viewpoint photographs). The location of the viewpoints is depicted in Figure 6.

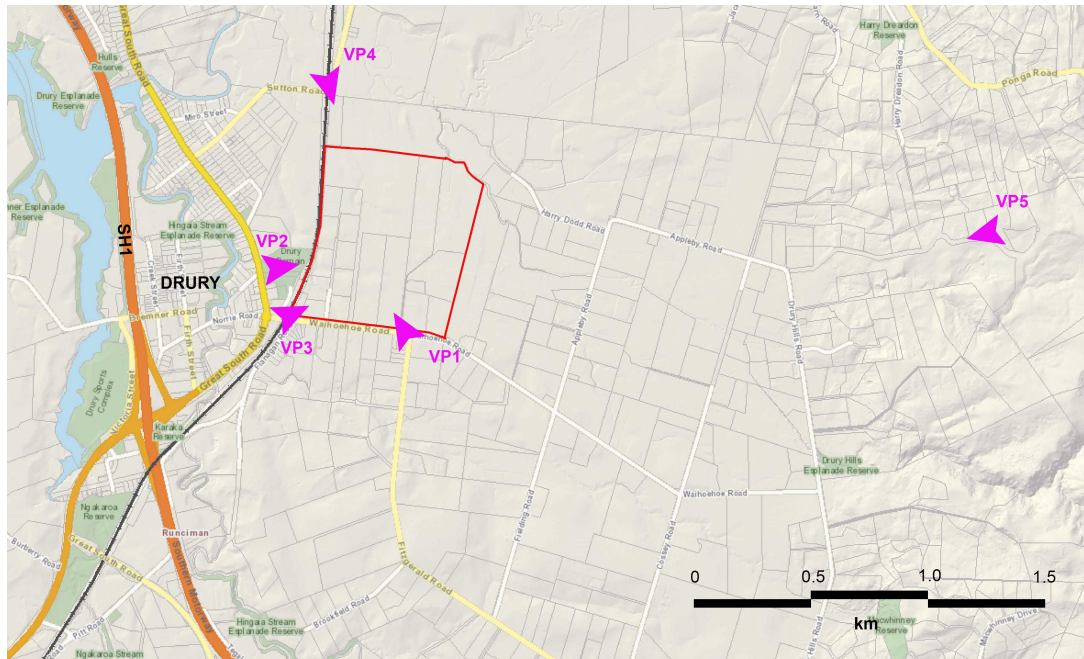


Figure 6. Viewpoint Locations (refer to Appendix 3 for Viewpoint Photographs) (Source: GeoMaps)

### Visual Effects Analysis

- 5.30 The following summaries describe the landscape and visual implications of the proposal for the various audiences.

#### Immediately Adjoining Areas

- 5.31 The properties adjoining the site would be most affected by the development enabled by the PPC. This includes the semi-rural/rural properties to the south (across Waihoehoe Road - refer to Viewpoint 1), and to the north and east of the site. Views towards the site from the north and east would however be moderated, filtered or screened to various degrees by the existing vegetation along the site boundaries and within the surrounding properties. This includes the established shelterbelts, vegetation associated with the Waihoehoe Stream and amenity planting.
- 5.32 Although there is nothing particularly remarkable about the site in the context of the local and wider area with respect to its landscape character and visual amenity, it is sensitive to the type of development proposed as it involves a total transformation of the site which will affect the main attributes that currently contribute to its rural amenity, namely the open space characteristics and established vegetation patterns.
- 5.33 Similarly the residential component of this audience is also likely to be relatively sensitive to any permanent changes to their existing rural outlooks. The other audiences that relate to the adjoining areas - train passengers and users of Drury Domain are likely to be comparatively less sensitive. The former as they are moving through a constantly changing landscape which is characterised by fragmented rural and development along the route, and the Domain users (refer to Viewpoint 2) as they are

- separated for the site by the rail line and existing vegetation and their focus is likely to be more on activities with the Domain itself.
- 5.34 For the immediately adjoining properties, particularly those along Waihoehoe Road, the existing outlook will change significantly from an often vegetated rural outlook to a comprehensive urban view. For occupiers of properties to the north and east, the effects of the development would be much less pronounced due to the buffer of open space to be retained within the site and additional open pasture beyond, combined with existing vegetation.
- 5.35 For train passengers the visual effects would be very low, as the site would just form a continuum of the ever-changing rural/urban views along this section of the journey. Also, the proposed retention of open space along the western boundary of the site would provide the opportunity to partially screen and integrate future development with planting.
- 5.36 For the users of the Drury Domain the proposal would initially change the current vegetated foreground to the distant views of the Hunua foothill with urban development. This would alter the context of the reserve from a semi-rural to a more of an urban condition. Some relief would be provided however by the separation of the rail corridor and the extensive drainage reserve along the western boundary of the site. Also once the proposed planting in this area establishes the existing vegetated outlook from the Domain could be largely reinstated.
- 5.37 So although the visual effects of the PPC would be variable for these audiences within the immediate vicinity, overall the proposal would constitute a significant change to the existing rural character and a loss of most of the existing vegetation and sense of spaciousness. Nevertheless, this is the type of change which is anticipated in much the wider area, and given the proposal presented to date, together with the development controls of the AUPOP for the relevant residential zones (which require landuse consents to provide consideration of design and appearance of development), combined, it is anticipated that a suitable level of amenity, albeit urban, would be achieved.
- 5.38 Once the site is developed, the existing views will be replaced with a mixture of urban development including medium to high-density housing (including, terraced housing and apartments), with extensively vegetated streetscapes and open spaces. The proposed open space network associated the watercourses, and drainage reserve plantings would also assist in maintaining a general sense of spaciousness associated with the site and in visually integrating the future development into the surrounding landscape.
- 5.39 From the adjoining areas the full effects of the change brought about by the proposal would also be gradual as the land is retired from rural lifestyle use, modified, and staged built development extends across the landform. As is the situation with other nearby

