

## **Appendix S27 – Mangaone Precinct Structure Plan**

### **S27.1 Introduction**

- S27.1.1 The Mangaone Precinct Structure Plan, together with the provisions of Part D, Section 7 (Industrial Zone), Part E (District Wide Provisions), and Part F (District Wide Natural and Cultural Heritage), provides the framework for industrial development within this area.
- S27.1.2 The Mangaone Precinct Structure Plan forms a component of the identified Hautapu Strategic Industrial Node within the C10 Growth Cell at Hautapu. The Mangaone Precinct Structure Plan area is approximately 71.4 hectares in size and was historically used for rural activities.
- S27.1.3 The Mangaone Precinct Structure Plan provides a design framework for development proposals to ensure urban design outcomes are achieved in line with the vision for the area. Outcomes include development integration with adjacent land parcels, the provision of appropriate buffer interface to surrounding rural land, and the incorporation of the Mangaone Stream as a key element of environmental and cultural significance.
- S27.1.4 Swaynes House, an identified and protected heritage building in the Waipā District Plan, is located within the Mangaone Precinct Structure Plan area.
- S27.1.5 The vision for the Mangaone Precinct Structure Plan is to enable Dry Industrial development within the Mangaone Precinct Structure Plan area that responds positively to site context, in particular at the interface with adjacent rural areas and the Mangaone Stream.

### **S27.2 Mangaone Precinct Structure Plan**

- S27.2.1 The Mangaone Precinct Structure Plan seeks to enable dry industrial activities to establish across the structure plan area in a manner that respects the cultural, ecological and freshwater values of the Mangaone Stream and its margins, as well as the rural character of the surrounding area to the north of Zig Zag Road and to the east of Swayne Road.

#### **Activities within the Mangaone Precinct Structure Plan area**

- S27.2.2 The Mangaone Precinct Structure Plan enables a light to medium industrial precinct to be developed within an identified Strategic Industrial Node.
- S27.2.3 A Central Focal Area is located centrally within the Mangaone Precinct Structure Plan area to facilitate the provision of small-scale commercial and retail activities that will service the day-to-day needs of the industrial businesses in the area.

## **Infrastructure**

S27.2.4 In order to develop a site within the Mangaone Precinct Structure Plan area, a development proposal will need to demonstrate compliance with the Waipā District Plan, including infrastructure provision. The following sections detail how the site is intended to be serviced.

### ***Stormwater***

S27.2.5 The stormwater generated from the Mangaone Precinct Structure Plan area will be managed through adopting a water sensitive design approach whereby the stormwater solutions are integrated within the built form and landscape.

S27.2.6 Primary Network: Roads and private lots are to be serviced by the primary stormwater network system with a level of service equivalent to the climate-adjusted 10% AEP 24-hr design storm event.

S27.2.7 Secondary Network: The road reserves along the swales shall convey the runoff from storm events exceeding 10% AEP and will have a level of service up to climate-adjusted 1% AEP 24-hr design storm event. Stormwater design will ensure that the flow depth and velocities along these roads shall not be unsafe to pedestrians and vehicles.

S27.2.8 Runoff from the Mangaone Precinct Structure Plan area will be conveyed via swales along the local roads towards future constructed wetlands to be located adjacent to the Mangaone Stream, integrated with existing natural wetlands.

S27.2.9 Stormwater management and treatment within the Mangaone Precinct Structure Plan area will be in general accordance with the Stormwater Management Plan prepared for the area, including:

- Contaminant management at source through the use of inert roofing materials.
- First flush pre-treatment through the use of onsite proprietary devices to treat at-source runoff from high use roads and car parks prior to discharge to the primary network. Additional pre-treatment of all runoff going through the primary network shall be also be provided.
- Water quality treatment shall be provided within constructed wetlands and/or stormwater ponds.
- Extended detention shall be provided within constructed wetlands and/or stormwater ponds.
- Stormwater ponds shall attenuate 2yr post-development flow to pre-development level.
- Swales along local roads shall provide conveyance with level of service up to 10yr ARI.
- Constructed wetlands shall attenuate 10yr ARI post-development flow to pre-development level.
- Flows in excess of the 10yr ARI shall be conveyed via roads with level of service up to the 100yr ARI.
- Constructed wetlands shall attenuate 100yr post-development flows to appropriate pre-development levels to eliminate additional flood risk to downstream properties.

