

# A1 BUILT ENVIRONMENT

## DEV - Marton Industrial Development Area (MIDA)

### DEV-O1

Provide for industrial activities at the MIDA that achieve sustainable transport outcomes by locating adjacent to a rail siding connection to the North Island Main Trunk and State Highway 1, on the north side of Mākirikiri Road whilst ensuring that the Development Area is serviced by infrastructure, and that adverse effects are avoided, remedied or mitigated to protect the existing rural amenity values, safety and quality of the local environment.

### DEV-O2

Development does not adversely affect the persistence of the local long-tailed bat population.

## Policies

**DEV-P1** Provide for industrial activities listed in DEV-R2 with an operational need to be near the NIMT and SH1, that are in general accordance with the MIDA (Appendix 1), that comply with the Development Area Standards and provide for mitigation of effects on the environment including noise, existing rural landscape and visual amenity, ecology, light spill and glare, transport, traffic safety, land contamination, dust, odour and essential infrastructure.

**DEV-P2** Ensure that industrial activities with an operational need to be near the NIMT and SH1, but not in general accordance with the MIDA (Appendix 1) or do not comply with the Development Area Standards, maintain the amenity and ecological values of the surrounding Rural Zone, avoid significant adverse effects beyond the boundary and achieve the provision of efficient, safe and resilient infrastructure services within the MIDA by achieving the following:

1. Avoid industrial activities that do not demonstrate an operational need to be near the NIMT or SH1, excluding industrial service activities\* located in general accordance with the MIDA\*.
2. The MIDA maintains road linkages to Mākirikiri Road.

3. The MIDA manages and enhances stormwater and water quality to ensure \*hydrological neutrality for each development within it, resulting in improved hydrological functioning for the MIDA footprint, to avoid the effects of flooding beyond the MIDA.
4. Industrial development and associated infrastructure are designed, as far as practicable, to work with the existing rural landscape.
5. The development avoids access directly onto State Highway 1. Legal and/or physical access to sites in the MIDA\* via any existing access directly onto State Highway 1, is to be avoided.
6. Adverse transportation effects (including demand generation) on the State Highway 1/ Mākirikiri Road, State Highway 3/ Mākirikiri Road or Mākirikiri Road/Wellington Road intersections are avoided by completion of the works specified in MIDA Stage 2.1 and additional mitigation where standards **DEVS1.3 General Standards or DEV-S3 Light and Heavy Vehicle Traffic** are not complied with.
7. Avoid development that is likely to exceed light and heavy vehicle thresholds and daily two-way traffic distribution set out in DEV-S3, except where a further traffic impact assessment confirms that the road network safety and capacity effects of further development within MIDA will be avoided or mitigated by the implementation of specific recommended measures.
8. Acoustic and vibration effects on the existing Rural Zone amenity values are avoided by works or design where standard DEV-S4 Noise Thresholds is exceeded.
9. Dust amenity effects on sensitive receivers in the existing Rural Zone are avoided by demonstrating compliance with the Manawatu-Whanganui Regional Council One Plan.
10. The MIDA does not adversely affect provision of critical infrastructure within the MIDA\* including the electricity and fibre distribution networks.
11. Identified ecological planted corridors are to be established and maintained (by RDC or the landowner) in the MIDA\* and the adjacent Rural Zone (to the north, west and east of the MIDA) as detailed in Appendix 1-1 and the Landscape Mitigation Plan, Appendix 1-3.

# A1 BUILT ENVIRONMENT continued

## DEV -Marton Industrial Development Area (MIDA)

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| <p><b>DEV-P3</b> Vehicle access to, from and within the MIDA* maintains or improves the safety and efficiency of the local and national roading network with access restricted to Mākirikiri Road only.</p>  | <p><b>DEV-P8</b> Protect significant habitat for long-tailed bats and require enhancement of ecological values, including through the preparation and implementation of an Ecological and Landscape Management Plan (ELMP), recognising that exotic trees and vegetation may provide significant habitat.</p>  |
| <p><b>DEV-P4</b> Apply light and heavy vehicle generation standards for the MIDA* as set out in DEV-S3, and monitor actual traffic generated by MIDA at regular development intervals.</p>   | <p><b>DEV-P9</b> The MIDA maintains or enhances riparian landscape, ecological and natural character values adjacent to streams at the development site by:</p> <ol style="list-style-type: none"> <li>1. Establishing best practice erosion and sediment control both during and after construction works;</li> <li>2. Maintaining or enhancing existing planting along stream channels to provide sediment filtration and retention along riparian zones.</li> <li>3. Riparian enhancement planting along all diverted riparian habitats, including native species known to encourage invertebrates which bats feed on.</li> </ol> |
| <p><b>DEV-P5</b> In considering applications for industrial activities under Policy DEV-P2, a precautionary approach must be taken to minimise the potential adverse effects of noise and vibration, dust, odour and other emissions on sensitive land uses existing at (Operative Date) in the adjacent Rural Zone.</p> | <p><b>DEV-P10</b> Buildings associated with industrial activities must be designed to integrate into the wider landscape to maintain the existing rural landscape character and amenity values.</p>  |
| <p><b>DEV-P6</b> Ensure that a Marton Industrial Development Area Comprehensive Monitoring Framework (MIDACMF) is developed to measure and report on the cumulative effects on the environment of the construction and operation of the Development Area.</p>  |  |
| <p><b>DEV-P7</b> Ensure that an effective community liaison mechanism is established as a means of engagement with the community in relation to construction and operation of industrial activities at the MIDA.</p>   |  |



## B5 INDUSTRIAL ZONE continued

### Permitted Activities

The following are permitted activities in the Industrial Zone:

- a) industrial activities (excluding on land identified in DEV-Development Area)\*;
- b) fuel service facilities\*;
- c) commercial\* garages;
- d) motor vehicle sales yards and premises for vehicle hire;
- e) residential accommodation and ancillary activities\* necessary for the operation of any permitted activity^;
- f) veterinary clinics;
- g) food outlets for takeaway activities servicing the needs of persons engaged within the zone and including canteens, cafes, dining rooms, recreational facilities and activities;
- h) open space\* activities including stock grazing\* of open space\*;
- i) network utility\* activities, associated structures^ and any minor upgrading\* of structures^;
- j) trade suppliers and timber merchants;
- k) buildings\* and ancillary activities\* associated with any permitted activity^;
- l) earthworks\*;
- m) relocated buildings\*.

### Permitted Activity Standards for the Industrial Zone

#### **B5.1 Daylight Setback**

B5.1-1 On sites\* adjoining the Residential Zone, any part of a building\* must comply with the daylight setback rule for the adjoining Residential Zone.

### Controlled Activities

There are no Controlled Activities in the Industrial Zone.

### Restricted Discretionary Activities

The following are Restricted Discretionary Activities in the Industrial Zone:

- a) any activity that would otherwise be a permitted^, but which fails to comply with one or more of the standards for that rule in the Industrial Zone or the general rules and standards as stated above;
- b) co-location of masts, radio and telecommunications equipment where the height exceeds the permitted activity standard.

The matters over which the Council will exercise its discretion are:

- a) the effect of the particular non-compliance on the environment, including the cumulative or combined effect of non-compliance.
- b) In relation to co-location of masts, radio and telecommunications equipment:
  - i. The effects of the height of the structure on the amenity values of the area adjacent to the proposed location of the activity.

## B5 INDUSTRIAL ZONE continued

- c) For signs:
  - i. Size
  - ii. Location
  - iii. Provision for maintenance
  - iv. Design
  - v. Safety
  - vi. The effects on heritage buildings identified in Schedule C3A.

### Discretionary Activities

The following are Discretionary Activities in the Industrial Zone:

- a) any activity that is not a permitted, or restricted discretionary activity<sup>^</sup> in the Industrial Zone, and any activity that is not specifically provided for in this Plan.
- b) any offensive activities.

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**Note:** Specific objectives, policies and rules apply to the Marton Industrial Development Area. See B5A.

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# B5A MARTON INDUSTRIAL DEVELOPMENT AREA

## DEV-R1 Permitted Activities

The following activities within the MIDA that comply with standards **DEV-S1 – DEV-S7** and **DEV-S13** and are in general accordance with the MIDA (Appendix 1)

- a) Industrial service activities\* (excluding truck stop for public use)
- b) Weighbridge facility
- c) Earthworks
- d) Primary production\* including buildings and ancillary activities associated with primary production
- e) Construction and operation of rail siding

## DEV-R2 Restricted Discretionary Activities

Activities specified in **DEV-R1** that do not comply with standards **DEV-S1 – DEV S7** or **DEV-S13**.

The matters over which the Council will exercise its discretion are:

- a) The effects of the noncompliance.

The following activities where they are in general accordance with the MIDA (Appendix 1) and comply with the relevant standards **DEV-S1 – DEV-S13**:

- a) Log yard with debarker facility
- b) Container storage and loading area
- c) Food producer manufacturing facility
- d) Plastics manufacturing facility
- e) Biomass energy plant

The matters over which the Council will exercise its discretion are:

- a) Landscape and visual amenity effects
- b) Ecological effects including the ELMP
- c) Light spill and glare
- d) Transport including traffic safety
- e) Dust and Odour
- f) Site layout
- g) Three waters infrastructure
- h) Construction effects
- i) Noise and vibration
- j) Disestablishment and remediation of any HAIL activity

## DEV-R3 Discretionary Activities

Any activity that is not in general accordance with the MIDA (Appendix 1) or does not comply with any relevant standard in **DEV-S1** to **DEV-S13**.