areas (e.g. Hingaia Peninsula, Auranga, Drury South etc). It is anticipated that the full progression from rural lifestyle to urban would take a number of years. Combined with the general transition of landuse in much of the surrounding area, this would also reduce the impact of the change to some degree, due to the incremental nature of the changes and a general conditioning of the audience over time as development progresses.

- 5.40 The gradual change, extensive green network and planting proposed would all have a significant influence on mitigating the visual effects of the development associated with the PPC to various degrees over different timeframes. Similarly, the visual effects for the different audiences in the immediate vicinity will also vary, ranging from very low for the likes of train passengers and neighbours separated by open space and screened by vegetation, to moderate to high for the likes of those along Waihoehoe Road who would experience a total transformation and permanent loss of rural character and associated visual amenity. The latter however constitutes a very small audience in the context of the setting.

#### **Surrounding Road Network**

- 5.41 Due to existing built development there is no, or very limited visibility of the site from SH1 or Great South Road where there are potentially very large viewing audiences. Rather views of the site will be largely confined to the adjacent local roads to the north, west and south
- 5.42 For road users on the surrounding road network, in particular those who live locally in rural situations, the development of the subject site is likely to result in visual effects of some significance, particularly for those using Waihoehoe Road and Fitzgerald Road. Users of Young Crescent and Sutton Road would be less affected due to the buffer of open pasture and existing stands of vegetation between the road and the site (refer to Photo-viewpoint 4). For general road users the effects are likely to be of much less significance as the development will be seen as part of the general pattern of land use change occurring locally.
- 5.43 Although a large audience, the road users are unlikely to be particularly sensitive to future development, as they will have fleeting views of only portions of the site whilst moving through a landscape, which already exhibits relatively diverse characteristics around Drury township and in other areas in the vicinity currently undergoing, or proposed for urbanisation. Again, the sensitivity and the effects of the proposal will be reduced further by the fact that the development will be gradual and staged over a number of years.
- 5.44 Future street tree plantings and planting associated with the open space network would also assist in integrating the built development into the landscape and provide a vegetated framework of appropriate form and scale. Overall the visual effects resulting from the PPC from the surrounding road network will be low.

**Wider Surrounding Area** (Refer to Photo-viewpoint 5)

- 5.45 Because of the relatively flat terrain and existing vegetation, beyond the immediate area identified above, there would be limited views over the site. The only extensive views on offer are from elevated locations on the slopes of the nearby Hunua foothills approximately 2km+ to the east.
- 5.46 Although comparatively low in density, this part of the Hunua foothills has a relatively consistent covering of residential lifestyle development. In many instances the elevation and aspect offer panoramic views over the Franklin countryside and Manukau Harbour from the Bombay Hills in the south, over the Awhitu Peninsula and the Waitakere Ranges to the Auckland metropolitan area in the north. It is a quality view and although the foreground, in particular, is fragmented by numerous farm buildings, infrastructure and concentrated development around Drury merging with Papakura to the north, the main view remains dominated by the widespread influence of rural production.
- 5.47 This audience is a moderately sized audience who are likely to be sensitive to changes to their main outlook. Because of the established vegetation on the flats, in most instances it is not until an elevation of around 60m above sea level before an overview of the subject site becomes available to the viewer. The view also has very high visual absorption characteristics due to its immense scale, visual diversity, complex patterning, and comprehensive covering of vegetation. In addition, the views from such elevated locations are naturally drawn out beyond the area in the foreground, to the distant views of rural Franklin and beyond.
- 5.48 Within this context the development proposed by the PPC would not result in significant adverse visual amenity effects for this audience. Those parts of the site development that are visible would be small in relation to landscape setting and would be seen as an extension of the established cluster of existing development associated with Drury township. It would also be seen in the context of a changing landscape in which the process of urbanisation will continue over relatively extensive areas over the next 30 years. Other mitigating factors that would further reduce the visual effects of the PPC for this audience include the relatively gradual nature of any change, and the proposed maintenance of large areas of well-vegetated open space, which would assist in breaking up and integrating future development when viewed from the foothills. Overall I consider that the visual effects of the proposal for this audience would be low.