S27.2.10 Stormwater management within the Mangaone Precinct Structure Plan area should preserve the mauri of the Mangaone Stream and shall support opportunities for enhancement of cultural and ecological values, including water quality.

### ***Water Supply***

S27.2.11 A 450mm diameter bulk main was installed in 2020 on the western side of Victoria Road to meet the future demands for northern Cambridge, including Hautapu.

S27.2.12 Water supply to the Mangaone Precinct Structure Plan area will be provided by the Victoria Road bulk main via the water supply network installed through the Bardowie Industrial Precinct as part of the Stage 1 development of that precinct and which has been designed and sized to service the Mangaone Precinct Structure Plan area.

S27.2.13 The developers of land within the Mangaone Precinct Structure Plan area will need to design and provide for firefighting requirements in accordance with the SNZ PAS 4509:2008 New Zealand Fire Service firefighting water supplies code of practice.

### ***Wastewater***

S27.2.14 The adjacent Bardowie Industrial Precinct includes the Bardowie Wastewater Pumpstation which ultimately discharges to the Cambridge Wastewater Treatment Plant.

S27.2.15 The Bardowie Wastewater Pumpstation and network has been designed as a terminal pumpstation servicing flows from the entire C10 Growth Cell.

### ***Electricity***

S27.2.16 Waipa Networks manage the power distribution in Cambridge. Waipa Networks has confirmed that, with planned upgrades in the area, electricity can be supplied to service the entire C10 Growth Cell, including the Mangaone Precinct Structure Plan area.

S27.2.17 Overhead, high-voltage power lines cross the Mangaone Precinct Structure Plan area to the north of the Mangaone Stream. Subdivision and development of land under, and within close proximity of, these power lines will need to have regard to the National Policy Statement on Electricity Transmission, Transpower National Grid Corridor Management requirements and New Zealand Electrical Codes of Practice.

### ***Roading***

S27.2.18 The primary road access point for the Mangaone Precinct Structure Plan area will be from a new Collector Road from Victoria Road that will be constructed through the neighbouring Bardowie Industrial Precinct to the west.

S27.2.19 The Mangaone Precinct Structure Plan area has existing frontage to Zig Zag Road to the north and Swayne Road to the east. Beyond the indicative roading network, no direct vehicle access from industrial sites to these roads is permitted and only light vehicles will be able to use the Swayne Road access point to the area. Upgrading of Zig Zag Road will be required if this is used as a vehicle access point.

Road Cross Sections

S27.2.20 Within the Mangaone Precinct Structure Plan Area, new roads, and upgrades to existing roads, shall be provided in accordance with the road cross-section diagrams at S27.2.20.1 to S27.2.20.5 below. Figure S27.A, Road Cross-section Key Diagram, below shows where each road cross-section type applies.