Truck stop for public use or service station.

## DEV-R4 Non- Complying Activities

Any industrial activity prior to completion of Stage One, or Stage Two – Item 1 in accordance with the MIDA.

# B5A MARTON INDUSTRIAL DEVELOPMENT AREA continued

## Standards

The following DEV- Standards apply to the rules above.

### DEV-S1 General Standards

- 1 Activities must comply with General Standards: B1.1 General Rule, B1.2-2 Light, B1.4 Surface Water Disposal, B1.5 Building Height (excluding exhaust flues constructed in accordance with DEV-S10), B1.6-2 Storage Areas, B1.8 Earthworks, B1.9 Hazardous Substances and Facilities, B1.11 Signage, B1.12 Network Utilities, B1.15 Temporary Military Activities.
- 2 Where there is a conflict with any B1 General Standards the DEV Standard must prevail.
- 3 Activities must comply with General Standards B9.1 Vehicle Access to Individual Sites and B9.6 - B9.12 relating to parking and loading space provision.
- 4 Activities must comply with the General Standard B1.7- Noise for the Industrial Zone at all other properties in the MIDA.

### DEV-S2 Buildings

Buildings and ancillary structures must utilise recessive, low reflective coloured materials.

Recessive colours are grey, green and brown colours.

### DEV-S3 Light and Heavy Vehicle Traffic

- 1 Traffic movements at the vehicle entry and exit points for the MIDA must not exceed either the peak hour or daily movements specified for either light or heavy vehicles set out in Table 1.

TABLE 1		
Vehicle Type	Peak Hour (vph) (7.30am – 8.30am and 4.30pm – 5.30pm)	Daily (vpd)
Light vehicles	195	470
Heavy Vehicles	50	274

- 2 In addition to DEV-S3.1, traffic turning into and out of the vehicle entry and exit points for the MIDA must not exceed the movements set out in Table 2.

TABLE 2		
Direction	Light vehicles (vpd)	Heavy vehicles (vpd)
Light vehicles	235	137

**Note:** Likely exceedances of values in Table 1 and 2 shall be informed by individual assessments and traffic monitoring information carried out in accordance with the MIDA Comprehensive Monitoring Framework carried out pursuant to Appendix 1.



# B5A MARTON INDUSTRIAL DEVELOPMENT AREA continued

## **DEV-S4 Noise Thresholds**

- 1 The noise limits that apply to the MIDA Monday to Sunday inclusive are:
  - a. Day time (7am – 10pm) – 55dB LAeq
  - b. Night time (10pm – 7am) - 40dB LAeq and 70 dB LAFmax
- 2 These levels must not be exceeded at the notional boundary of dwellings (existing at operative date) except at the properties listed below where a noise limit of 55 dB LAeq applies between 7am – 10pm and 45 dB LAeq / 70 dB LAFmax applies between 10pm – 7am:
  - 1020 State Highway 1
  - 1066 State Highway 1
  - 1091 State Highway 1
  - 1108 State Highway 1
  - 1165 State Highway 1

## **DEV-S5 Lighting and Glare**

Exterior lighting associated with the activity must be designed to comply with:

- a) AS/NZS 4282:2019 – Control of the Obtrusive Effects of Outdoor Lighting.
- b) ELMP thresholds for lighting at the MIDA boundary.
- c) Exterior lighting within the industrial service area shall be directed away from Mākirikiri Road and not be permanently on.
- d) A luminance level of no more than 0.1 lux shall be maintained
  - i. immediately beyond the MIDA boundary or at the outer edge of the existing trees rows at the MIDA boundary; and
  - ii. in relation to the western shelterbelt adjacent to the MIDA the light level must be achieved at the outer edge of the shelterbelt

## **DEV-S6 Construction Activities**

A Construction Noise and Vibration Management Plan (CNVMP) must be adopted for each construction area at the MIDA and be developed in accordance with Annex E2 of NZS 6803:1999.

## **DEV-S7 Rail**

Activities must be in accordance with the following:

- 1 Construction standards
  - a) Before commencement of the siding construction the MIDA Stage 1 (Items 1 – 3) must be completed.
- 2 Operation standards
  - a) Rail wagons loading and unloading shall not exceed three trains of 30 wagons (in and out) per day.
  - b) Rail wagons loading and unloading shall only operate Monday to Saturday inclusive between 7 am and 6 pm.
  - c) Locomotive idling and movement of wagons must not occur between 10 pm and 7 am.
  - d) Other rail activities shall not occur between 10 pm and 7 am unless it can be shown that the activity can comply with the permitted night time standard (DEVS4.1).

## B5A MARTON INDUSTRIAL DEVELOPMENT AREA continued

### **DEV-S8 Log Yard and Debarker Activity**

Activities must be in accordance with the scale and intensity as detailed below:

- 1 Hours of operation – 7am – 5pm Monday to Saturday inclusive
- 2 Outdoor equipment may include:
  - a) Loaders.
  - b) A de-barker with throughput up to 1300 tones/ day and operating up to 10 hours/day.
  - c) A pump station. Any pumps must be located within a pump room.
  - d) Motorised conveyor for transporting waste to storage bins.
- 3 Water flushing must be applied to the paved log yard during dry conditions to minimise dust.

### **DEV-S9 PHA/PLA Plant Activity**

Activities must be in accordance with the scale and intensity as detailed below:

- 1 Hours of operation – 24 hours and 7 days per week
- 2 All processing and manufacturing must be undertaken in enclosed tanks or buildings.
- 3 Equipment that may be used only within a building or tanks includes:
  - a) Loaders
  - b) A chipper
  - c) Reactor chambers and distillation chambers.
  - d) Conveyors
  - e) Motors, pumps, reactors and centrifugal tanks, crystallisers boilers, mixing tanks, dryers and a granulation plant are associated with this activity.
- 4 Closed tankers must be used for the delivery of raw material inputs and closed tanks for feedstock transport and storage.
- 5 Any exhaust air from storage tanks will be ducted.

### **DEV-S10 Food Producer Activity**

Activities must be in accordance with the scale and intensity as detailed below:

- 1 Hours of operation – 24 hours and 7 days per week
- 2 All operations must occur within buildings. Some activity (such as boilers or dryers), while inside, will have exhaust flues up to 30m height.
- 3 Any biomass energy plant on site must be enclosed.
- 4 Onsite car and truck parking areas for staff and associated with freight movement.
- 5 Building scale – up to 14,600m<sup>2</sup> total net floor area, comprising a series of single-story buildings including warehousing, container loading and storage, offices, processing plants, biomass energy plant and waste disposal purposes.



# B5A MARTON INDUSTRIAL DEVELOPMENT AREA continued

## **DEV-S11 Energy Plant Activity**

Activities must be in accordance with the scale and intensity as detailed below:

- 1 Hours of operation – 24 hours, 7 days per week
- 2 A large boiler flue, fans, and turbines may be located on this site for the boiler and energy production.
- 3 Waste may be pumped to the energy plant.
- 4 All processes will occur within building/s.
- 5 Turbines will be located within acoustic enclosure.

## **DEV -S12 Container Storage and Loading Area Activity**

Activities must be in accordance with the scale and intensity as detailed below:

- 1 Hours of operation – 7am – 10pm, 7 days per week
- 2 Container stackers or wheeled top-lift hoists may operate at the site.
- 3 Provision for the storage of up to 80 containers stacked up to 2 containers high.
- 4 Any waste slurry pumps must be enclosed in pump station.

## **DEV-S13 Ecological and Landscape Management Plan**

Activities must be in accordance with the Certified Ecological and Landscape Management Plan (ELMP) prepared pursuant to Appendix 1.

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### **General Advice Note:**

1. Any discharges (including to air), earthworks or water related activities will need to comply with the Horizons Regional Council One Plan and regional resource consents may be required.
  2. A Permit under the Wildlife Act 1953 may be required for the removal of trees due to the presence of long tailed bats in the vicinity of the MIDA. Please contact the Department of Conservation Permissions team for advice.
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# B5A APPENDIX 1

## MIDA Comprehensive Development Plan

The Comprehensive Development Plan (CDP) for Marton Rail Hub comprises an internal roading network, private rail siding, container storage area, a weighbridge and commercial services area intended to service multiple industrial activities within the Development Area.

The CDP is set out on the layout plan below and incorporates the following design principles.

