IN THE ENVIRONMENT COURT AT AUCKLAND

I TE KŌTI TAIAO O AOTEAROA KI TĀMAKI MAKAURAU

Decision [2024] NZEnvC 317

IN THE MATTER OF an appeal under clause 14 of Schedule 1 of the Resource Management Act 1991

BETWEEN MANGAWHAI MATTERS INCORPORATED

(ENV-2024-AKL-222)

Appellant

AND

AND

Respondent

MANGAWHAI HILLS LIMITED

KAIPARA DISTRICT COUNCIL

Applicant

Court:	Environment Judge J A Smith sitting alone under s 279 of the Act
Last case event:	29 November 2024
Date of Order:	4 December 2024
Date of Issue:	4 December 2024

CONSENT DETERMINATION



Mangawhai Matters Incorporated v Kaipara District Council

- A: Under section 279(1)(b) of the Resource Management Act 1991, the Environment Court, by consent, <u>orders</u> that:
 - (1) The Private Plan Change 84: Mangawhai Hills provisions of the Operative Kaipara District Plan are amended in accordance with Appendix A; and
 - (2) The appeal by Mangawhai Matters Incorporated is resolved in its entirety.
- B: Under section 285 of the Resource Management Act 1991, there is no request for or order as to costs.

REASONS

Introduction

[1] This consent determination relates to an appeal by Mangawhai Matters Incorporated (**Appellant**) against a decision of Kaipara District Council (**Council**) on Private Plan Change 84: Mangawhai Hills Development Area (**PC84**).

Plan Change 84

[2] The PC84 area comprises 218.3 ha of land bounded by Cove Road, Tara Road, Moir Road and Old Waipu Road, Mangawhai (**Site**). The Site is zoned Rural Zone under the Operative Kaipara District Plan.

[3] PC84 seeks to rezone the Site from Rural Zone to Mangawhai Hills Development Area (**MHDA**). The MHDA contains bespoke provisions and introduces a suite of objectives, policies and rules which guide and manage future development on the Site.

[4] The MHDA provisions protect the Site's ecological and landscape values while enabling high-quality residential development outcomes. Those outcomes are supported by community benefits and recreational opportunities via the provision of community facilities, public open space, the restoration and enhancement of indigenous vegetation, wetlands and water systems, and the provision of appropriate infrastructure.

[5] The development enabled by PC84 is broadly consistent with that anticipated by the Mangawhai Spatial Plan. The MHDA has been informed by, and is consistent with, the Mangawhai Hills Structure Plan which illustrates the intended spatial outcomes of the Site and informs the spatial pattern of land use, subdivision, indicative roading, open space and ecological restoration and enhancement.

[6] Currently, the Site is used for grazing associated with dairy farm operations. A series of native and exotic vegetation and freshwater features (intermittent and permanent streams and natural wetlands) are located throughout the Site.

[7] There are two primary streams, located between ridge lines which converge towards the southeastern portion of the Site and continue further south along Tara Road. A number of wetlands are typically located in close proximity to the stream network.

[8] The Site is currently surrounded by residential and rural residential activities and is largely fragmented. Areas to the east and south of the Site are zoned Large Lot Residential, which is consistent with the residential outcomes sought by PC84.

The Council's Decision

[9] The Council appointed an Independent Hearings Panel to hear submissions on PC84. The hearing took place on 28 and 29 May 2024. The Independent Hearings Panel issued a Recommendation Report on 8 July 2024.

[10] On 28 August 2024 the Council issued a decision adopting the recommendations of the Independent Hearings Panel and approving PC84 (**Decision**). PC84 was publicly notified on 17 September 2024.

[11] The approved MHDA creates a transition from residential development to the rural edge of Mangawhai and enhances community benefits and recreational opportunities through the provision of community facilities, access to public open space, nature trails and shared amenities and network connectivity, benefiting

Mangawhai and the wider Kaipara District. The Development Area strengthens multimodal transportation, ecological and hydrological connections.

[12] The key positive features enabled by PC84 are encapsulated in Objective 1 of the MHDA which provides:

Sustainable residential living opportunities are provided for in the Mangawhai Hills Development Area while ecological, landscape, amenity, servicing and transportation effects are avoided, remedied or mitigated.

[13] That objective is implemented through the MHDA which includes rules which ensure sufficient infrastructure and servicing is available, provide for a safe transport network and connectivity for cars, bicycles and pedestrians, and enhancement and restoration of landscape and ecological features of the Site.

The Appeal

[14] Mangawhai Matters Incorporated appealed the Decision to the Environment Court on 23 October 2024. No parties have joined the proceedings under s 274 of the Act.

[15] The reasons for the appeal focus on protection of the Mangawhai Harbour and ensuring that works associated with the urbanisation of the Site are conducted in a manner consistent with best practice in order to safeguard the harbour from adverse effects of sediment in particular. The appellant wishes to ensure that the performance of onsite sediment controls required by PC84 will ensure that sediment discharges from Mangawhai Hills development into the Estuary are minimised.

[16] The relief sought seeks amendments to the MHDA provisions relating to sediment control and detention that aim to reduce the sediment loadings discharged from the Site into the Mangawhai Estuary.

[17] Following discussions, the parties have agreed that the appeal can be resolved in its entirety by consent on the basis that the parties have agreed to amendments to the provisions as set out in **Appendix A**.

Agreement reached

[18] The agreed amendments to the provisions relate to sediment control and detention and aim to reduce the sediment loadings discharged from the Site into the Mangawhai Estuary, thereby improving water quality.

[19] The Parties have agreed to the following amendments to the MHDA provisions as set out in Appendix A to the consent order:

- (a) MHDRA-R7 Advice Note 3 is amended to include reference to earthwork activities following good management practice equivalent to those set out in the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05);
- (b) MHDRA-R7(3)(j) is amended to include reference to stormwater disposal and for earthworks to follow good management practice equivalent to those set out in the Auckland Region Guidance Document (GD01);
- MHDA-R19 is amended to correct an error by replacing reference to MHDA-R19.1a-j to MHDA-R19.1a -k;
- (d) New standard MHDRA-S9.5 is inserted into the Earthworks provisions which requires earthworks to be undertaken in accordance with best practice as set out in the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05); and
- (e) MHDRA-REQ-1 Note 2 is amended to strengthen the provision by requiring that good management for stormwater management "shall be" equivalent to those set out in the guideline document Stormwater Management Devices in the Auckland Region (GDO1).

Section 32AA analysis

[20] Section 32AA of the Act requires a further evaluation of any changes to a proposal since the evaluation report was completed.

- [21] The Parties:
 - (a) Are satisfied that the proposed amendments to the provisions are more appropriate than the decisions version of the provisions to achieve consistency and to better reflect Part 2 of the Act; and
 - (b) Agree that this is not a situation where there is uncertain or insufficient information such that the risk of acting or not acting needs to be evaluated.

Consideration

- [22] In making this order the Court has read and considered:
 - (a) The notice of appeal dated 23 October 2024; and
 - (b) The joint memorandum of counsel, including the s32AA evaluation, dated 29 November 2024.

[23] The Court is making this order under section 279(1) of the Act, such order being by consent, rather than representing a decision or determination on the merits. The Court understands for present purposes that:

- (a) All parties to the proceedings have executed the memorandum requesting this order; and
- (b) All parties are satisfied that all matters proposed for the Court's endorsement fall within the Court's jurisdiction, and conform to the relevant requirements and objectives of the Act including, in particular, Part 2.

[24] The agreement reached better provides for the protection of the wider environment than those of the decision appealed. I agree with the parties that the amendments to PC84 ensure there is no ambiguity with respect to earthworks and stormwater management, including associated erosion and sediment control. [25] The agreed amendments put in place provisions which help to address sediment loading and are consistent with best practice. The improvements better achieve the objective of the plan change as it relates to ecological, landscape, amenity, servicing and transportation effects.

[26] Overall, I consider the sustainable management purpose and the other relevant requirements of the Act are broadly met.

Order

- [27] Therefore, the Court orders by consent that:
 - (a) The appeal is allowed to the extent that the Mangawhai Hills Development Area provisions are amended as set out in Appendix A;
 - (b) The appeal is otherwise dismissed. This order resolves the appeal in its entirety; and
 - (c) Costs are not sought and there is no order as to costs.

J A/Smith **Environment Judge** OF COURT

Mangawhai Hills Development Area Description

The Mangawhai Hills Development Area (MHDA) provides a unique opportunity for high quality residential development in a sustainable environment and a natural landscape, framed by indigenous vegetation, wetlands and water systems. The Development Area contributes to the enhancement of ecological and landscape values in Mangawhai.

The Mangawhai Hills Development Area creates a transition from residential development to the rural edge of Mangawhai and enhances community benefits and recreational opportunities through the provision of community facilities, access to public open space, nature trails and shared amenities and network connectivity, benefiting Mangawhai and the wider Kaipara District. The Development Area strengthens multi-modal transportation, ecological and hydrological connections.

The extent and form of topography strongly influences street alignments, housing typologies and the types of open spaces. The built form enabled within the Development Area requires sensitive design to enable a sympathetic transition between the site and the existing built and natural environment in Mangawhai.

The Mangawhai Hills Structure Plan (see **Appendix 1**) has been prepared to illustrate intended spatial outcomes and to reflect the comprehensive design statement analysis for the Mangawhai Hills Development Area. This informs the spatial pattern of land use and subdivision within the Development Area.