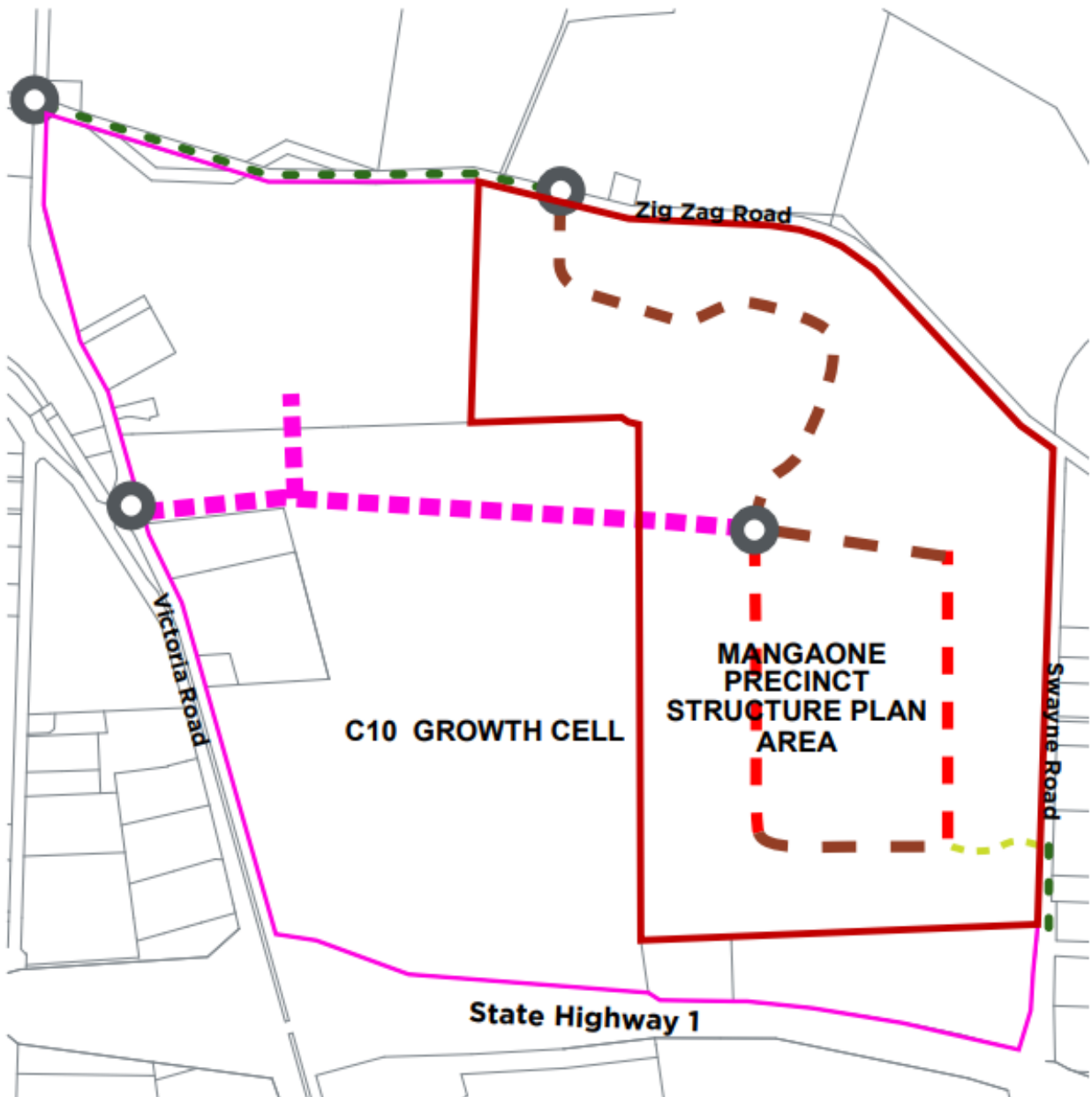
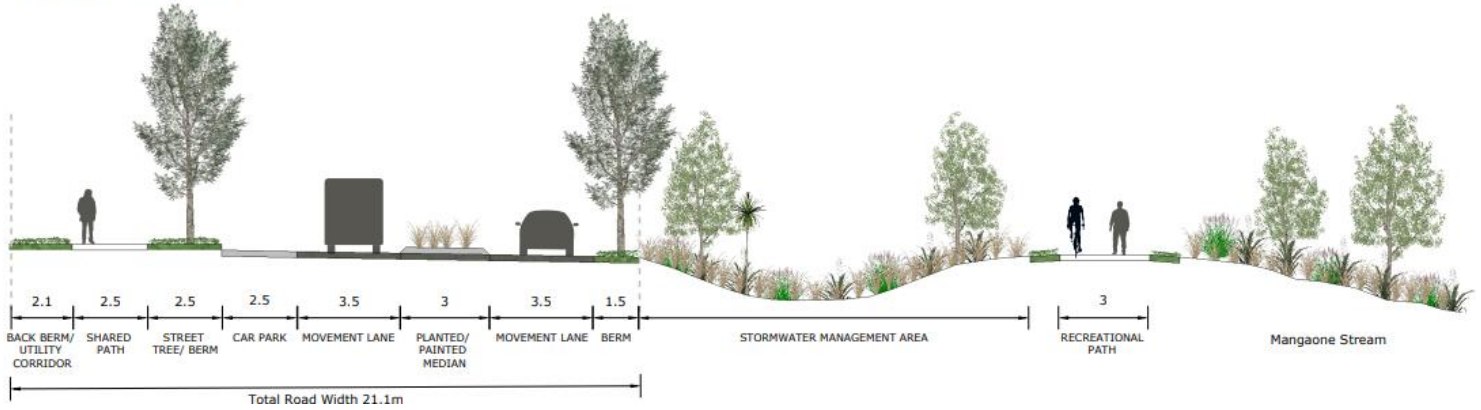