- The CDP provides specified areas for a food producer plant, Polyactic Acid (PLA) and Polyhydroxyalkanoates (PHA) plastics manufacturing plants, an energy plant and log yard with debarking area, and commercial services area.
- Container storage and loading platforms will be provided both north and south of the rail siding.
- The rail siding will provide a 530m long stabling facility for up to 30 wagons.
- The perpendicular configuration avoids a steep incline to the Marton Station.
- Access is solely from Mākirikiri Road with two specified access points, one for heavy vehicles incorporating a weigh bridge and a separate access for employees, visitors and some truck movements.
- There is to be no access directly to or from State Highway 1.
- Drainage will be north to south and requires some earthworks to achieve this.
- The earthworks cut to fill will be balanced across the CDP including use of cut from the detention pond to be used to raise the level of land in the south and southwest corner.
- Three waters servicing will be provided in or adjacent to the internal road network and to each industrial site.
- A stormwater detention pond for the entire area will be required and is likely to be located adjacent to Mākirikiri Road and is to be fed by a mix of piped and open swale network. The system will be designed to achieve \*hydrological neutrality within the MIDA.
- Sewage will be pre-processed on each industrial site, as required and then pumped into the Council sewerage system.
- The Marton water network will be extended to the Development Area.
- The stream at the western edge of the area and the diverted stream will be enhanced with riparian planting.
- Mitigation measures will be implemented through consent conditions including landscape and visual amenity effects, ecological effects, light spill and glare, transport, dust, odour and vibration.
- Timing for works in each section of the MIDA shall delay mature tree removal until essential for construction to progress.
- Any removal of mature trees ahead of development must be completed under the direct supervision of a suitably qualified bat ecologist recognised by the Department of Conservation.



# B5A APPENDIX 1 continued

## Staging of Development

Development shall occur in three distinct stages, as outlined below.

**Stage One** involves the following:

- 1 The Rangitikei District Council shall develop a MIDA Comprehensive Monitoring Framework to measure and report on the cumulative effects on the environment of the construction and operation of the MIDA to inform individual land use resource consent monitoring conditions and the community. The Group Manager – Democracy and Planning is responsible to ensure that ongoing monitoring is undertaken, as set out in the MIDA Comprehensive Monitoring Framework.  
Without limitation, the MIDA Comprehensive Monitoring Framework ensure that monitoring of traffic at the vehicle entry and exit points to the MIDA is undertaken at occupation of approximately 25%, 50%, 75% and 100% of development land area to identify whether actual traffic generation and two-way traffic distribution remains within the figures identified at DEV-S3.  
The MIDA Comprehensive Monitoring Framework must also require that when development reaches a level where DEV-S3 values are exceeded, then a further TIA should be undertaken and mitigation measures implemented, before any further development within the MIDA can occur.
- 2 Rangitikei District Council (RDC) or the landowner/s for the MIDA, shall:
  - a) Initiate a Community Liaison Group (CLG) and provide co-ordination and administrative support, including a dedicated contact person and provision of a meeting point. The general purpose of the CLG shall be for the various Consent Holders to inform the CLG of:
    - Progress and timing of development and operation of industrial activities at the MIDA.
    - Report on the MIDA Comprehensive Monitoring Framework requirements.
    - Any compliance issues and actions to remediate.
  - b) RDC shall invite representation from the Marton community (including surrounding landowners), Rangitikei District Council, Iwi and MIDA industrial operators and/ or consent holders.
  - c) Meetings of the CLG shall be held annually in March and upon receiving a written request for a meeting from the consent holders or CLG member. A CLG meeting shall be convened by Council within four (4) weeks of any such request being received, up to a limit of three (3) meetings annually.
  - d) Compliance for commencing construction works shall be achieved at completion of matters 2a and 2b above.



- 3 RDC or the landowner/s for the MIDA shall be responsible for preparation of an Ecological and Landscape Management Plan (ELMP) for the purpose of protecting roosting, foraging and commuting habitat for long tailed Bats and ensuring enhancement of ecological values, prepared by a suitably qualified ecologist and in consultation with an ecologist appointed by the Department of Conservation. In the event of a dispute between the ecologists over the preparation of the ELMP, a suitably qualified ecologist mutually agreed between the ecologists shall review and confirm the ELMP. The ELMP shall as a minimum comprise details of:
  1. Department of Conservation (DOC) Bat Roost Protocols.
  2. Best practice standards as set out in DEV-S5 to be followed for lighting, associated with bat habitats.
  3. European best-practice (Voigt et al., 2018) and Australian best-practice (Commonwealth of Australia 2020) shall be followed for all lighting.
  4. A luminance of no more than 0.1 lux should be maintained immediately beyond the MIDA boundary. In relation to the western shelterbelt adjacent to the MIDA the light level must be achieved at the outer edge of the shelterbelt.
  5. All landscape plantings shall be designed to maximise their utilization by long tailed bats, and achieve tall contiguous planting around the MIDA, as far as practicable whilst maintaining health and safety compliance for transport infrastructure.
  6. As far as practical, avoid felling of trees for construction until the latest point in the construction programme.
  7. Protocols for passive lizard management and breeding native birds.
  8. Opportunities for ecological enhancement of the stormwater detention area.
  9. Protocols for stream diversions, including timing and methodology related to bat protection.
  10. Provision for riparian enhancement planting along all diverted riparian habitats, including native species known to encourage invertebrates which bats feed on.
  11. Consider methods to enhance protection of potential roost sites in the retained gum trees.
  12. An acoustic monitoring programme be developed to measure the effectiveness of landscape planting as alternative commuting and foraging areas for bats, to be commenced before the first removal of trees in the MIDA.

This shall include an annual report, to be submitted to the Group Manager – Democracy and Planning, on the results of acoustic monitoring, and discussion between the suitably qualified ecologist and ecologist appointed by DOC.

## B5A APPENDIX 1 continued

13. The Ecological Management and Landscape Plan shall be subject to review in relation to the purpose on a three-yearly basis until it is agreed that the monitoring is no longer required. This review shall include the involvement of a suitably qualified bat ecologist and DOC bat ecologist and shall make recommendations on any available additional measures to achieve the purpose.
14. Set out measures to ensure landscape plantings are actively maintained to optimize growth.
15. Identify mechanisms to ensure existing shelterbelts on the western boundary and new landscape planting as per **Appendix 1-1** are maintained and retained long term.

Item 3 is deemed to be complete for commencement of Stage 2, when the Council's Group Manager – Democracy and Planning confirms that technical requirements 1 to 15 above have been addressed appropriately. The Group Manager – Democracy and Planning is responsible to ensure the ongoing compliance monitoring for the ELMP.

- 4 The minimum 15 metre wide perimeter planting of both exotic and native tree species in accordance with Appendix 1-2 – Tree Species must occur in the first planting season after (the operative date) except where the planting needs to align with contractor programmes for earthworks and infrastructure services construction.
- 5 Preparation of an independently peer reviewed safe systems assessment (SSA) to the satisfaction of Council's Chief Operating Officer and Waka Kotahi to confirm the number, location, form, function and design of the MIDA\* entrances from Mākirikiri Road, and the design of the improvements at the State Highway 1/ Mākirikiri Road and Mākirikiri Road / Wellington Road intersections. All designs to comply with AustRoads/Waka Kotahi relevant standards, including achieving sight and separation distances that are appropriate to the form of intersection. The SSA and design of the Mākirikiri Road intersections with the site accesses, Wellington Road and SH1 is to take particular account of cyclists on Mākirikiri Road.

**Stage Two:** Following completion of Stage One Items 1 – 3 in, Stage Two may commence. Stage Two comprises:

- 1 Completion of a suitably designed upgrade of the State Highway 1/Mākirikiri Road intersection and safety improvements at the Mākirikiri Road/Wellington Road intersection, in accordance with an independently peer reviewed safe system assessment (taking particular account of cyclists on Makirikiri Road), to the satisfaction of Council's Chief Operating Officer and Waka Kotahi. These works must be completed prior to commencement of any industrial activity.
- 2 Partial earthworks, planting and construction activities and provision of services to facilitate