MHDA Objectives

MHDA-O1	Mangawhai Hills Development Area	
Sustainable residential living opportunities are provided for in the Mangawhai Hills Development Area while ecological, landscape, amenity, servicing and transportation effects are avoided, remedied or mitigated.		
MHDA-O2	Amenity	
Subdivision and development are comprehensively designed and promote high quality urban design and open space networks that respond positively to the local context and outcomes anticipated with a large lot residential housing density.		
MHDA-03	Transportation and Connectivity	
Provide a connected, legible and safe multi-modal transport network.		
MHDA-04	Indigenous Biodiversity	
Identify, protect and promote the restoration and enhancement of indigenous biodiversity within the Mangawhai Hills Development Area.		
MHDA-05	Freshwater Management	
Subdivision and development are undertaken in a manner that adopts an integrated approach to the effects of land use and development on freshwater values.		
MHDA-O6	Non-residential activities	
Non-residential activities are compatible with the character and amenity of the Mangawhai Hills Development Area, and do not have any significant adverse effects on the role and function of commercial zones in Mangawhai.		

MHDA Policies

MHDA-P1 Built Development		Built Development	
To provide for and enable comprehensively designed built development which:			
 Identifies building platforms that respond to site topography and environmental characteristics. For residential development, achieve a large lot residential density and pattern of development. Considers mana whenua values. Maintains a sense of spaciousness between built form. Maintains the dominance of the natural environment (such as landscape values, natural wetlands, intermittent and permanent streams, and indigenous vegetation) over the built environment. Locating access ways, services, utilities and building platforms where these can be provided without the need for significant earthworks, retaining, benching or site contouring. Provides a scale and form of built development that achieves an appropriate standard of residential amenity and design. Relates to neighbouring properties by employing setbacks, sensitive building orientation and design, and landscaping to mitigate dominance and privacy impacts. 			
мн	DA-P2	Transportation and Connectivity	
by:		d development to achieve a connected, legible and safe multi-modal transport network	
1. 2. 3. 4.	3. Maximising walking and cycling networks along streets, waterways, natural wetlands and open spaces.		
МН	DA-P3	Ecological Values	
and	d permanent stream velopment, with part Maintaining and en	he restoration and enhancement of the values of natural wetland features, intermittent s, and indigenous vegetation identified within the site when undertaking subdivision and icular regard to: hancing the interconnected network between the ecological features. n and extension of ecological linkages.	
 Reparameter restoration and extension of ecological intrages. Methods of enhancement and permanent protection of the indigenous terrestrial and freshwater biodiversity values of the Development Area. Appropriate building setbacks. Management of earthworks and vegetation clearance. Management and treatment of stormwater and wastewater. 			
МН	DA-P4	Open Space	
	quire subdivision wit idents by:	thin the Mangawhai Hills Development Area to provide for the recreational needs of	
 Establishing active open spaces which are prominent, and of a quality and size in proportion to the anticipated density. Establishing a strong network of lineal open spaces, connected by pedestrian and cycle linkages. Creating a range of active and passive recreational activities within the network of lineal open spaces, while also enhancing the local ecology landscape and amenity. 			

also enhancing the local ecology, landscape and amenity.

MHDA-P5	Sustainable Infrastructure	
To ensure that infrastructure is sustainable and appropriately managed by requiring subdivision and development to:		
 Provide co-ordinated and integrated infrastructure which is compatible with the existing infrastructure and capacities. Incorporate water sensitive design techniques. Utilise best practice methods to manage three waters servicing. Provide for onsite wastewater treatment and disposal where a site is not able to practically connect to a public or private wastewater network. 		
MHDA-P6	Subdivision	
The Mangawhai Hills D Hills Structure Plan wh	Development Area provides for high quality subdivision that implements the Mangawhai nere:	
 The subdivision and development identifies, protects and promotes the restoration and enhancement of the full extent of natural wetland features, intermittent and permanent streams, and indigenous vegetation and related buffer areas. Inappropriate new development in the moderate to high-risk instability area, 10- and 100-year flood hazard areas, coastal hazard areas including providing for climate change, is avoided. There is sufficient provision of sustainable infrastructure to accommodate the subdivision and development. Building platforms are designed and orientated to be well integrated, respond to topography, solar orientation, and prevailing winds. Lots are generally shaped, sized and orientated to achieve positive sunlight access, onsite amenity, privacy and outlook. Public roads and open space networks are well connected, legible and safe. 		
MHDA-P7	Commercial Activities, Community Facilities and Educational Facilities	
To provide for commercial activities, community facilities and educational facilities within the Mangawhai Hills Development Area where the: 1. Commercial activity, community facilities and educational facilities are located to maintain the amenity of		
 adjoining residential activities. Scale and size of commercial activities, and community facilities is restricted within Community Hub Areas A and B to maintain the vitality and vibrancy of the existing commercial zones within Mangawhai. Educational facilities and associated accessory activities are clustered in Community Hub Area C and are of a character and scale that provides a high standard of amenity and safety while enabling the efficient use of the site. 		
MHDA-P8	Landscape Protection Area	
To require the form and pattern of built development within the Landscape Protection Area is integrated and recessed into the landscape by:		
 Limiting the location and extent of built development. Requiring the establishment and protection of planting to visually mitigate development into the wider landscape. 		

MHDA Land Use Rules

Note – the Land Use Rules are subject to "Standards" which are to be complied with. Also, where a land use consent is required, it may trigger the "Information Requirements" provisions. These are set out below.

MHDA-R1	Buildings, accessory buildings an	d structures
 MHDA-R1 Buildings, accessory buildings an 1. Activity Status: Permitted Where: a. The construction, alteration, addition, or demolition of any building, accessory building, or structure that complies with: i. MHDA-S1 Site coverage. ii. MHDA-S2 Height. iii. MHDA-S3 Height in relation to boundary. iv. MHDA-S4 Setback from internal boundaries. v. MHDA-S5 Setback from road boundaries. vi. MHDA-S6 Fencing and Landscaping. vii. MHDA-S7 Setback from natural features. viii. MHDA-S15 Stormwater Disposal x. MHDA-S15 Stormwater Disposal x. MHDA-S17 Minimum Floor Level. b. The building, accessory building, or structure is located outside of: i. The flood extent as mapped within the 1% annual exceedance probability event detailed in Flood map in Figure 1; and ii. The moderate to high risk instability area shown on the Mangawhai Hills Structure Plan. 		 Activity status when compliance not achieved: Restricted Discretionary Matters over which discretion is restricted: a. The extent to which the buildings and structures within the flood hazard area will mitigate effects arising from loss of flood storage and the increase in peak flows. b. The extent to which the buildings and structures ensure that floodwaters in a 1% annual exceedance probability event are not diverted or displaced onto any other site. c. Whether the building or structure will initiate or exacerbate natural hazards or result in building areas being subject to natural hazards. d. The matters of discretion of any infringed standard.
MHDA-R2	Residential unit	
1. Activity Status: Permitted Where:		2. Activity status when compliance not achieved: Restricted Discretionary
 a. Each residential unit has a minimum net site area of 1,000m² per residential unit, where the site is connected to a public or private reticulated wastewater network. b. Each residential unit has a minimum net site area of 3,000m² where the site is not connected to a public or private reticulated wastewater network. c. A maximum of one residential unit is constructed per site. d. The residential unit(s) is/are located outside of Community Hub Areas A and B on the Mangawhai Hills Structure Plan. e. The residential unit complies with: MHDA-S12 Vehicle Crossings. 		 Matters over which discretion is restricted: Residential character and amenity. Sufficient sunlight access to outdoor living spaces. Building mass, orientation and passive surveillance of the road/street. Bulk and scale effects. Effects on any natural features with respect to natural wetlands, intermittent and permanent streams, and indigenous vegetation. The extent to which the activity is consistent with the Mangawhai Hills Structure Plan. The ability to accommodate incidental activities anticipated within the Mangawhai Hills

 ii. MHDA-S13 Roads. iii. MHDA-S134A Vehicle Access/Driveways iv. MHDA-S134B Pedestrian Footpaths and Cycleways v. MHDA-S14 Water Supply. vi. MHDA-S15 Stormwater Disposal. vii. MHDA-S16 Wastewater Disposal. 	 Development Area such as access, parking, manoeuvring, waste collection and landscaping. h. The function and role of Community Hub areas A and B. i. The matters of discretion of any infringed standard.
	2. Activity status when compliance not achieved
1. Activity Status: Permitted Where:	with MHDA-R3.1.a: Discretionary
 a. The home business occupies a maximum of 40m² gross floor area. b. No more than two persons who are not permanent residents of the site are employed on the site at any one time. c. The home business takes place entirely within a building and no goods, materials, or equipment are stored outside a building. d. Unloading or loading of vehicles or the receiving of customers or deliveries only occurs between 0730 and 1900 on any day. e. The home business is located outside of any Community Hub Areas A and B identified on the Mangawhai Hills Structure Plan. f. The home business complies with: i. MHDA-S10 Traffic intensity. ii. MHDA-S13 Roads. iv. MHDA-S134A Vehicle Access/Driveways v. MHDA-S14 Water Supply. vii. MHDA-S15 Stormwater Disposal. viii. MHDA-S16 Wastewater Disposal. 	 3. Activity status when compliance is not achieved with MHDA-R3.1.b, c, d, e or f: Restricted Discretionary 4. Matters over which discretion is restricted: a. Residential character and amenity. b. Design and layout. c. Effects on the role and function of Commercial Zones and Community Hubs. d. Transport safety and efficiency. e. Scale of activity and hours of operation. f. Infrastructure servicing. g. The matters of discretion of any infringed standard.
MHDA-R4 Visitor accommodation	
 Activity Status: Permitted Where: a. It provides for no more than 6 guests. b. The Visitor Accommodation is located outside of any Community Hub Areas A and B identified on the Mangawhai Hills Structure Plan. c. The Visitor Accommodation complies with: i. MHDA-S10 Traffic intensity. ii. MHDA-S12 Vehicle Crossings. iii. MHDA-S13 Roads. iv. MHDA-S134A Vehicle Access/Driveways v. MHDA-S134B Pedestrian Footpaths and Cycleways vi. MHDA-S14 Water Supply. 	2. Activity status when compliance not achieved: Discretionary