## 6.0 RELEVANT PLANNING CONSIDERATIONS

6.1 The following statutory documents are of particular relevance to this assessment:

- Auckland Future Urban Land Supply Strategy
- Auckland Unitary Plan (Operative in Part)

### ***Auckland Future Urban Land Supply Strategy (FULSS)***

6.2 As noted earlier within this document, the area the site is located (Opaheke-Drury) is timed to be ready for future urban development within the period 2028 - 2032. The PPC proposal is consistent with the general intent for the area in terms of urbanisation. Although currently this is not anticipated in this area for another decade, the actual timing of site development will be dependent on the provision of bulk infrastructure. Further, the FULSS highlights:

*“Staging of areas for plan changes will generally follow the sequence and timeframes identified in the Future Urban Land Supply Strategy, unless an alternative staging is considered appropriate through the structure planning process”.<sup>8</sup>*

This indicates that there is a certain amount of flexibility in relation to staging for development.

### ***The Auckland Unitary Plan (Operative in Part)***

6.3 The site and surrounds are not identified in the AUP as an area of Outstanding Natural Landscape, Outstanding Natural Feature, Outstanding Natural Character or High Natural Character.

6.4 The main relevant section of the AUPOP relating to the landscape and visual effects is:

### **B2. Tāhuhu whakaruruhau ā-taone – Urban growth and form**

<b>B2.2 Urban Growth and Form B2.2.1. Objectives</b>	<b>Comment</b>
<p>(1) <i>A quality compact urban form that enables all of the following:</i></p> <ul style="list-style-type: none"> <li>(a) <i>a higher-quality urban environment;</i></li> <li>(b) <i>greater productivity and economic growth;</i></li> <li>(c) <i>better use of existing infrastructure and efficient provision of new infrastructure;</i></li> <li>(d) <i>improved and more effective public transport;</i></li> <li>(e) <i>greater social and cultural vitality;</i></li> <li>(f) <i>better maintenance of rural character and rural productivity; and</i></li> <li>(g) <i>reduced adverse environmental effects.</i></li> </ul> <p>(2) <i>Urban growth is primarily</i></p>	<p>Development enabled by the PPC a would achieve a quality environment with a range of housing densities and typologies. The proposed master plan responds to the intrinsic qualities and physical characteristics of the site through the retention and enhancement of the general character of the landform, existing watercourses and drainage network. This together with extensive planting proposed throughout the streets and open space network will ensure suitable levels of amenity and integration of the built development. Potential adverse effects of urban activities on the environment will be</p>

<sup>8</sup> Auckland Council. July 2017. Auckland Future Urban land Supply Strategy. page 10

<p><i>accommodated within the urban area 2016 (as identified in Appendix 1A).</i></p> <p>(3) <i>Sufficient development capacity and land supply is provided to accommodate residential, commercial, industrial growth and social facilities to support B2 Tāhuhu whakaruruhau ā-taone - Urban growth and form Auckland Unitary Plan Operative in part 2 growth.</i></p> <p>(4) <i>Urbanisation is contained within the Rural Urban Boundary, towns, and rural and coastal towns and villages.</i></p> <p>(5) <i>The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is integrated with the provision of appropriate infrastructure.</i></p> <p><b>B2.3. A quality built environment</b></p> <p><b>B2.3.1. Objectives</b></p> <p>(1) <i>A quality built environment where subdivision, use and development do all of the following:</i></p> <p>(a) <i>respond to the intrinsic qualities and physical characteristics of the site and area, including its setting;</i></p> <p>(b) <i>reinforce the hierarchy of centres and corridors;</i></p> <p>(c) <i>contribute to a diverse mix of choice and opportunity for people and communities;</i></p> <p>(d) <i>maximise resource and infrastructure efficiency;</i></p> <p>(e) <i>are capable of adapting to changing needs; and</i></p> <p>(f) <i>respond and adapt to the effects of climate change.</i></p> <p><b>B2.3.2. Policies</b></p> <p>(1) <i>Manage the form and design of subdivision, use and development so that it does all of the following:</i></p> <p>(d) <i>supports the planned future environment, including its shape, landform, outlook, location and relationship to its surroundings, including landscape and heritage;</i></p>	<p>avoided, remedied or mitigated through the proposed provisions for the PPC area and the operative AUP.</p>
--	---