## B5A APPENDIX 1 continued

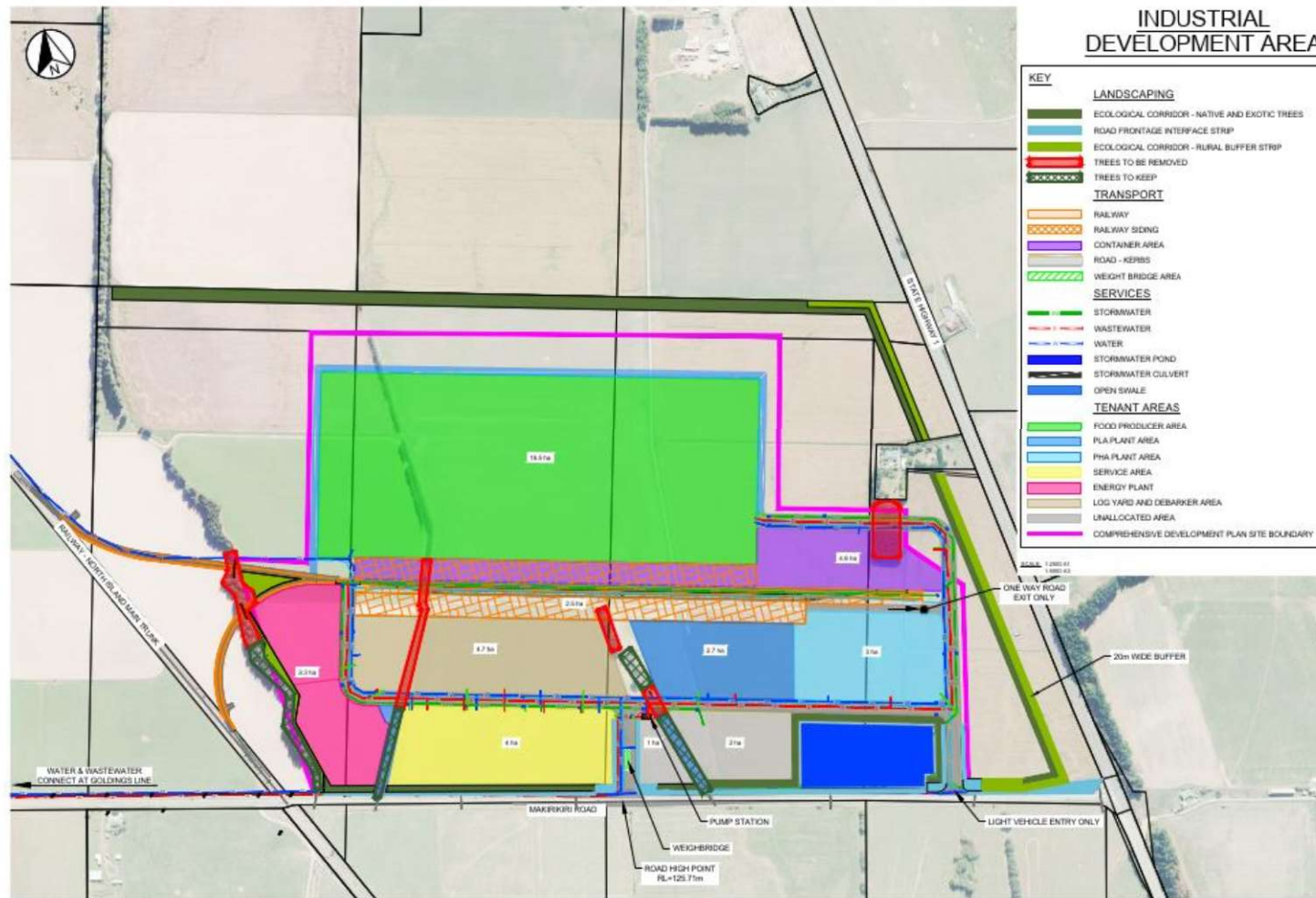
the following sub-stages:

- Rail siding and log wagon loading area to south of siding;
- Development of site entrances in accordance with item 5 of Stage 1, and internal roading to provide access to the rail siding and log yard.
- Stormwater to serve rail siding, log yard and initial roading including partial or full completion of the stormwater detention basin;
- Installation of underground services—as required in sub-stages;
- Remaining landscaping visual amenity and bat habitat species planting mitigation required after the completion of Stage 1 (4) for the rail siding and log yard, as specified in the ELMP, and consistent with **Appendix 1-1**.
- Timing for works in each section of the MIDA shall delay mature tree removal until essential for construction to progress.
- Any removal of mature trees ahead of development must be completed under the direct supervision of a suitably qualified bat ecologist recognised by the Department of Conservation.
- Weighbridge facility including overflow parking area;
- Log yard and log de-barking activity.

In **Stage Three** all other identified activities are expected to establish within five – ten years of Stage One.



# B5A APPENDIX-1-1



**Note: Size of stormwater detention pond to be determined by best practice. Location of stormwater detention pond indicative only**

## B5A APPENDIX 1-2

### Tree Species

MIDA perimeter tree planting shall include the following list of native and exotic plant species to provide mitigation for loss of bat habitat:

Common name	Latin name	Value to bats
<b>Exotic Trees</b>		
Giant gum	<i>Eucalyptus regnans</i>	Roosting
Brown Barrel	<i>Eucalyptus fastigata</i>	Roosting
Messmate	<i>Eucalyptus obliqua</i>	Roosting
Tasmanian Blackwood	<i>Acacia melanoxylon</i>	Roosting
Radiata Pine	<i>Pinus Radiata</i>	Roosting
London plane	<i>Platanus x acerifolia</i>	Roosting
Sessile oak	<i>Quercus petraea</i>	Roosting
<b>Native Trees</b>		
Makomako	<i>Aristotelia serrata</i>	Encourages insects for foraging
Mingimingi	<i>Coprosma propinqua</i>	Encourages insects for foraging
Karamu	<i>Coprosma robusta</i>	Encourages insects for foraging
Ti kouka	<i>Cordyline australis</i>	Roosting Encourages insects for foraging
Kahikatea	<i>Dacrycarpus dacrydioides</i>	Roosting Encourages insects for foraging
Rimu	<i>Dacrydium cupressinum</i>	Roosting Encourages insects for foraging
Pokaka	<i>Elaeocarpus hookerianus</i>	Encourages insects for foraging
Kanuka	<i>Kunzea</i> var.	Encourages insects for foraging
Manuka	<i>Leptospermum</i> var.	Encourages insects for foraging
Mahoe	<i>Melicytus ramiflorus</i>	Encourages insects for foraging
Harakeke	<i>Phormium tenax</i>	Encourages insects for foraging
Manatu	<i>Plagianthus regius</i>	Encourages insects for foraging
Totara	<i>Podocarpus totara</i>	Roosting Encourages insects for foraging
Matai	<i>Prumnopitys taxifolia</i>	Encourages insects for foraging

# MARTON RAILWAY HUB

## *Landscape Mitigation Plan*



JULY 2022 REV 0



# MARTON RAILWAY HUB

## *Landscape Mitigation Plan*

Date: July 2022

Status: Revision 0

Reference: 5-WT696.01

File: U:\Projects\NZ\5-WT696.01 Marton Rail Hub - Rail Civil Works\Home\04\_CADD\01\_WIP\Landscape\Indesign

Prepared by:



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(NZILA Registered)

## DESIGN PHILOSOPHY

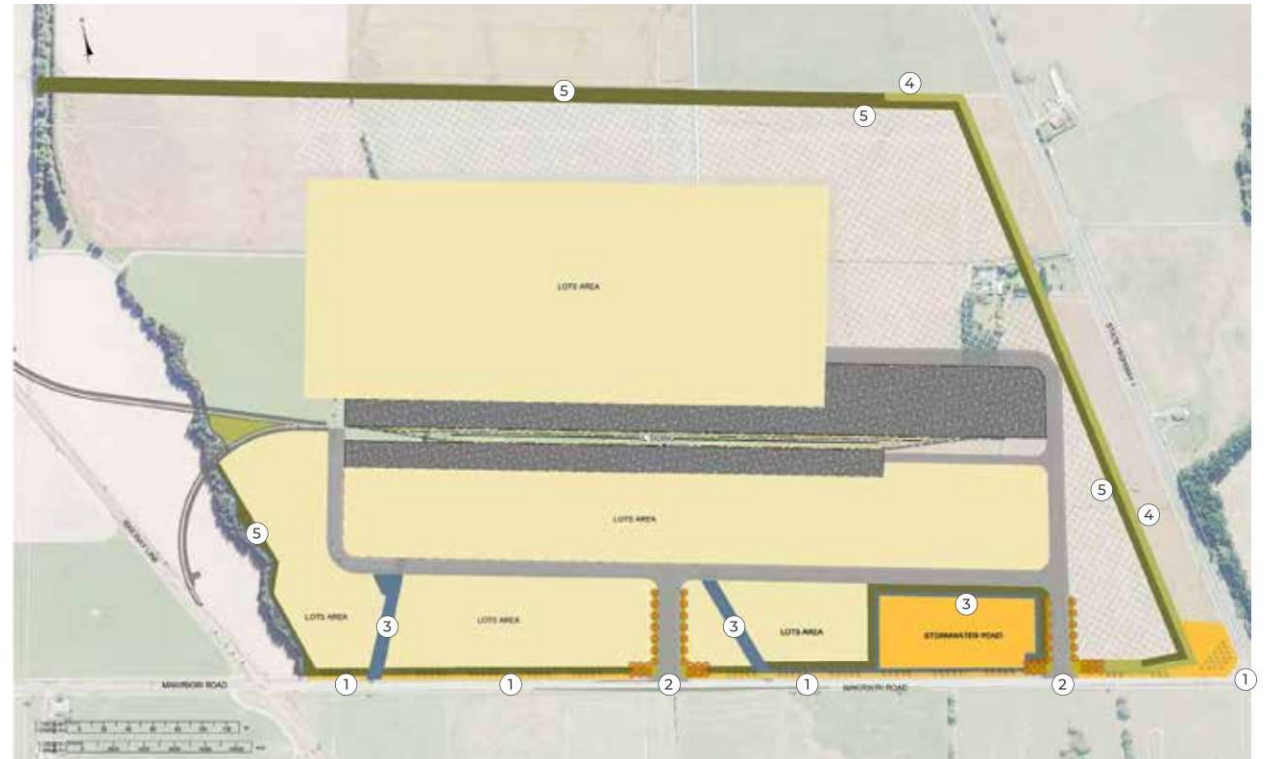
The concept design proposes measures to minimise or alleviate potential negative landscape and visual effects that the proposed development may have on the existing landscape and to integrate the proposed Rail Hub into the wider environment. It is therefore expected that over time, any adverse landscape and visual effects will be reduced to an acceptable level and the proposal will be integrated into the existing landscape.