vii. MHDA-S15 Stormwater Disposal. viii. MHDA-S16 Wastewater Disposal.	
MHDA-R5 Commercial Activities	
 Activity Status: Restricted Discretionary Where: The activity is located within Community Hub Areas A – B shown on the Mangawhai Hills Structure Plan. The activity operates within a building with a maximum GFA of 250m² or within a maximum site area of 500m². The cumulative total of commercial activities and community facilities within each hub does not exceed 1000m² net floor area. The commercial activity or community facility complies with:	 Activity status when compliance not achieved: Discretionary Matters over which discretion is restricted: a. Character and amenity. b. Design and layout. c. Effects on the role and function of Commercial Zones and Community Hubs. d. Transport safety and efficiency. e. Scale of activity and hours of operation. f. Infrastructure servicing. g. Whether, and the extent to which, an adequate supply of water can be provided to every allotment being created on the subdivision. h. Whether, and the extent to which, the water supply meets the requirements of the Kaipara District Council Engineering Standards 2011 or has been confirmed as appropriate by Council's Engineer. f. Sufficient firefighting water supply is available. j. The matters of discretion of any infringed standard.
MHDA-R5A Educational Facilities	
 Activity Status: Restricted Discretionary Where: The activity is located within Community Hub Area C shown on the Mangawhai Hills Structure Plan. The cumulative total of educational facilities within Community Hub Area C shown on the Mangawhai Hills Structure Plan does not exceed 5000m² net floor area. The activity complies with:	 Activity status when compliance not achieved: Discretionary Matters over which discretion is restricted: a. Character and amenity. b. Design and layout. c. Effects on the role and function of Community Hubs. d. Transport safety and efficiency. e. Scale of activity and hours of operation. f. Infrastructure servicing. g. Whether, and the extent to which, an adequate supply of water can be provided. h. Whether, and the extent to which, the water supply meets the requirements of the Kaipara District Council Engineering Standards 2011 or has been confirmed as appropriate by Council's Engineer. i. Sufficient firefighting water supply is available. j. The matters of discretion of any infringed standard. k. Connectivity and access to active open space and recreation facilities.

MHDA-R6	Any activity not otherwise provided for	
Activity Status: Discretionary		
MHDA-R7	Excavation and Fill	
Activity Status: Discretionary		 Activity status where compliance not achieved: Restricted Discretionary Matters over which discretion is restricted: Volume, extent and depth of earthworks. Effects on amenity and character and landscape values. Dust, erosion and sediment control, land instability. Effects on the margins of water bodies. Effects on the land transport network, particularly heavy vehicles and traffic generated as a result of the earthworks activity. Changes to the natural water flows and existing drainage paths are mitigated. Adjoining properties and public services are protected. Effects on the overall form, integrity and extent of the Landscape Protection Area from land modification. Effects on ecological values The extent to which Sediment Management and Stormwater Disposal associated with earthworks follows good management practice equivalent to those set out in the guideline documents, <i>Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05) and Auckland Region Guidance Document GD01</i> The extent on discretion of any infringed standard. Effects on cultural values.
MHDA-R8	Indigenous Vegetation Clearance	

 Activity Status: Permitted Activity Status: Permitted Activity Status: Permitted Activity status where compliance not achieved: Restricted Discretionary Matters over which discretion is restricted: a. The indigenous vegetation is not located within any of the Existing Native Vegetation areas identified on the Mangawhai Hills Structure Plan; or b. The indigenous vegetation is not part of a continuous area of predominantly indigenous vegetation greater than 3m in height and greater than 50m² in area; or c. Indigenous vegetation is cleared for the following purposes: Activity status where compliance not achieved: Restricted Discretionary Matters over which discretion is restricted: a. Effects on the locality, particularly the character and amenity values of adjoining sites/land uses. b. Effects on landscape and heritage values. c. Effects on any natural features with respect to natural wetlands, intermittent and permanent streams, and indigenous vegetation. e. The extent to which the activity is consistent with the purpose, character and amenity values of the Mangawhai Hills Development Area. f. The extent to which the activity is consistent with
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human network ii. The re mainter metres area, st identifie Plan. iii. The clea fence li purpose and/or protecte purpose not exce fence li do not r tree ove iv. It is part network v. The ren break b vi. It is in a Elizabe or the re	noval is of trees that are a danger to life or existing structures (including a utilities). moval is for the formation and hance of walking tracks less than 2 wide, outside of the native vegetation tream, or riparian restoration areas, ad on the Mangawhai Hills Structure arance is for maintenance of existing nes or for a new fence where the e of the new fence is to exclude stock pests from an area which is to be ed for ecological or soil conservation es, provided that the clearance does eed a width of 3.5m either side of the ne; wide using manual methods that equire the removal of any indigenous er 300mm girth. t of the operation and maintenance of a utilities. noval is for the construction of a fire y a fire authority. ccordance with the terms of a Queen th II National Trust or other covenant, emoval is limited to naturally dead, or	g. The matters of discretion of any infringed standard.h. Effects on cultural values.
	rown trees.	
MHDA-R9	Noise and Temporary Activities	2. Activity status when compliance not achieved:
1. Activity Status	s: Permitted	Discretionary
 Where: a. Any activity complies with rule 13.10.14 General Noise permitted activity standard. b. Any temporary activity complies with rule 13.10.15 Construction Noise and Temporary Activities permitted activity standard. c. Wind turbines comply with rule 13.10.16 Wind Generation: Noise permitted activity standard. 		
MHDA-R10	Vibration	
 1. Activity Status: Permitted Where: a. Any activity complies with rule 13.10.17 Vibration permitted activity standard. 		2. Activity status when compliance not achieved: Discretionary
MHDA-R11	Hazardous Substances	
 Activity Status: Permitted Where: Any activity complies with rule 13.10.21 Hazardous Substances permitted activity standard. 		2. Activity status when compliance not achieved: Discretionary

MHDA-R12	Radioactive Materials	
1. Activity Status: Permitted Where:		2. Activity status when compliance not achieved: Discretionary
a. Any activity complies with rule 13.10.22 Radioactive Materials permitted activity standard.		
MHDA-R13	Lighting	
1. Activity Status Where:	s: Permitted	2. Activity status when compliance not achieved: Restricted Discretionary
	complies with rule 13.10.23 Lighting permitted activity standard.	3. Matters over which discretion is restricted: a. Those matters listed in rule 13.10.23.
MHDA-R14	Signs	
1. Activity Status: Permitted Where:		2. Activity status when compliance not achieved: Restricted Discretionary
a. Any activity complies with rule 13.10.24 Signs permitted activity standard.		3. Matters over which discretion is restricted: a. Those matters listed in rule 13.10.24.
MHDA-R15	Vehicle Crossing	
1. Activity Status: Permitted		2. Activity status when compliance not achieved: Restricted Discretionary
Where: a. The vehicle	crossing complies with MHDA-S12	3. Matters over which discretion is restricted:
Vehicle Crossing.		a. The matters of discretion of any infringed standard.
MHDA-R16	Roads, Vehicle Access, Pedestria	n Walkways and Cycleways
1. Activity Status: Permitted Where:		2. Activity status when compliance not achieved: Restricted Discretionary
	ehicle access, pedestrian walkways	3. Matters over which discretion is restricted:
 and cycleways comply with MHDA-S13 Roads, MHDA-S13A Vehicle Access / Driveways and MHDA-13B Pedestrian Footpaths and Cycleways. b. All maintenance and upgrades to roads comply with MHDA-S13C Public Road Upgrades. 		a. The matters of discretion of any infringed standard.
MHDA-R17	Network Utilities	
1. Activity Status	s: Permitted	2. Activity status when compliance not achieved: Restricted Discretionary
Where:	complian with rule 10,11,1	3. Matters over which discretion is restricted:
a. Any activity complies with rule 10.11.1 permitted activity standard.		a. The matters of discretion of any infringed standard.

MHDA-R18	Outdoor Recreational Activities and Primary Production Activities	
4. Activity Status: Permitted		

MHDA Subdivision Rules

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Note – the Subdivision Rules are subject to "Standards" which are to be complied with. Also, where a subdivision consent is required, it may trigger the "Information Requirements" provisions. These are set out below.

MHDA-R19	Subdivision	
1. Activity Statu Where: a. Proposed a area of 1,00 allotment is allotment o b. Proposed a area of 3,00	subdivision s: Restricted Discretionary allotments have a minimum net site 00m ² , except where the proposed s an access allotment, utility r road to vest in Council; or allotments have a minimum net site 00m ² , where no connection to wastewater infrastructure or	Activity status where compliance not achieved with MHDA-R19.1 a- kj: Discretionary
community c. Any subdiv primary and boundary ir roads show Plan; d. Where a ro Road, a mi constructed the existing	wastewater system is available. ision shall establish any part of all d secondary roads within the Site n accordance with the indicative <i>n</i> on the Mangawhai Hills Structure ad connection is established to Tara nimum 1.8m wide footpath shall be d along Tara Road extending from g footpath at 99 Tara Road to the ost road connection from the	
Road. e. An active o	i Hills Development Area onto Tara pen space area is established in e with MHDA-S18.	
	hall not apply where a public open egally established within 500 lineal posed allotments.	
stream or in within the M subdivision perpetuity a accordance and Manag wetland, str	ntains an indicative natural wetland, ndigenous vegetation identified Mangawhai Hills Structure Plan the shall enhance, legally protect in and manage on an on-going basis in e with an Ecological Enhancement gement Plan any natural feature, ream or indigenous vegetation.	
risk instabil Mangawha	ntains an area of moderate to high ity area identified within the i Hills Structure Plan and the o high risk instability area includes	