Figure S27.A – Road Cross-section Key Diagram

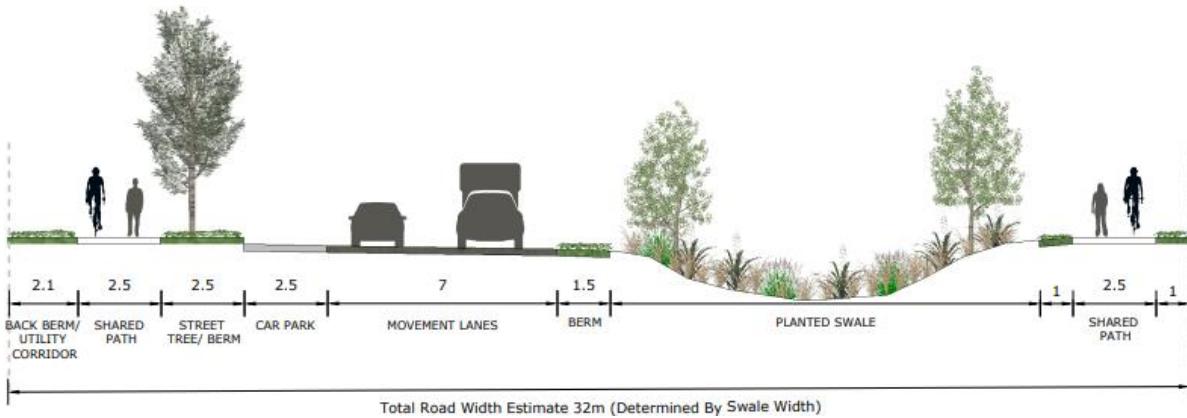
S27.2.20.1 Collector Road

COLLECTOR ROAD ■■■■



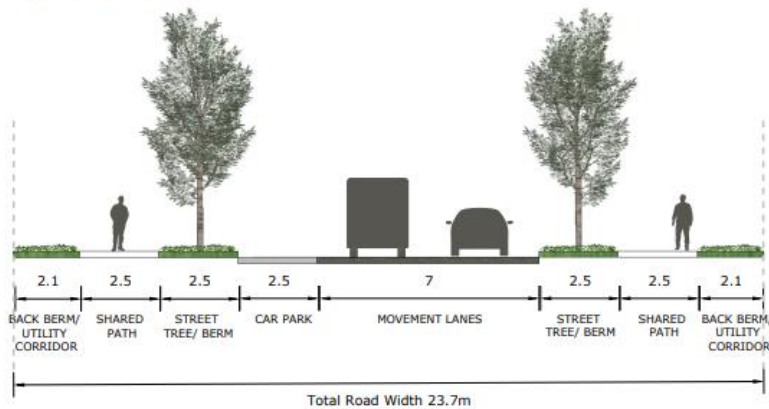
S27.2.20.2 Local Road (With Swale)