### Mitigation Planting Benefits

The concept design specifies the type and location of proposed vegetated areas to be planted and maintained on site. The proposed planting will have the following benefits including:

- Achieving a dense visual screen in a short timeframe to mitigate the landscape and visual effects of the rail siding, log yard and wider CDP area;
- Visually 'anchoring' the proposal into the landscape. This can be achieved by using screen planting that has a high level of compatibility with shelterbelt planting patterns from the surrounding rural landscape;
- Reducing the scale and bulk of the proposed buildings, effectively rendering them less noticeable;
- Enhancing the visual amenity of the road frontage and;
- Encouraging dust suppression and screening dust plumes by locating tall vegetation on the periphery of, and in strategic locations throughout the site; and
- Incorporating native and exotic tree species to provide bat roosting habitats.

The screen planting typologies are explained in more detail on the overleaf.



#### KEY

- ① Makirikiri Road Amenity Enhancement Planting and Visual Mitigation Planting
- ② Main Entrance Amenity Planting
- ③ Stormwater Pond/Riparian Enhancement Planting
- ④ State Highway Buffer Planting
- ⑤ Visual Mitigation Planting

## ENLARGEMENT: MITIGATION PLANTING PLAN

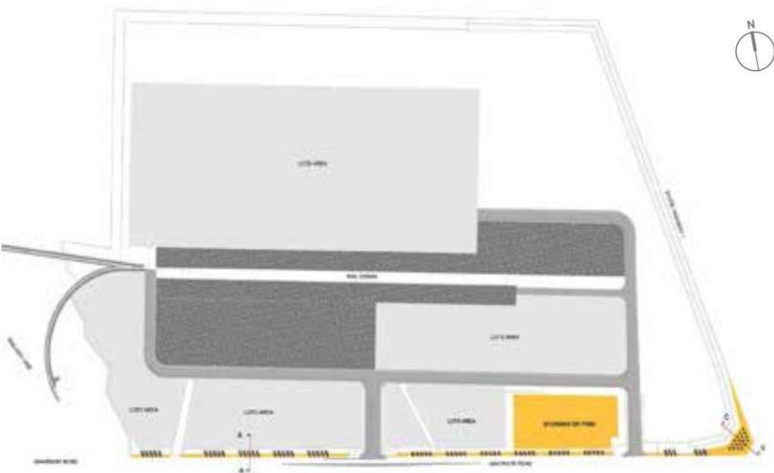
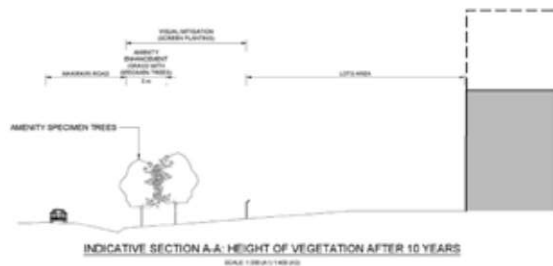




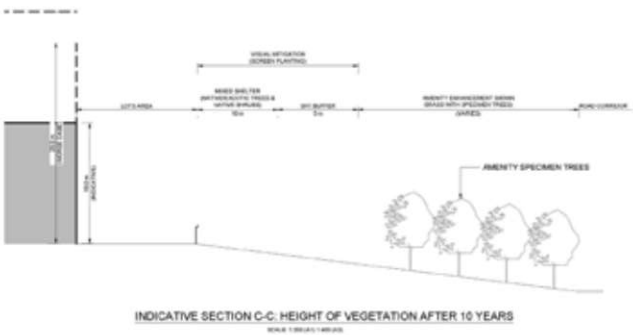
# AMENITY ENHANCEMENT PLANTING TYPOLOGIES

## 1 Makirikiri Road Amenity Enhancement Planting and Visual Mitigation

A 5 m wide 'parkland' buffer is proposed immediately adjacent to the Makirikiri Road edge to reduce the potential for adverse visual effects and soften the interface between the road corridor and the proposal. This buffer will comprise groves of exotic specimen trees, redolent of the typical rural shelterbelts found throughout the wider landscape. The use of deciduous trees will provide light, vertical structure and seasonal colour. The groves will be planted in open mown grass areas to create a picturesque parkland setting along the road frontage.



Groves of specimen trees



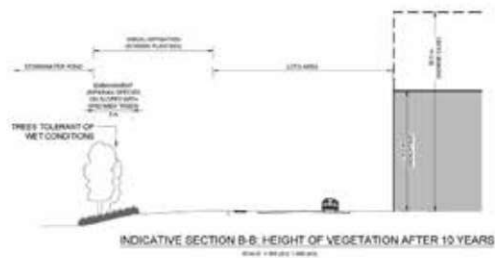
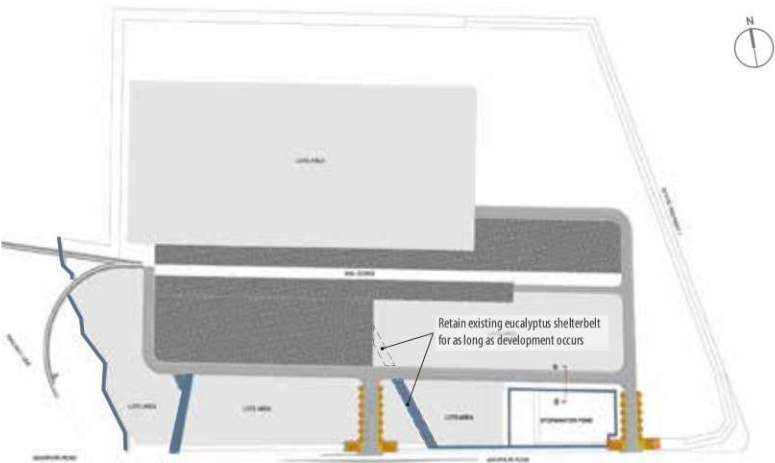
# SCREEN PLANTING TYPOLOGIES

## 2 Main Entrance Amenity Planting

The gateway enhancement planting is located at the main entrances of the proposal. Linear and formal specimen tree planting along the access roads will create broad avenues, provide seasonal colour and vertical scale. The specimen trees will be planted in beds of low growing native shrubs. Plant selection is important as it will create a sense of arrival, provides the first impressions of entering the site and creates a positive visual environment for the community, travelling public and workers at the proposed Rail Hub.

## 3 Stormwater Pond / Riparian Enhancement Planting

A mixture of native riparian grasses and rushes are proposed for the stormwater reserve, stream and swales. Low-growing plant species are proposed along the Makirikiri Road boundary which will maintain views from the road frontage into the stormwater reserve, creating a positive relationship with the road frontage and main entrances. A Mixed Native and Exotic Screen is located at the rear of the stormwater reserve to help screen views of the proposal in the background and form a positive backdrop to the pond. It is proposed to retain the existing eucalyptus shelterbelt for as long as possible prior to development occurs.



Stream planting



Stormwater pond planting

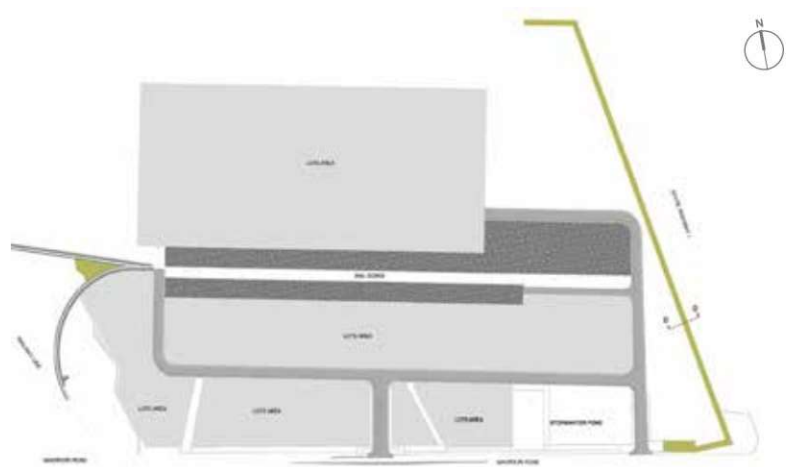


Avenue trees



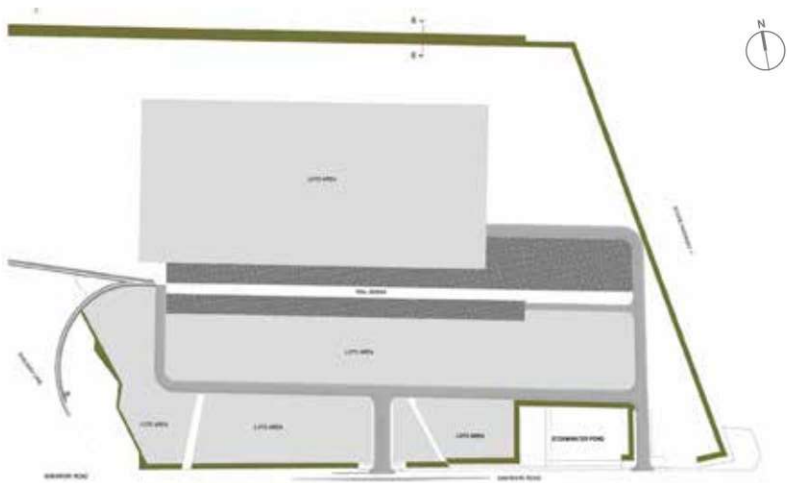
Seasonal colour

# SCREEN PLANTING TYPOLOGIES



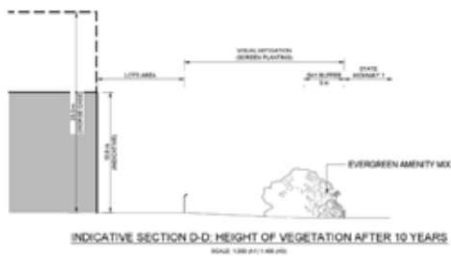
- 4 State Highway 1 Buffer Planting (Native Shrub Mix)
 