 an unvegetated area or area in pasture or non-indigenous plants, the area shall be: Planted to an average density of 1.4m centres (5, 100 stems per hectare), reducing to fm centres (10,000 stems per hectare) in kikuyu and riparian margins and 0.5 – 1m centres in wetland environments. Enhanced, legally protected in perpetuitly and managed on an on-going basis in accordance with a 'Soil Assessment, Retirement and Rehabilitation Management Plan'. Any application under this rule shall comply with MHDA.REQ5. Note: This rule shall not apply to road or track crossings over streams or wetlands. Any area of archaeological, cultural or spiritual significance is protected. A connection, or easements to secure connection, to a reticulated electrical supply system at the boundary of the net site area of the allotment is provided. Each allotment is provided. Each allotment is provided with a connection, or the ability to connect to a wireless, above ground, or underground telecommunications system. MHDA-S11 Water Supply. MHDA-S13 Roads. MHDA-S13 Roads. MHDA-S13 Wehicle Access/Driveways MHDA-S14 Wehicle Access/Driveways MHDA-S15 Stormwater Management. MHDA-S18 Redestrian Footpaths and Cycleways MHDA-S19 Stream and Wetland Restoration Planting Areas. 2. Discretion is restricted to the following matters: Subdivision layout, design, shape and range of allotment sizes, including the layout of roads and the number of rear allotments proposed. Provision of a landscapie purposed. Provision of a landscape purposed. Provision of a landscape purposed. Measures and mechanisms for ownership and maintenance to protect, restore and enhance all indigenous terrestrial and freshwater biodiversity values. 		
 comply with MHDA.REQ5. Note: This rule shall not apply to road or track crossings over streams or wetlands. h. Any area of archaeological, cultural or spiritual significance is protected. i. A connection, or easements to secure connection, to a reticulated electrical supply system at the boundary of the net site area of the allotment is provided. j. Each allotment is provided with a connection, or the ability to connect to a wireless, above ground, or underground telecommunications system. k. The subdivision complies with the following: i. MHDA-S11 Building Platforms ii. MHDA-S11 Building Platforms iii. MHDA-S13 Roads. v. MHDA-S13 Roads. v. MHDA-S13 Roads. v. MHDA-S13 Pedestrian Footpaths and Cycleways vii. MHDA-S14 Water Supply. viii. MHDA-S15 Stormwater Management. ix. MHDA-S16 Vantewater Management. ix. MHDA-S16 Wastewater Management. x. MHDA-S16 Wastewater Management. x. MHDA-S19 Stream and Wetland Restoration Planting Areas. 2. Discretion is restricted to the following matters: a. Subdivision layout, design, shape and range of allotment sizes, including the layout of roads and the number of rear allotments proposed. b. Streetscape and landscape buffer strip along the Tara Road, Old Waipu Road and Cove Road frontage. d. The extent to which the proposal is generally in accordance with the Mangawhai Hills Structure Plan. e. Measures and mechanisms for ownership and maintenance to protect, restore and enhance all indigenous terrestrial and freshwater biodiversity values. 	 i. Planted to an average density of 1.4m centres (5,100 stems per hectare), reducing to 1m centres (10,000 stems per hectare) in kikuyu and riparian margins and 0.5 – 1m centres in wetland environments. ii. Enhanced, legally protected in perpetuity and managed on an on-going basis in accordance with a 'Soil Assessment, Retirement and Rehabilitation Management 	
 h. Any area of archaeological, cultural or spiritual significance is protected. i. A connection, or easements to secure connection, to a reticulated electrical supply system at the boundary of the net site area of the allotment is provided. j. Each allotment is provided with a connection, or the ability to connect to a wireless, above ground, or underground telecommunications system. k. The subdivision complies with the following: MHDA-S12 Vehicle Crossings. MHDA-S12 Vehicle Access/Driveways MHDA-S13A Vehicle Access/Driveways MHDA-S13 Vehicle Access/Driveways MHDA-S15 Stormwater Management. MHDA-S15 Stormwater Management. MHDA-S16 Wastewater Management. MHDA-S18 Active Open Space. MHDA-S19 Active Open Space. 2. Discretion is restricted to the following matters: a. Subdivision layout, design, shape and range of allotment sizes, including the layout of roads and the number of rear allotments proposed. b. Streetscape and landscapie buffer strip along the Tara Road, Old Waipu Road and Cove Road frontage. d. The extent to which the proposal is generally in accordance with the Mangawhai Hills Structure Plan. Measures and mechanisms for ownership and maintenance to protect, restore and enhance all indigenous terrestrial and freshwater biodiversity values. 	comply with MHDA.REQ5. Note: This rule shall not apply to road or track	
 a. Subdivision layout, design, shape and range of allotment sizes, including the layout of roads and the number of rear allotments proposed. b. Streetscape and landscaping proposed. c. Provision of a landscape buffer strip along the Tara Road, Old Waipu Road and Cove Road frontage. d. The extent to which the proposal is generally in accordance with the Mangawhai Hills Structure Plan. e. Measures and mechanisms for ownership and maintenance to protect, restore and enhance all indigenous terrestrial and freshwater biodiversity values. 	 h. Any area of archaeological, cultural or spiritual significance is protected. i. A connection, or easements to secure connection, to a reticulated electrical supply system at the boundary of the net site area of the allotment is provided. j. Each allotment is provided with a connection, or the ability to connect to a wireless, above ground, or underground telecommunications system. k. The subdivision complies with the following: MHDA-S9-Earthworks MHDA-S11 Building Platforms MHDA-S12 Vehicle Crossings. MHDA-S13A Vehicle Access/Driveways MHDA-S13B Pedestrian Footpaths and Cycleways MHDA-S16 Wastewater Management. MHDA-S18 Active Open Space. xi. MHDA-S19 Stream and Wetland 	
	 Discretion is restricted to the following matters: Subdivision layout, design, shape and range of allotment sizes, including the layout of roads and the number of rear allotments proposed. Streetscape and landscaping proposed. Provision of a landscape buffer strip along the Tara Road, Old Waipu Road and Cove Road frontage. The extent to which the proposal is generally in accordance with the Mangawhai Hills Structure Plan. Measures and mechanisms for ownership and maintenance to protect, restore and enhance all indigenous terrestrial and freshwater 	
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f.	Within the Landscape Protection Area,
	integration with the identified characteristics and
	qualities of the area.
g.	Staged subdivision establishes and coordinates
	with necessary infrastructure upgrades.
h.	Effects on cultural and heritage values (as
	defined in Chapter 17), including any
	consultation undertaken with Tangata Whenua
	as appropriate.
i.	The extent to which a lineal open space
	network is provided in general accordance with
	the Mangawhai Hills Structure Plan.
j.	Provision of pedestrian and cycle connectivity
	within lineal open space and existing native
	vegetation.
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Standards

MHDA-S1 Site coverage	
 The maximum building and accessory building coverage are the lesser of 30% of the net site area or 500m² except where within the Landscape Protection Area or Community Hub Areas A - C. a. Within the Landscape Projection Area, the maximum building coverage is the lesser of 25% of the net site area or 350m²; and b. Within the Community Hub Areas A - C, the maximum building coverage is 30% of the net site area. The maximum percentage of the net site area covered by impervious surfaces shall be 50%. All stormwater management for the site shall comply with any stormwater management plan approved under MHDA-REQ1 and performance standard MHDA-S15 Stormwater Management. Note: For the purposes of MHDA-S1 water storage tanks shall not be included in the site coverage calculations. 	 Where compliance is not achieved with MHDA- S1 Matters over which discretion is restricted: Amenity and character of the surrounding area. The bulk and scale of the buildings, structures, and impervious surfaces. Water sensitive design and outfalls that mitigate concentrated flows. Provision of stormwater quality treatment to protect the environment from contaminants generated from the activity including appropriate stormwater quality monitoring associated with the design and construction stages as well as the consent holder's maintenance obligations. The massing and dominance of buildings within the Landscape Protection Area.
MHDA-S2 Height	
 The maximum height of buildings, accessory buildings, and structures is 8m measured from the natural ground level immediately below that part of the building, accessory building or structure except where within the Landscape Protection Areas. Within the Landscape Protection Area as shown on the Mangawhai Hills Structure Plan: The highest point of any buildings, accessory buildings, and structures shall be the lesser of 8m measured from natural ground level immediately below that part of the building, or 5m above natural ground level of the 'Northern 	 3. Where compliance is not achieved with MHDA-S2 Matters over which discretion is restricted: a. Amenity and character of the surrounding area. b. Any adverse shading, privacy, or visual dominance effects on adjacent sites. c. Visual intrusion of the building from beyond the site and the effect on skylines and ridgelines.

 Ridgeline' as shown on the Mangawhai Hills Structure Plan. Note: This standard does not apply to: Chimney structures not exceeding 1.2m in width and 1m in height on any elevation. Architectural features (e.g., finials, spires) that do not exceed 1m in height. Solar and water heating components provided these do not exceed the height by more than 0.5m. 	
MHDA-S3 Height in relation to boundary	
 Buildings, accessory buildings, and structures adjoining another site shall be contained within a building envelope defined by a 45 degree recession plane measured from 2.5m above existing ground level at the internal boundaries of the site, except: The following intrusions are permitted:	 2. Where compliance is not achieved with MHDA- S3 Matters over which discretion is restricted: a. Amenity and character of the surrounding area. b. Any adverse shading, privacy, or visual dominance effects on adjacent sites.
exceed 1m in length parallel to the boundary.	
Note: Where the boundary adjoins a vehicle accessway to a rear site that is less than 6m in width or is secured via a legal mechanism and shared between more than one site, the recession plane shall be taken from the far side of the accessway.	
MHDA-S4 Setbacks from any site boundary othe	er than a road boundary
 Buildings, accessory buildings, and structures except within the Landscape Protection Area shall be setback a minimum of 3m from any boundary other than a road boundary, except: a. No setback is required for fences adjacent to boundaries. b. No setback is required for unpervaried deals are 	 Where compliance is not achieved with MHDA- S4 Matters over which discretion is restricted: a. Amenity and character of the surrounding area. b. Screening, planting and landscaping of the site. c. Privacy and visual dominance of adjacent sites.
 b. No setback is required for uncovered decks or swimming pools that are less than 0.5m in height above ground level. 	
2. Within the Landscape Protection Area, Buildings, accessory buildings, and structures shall be setback a minimum of 5m from any boundary other than a road boundary, except:	
 a. No setback is required for fences adjacent to boundaries. b. No setback is required for uncovered decks or swimming pools that are less than 0.5m in height above ground level. 	