## **7.0 SUMMARY AND CONCLUSIONS**

- 7.1 Although the site is currently is largely in open pasture, it's 'ruralness' is already significantly degraded by the relatively limited productive landuse, fragmentation by numerous small land holdings, the relatively high density of built development and settlement, and the proximity to Drury township and key transport infrastructure corridors. The site also presents a modified, degraded environment with no significant landscape features aside for the existing oak avenue. These factors together with the flat terrain make the site well suited to the type of urban development proposed.
- 7.2 The site is zoned for future urban use. The plan change proposes mixed-use residential development for the site. The layout has been designed with consideration of the limitations and opportunities presented by the site. The PPC would ultimately see the site changing from rural to urban use. Despite this most of the key landscape attributes, including the landform, the watercourses, and a significant portion of the open space would be retained as part of the development.
- 7.3 Inevitably the urban expansion of the site will have implications for the adjacent rural land and will degrade rural qualities of these areas. Nevertheless, the development is consistent with urban expansion envisaged in the Auckland Plan, Future Land Supply Strategy, and AUPOP, and such effects of urban expansion on the urban fringe cannot be avoided. These adjacent areas are also designated for future urban use so will also inevitably be absorbed into the burgeoning urban area over the next few decades with similar landuse through the Council Structure Plan and plan change process.
- 7.4 Due to the anticipated urbanisation of the area there are no proposals in place to attempt to screen the development, rather to accept the change and attempt to develop the site in accordance with accepted urban design principles to create a quality residential development with significant areas of open space with a vegetated framework to create a high level of amenity, albeit urban rather than rural.
- 7.5 The development of the site would also result in number significant landscape related benefits including the protection and enhancement of the watercourse and drainage network by their inclusion into an extensive open space network with widespread riparian and amenity planting. This would result in environmental enhancement through habitat enrichment, improved water quality in watercourses. The reserve areas and associated vegetation would also assist in maintaining a sense of spaciousness, assist in breaking up the built development, and with time contribute to the wider surrounding area.
- 7.6 Despite the relatively low landscape values and limited visual catchment area, the development would initially result in visual effects of some significance. These however are inevitable with urban development in a predominantly rural area at the start of a process of urbanisation. While the proposed development will result in a significant visual

change from the site's current open semi-rural state to one with urban characteristics, the main effects of this would only be experienced to a significant degree by some of the immediate neighbours. Although this is a sensitive audience it is also relatively small in the context of the setting. Further, such visual change is anticipated and is in accordance with the key planning initiatives for the area.

Jason Hogan  
(NZILA) Registered Landscape Architect  
Director - LA4 LANDSCAPE ARCHITECTS



APPENDICES



LA4 LANDSCAPE ARCHITECTS LTD  
26 KITCHENER STREET, CBD  
PO BOX 5669 AUCKLAND 1141  
NEW ZEALAND  
PH: (09) 353 0643  
FAX:09 358 0895  
EMAIL: jason@la4.co.nz  
WEB: www.la4.co.nz

**WAIHOEHOE ROAD PLAN CHANGE**  
Landscape and Visual Effects Assessment

**September 2019**

**APPENDICES**

---



**WAIHOEHOE ROAD PLAN CHANGE**

LANDSCAPE AND VISUAL ASSESSMENT  
SEPTEMBER 2019

**CONCEPT MASTERPLAN**

APPENDIX  
**1.0**



SUPER BLOCK	ZONE	DUPHA	LOW	MED	HIGH
		Area	UNITS	UNITS	UNITS
SB1	THAB	28,764	86	115	144
SB2	THAB	11,505	35	46	58
SB3	THAB	25,614	77	102	128
SB4	THAB	31,345	94	125	157
SB5	THAB	9,302	80	37	47
<b>SUB TOTALS</b>			<b>372</b>	<b>426</b>	<b>533</b>

SUPER BLOCK	ZONE	DUPHA	LOW	MED	HIGH
		Area	UNITS	UNITS	UNITS
SB6	MHU	8,320	15	21	29
SB7	MHU	16,469	30	41	58
SB8	MHU	9,948	18	25	35
SB9	MHU	25,593	46	64	90
SB10	MHU	16,556	30	41	58
SB11	MHU	12,258	22	31	43
SB12	MHU	46,980	85	117	164
SB13	MHU	2,166	4	5	8
SB14	MHU	5,803	10	15	20
SB15	MHU	3,938	9	12	17
<b>SUB TOTALS</b>			<b>268</b>	<b>372</b>	<b>521</b>
<b>TOTAL UNITS</b>			<b>640</b>	<b>798</b>	<b>1,054</b>

	M <sup>2</sup>	HA
THAB	106,533	10.7
MHU	148,036	14.8
DRAINAGE RES	181,814	18.2
ROAD RES	52,627	5.3
<b>TOTAL AREA</b>	<b>489,010</b>	<b>48.9</b>
Max Gross Dev Density (DUPHA)		21.55
Max Net Dev Density (DUPHA)		41.40



This document and design remains the property of Holistic Urban Environments Ltd. No liability shall be accepted for any unauthorised use. This design is subject to further detailed investigation including but not limited to Planning, Engineering, Survey, Architecture, and Urban Design.