A 5 m wide native planting buffer strip is proposed immediately adjacent to the SH1 edge. The low to medium height buffer will soften the interface between the highway corridor and the mixed screen planting strip and create scale. It will be tiered to soften the abrupt transition, avoiding a ‘wall’ effect that may otherwise occur with more traditional screen/shelterbelt planting.



- 5 Visual Mitigation Buffer Planting (Native and Exotic Screen Planting Mix)
 

A 10 m wide screen planting buffer strip is proposed along the majority of the site boundary to obscure views from the surrounding landscape towards the proposal. In terms of plant selection, a mix of native understory shrubs and exotic and native trees is proposed, with a tree height of 30 m to 50 m minimum at maturity. Plant densities will ensure that a dense visual screen is achieved. Trees are planted in random patterns with a planted understory and/or mulched.



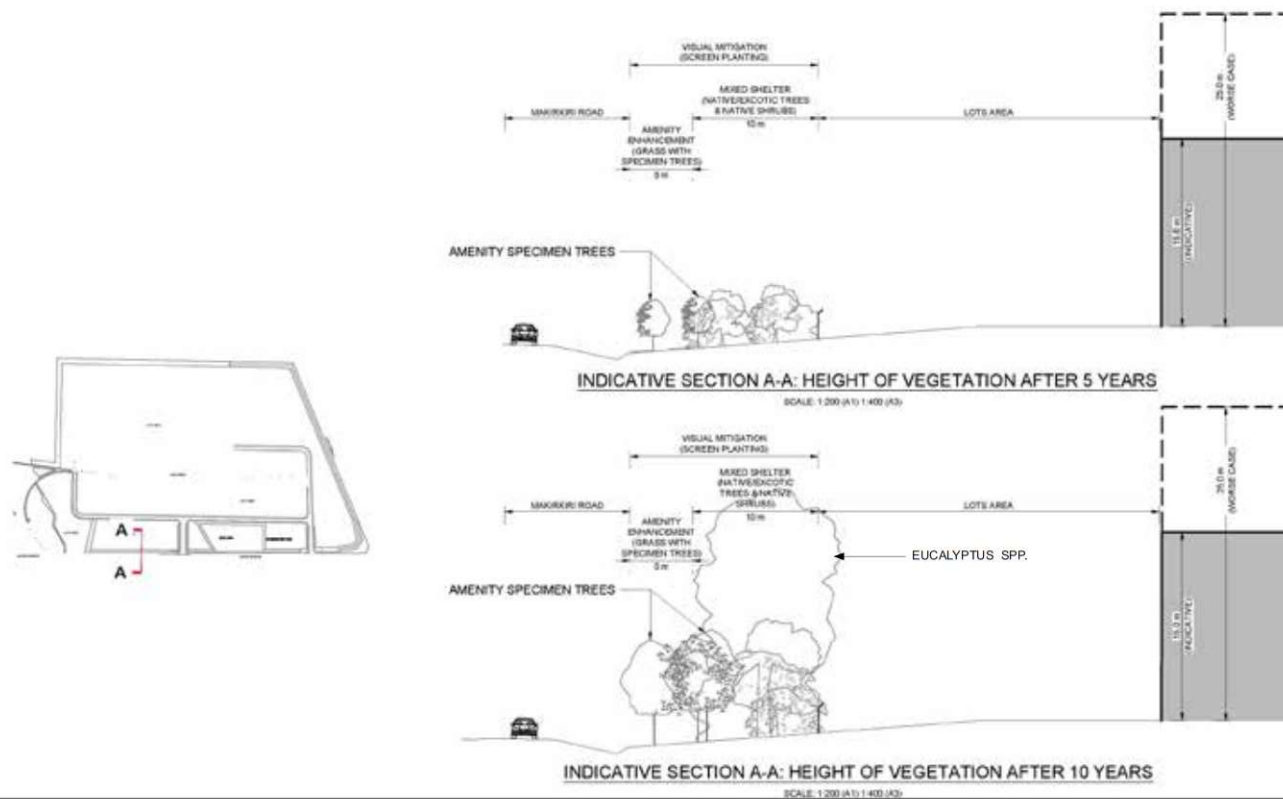


## MAKIRIKIRI ROAD BOUNDARY TREATMENT: TYPICAL PLANTING PLAN AND CROSS SECTIONS

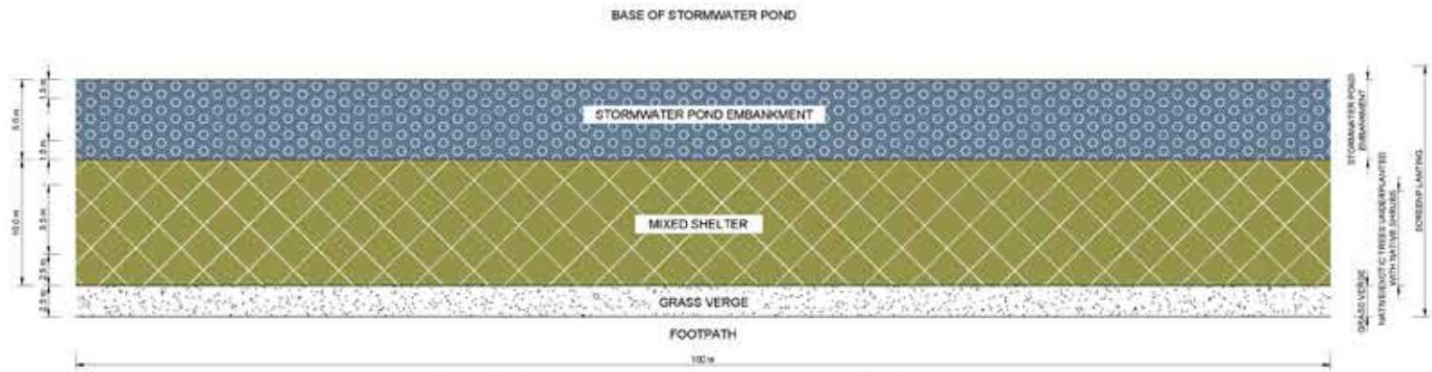


TYPICAL PLANTING DETAIL A: SCREEN PLANTING ALONG MAKIRIKIRI ROAD

SCALE: 1:200 (A.1) 1:400 (A.2)

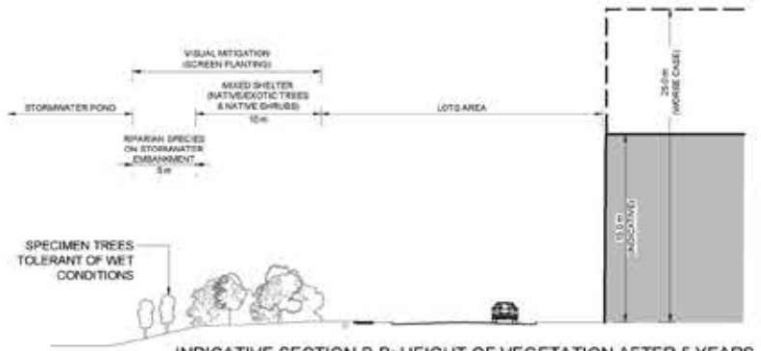
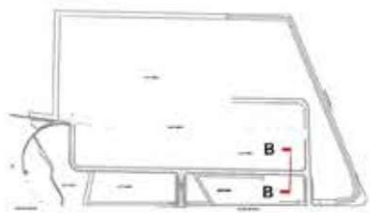