MHDA-S5	Setback from road boundaries	
be setback boundaries a. A garag minimur b. Fences c. Swimmi than 1m d. Letterbo e. Water ta ground 2. Car parking	accessory buildings, and structures shall a minimum of 5m from road a except where: e door faces the road boundary, the m setback shall be 5.5m. or walls no more than 2m in height. ng pools and uncovered decks less in height above ground level. bxes, clotheslines and outdoor furniture. anks less than 2.7m in height above level. g spaces shall be setback a minimum of e road boundary.	 3. Where compliance is not achieved with MHDA- S5 Matters over which discretion is restricted: a. Amenity and character of the surrounding area. b. The safety and efficiency of the land transport network and private access-ways. c. Screening, planting and landscaping of the site.
MHDA-S6	Fencing and Landscaping	
 more than permeabilit area. 2. The maxim service are are a service are a service are are a service are a servi	e of achieving a minimum establishment of 2m above the ground level of the road	 Where compliance is not achieved with MHDA-S6 Matters over which discretion is restricted: Amenity and character of the surrounding area. Screening, planting and landscaping of the site. The extent to which the fencing and landscaping visually connects the private front yards to the street. The extent to which privacy is provided for residential units, while enabling opportunities for passive surveillance of public places. The extent to which shading and visual dominance effects to immediate neighbours and the street are minimised. Health and safety effects.

 6. Any subdivision of a site within the Landscape Protection Area shall establish an area of native vegetation planting within the entire extent of the Green Corridor as identified on the Mangawhai Hills Structure Plan, which is: a. Capable of achieving a minimum establishment height of 8m above ground level; and b. At a density that will achieve canopy closure within 3-5 years. 	
MHDA-S7 Setbacks from natural features	
 Buildings, accessory buildings and structures must be setback: Sm from the edge of any stream riparian restoration area, wetland restoration area, and indigenous vegetation area identified within the Mangawhai Hills Structure Plan. Sm from the edge of any existing indigenous vegetation area. The setbacks above do not apply to:	 Where compliance is not achieved with MHDA- S7 Matters over which discretion is restricted: The design and siting of the building or structure with respect to effects on the natural character and amenity of the waterbody. The impacts on existing and future esplanade reserves, esplanade strips, and public access to the waterbody margins. Screening, planting and landscaping on the site. Natural hazard mitigation and site constraints.
MHDA-S8 Exterior Finish	
 Except within the Landscape Protection Area, all buildings, accessory buildings or structures exteriors shall: a. Not utilize mirror glazing within their exteriors; and b. Include at least 70% of the total painted or galvanised external surface of buildings (excluding windows) with a colour with a reflectance value no greater than 35% and with a roof colour with a reflectance value no greater than 20%. Within the Landscape Protection Area, all buildings, accessory buildings or structures exteriors shall: 	 3. Where compliance is not achieved with MHDA- S8 Matters over which discretion is restricted: a. Amenity and character of the surrounding area. b. Any adverse shading, privacy, or visual dominance effects on adjacent sites. c. Extent of visual intrusion of the building from beyond the site, particularly from the road and public places including the effect on skylines and ridgelines.
 exteriors shall: a. Not utilize mirror glazing within their exteriors; and b. Be coloured or painted or galvanised (excluding windows) with a colour in the range of browns, greys and black, with a reflectance value no 	

MHDA-S9 Earthworks 1. The total volume of excavation or fill (excluding of water storage tanks) shall not exceed 100m ³ per 1000m ³ site area in any 12-month period; and 5. Where compliance is not achieved with MHDA-S9 matters over which discretion is restricted: 2. The maximum height or depth of any cut or fill face shall not exceed 1.5m over a continuous distance of less than 50m within a site; and 5. Uhere compliance is not achieved with MHDA.S9 matters over which discretion is restricted: 3. There are no earthworks located within the moderate to high risk instability area, native vegetation areas, stream, or riparian restoration areas, identified on the Mangawhai Hills Structure plan. 6. Effects on cultural values. 4. There are no earthworks located within the flood extent as mapped within the 1% annual exceedance probability event detailed in Flood map in Figure 1. 6. The earthworks are underfaken in accordance with be and location of a set out. In Erosion and Sediment Control Guide for Land Disturbing Activates in the Auckard Region (QDD) MHDA-S10 Traffic Intensity 1. The total traffic generated from each site shall not exceed 20 daily one-way movements, where construction traffic is excluded. 3. Where compliance is not achieved with MHDA.S10 matters over which discretion is restricted: 2. The total traffic generated from each site shall not exceed 20 daily one-way movements, where construction traffic is excluded. 3. Where compliance is not achieved with MHDA.S10 matters over which discretion is restricted: 3. The total traffic generated from each Community Hub A	greater than 25% (provided that 2% of each exterior is exempt) and with a roof colour with a reflectance value no greater than 20%.	
 S9 matters over which discretion is restricted: Search and the undergrounding of earthworks. Search and the undergrounding of earthworks are undertaken in eccordance with best prevent detailed in Flood map in Figure 1. Searchworks are undertaken in eccordance with best prevent detailed in Flood map in Figure 1. Searchworks are undertaken in eccordance with best prevent detailed in Flood map in Figure 1. Searchworks are undertaken in eccordance with best prevent detailed in Flood map in Figure 1. Searchworks are undertaken in eccordance with best prevent detailed in Flood map in Figure 1. Searchworks are undertaken in eccordance with best prevent detailed in the operation of each activity and the each activity is contained within the flood activity of the each activity is contained withing Appendix 25F of this Plan. Search and the access site, and/or intersecting roads including but not limited to which activity and read network). Search and the access and the index of the access site, and/or intersecting roads including but not limited to which activity and read network). Search and the access and the access s	MHDA-S9 Earthworks	
 MHDA-S10 Traffic Intensity 1. The total traffic generated from each site shall not exceed 20 daily one-way movements, where the traffic generated by single residential unit, and construction traffic are excluded. 2. The total traffic generated from each Community Hub A – C shall not exceed 200 daily one-way movements, where construction traffic is excluded. Note: Trip generation for each activity is contained withing Appendix 25F of this Plan. 3. Where compliance is not achieved with MHDA-S10 matters over which discretion is restricted: a. The trip characteristics associated with the proposed activity. b. The design of features intended to ensure safety for all users of the access site, and/or intersecting roads including but not limited to vehicle occupants, vehicle riders and pedestrians. c. Land transport network safety and efficiency, particularly at peak traffic times (of both the activity and road network). d. Mitigation to address adverse effects, such as: i. Travel/trip planning and timing. ii. Providing alternatives to private vehicle trips. iii. Contributing to improvements to the road network, where appropriate. iv. The effect of traffic on the amenity and 	 excavation associated with the undergrounding of water storage tanks) shall not exceed 100m³ per 1000m² site area in any 12-month period; and 2. The maximum height or depth of any cut or fill face shall not exceed 1.5m over a continuous distance of less than 50m within a site; and 3. There are no earthworks located within the moderate to high risk instability area, native vegetation area, stream, or riparian restoration areas, identified on the Mangawhai Hills Structure plan. 4. There are no earthworks located within the flood extent as mapped within the 1% annual exceedance probability event detailed in Flood map in Figure 1. 4.5. The earthworks are undertaken in accordance with best practice as set out in Erosion and Sediment Control Guide for Land Disturbing 	 S9 matters over which discretion is restricted: a. Effects on character and amenity of the surrounding locality upon completion of earthworks. b. Land stability upon completion. c. Landscaping as necessary. d. Measures to manage dust, erosion and sediment control, and land instability. e. Measures to manage upstream and downstream flood hazard effects. f. Effects on cultural values.
 exceed 20 daily one-way movements, where the traffic generated by single residential unit, and construction traffic are excluded. 2. The total traffic generated from each Community Hub A – C shall not exceed 200 daily one-way movements, where construction traffic is excluded. Note: Trip generation for each activity is contained withing Appendix 25F of this Plan. S10 matters over which discretion is restricted: a. The trip characteristics associated with the proposed activity. b. The design of features intended to ensure safety for all users of the access site, and/or intersecting roads including but not limited to vehicle occupants, vehicle riders and pedestrians. c. Land transport network safety and efficiency, particularly at peak traffic times (of both the activity and road network). d. Mitigation to address adverse effects, such as: i. Travel/trip planning and timing. ii. Providing alternatives to private vehicle trips. iii. Contributing to improvements to the road network, where appropriate. iv. The effect of traffic on the amenity and 		
3 • • • • •	 exceed 20 daily one-way movements, where the traffic generated by single residential unit, and construction traffic are excluded. 2. The total traffic generated from each Community Hub A – C shall not exceed 200 daily one-way movements, where construction traffic is excluded. <i>Note: Trip generation for each activity is contained</i> 	 S10 matters over which discretion is restricted: a. The trip characteristics associated with the proposed activity. b. The design of features intended to ensure safety for all users of the access site, and/or intersecting roads including but not limited to vehicle occupants, vehicle riders and pedestrians. c. Land transport network safety and efficiency, particularly at peak traffic times (of both the activity and road network). d. Mitigation to address adverse effects, such as: i. Travel/trip planning and timing. ii. Providing alternatives to private vehicle trips. iii. Contributing to improvements to the road network, where appropriate.