CLIENT  
**OYSTER CAPITAL**

ADDRESS  
**WAIHOEHOE ROAD  
PLAN CHANGE**

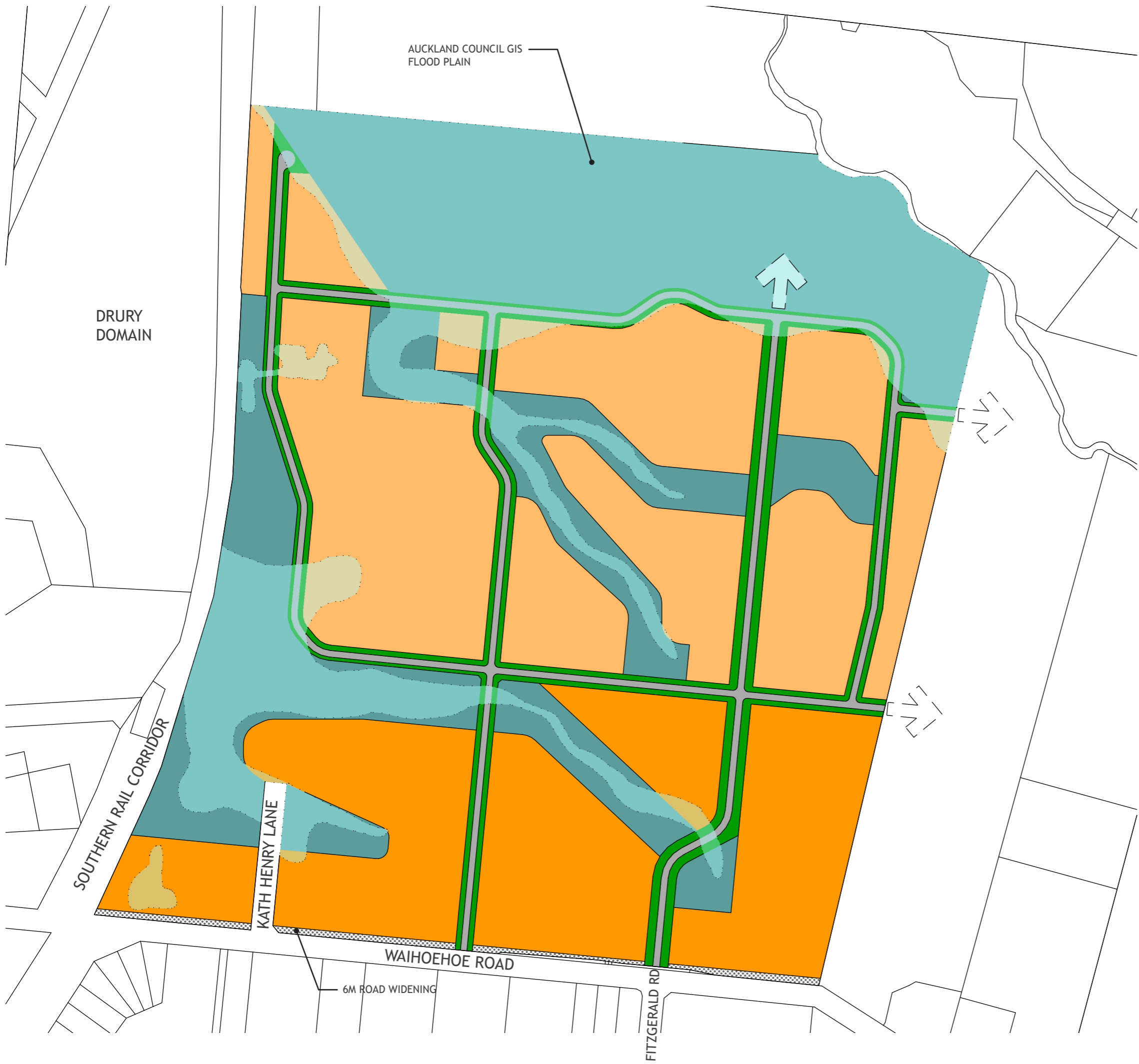
PROJECT #: 19-005\_WAHH  
ISSUE DATE: 03/18/19  
STATUS: DRAFT  
AUTHOR: MP  
SCALE: 1:3,500 @ A3

DWG TITLE  
**CONCEPT  
MASTERPLAN**

DWG #  
**CP-101-A**

- KEY**
- DEVELOPMENT BLOCKS
  - TERRACE HOUSING & APARTMENT ZONE
  - MIXED HOUSING URBAN ZONE
  - DRIANGE RESERVE
  - ROAD RESERVE & CARRIAGEWAY

6M ROAD WIDENING



AUCKLAND COUNCIL GIS FLOOD PLAIN

DRURY DOMAIN

SOUTHERN RAIL CORRIDOR

KATH HENRY LANE

WAIHOEHOE ROAD

FITZGERALD RD

6M ROAD WIDENING

- KEY**
- SB# DEVELOPMENT BLOCKS
  - TERRACE HOUSING & APARTMENT ZONE
  - MIXED HOUSING URBAN ZONE
  - DRIANGE RESERVE
  - ROAD RESERVE & CARRIAGEWAY



This document and design remains the property of Holistic Urban Environments Ltd. No liability shall be accepted for any unauthorised use. This design is subject to further detailed investigation including but not limited to Planning, Engineering, Survey, Architecture, and Urban Design.