STORMWATER POND EDGE TREATMENT: TYPICAL PLANTING PLAN AND CROSS SECTIONS



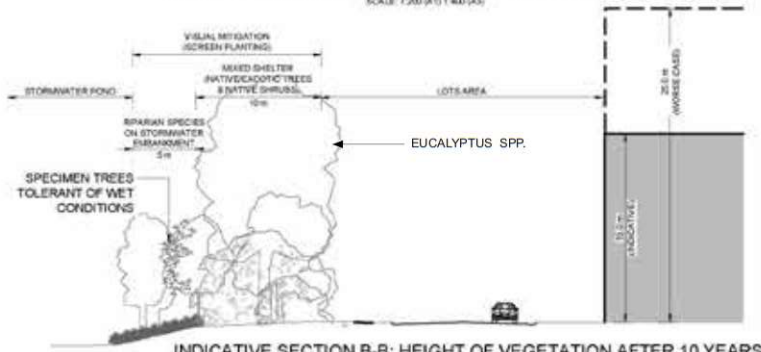
TYPICAL PLANTING DETAIL B: SCREEN PLANTING ALONG STORMWATER POND

SCALE: 1:200 (A3) 1:400 (A3)



INDICATIVE SECTION B-B: HEIGHT OF VEGETATION AFTER 5 YEARS

SCALE: 1:200 (A3) 1:400 (A3)



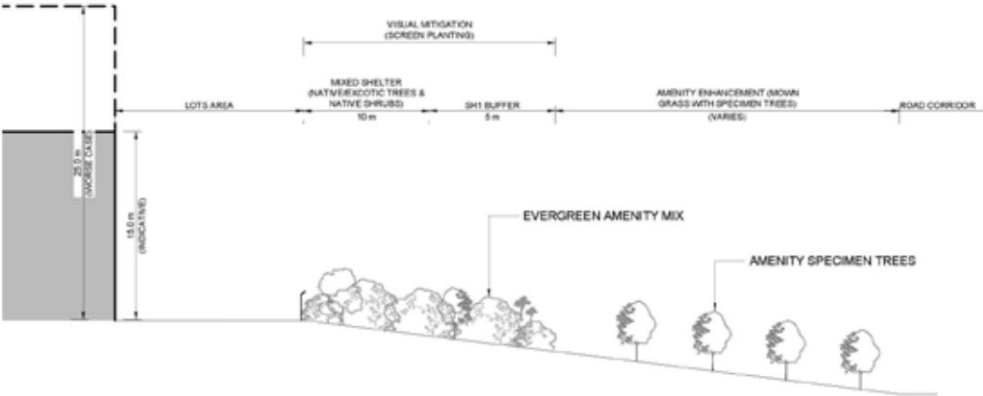
INDICATIVE SECTION B-B: HEIGHT OF VEGETATION AFTER 10 YEARS

SCALE: 1:200 (A3) 1:400 (A3)

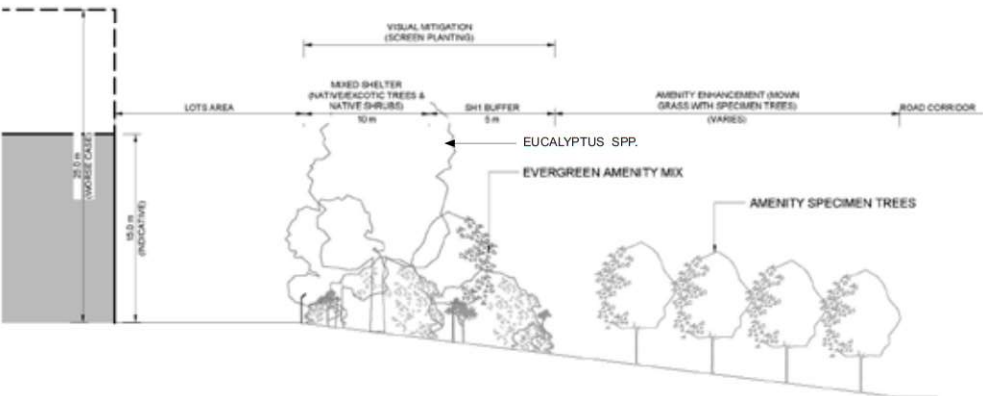


CORNER MAKIRIKIRI ROAD AND STATE HIGHWAY 1 : TYPICAL CROSS SECTIONS

NOTE:  
SEE SCREEN PLANTING PLAN TYPICAL  
DETAIL D FOR SCREEN PLANTING LAYOUT



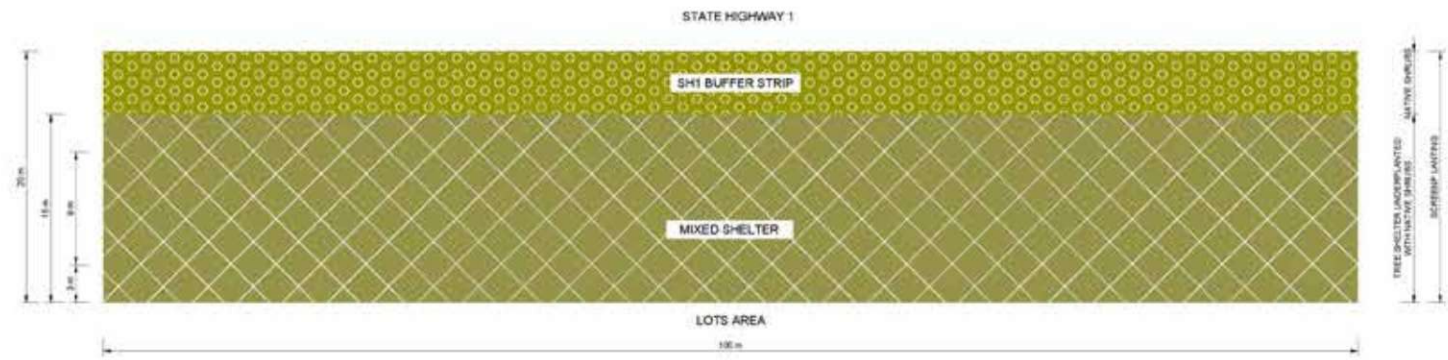
INDICATIVE SECTION C-C: HEIGHT OF VEGETATION AFTER 5 YEARS  
SCALE: 1:200 (A1) 1:400 (A3)



INDICATIVE SECTION C-C: HEIGHT OF VEGETATION AFTER 10 YEARS  
SCALE: 1:200 (A1) 1:400 (A3)

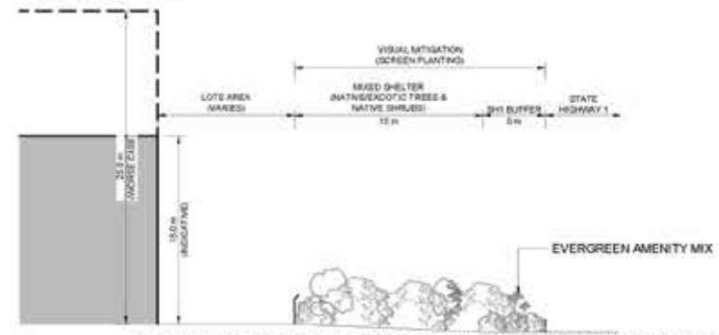


STATE HIGHWAY 1 BOUNDARY: TYPICAL PLANTING PLAN AND CROSS SECTIONS



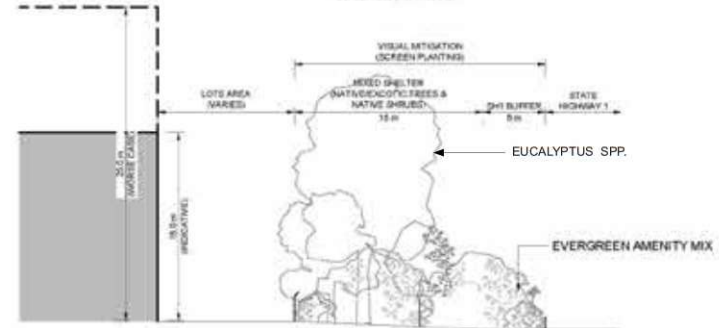
TYPICAL PLANTING DETAIL D: SCREEN PLANTING ALONG STATE HIGHWAY BOUNDARY

SCALE: 1:200 (A1) 1:400 (A2)



INDICATIVE SECTION D-D: HEIGHT OF VEGETATION AFTER 5 YEARS

SCALE: 1:200 (A1) 1:400 (A2)



INDICATIVE SECTION D-D: HEIGHT OF VEGETATION AFTER 10 YEARS

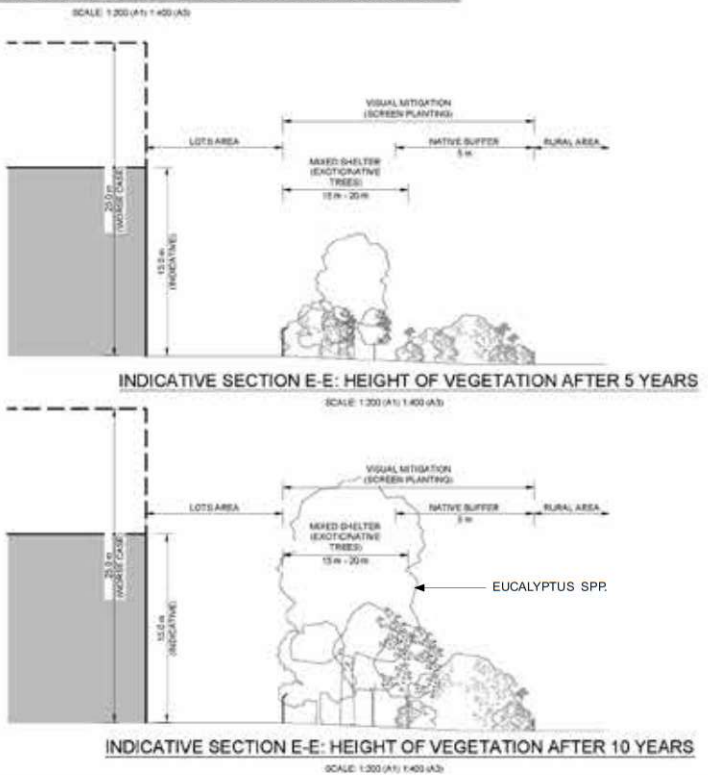
SCALE: 1:200 (A1) 1:400 (A2)