 Every proposed allotment (other than a unity allotment) shall comply with the f 	ollowing: S11 matters over which discretion is restricted:
a. Each allotment has a shape factor,	being: a. Earthworks and fill material required for building
i. A circle with a diameter of at lea	ast 20m, platforms and access.
exclusive of boundary setbacks	b. Geotechnical suitability for building.

 ii. Which contains a minimum 150m² building platform area that is suitable to construct a building either in accordance with NZS 3604/2011; or with specific engineering design of foundations. b. All building platforms proposed in accordance with 1.a.ii are: Certified by a geotechnical engineer as geotechnically stable and suitable for a building platform. Has vehicular access in accordance with MHDA-S12 Vehicle Crossings. Not subject to inundation in a 1% AEP storm or flood event. iv. iv. Able to accommodate a residential unit as a permitted activity in accordance with Rule MHDA-R2. 	 c. The relationship of the building platform and future residential activities with surrounding rural activities to ensure reverse sensitivity effects are avoided or mitigated. d. Avoidance of natural hazards. e. Effects on landscape and amenity. f. Measures to avoid storm or flood events.
MHDA-S12 Vehicle Crossings	
 New vehicle crossings on to roads controlled by the Kaipara District Council shall be designed, constructed and located in accordance with the Kaipara District Council Engineering Standards 2011, except as it relates to 5.2.10.d and 5.2.10.e of those Standards, where it shall comply with the following: a. No vehicle crossing shall be situated within 10m of any road intersection (as measured from the meeting point of the main kerb alignments). b. The minimum spacing between vehicle crossings on the same side of any road shall be 2m. c. No more than one vehicle crossing is provided to each lot, except where a vehicle crossing width shall be a maximum of 7m. d. Formed with a sealed all-weather surface. e. Shall include internal manoeuvring area sufficient that vehicles using the driveway do not need to reverse onto a road or shared driveway where the access is located within 10m of an intersection road boundary. f. Shall serve no more than four parking spaces, should vehicles be required to reverse from a site. g. Shall serve no more than 30 residential units. 	 Where compliance is not achieved with MHDA-S12 matters over which discretion is restricted: Adverse effects on the safe, efficient and effective operation of the land transport network. The ability to provide for emergency vehicle access. The extent and effect of any non- compliance with any relevant rule or standard and any relevant matters of discretion in the infringed rule(s) or standard(s). Traffic generation by the activities to be served by the access. Location, design, construction and materials of the vehicle access. Safety for all users of the access and/or intersecting road including but not limited to vehicle occupants or riders and pedestrians. Mitigation to address safety and/or efficiency, including access clearance requirements for emergency services. The extent to which the safety and efficiency of road operations will be adversely affected. The outcome of any consultation with the road controlling authority. Any characteristics of the proposed use or site that will make compliance unnecessary.
MHDA-S13 Roads	
 Roads shall be located in accordance with the indicative roads shown on the Mangawhai Hills Structure Plan. 	 Where compliance is not achieved with MHDA- S13 matters over which discretion is restricted: a. Effect on sight distances or road safety.

 Road Networks shall be designed and constructed in accordance with the Kaipara District Council Engineering Standards 2011, except as they relate to the following: The legal and construction widths as detailed in Table 5.1 of the Kaipara District Council Engineering Standards 2011 do not apply. Legal and construction widths shall meet Table MHDA-1. On-street car parking detailed in 5.2.10.d of the Kaipara District Council Engineering Standards 2011. On-street parking shall be provided at a rate of 1 per 4 residential units. Note: Where private accesses are created, on-street carparking may be substituted for parking areas along the private access, provided that the access width is sufficient to accommodate a parked vehicle and general vehicle movement. 	 b. Design and carrying capacity. c. Adverse effects arising from construction, including amenity, vibration and noise. d. Traffic management while the works are being undertaken. e. Adverse operational effects, particularly on sensitive activities, including effects of vibration, noise, glare and vehicle emissions. f. Severance and changes to drainage patterns. g. The benefits provided by the activity, including safety and efficiency of the transport network. h. Whether the works will involve reductions in the capacity of storm water systems present within the road or road reserve. i. Whether the works comply with all other provisions relating to activities within the Kaipara District Council Engineering Standards 2011. j. Management of sediment and dust, including the staging of works. k. The volume, extent and depth of the earthworks activities. l. The location of the earthworks activities, taking into account any effects on the values, qualities and characteristics of the site. m. Provision of a highly connected multi-modal transport network.
MHDA-S13A Vehicle Access/Driveway	
 Each site shall be provided with and maintain a driveway to the following Standard: a. Formed with a sealed all-weather surface. Shall provide accessway or driveways with minimum widths in accordance with Table MHDA.1. b. Shall include internal manoeuvring area sufficient that vehicles using the driveway do not need to reverse onto a road or shared where the access is located within 10m of an intersection road boundary or where the access is off a Primary Road. c. Shall serve no more than four parking spaces, should vehicles be required to reverse from a site. d. Shall serve no more than 30 household equivalents. e. For an accessway or driveway servicing up to 6 residential units the minimum width shall be 3.0m and maximum length shall be 50m. f. For an accessway or driveway servicing up to 30 residential units the minimum width shall be 5.5m. g. Shall include internal manoeuvring area sufficient that vehicles using the driveway do 	 Where compliance is not achieved with MHDA-S13A matters over which discretion is restricted: Adverse effects on the safe, efficient and effective operation of the land transport network. The ability to provide for emergency vehicle access. The extent and effect of any non- compliance with any relevant rule or standard and any relevant matters of discretion in the infringed rule(s) or standard(s). Traffic generation by the activities to be served by the access. Location, design, construction and materials of the vehicle access. Safety for all users of the access and/or intersecting road including but not limited to vehicle occupants or riders and pedestrians.

 not need to reverse onto a road or shared driveway where the access is located within 10m of an intersection road boundary. h. Shall serve no more than four parking spaces, should vehicles be required to reverse from a site. Note: Accesses serving more than 30 household equivalents shall be treated as road under MHDA-S13. 	
MHDA-S13B Pedestrian Footpaths and Cycleways	
 Pedestrian footpaths and cycleways shall be located in accordance with the indicative 3m shared path and roadside footpaths shown on the Mangawhai Hills Structure Plan. Pedestrian footpaths and cycleways networks shall be designed and constructed in accordance with Table MHDA.1. 	 Where compliance is not achieved with MHDA- S13B matters over which discretion is restricted: Whether safe and connected active transport networks will be achieved from the subdivision or development to established footpath and cycling facilities. Adverse effects on the safe, efficient and effective operation of the land transport network. Location, design, construction and materials of the footpath and cycleway. Whether alternative pedestrian trails and cycleways provide enhanced connectivity and linkages throughout the site and to the surrounding road network.
MHDA-S13C Public Road Upgrades	
 All construction and works on a Public Road shall comply with the Transport Network Performance Standards listing in Chapter 11. 	 2. Where compliance is not achieved with MHDA- S13C matters over which discretion is restricted: a. The matters listed in Rule 11.10.
MHDA-S14 Water Supply	
 Where a Council water supply is available and utilised: All allotments are provided, within their net site area, with a connection to the Council water supply. All water pipelines vested with Council shall be protected by an Easement in favour of Council. Where a Council water supply is not available or utilised, water supplies to all new allotments or new land use activity shall meet the requirements in Table MHDA-2. Any allotment or residential unit shall be supplied with water for the purpose of firefighting, at least 10,000 litres of water from sources that are: Within 90 metres of an identified building platform on each lot or the residential unit; and b. Existing or likely to be available at a time of 	 Where compliance is not achieved with MHDA-S14 matters over which discretion is restricted: a. Whether, and the extent to which, an adequate supply of water can be provided to every allotment being created on the subdivision. b. Whether, and the extent to which, the water supply meets the requirements of the Kaipara District Council Engineering Standards 2011 or has been confirmed as appropriate by Council's Engineer. c. Sufficient firefighting water supply is available.

development of the lot; and c. Accessible and available all year round; and Note : Sources may be comprised of water tanks, permanent natural waterbodies, dams, swimming pools, whether located on or off the lot.	
MHDA-S15 Stormwater Disposal	
 All allotments shall be provided with the means for the transport and disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surface, in such a way as to mitigate any adverse effects of stormwater runoff on the receiving environment by providing: a. Retention (volume reduction) of a minimum of 5mm runoff depth for all impermeable surfaces. b. Detention (temporary storage) with a drain down period of 24 hours for the difference between the pre-development (grassed state) and post-development runoff volumes from the 1/3 of the 2 Year Average Recurrence Interval (ARI), 24-hour rainfall event with climate change minus any retention volume provided for all impermeable surfaces. c. Detention of peak post-development to peak pre-development (grassed state) for the 100 Year Average Recurrence Interval (ARI), 24- hour rainfall event with the climate change adjustment d. Conveyance and discharge of primary and secondary flow in accordance with the Kaipara District Council Engineering Standards 2011 and Auckland Region Guidance Document GD05. 	 Where compliance is not achieved with MHDA-S15 matters over which discretion is restricted: Whether there is sufficient control of waterborne contaminants, litter and sediment. Whether there is sufficient land available for disposal of stormwater. Whether and the extent to which the capacity of the downstream stormwater system is able to cater for increased runoff from the proposed allotments. Whether and the extent to which measures are necessary in order to give effect to any drainage. Whether and the extent to which measures proposed for avoiding or mitigating the effects of stormwater runoff, including water sensitive design principles are effective. Whether and the extent to which the stormwater infrastructure within the subdivision, is able to link with existing disposal systems outside the subdivision. Whether and the extent to which the development meets the relevant performance standards, the Kaipara District Council Engineering Standards 2011 and the Mangawhai Hills Development Area Stormwater Management Plan. The extent to which run-off from a developed catchment. The applicability of retention to be provided within a 72-hour period. The extent to which inert building materials are to be utilised (e.g., inert roof material). Whether and the extent to which risks and impacts of natural hazard events, including providing for climate change, are minimised.
MHDA-S16 Wastewater Disposal	
 Where a Council reticulated wastewater system is available and utilised: The Council reticulated wastewater system can be extended to serve the subdivision; and All allotments are provided, within their net site area, with a connection to the Council reticulated wastewater system; and Any extension to Council reticulated wastewater system is designed and constructed in accordance with the specific requirements of 	 4. Where compliance is not achieved with MHDA-S16 matters over which discretion is restricted: a. Whether the capacity, availability and accessibility of the reticulated system is adequate to serve the proposed subdivision. b. Availability of land for wastewater disposal on site. c. Compliance with the provisions of the Kaipara District Council Engineering Standards 2011