LOCAL ROAD WITH SWALE - - - -

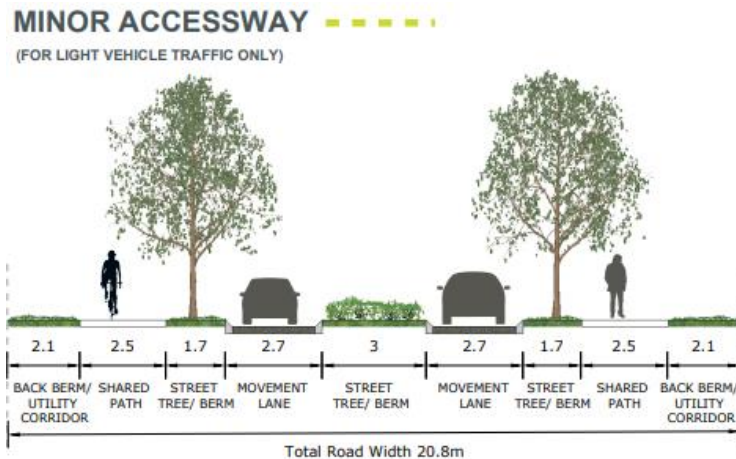


S27.2.20.3 Local Road

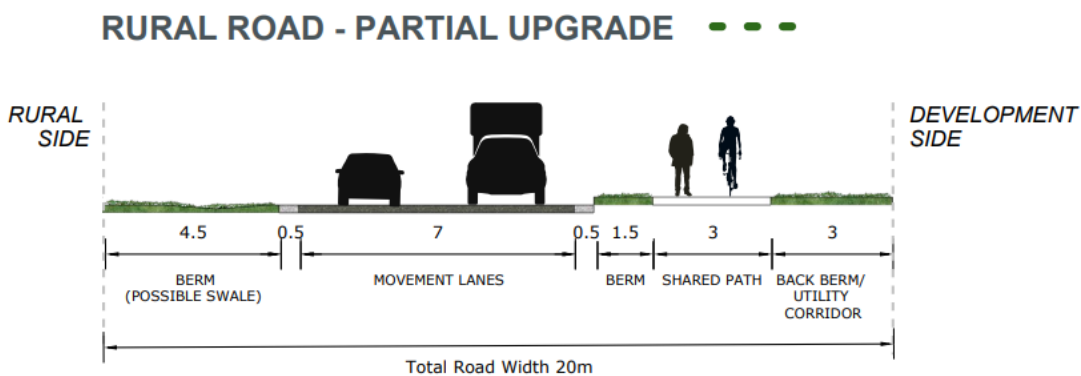
LOCAL ROAD - - - -



### S27.2.20.4 Minor Accessway



### S27.2.20.5 Rural Road (Partial Upgrade)



## Development Agreement

S27.2.21 Development within the Mangaone Precinct Structure Plan area will only be approved once a Development Agreement is signed between Council and the developer.

## Heritage and Cultural Values

S27.2.22 The Mangaone Stream, and adjacent natural wetlands, is of spiritual, social and cultural significance to mana whenua. Opportunities to work with Council, mana whenua and the local community to preserve and enhance the cultural heritage, ecological and amenity values should be fully considered at the time of subdivision and development of the Mangaone Precinct Structure Plan area.

S27.2.23 Appendix N1 contains the heritage items within the Waipā District. Included in Appendix N1 is Swaynes House (reference 139, Fencourt), with a site address of 195 Swayne Road and a 'DP Cat' (District Plan Category) of 'C', being of Community Significance - Local significance heritage items that are of local importance and contribute to the community's history and that are noteworthy as community heritage places. Swaynes House is located within the Mangaone

Precinct Structure Plan area and the heritage and archaeology provisions of Section 22 of the Waipa District Plan will apply to any future works or proposals affecting Swaynes House.

S27.2.24 Appendix N2 contains the known cultural sites and Appendix 3 contains the known archaeological sites within the Waipā District based on New Zealand Archaeological Association records as at 2009. Sites are marked with a number and 'X' symbol on the Planning Maps. Additional archaeological sites may have been identified since the notification of this Plan. For this reason, people are also referred to the NZAA Database. Consultation with Heritage New Zealand is advisable.