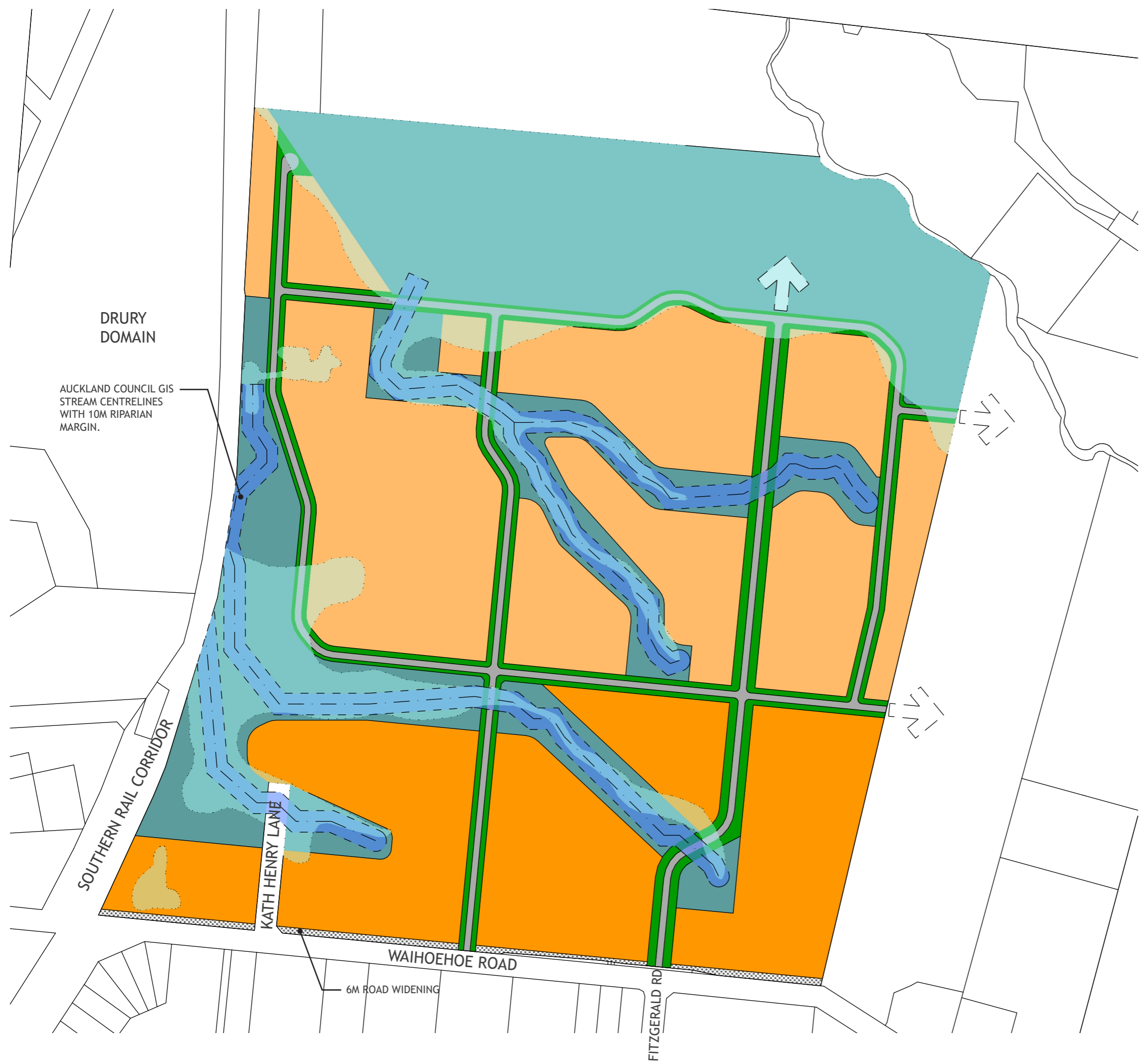
CLIENT  
**OYSTER CAPITAL**

ADDRESS  
**WAIHOEHOE ROAD  
PLAN CHANGE**

PROJECT #: 19-005\_WAHH  
ISSUE DATE: 03/18/19  
STATUS: DRAFT  
AUTHOR: MP  
SCALE: 1:3,500 @ A3

DWG TITLE  
**CONCEPT  
MASTERPLAN  
+ AUCKLAND COUNCIL GIS  
FLOOD PLAINS**

DWG #  
**CP-102-A**



DRURY DOMAIN

AUCKLAND COUNCIL GIS  
STREAM CENTRELINES  
WITH 10M RIPARIAN  
MARGIN.

SOUTHERN RAIL CORRIDOR

KATH HENRY LANE

WAIHOEHOE ROAD

FITZGERALD RD

6M ROAD WIDENING

- KEY**
- SB# DEVELOPMENT BLOCKS
  - TERRACE HOUSING & APARTMENT ZONE
  - MIXED HOUSING URBAN ZONE
  - DRIANGE RESERVE
  - ROAD RESERVE & CARRIAGEWAY



This document and design remains the property of Holistic Urban Environments Ltd. No liability shall be accepted for any unauthorised use. This design is subject to further detailed investigation including but not limited to Planning, Engineering, Survey, Architecture, and Urban Design.