3.	 d. All wastewards shall be proceed council. Or Where a community of the system with AS/NZ for wastewater wastewater wastewater b. All allotmer area with a wastewater Or Where no Cour or community of the system in accordance wastewater Managemer As an onsite system of the sy	ncil reticulated wastewater system wastewater system is available or oposed activity shall be serviced via em and the system shall be designed with AS/NZS 1547:2012 "Onsite anagement Standards".	 where new reticulation is proposed. d. Capacity of existing wastewater treatment and disposal system, to which the outfall will be connected. e. Provision of a reticulated system with a gravity outfall is provided, or where not practical, provision of alternative individual pump connections (with private rising mains), or new pumping stations, complete pressure, or vacuum systems. f. Where a reticulated system is not available, or a connection is impracticable, provision of a suitable wastewater treatment or other disposal systems. g. Effects on cultural effects. h. Effects on ecological values. 				
N	MHDA-S17	Minimum Floor Level					
	 Habitable Build a. Floor level of (Reference) b. Freeboard of (climate characteristic) Where a buildidies a Non-habitation minimum: a. Floor level of One Tree Fib. Freeboard 	able Building is proposed, the ding shall have a minimum: of 3.5m above mean sea level One Tree Point Datum). level of 500mm above 100-year ARI ange adjusted). ng contains a Commercial Activity or able Building it shall have a of 3.3m above sea level (Reference Point Datum). level of 300mm above 100-year ARI ange adjusted).	 3. Where compliance is not achieved with MHDA-S17 matters over which discretion is restricted: a. Whether the size, location and design of the proposed building has sufficient height clearance to mitigate the risk of being affected by inundation, and has the structural integrity to withstand inundation. b. Whether the building will perform safely under hazard conditions for the life of the structure. 				
Ν	MHDA-S18	Active Open Space					
2.	400m ² of an a Any active ope 300m ² in area All active open	allotments shall be located within ctive open space area. In space area shall be no less than spaces shall include flat open e for a range of informal recreational	4. No matters of discretion as subdivision defaults to Discretionary Activity if compliance is not achieved with MHDA-S18.				
Ν	MHDA-S19	Stream and Wetland Restoration	Planting Areas				
1.	restoration are Hills Structure of 10m from th	toration and stream riparian as as identified on the Mangawhai Plan shall be planted to a minimum e edge of natural wetlands, d permanent streams.	2. No matters of discretion as subdivision defaults to Discretionary Activity if compliance is not achieved with MHDA-S19.				

Information Requirements

MHDA-REQ1 Stormwater Management

prepared by a a. Treatment of generating b. Retention (c. Detention (developme hour rainfal d. Conveyand Council Eng e. Acceptable	n consent application shall be supported by a detailed stormwater assessment report suitably qualitied engineer to confirm that the proposal will achieve the following: of the Water Quality Volume (WQV) or Water Quality Flow (WQF) from all contaminant impermeable surfaces by a water quality device for the relevant contaminants. volume reduction) of a minimum of 5mm runoff depth for all impermeable surfaces. emporary storage) with a drain down period of 24 hours for the difference between the pre- nt (grassed state) and post-development runoff volumes from the 1/3 of the 2 Year ARI, 24- l event minus any retention volume provided for all impermeable surfaces. e and discharge of primary and secondary flow in accordance with the Kaipara District gineering Standards 2011. site stability as a result of any stormwater disposal.
be used a	e Mangawhai Hills Development Area, 1/3 of the 2 Year ARI rainfall event runoff volume is to as the Water Quality Volume (WQV) when designing a treatment device, and 10mm/hour is to as the Water Quality Flow (WQF).
<mark>managen</mark>	e Mangawhai Hills Development Area, good management practice for stormwater pent <u>shall be is equivalent to those set out in the guideline document, Stormwater</u> pent Devices in the Auckland Region (GD01).
MHDA-REQ2	Integrated Transport Assessment – Subdivision and Roading
 supported by a qualified engin a. A description previous distribution of the surplate of the	n consent application that involves a new Road (which is to be publicly vested) shall be n Integrated Transport Assessment and Safe System Assessment prepared by a suitably eer, which shall include: on of the proposed activity, the purpose and intended use of the ITA, and an outline of any scussions with the relevant road controlling authorities. on of location, site layout, existing use and consents (if any), adjacent and surrounding land on of the existing access and service arrangements and on-site car parking. A description of ding transport network (including hierarchy, traffic volumes, crash analysis, congestion and s). A description of passenger transport modes and accessibility, walking and cycling on of other developments and land use and transport network improvements (including transport, walking and cycling). a Primary or Secondary Road connection to Moir Street is not established consideration of r the upgrade required by rule MHDA.R19.1.e shall accommodate a shared path along Tara
 f. A description parking and manageme g. A description type propore h. If relevant we should consist conclusions i. An assession (including service) and consist i. Tara Reference 	he existing trip generation, modal split, and assignment of trips to the network. In of the proposal (including site layout, operational hours, vehicle access, on site car I drop off, and internal vehicle and pedestrian circulation). A description of any construction int matters. A description of what end of journey facilities are proposed. In of the trip generation, modal split, trip assignment to the network, trip distribution and trip tions of the proposal. Consideration of future traffic volumes and trip generation. alidated and comprehensive transportation forecasts are not available, the assessment sider expected traffic conditions over a 5-year period and the sensitivity of assessment to changes in traffic conditions. Thent of safety, efficiency, environmental, accessibility, integration and economic effects ensitivity testing). A specific assessment of the safety and efficiency of the transport network ency with the Mangawhai Hills Structure Plan including: to ad and Moir Road; and Garbolino Road:

iii. Tara Road and Cove Road;

- iv. Cove Road and Old Waipu Road; and
- v. Moir Road and Urlich Drive.
- j. Details of any mitigating measures and revised effects, including measures to encourage other modes. Travel planning and travel demand management measures and sensitivity testing mitigations.
- k. Review against District Plan objectives, policies and rules.
- I. An assessment of effects and conclusion of effects. Confirmation of the suitability of the location of the proposal.
- m. Proposed conditions (if any) and proposed timing and implementation of necessary road connections and wider road network upgrades.
- n. A Safe System Assessment that is appropriate to the scale of the subdivision or development proposed.

MHDA-REQ3	Integrated Transport Assessment					
 Transport Asse a. A description previous distingent of the seription use. c. A description the surround intersection networks. d. Consideratingent of the seription of the series of the s	poplication for an activity that infringes MHDA-S10.2 shall be supported by an Integrated pessment prepared by a suitably qualified engineer, which shall include: In of the proposed activity, the purpose and intended use of the ITA, and an outline of any scussions with the relevant road controlling authorities. In of location, site layout, existing use and consents (if any), adjacent and surrounding land In of the existing access and service arrangements and on-site car parking. A description of ding transport network (including hierarchy, traffic volumes, crash analysis, congestion and s). A description of passenger transport modes and accessibility, walking and cycling on of other developments and land use and transport network improvements (including ransport, walking and cycling). The existing trip generation, modal split, and assignment of trips to the network. In of the proposal (including site layout, operational hours, vehicle access, on site car drop off, and internal vehicle and pedestrian circulation). A description of any construction ant matters. A description of what end of journey facilities are proposed. In of the proposal. Consideration of future traffic volumes and trip generation. alidated and comprehensive transportation forecasts are not available, the assessment sider expected traffic conditions. Thent of safety, efficiency, environmental, accessibility, integration and economic effects ensitivity testing). A specific assessment of the safety and efficiency of the transport d consistency with the Mangawhai Hills Structure Plan. Ny mitigating measures and revised effects, including measures to encourage other modes. Aning and travel demand management measures and sensitivity testing mitigations. Inst District Plan objectives, policies and rules. Thent of effects and conclusion of effects. Confirmation of the suitability of the location of the ponditions (if any) and proposed timing and implementation of necessary road connections and network upgrades. em Assessment					
MHDA-REQ4	Landscape Protection Area Landscape Evaluation					
MHDA-S6.5, M evaluation. The a. Document h Landscape b. Clearly iden nature and	oplication for an activity that infringes MHDA-S1.1, MHDA-S1.1A, MHDA-S2.2A, MHDA-S4.2, IHDA-S6.6 or MHDA-S8.2 shall be supported by a site or property-specific landscape e landscape evaluation shall: now potential adverse effects are to be avoided on the characteristics and qualities of the Protection Area; tify where the avoidance of adverse effects is not considered practicable and record the scale of those effects; e how unavoidable adverse effects will be remedied or mitigated; and					

d. Demonstrate any ways in which the proposal may conserve or heighten the characteristics and qualities of the Landscape Protection Area through a comprehensive approach to landscape analysis and project