S27.2.25 The Heritage New Zealand Pouhere Taonga Act 2014 makes it unlawful for any person to destroy, damage or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand. Sites associated with human activity that occurred before 1900 are protected, whether or not they are recorded with Heritage New Zealand. An authority to destroy or modify any archaeological evidence is required from Heritage New Zealand under the Heritage New Zealand Pouhere Taonga Act 2014 prior to the works commencing. This is the case regardless of whether the land on which the site is located is designated, or a resource or building consent has been granted.

## **S27.3 Design Principles and Key Issues**

### **Design Principles**

S27.3.1 The Design Principles for the Mangaone Precinct Structure Plan area are:

1. To establish an attractive place for industrial activities to thrive with buildings and with landscaping that provides high amenity for those who work in the Precinct.
2. To establish an industrial area that is accessible, visually attractive and complements the established character and landscape qualities of the Cambridge area.
3. To protect and enhance the Mangaone Stream, natural wetlands and their margins.
4. To manage the interface between industrial subdivision and development within the Mangaone Precinct Structure Plan area with the Mangaone Stream Reserve and the Rural zone.
5. To integrate stormwater management and treatment with road design and with the cultural, ecological and amenity values of the Mangaone Stream Reserve.
6. To establish a safe, functional and convenient roading network that integrates with its strategic roading context, and that supports efficient freight vehicle movements as well as active modes of travel.

## Key Issues

S27.3.2 The two key issues that subdivision and development within the Mangaone Precinct Structure Plan Area need to address are:

### **S27.3.3 *Issue 1 - Mangaone Stream Reserve***

- The Mangaone Stream is of spiritual, cultural and ecological significance to mana whenua. Council will expect applicants to demonstrate that consultation has been undertaken with mana whenua in designing the Mangaone Stream Reserve and in formulating the provisions of a Mangaone Stream Reserve Management Plan.
- The Mangaone Stream Reserve encompasses a significant riparian margin on both sides of the Mangaone Stream including natural inland wetlands;
- Stormwater devices within the Mangaone Stream Reserve will need to be designed to integrate with the existing environment. Opportunities to enhance the ecological values and hydraulic function of natural wetland areas should be integral to any application for enabling works within the reserve area;
- Mangaone Stream Reserve contains the High Value Bat Habitat Area. Additional lighting, landscaping and building setback controls will protect and enhance bat habitat and ecological values in this area;
- There is provision for only one road to cross the reserve linking the northern and southern parts of the Mangaone Precinct Structure Plan Area;
- There is provision for pedestrian and cycle paths throughout the Mangaone Stream Reserve and these should connect with on-road cycling and pedestrian facilities within the Mangaone Precinct Structure Plan Area and the surrounding area;
- The amenity of the Mangaone Stream Reserve will be able to be enjoyed as the northern outlook from the Central Focus Area (within which it is expected that a café and other supporting activities will locate).

### **S27.3.4 *Issue 2 - The Rural Interface***

- Mangaone Precinct Structure Plan Area borders Rural zoned land to the north and east. It is important that subdivision and development responds to this rural interface and specific rules apply within the Precinct to achieve appropriate built form and landscaping outcomes. These rules include:
  - A 5m wide planted landscape buffer strip along Swayne Road and Zig Zag Road;
  - A 3m wide landscaped buffer strip along the boundary of industrial site bordering Rural zoned land within the C10 Growth Cell.
  - A 10m setback for buildings along Swayne Road and Zig Zag Road;
  - A rule to control the height of buildings in relation to Swayne Road and Zig Zag Road so that any part of a building should not penetrate a recession plane taken at 30-degrees at a point 3m above ground level at the road boundary;
  - A rule requiring that there be no signage on the façade of buildings facing Swayne Road or Zig Zag Road;



- A rule requiring that, apart from one point of roading access onto each of Swayne Road and Zig Zag Road in accordance with the Mangaone Precinct Structure Plan, there shall be no direct access to industrial lots within the Mangaone Precinct Structure Plan Area directly from Swayne Road or Zig Zag Road; and
- A limitation on only light vehicles using Swayne Road to access the Mangaone Precinct Structure Plan Area.