CLIENT  
**OYSTER CAPITAL**

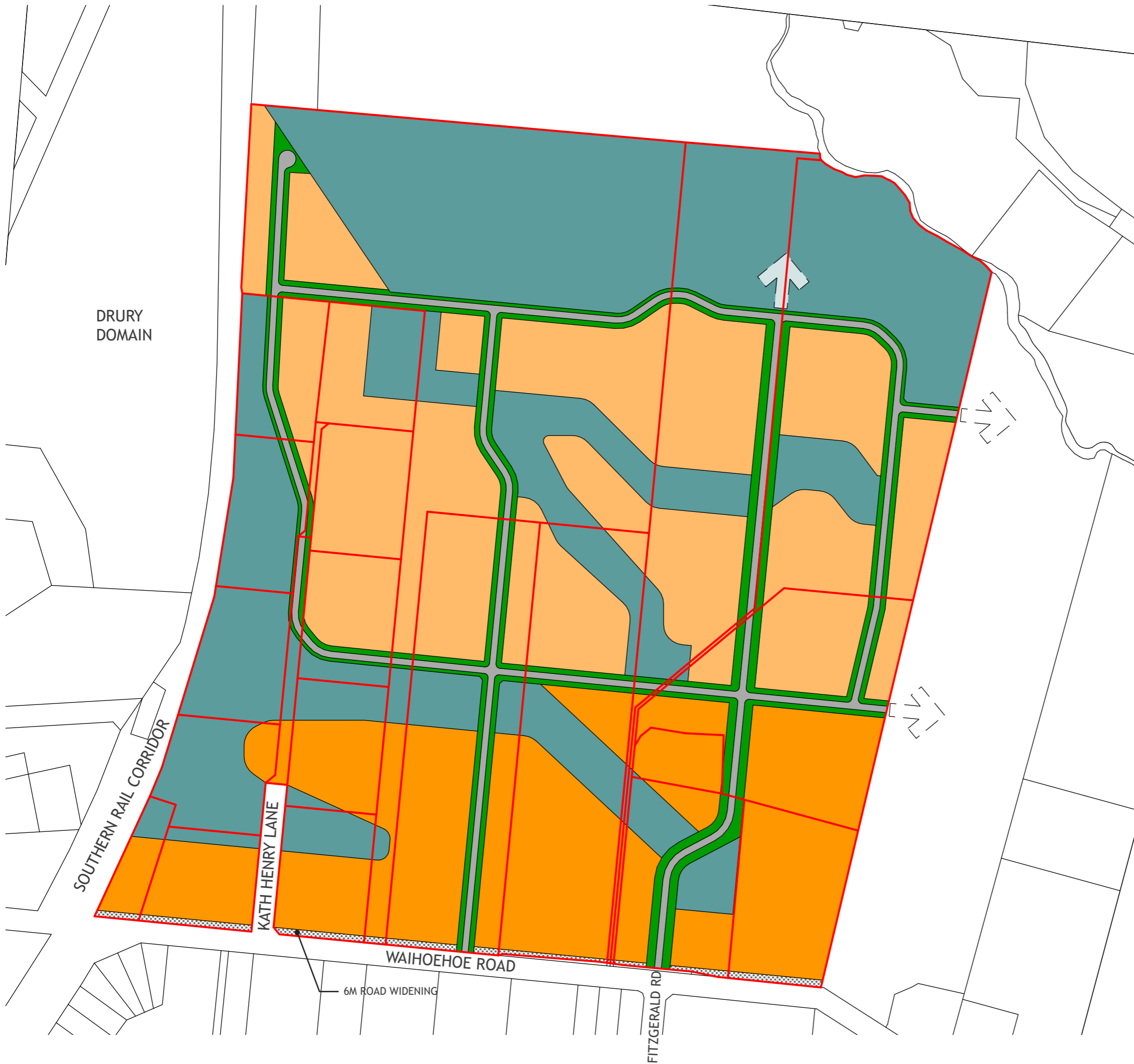
ADDRESS  
**WAIHOEHOE ROAD  
PLAN CHANGE**

PROJECT #: 19-005\_WAHH  
ISSUE DATE: 03/18/19  
STATUS: DRAFT  
AUTHOR: MP  
SCALE: 1:3,500 @ A3

DWG TITLE  
**CONCEPT  
MASTERPLAN  
+ AUCKLAND COUNCIL GIS  
FLOOD PLAINS  
+ STREAMS & RIPARIAN**

DWG #  
**CP-103-A**





- KEY**
- SB# DEVELOPMENT BLOCKS
  - TERRACE HOUSING & APARTMENT ZONE
  - MIXED HOUSING URBAN ZONE
  - DRIANGE RESERVE
  - ROAD RESERVE & CARRIAGEWAY



This document and design remains the property of Holistic Urban Environments Ltd. No liability shall be accepted for any unauthorised use. This design is subject to further detailed investigation including but not limited to Planning, Engineering, Survey, Architecture, and Urban Design.