design						
MHDA-REQ5 Moderate to high risk instability area Soil Assessment, Retirement and Rehabilitation Management Plan						
instability shown Retirement and F	consent application that is on a site that contains areas identified as moderate to high risk on the Mangawhai Hills Structure Plan shall be supported by a Soil Assessment, Rehabilitation Management Plan, prepared by a suitably qualified soil scientist or engineer suitably qualified ecologist or landscape architect, which shall include:					
	nt of the suitability of the existing conditions of the site and land to be retired and ncluding the following:					
i. Topograp	hy and slope analysis;					
ii. Existing v	egetation;					
iii. Hydrology	, ,					
iv. Soil analy	sis;					
v. Any factor rehabilitat	rs that will influence the successful implementation of the area to be retired and ed.					
b. An Enhancem	nent and Management Plan setting out (to the extent relevant to the proposal):					
	rotection and enhancement objectives and outcomes to be met, including the qualities and stics of the environmental protection area that are to remain protected in perpetuity					
	ction and ongoing management methods required to achieve the objectives and , including but not limited to:					
 Pest or Re-veg Fencin Fire ris Access 	nimal control. ganism control, including kauri dieback disease and myrtle rust. jetation and restoration opportunities.					
	ing monitoring methods to measure the success or otherwise of the implementation of the ient methods, including feedback to Council and provision for review of the management					
iv. The mech	anisms to ensure that the management plan applies to and binds future owners as le for the costs of implementing the management plan.					
MHDA-REQ6	Ecological Assessment					
qualified ecologis a. Identifies, deli habitats and i b. Assess the po	neates and classifies all ecological features on site including, water courses, wetland ndigenous vegetation; otential ecological constraints to development and opportunities for restoration and					
d. Identifies the Revegetation	nancement juirements under the National Policy Statement for Indigenous Biodiversity (2023). necessary extent and location of revegetation planting within the Additional Native Area identified on the Mangawhai Hills Structure Plan. by an Ecological Planting, Restoration and Management Plan that ensures that existing					

e. Is supported by an Ecological Planting, Restoration and Management Plan that ensures that existing natural features and ecological values on site are appropriately enhanced, protected and maintained as a part of site development.

- **2.** The Ecological Planting, Restoration and Management Plan for proposed revegetation planting shall consider and identify:
 - a. The appropriateness and practicability of the proposed planting:
 - i. To be native vegetation which is sourced from the ecological district and to be appropriate for the soil, aspect, exposure and topography;
 - ii. To reflect the composition of former natural vegetation likely to have occupied the site and include appropriate native species that will enable natural processes of succession.
 - iii. The ecological district of the site.
 - iv. The characteristics of the soil (i.e., clay, silt, loam etc.).
 - v. Soil drainage.
 - vi. Topography of the area to be planted.
 - vii. Aspect of the area to be planted.
 - viii. Exposure of site to wind, frost, sunlight and salt spray.
 - ix. Presence of plant and animal pests.
 - x. Any restrictions on planting, such as safety or existing access issues etc.
 - xi. The purpose of the planting in relation to the surrounding environment (including buffering, corridors, linkages).
 - xii. The location and extent of planting.
 - xiii. Site preparation for planting, including stock-proof fencing of planting areas, weed and animal pest control.
 - xiv. Site planting, including species to be planted, size and spacing of plants and where they are to be planted, requirements for replacement of pest plants with appropriate native species and measures to minimise reinvasion of pest plants.
 - xv. Maintenance plan of planting, including releasing plants, fertiliser, plant and animal pest control and mulching and replacement of plants which do not survive, and a management plan for animal and plant pest control.
 - xvi. An assessment of the effects of the potential development on the environmental protection area.
 - xvii. An assessment of the effects of domestic cats and dogs on ecological values and whether a management plan is required.
 - xviii. A management plan that specifies the protection measures proposed to ensure the indigenous vegetation remain protected in perpetuity, that includes how all of the following matters will be implemented prior to the Council issuing section 224(c) certificate.
 - xix. As appropriate and necessary a bat survey and maintenance plan. (Appropriateness and necessity are to be assessed in terms of the latest best practice guidance or protocols).
 - xx. The establishment of secure stock exclusion.
 - xxi. The maintenance of plantings, which must occur until the plantings have reached 80% canopy closure. Forest diversity planting (typically at Year 4 of the project) will have occurred. The survival rate must ensure a minimum 90% of the original density and species.
 - xxii. The maintenance of plantings must ensure that all invasive plant pests are eradicated from the planting site both at the time of planting and on an on-going basis to ensure adequate growth.
 - xxiii. The maintenance of indigenous vegetation must ensure animal and plant pest control occurs.
- 3. Any subdivision consent application that involves earthworks shall be supported by details of any excavation and fill associated with the subdivision, including erosion and sediment control measures in accordance with best practice.

Note: Within the Mangawhai Hills Development Area, good management practice for erosion and sediment control measures is equivalent to those set out in the guideline document, 2016/05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region.

Table MHDA.1: Mangawhai Hills Development Area Road, Private Way, Cycle Way and Property AccessLegal and Construction Widths

Road Hierarchy	Minimum Legal Width	Minimum Formation Width	Minimum Cycleway / Footpath Width	Surface	Maximum Design Speed	Minimum Radius (m)	Minimum SSD (m)	Maximum Grade
Private access serving up to 6 units/lots and less than 50m in length	3.6m except every 50m has	3m	0.5m (one side only where footpath is not provided separately)	seal	30km/h	6m subject to vehicle tracking for anticipated design vehicle		20%
Private Accessway serving 7- 30 units/lots (not vested) or serving up to 6 that is over 50m in length	9.5m	5.5m (no on street parking)	1.4 m (one side only where footpath is not provided separately)	seal	30km/h	6m subject to vehicle tracking for anticipated design vehicle	30m*	12.5% Note: transition between two gradients shall not exceed 12.5%. if they do, separate transition gradient must be provided over a length no less than 2m.
Local / Secondary Road	16m	6.0m + indented parking bays	1.4m (one side only)	Seal	40km/h	10m	40m	12.5%
Primary Road	20m	6.5m + indented parking bays	1.4m footpath on one side only and a 3m shared path on the other.	Seal	50km/h	10m	40m	12.5%
Gravel pathways			Minimum 1.5m formation maximum 3m formation					

Nature trails	minimum 1m maximum 2m			
Shared Paths	Minimum 3m			

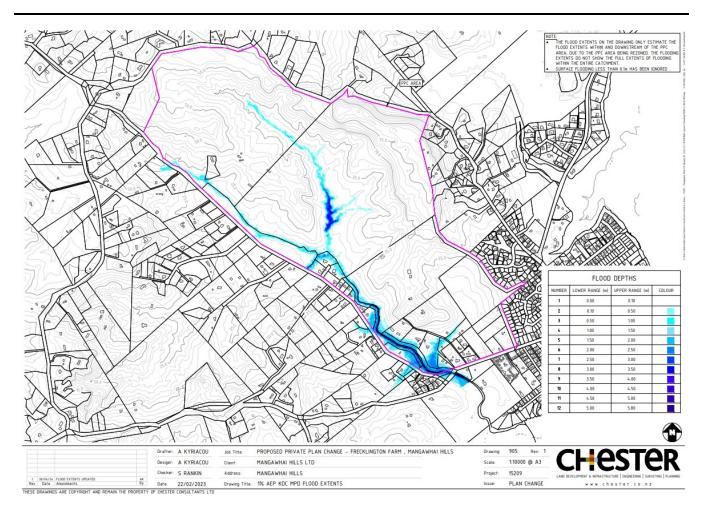
Table Notes:

- (1) The legal width shall be sufficient for the carriageway (including widening on curves), cul-de-sacs, footpaths and cycleways (where appropriate), parking (where appropriate), public utilities, drainage facilities, grassed Berms, Swale Drains, amenity planting, sight benching and street furniture. Roads to vest shall have sufficient legal width for planned future development. Refer to Kaipara District Council Engineering Standards 2011, clause 5.2.4.
- (2) Carriageway width is exclusive of Berms, kerb concrete and parking. Carriageway widths should be increased by up to 1.0m where there is a high proportion of heavy traffic. Additional widening is required on curves in accordance with Kaipara District Council Engineering Standards 2011 clause 5.2.5. Passing bays are required on single lane carriageways in accordance with Kaipara District Council Engineering Standards 2011 clause 5.2.5.
- (3) Carriageway surface shall be sealed in accordance with Kaipara District Council Engineering Standards 2011clause 5.2.6.
- (4) Design speeds are based on rolling terrain typical in Kaipara District. Higher design speeds should be considered in flatter terrain.
- (5) Safe stopping sight distances marked * have been increased to provide for two vehicles approaching each other on a single lane carriageway to stop before colliding. If a two lane carriageway is proposed for access ways serving 1 to 6 lots, sight distances may be reduced accordingly. K value is the length of vertical curve (m) divided by the algebraic difference in gradients (%).
- (6) Where there is potential for further development under the District Plan, the horizontal and vertical geometry and legal width shall provide for the Ultimate Development.

Roof	Bedrooms					
Catchment (m ²)	1	2	3	4	5	
100	20m ³	50m ³				
120	15m ³	35m ³				
140	10m ³	30m ³	75m ³			
160		20m ³	60m ³			
180			50m ³	75m ³		
200			45m ³	65m ³		
220			35m ³	55m ³	90m ³	
240			30m ³	50m ³	80m ³	
260			30m ³	45m ³	70m ³	
280				40m ³	65m ³	
300				35m ³	60m ³	

Table MHDA.2: Recommended Potable Water Supply Volumes for On-site Residential Supply

Figure 1 – Flood Map



Definitions

The standard definitions of the National Planning Standards shall apply to the Mangawhai Hills Development Area Provisions.

Appendix 1 – Mangawhai Hills Structure Plan