## **Structure Plan**

S27.3.5      Figure S27.B below is the Mangaone Precinct Structure Plan.

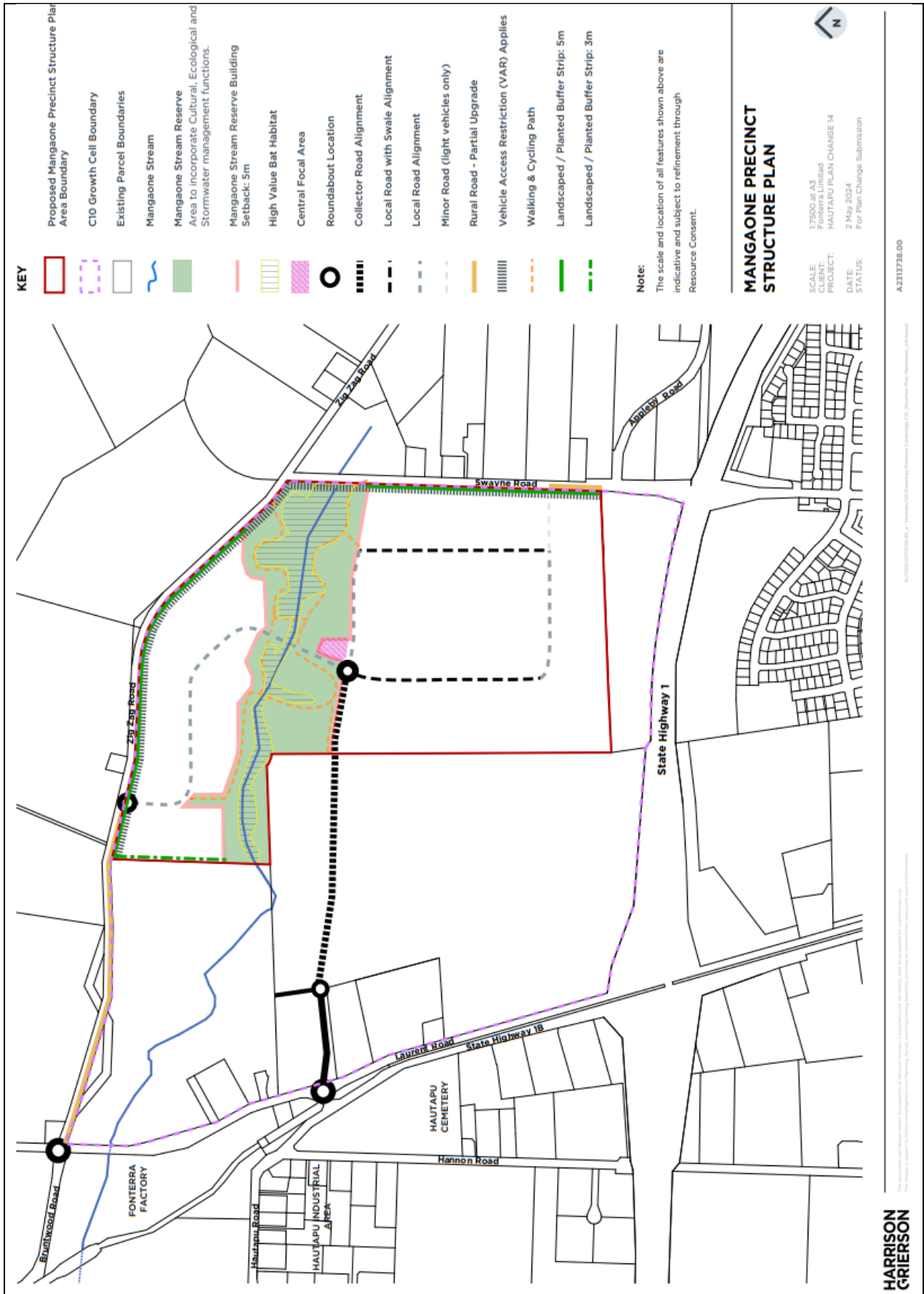


Figure S27.B – Mangaone Precinct Structure Plan