CLIENT  
**OYSTER CAPITAL**

ADDRESS  
**WAIHOEHOE ROAD  
PLAN CHANGE**

PROJECT #: 19-005\_WAHH  
ISSUE DATE: 03/18/19  
STATUS: DRAFT  
AUTHOR: MP  
SCALE: 1:3,500 @ A3

DWG TITLE  
**CONCEPT  
MASTERPLAN  
+ PROPERTY BOUNDARIES**

DWG #  
**CP-104-A**

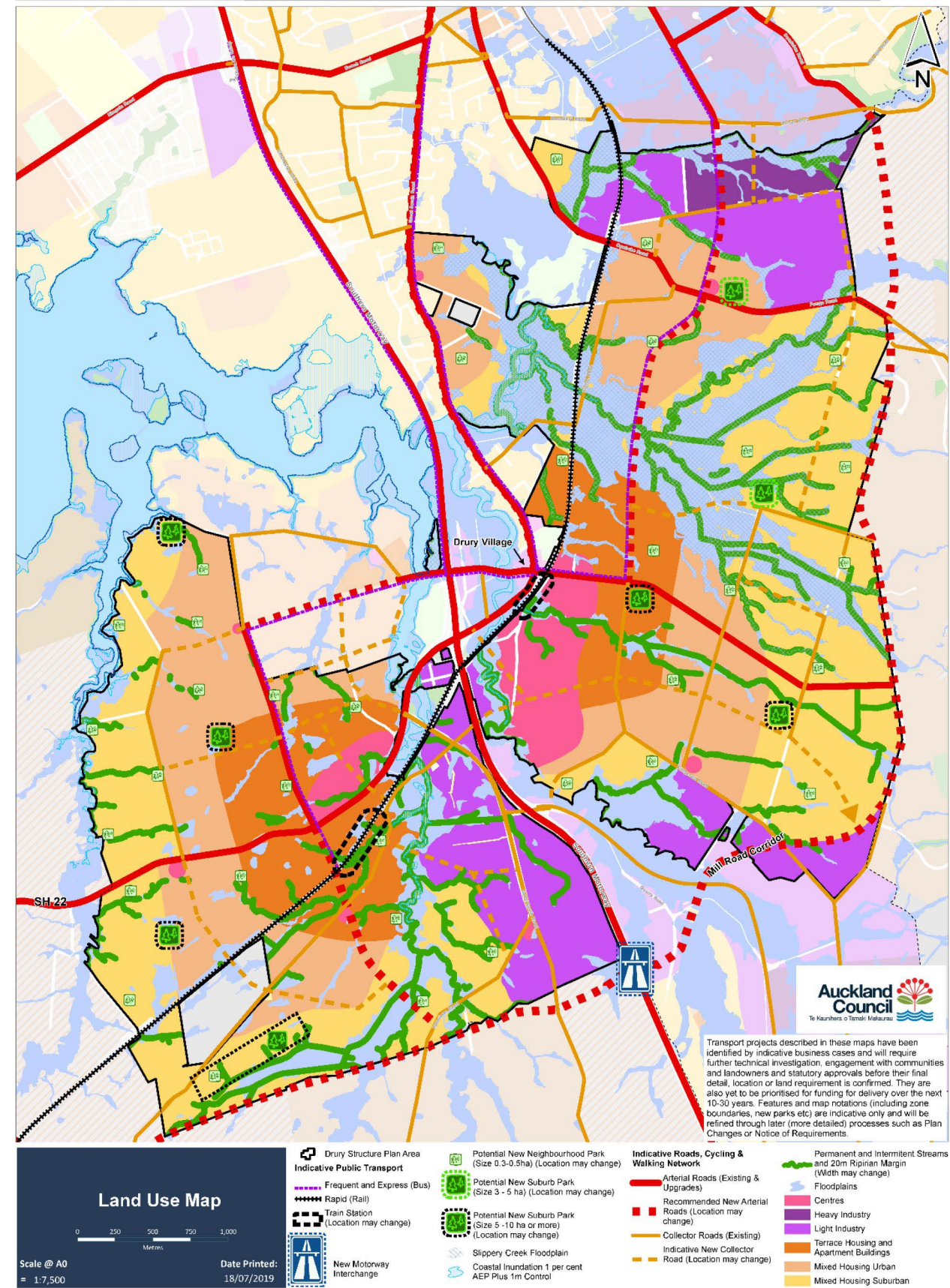


Figure 1: The Drury - Opāheke Structure Plan 2019 land use map 2019



**WAIHOEHOE ROAD PLAN CHANGE**

LANDSCAPE AND VISUAL ASSESSMENT  
SEPTEMBER 2019

**PHOTO-VIEWPOINTS**

APPENDIX  
**3.0**



Photo-Viewpoint 1 (from near the corner of Waihoehoe Road and Fitzgerald Road looking to the northwest)

Date 06.05.2019



Photo-Viewpoint 2 (from Drury Domain looking to the east)

Date 21.03.2019





Photo-Viewpoint 3 (from the Waihoehoe Road Rail bridge looking to the northeast)

Date 21.03.2019



Photo-Viewpoint 4 (From Sutton Road rail line crossing looking south)

Date 21.03.2019



Photo-Viewpoint 5 (from outside 615 Appleby Road looking west)

Date 21.03.2019



**WAIHOEHOE ROAD PLAN CHANGE**

LANDSCAPE AND VISUAL ASSESSMENT  
SEPTEMBER 2019

**PHOTO-VIEWPOINTS  
(WIDER SURROUNDING AREA)**

Approximate Property Boundary Shown by Red Line  
(Refer to Figure 3 in the accompanying report for  
Viewpoint Location Map)

APPENDIX

**3.3**