RURAL BOUNDARY: TYPICAL PLANTING PLAN AND CROSS SECTIONS



TYPICAL PLANTING DETAIL E: SCREEN PLANTING ALONG RURAL BOUNDARY



# PLANT SCHEDULE

MARTON RAIL HUB PLANT SCHEDULE			
Schedule of Species			
U:\Projects\NZ\S\5-WT696.01 Marton Rail Hub - Rail Civil Works\Home\04_CADD\01_WIP\Landscape\Plant Schedule			
Date: February 2022			
Botanical Name	Common Name	Unit/ Grade	Max. Growth Size (H x W)
<b>NATIVE TREES</b>			
<i>Dacrydium cupressinum</i>	Rimu	PB18	6.0 x 4.0m
<i>Dacrycarpus dacrydioides</i>	Kahikatea	PB18	50 x 5.0m
<i>Kunzea ericoides</i>	Kanuka	PB3	7.0 x 3.0m
<i>Podocarpus totara</i>	Totara	PB18	20 x 5.0m
<i>Sophora microphylla</i>	Kowhai	PB18	8.0 x 4.0m
<i>Sophora godleyi</i>	Kowhai	PB18	6.0 x 3.0m
Subtotal			
<b>EXOTIC TREES (OPEN GROUND)</b>			
<i>Eucalyptus obliqua</i>	Messmate Stringybark	OG	50 x 10m
<i>Eucalyptus nitens</i>	Shinin gum	OG	50 x 8m
<i>Eucalyptus regnans</i>	Mountain Ash	OG	50 x 10m
<i>Liriodendron tulipifera</i>	Tulip tree	OG	30 x 6m
<i>Platanus x acerifolia</i>	London plane	OG	15 x 11m
<i>Quercus petraea</i>	Sessile oak	OG	25 x 15m
<i>Quercus robur</i>	English oak	OG	30 x 15m
<i>Quercus robur 'Fastigiata'</i>	Upright oak	OG	30 x 4m
Subtotal			
<b>RIPARIAN PLANTING MIX (STOMRWATER POND/DRAINS)</b>			
<i>Apodasmia similis</i>	Cabbage tree	PB3	1.0 x 1.0m
<i>Carex secta</i>	Purei	PB3	1.5 x 1.0m
<i>Carex virgata</i>	Carex grass	PB3	1.0 x 1.0m
<i>Cortaderia fulvida</i>	Toetoe		1.0 x 1.0m
<i>Juncus edgariae</i>	Wiwi	PB3	1.0 x 1.0m
<i>Phormium cookianum</i>	Mountain flax	PB3	0.6 x 0.80m
Subtotal			
<b>MAIN ENTRANCES (NATIVE SHRUB MIX)</b>			
<i>Apodasmia similis</i>	Oioi	PB3	1.0 x 1.0m
<i>Chionochloa flavicans</i>	Minature toetoe	PB3	0.75 x 1.0m
<i>Carex virgata</i>	Carex grass	PB3	1.0 x 1.0m
<i>Coprosma 'Black Cloud'</i>	Coprosma	PB2	0.5 x 1.0m
<i>Coprosma 'Red Rocks'</i>	Coprosma	PB3	0.3 x 1.5m
<i>Hebe 'Wiri Mist'</i>	Hebe	PB3	0.6 x 0.80m
<i>Phormium 'Green Dwarf'</i>	Flax	PB3	1.0 x 1.0m
<i>Phormium cookianum</i>	Mountain flax	PB3	0.6 x 0.80m
<i>Leptospermum 'Wiri Joan'</i>	Flowering Manuka	PB3	3.0 x 2.0m
<i>Muehlenbeckia astonii</i>	Wirebrush	PB3	1.5 x 1.0m
Subtotal			

STATE HIGHWAY BUFFER STRIP (NATIVE SHRUB MIX)			
<i>Coprosma robusta</i>	Karamu	PB3	4 x 1.5m
<i>Coprosma propinqua</i>	Mingimingi	PB3	5 x 2.5m
<i>Hebe stricta</i>	Koromiko	PB3	1.8 x 1.0m
<i>Phormium cookianum</i>	Mountain flax	PB3	0.6 x 0.80m
<i>Phormium tenax</i>	Harakeke	PB3	2.5 x 2.0m
<i>Pittosporum tenuifolium 'Wrinkled Blue'</i>	Kohuhu	PB3	4.0 x 2.5m
<i>Leptospermum scoparium</i>	Manuka	PB3	4.0 x 3.0m
<i>Leptospermum 'Wiri Joan'</i>	Flowering Manuka	PB3	4.0 x 3.0m
<i>Muehlenbeckia astonii</i>	Wirebrush	PB3	1.5 x 1.0m
Subtotal			
<b>VISUAL MITIGATION BUFFER STRIP (NATIVE SHRUB PLANTING MIX)</b>			
<i>Coprosma robusta</i>	Karamu	PB3	2 x 1.5m
<i>Coprosma propinqua</i>	Mingimingi	PB3	5 x 2.5m
<i>Dadonaea viscosa</i>	Akeake	PB3	7 x 3m
<i>Hebe stricta</i>	Koromiko	PB3	1.8 x 1.0m
<i>Hoheria sexstylosa</i>	Ribbonwood		8.0 x 6.0m
<i>Phormium cookianum</i>	Mountain flax	PB3	0.6 x 0.80m
<i>Phormium tenax</i>	Harakeke	PB3	2.5 x 2.0m
<i>Pittosporum eugenoides</i>	Lemonwood	PB3	12 x 3.0m
<i>Pittosporum tenuifolium</i>	Kohuhu	PB3	6.0 x 3.0m
<i>Plagianthus regius</i>	Ribbonwood		12 x 4.0m
<i>Leptospermum scoparium</i>	Manuka	PB3	4.0 x 3.0m
<i>Leptospermum 'Wiri Joan'</i>	Flowering Manuka	PB3	4.0 x 3.0m
<i>Muehlenbeckia astonii</i>	Wirebrush	PB3	1.5 x 1.0m
Subtotal			
<b>Total</b>			



## DEFINITIONS continued

**Wall Height** means, in relation to a building, the vertical distance of an exterior wall of a building from the ground level to the roof, including any fascia, barge, spouting, or eave.

**Warning Sign** means any sign warning the public of any nearby natural hazard associated with any construction or demolition site or earthworks or other similar works.

**Wetland** has the same meaning as in the Resource Management Act 1991 and any subsequent amendments, and includes permanently or intermittently wet areas, shallow water and land/water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.

**Wind Farm** means the land (including one or more sites that may form a wind farm) activities and structures (including substations, lines and turbines), earthworks and access tracks associated with the generation of electricity from wind. It does not include domestic-scale turbines that are capable of generating up to 5kW of electricity and up to 20kW of total maximum output per site.

**Wind Monitoring Mast** means mast for the purpose of wind resource measurement. This includes guy wires, radio telemetry equipment (for transmitting meteorological data) and various meteorological instruments to be erected at varying heights, including: (a) anemometers to measure the average wind speed, wind gust speeds, turbulence intensity and wind shear; (b) wind vanes to measure wind direction; and (c) other meteorological instruments to measure temperature, air pressure, humidity and rainfall.

## Marton Industrial Development Area Definitions

**Hydrological Neutrality** for the MIDA in relation to stormwater infrastructure design, means managing post development runoff so that it does not exceed the pre-development runoff for storm events up to and including the 1% AEP with an allowance for climate change. Climate change scenario will utilise NIWA's HIRDS v4 RCP6.0 for the period 2081-2100 in line with general industry guidance.

**Industrial Service Activities\*** - means small business activities that can support the wider industrial activities, excluding a service station and would include but not be limited to the following: café/ truck stop, take-away food outlets, truck wash area, vehicle repair workshops, tyre replacement workshops, offices and truck-stop only refuelling facilities.

**Marton Industrial Development Area (MIDA)** – means the area identified as the Comprehensive Development Plan (CDP) Site in Appendix 1-1 – Marton Industrial Development Area Layout Plan and identified on the Planning Map

**Operational Need** - means the need for a proposal or activity to traverse, locate or operate in a particular environment because of technical, logistical or operational characteristics or constraints.

**Sensitive receivers** – means the Fraser Auret Racing Facility and the closest dwellings to the MIDA and existing at the (Operative Date), being 1020, 1066, 1091 and 1165 State Highway 1.