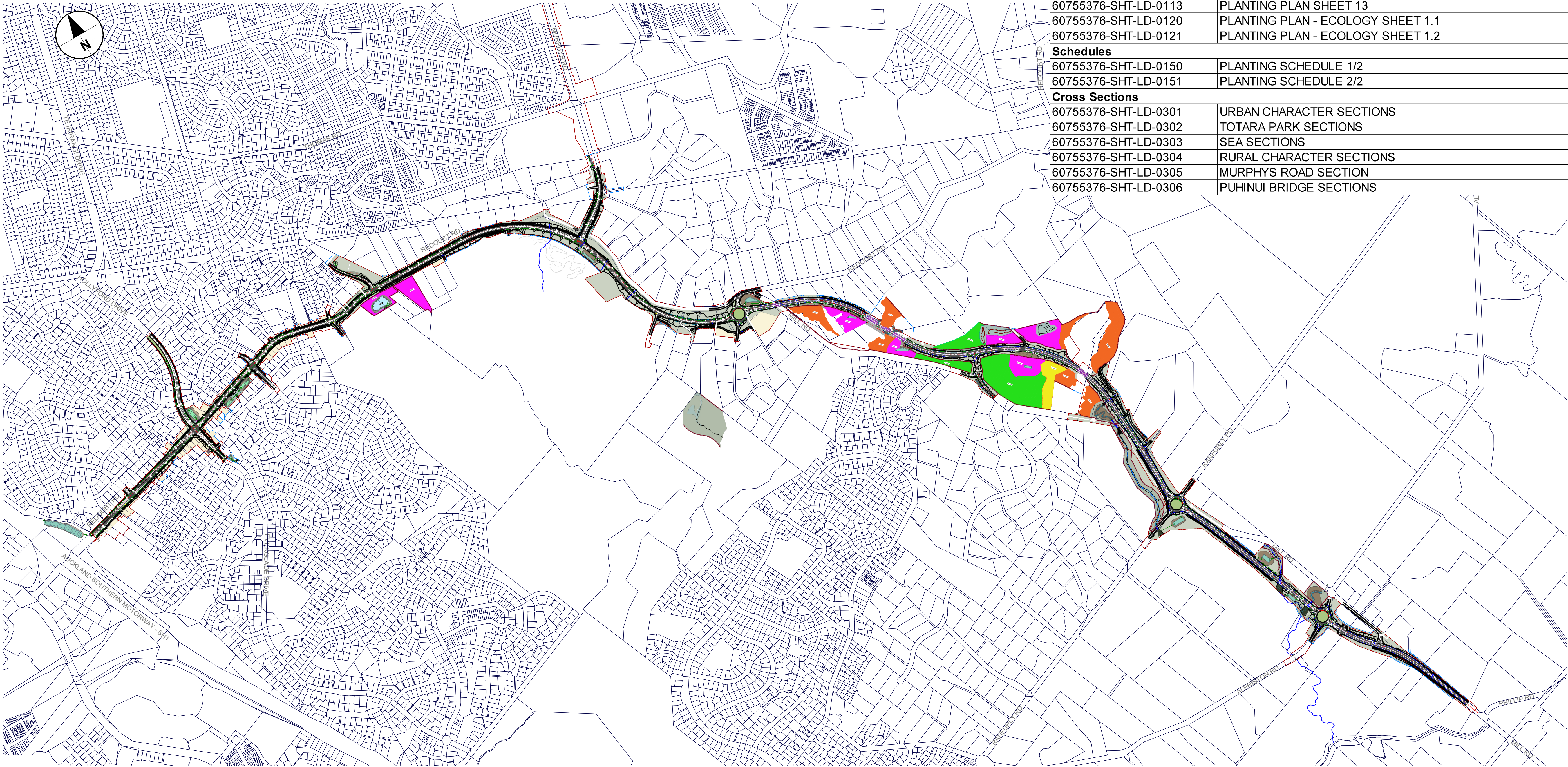




SHEET NUMBER	SHEET NAME
60755376-SHT-LD-0000	COVER SHEET
60755376-SHT-LD-0050	OUTLINE SPEC
60755376-SHT-LD-0100	SHEET LAYOUT PLAN
Planting Plans	
60755376-SHT-LD-0101	PLANTING PLAN SHEET 01
60755376-SHT-LD-0102	PLANTING PLAN SHEET 02
60755376-SHT-LD-0103	PLANTING PLAN SHEET 03
60755376-SHT-LD-0104	PLANTING PLAN SHEET 04
60755376-SHT-LD-0105	PLANTING PLAN SHEET 05
60755376-SHT-LD-0106	PLANTING PLAN SHEET 06
60755376-SHT-LD-0107	PLANTING PLAN SHEET 07
60755376-SHT-LD-0108	PLANTING PLAN SHEET 08
60755376-SHT-LD-0109	PLANTING PLAN SHEET 09
60755376-SHT-LD-0110	PLANTING PLAN SHEET 10
60755376-SHT-LD-0111	PLANTING PLAN SHEET 11
60755376-SHT-LD-0112	PLANTING PLAN SHEET 12
60755376-SHT-LD-0113	PLANTING PLAN SHEET 13
60755376-SHT-LD-0120	PLANTING PLAN - ECOLOGY SHEET 1.1
60755376-SHT-LD-0121	PLANTING PLAN - ECOLOGY SHEET 1.2
Schedules	
60755376-SHT-LD-0150	PLANTING SCHEDULE 1/2
60755376-SHT-LD-0151	PLANTING SCHEDULE 2/2
Cross Sections	
60755376-SHT-LD-0301	URBAN CHARACTER SECTIONS
60755376-SHT-LD-0302	TOTARA PARK SECTIONS
60755376-SHT-LD-0303	SEA SECTIONS
60755376-SHT-LD-0304	RURAL CHARACTER SECTIONS
60755376-SHT-LD-0305	MURPHYS ROAD SECTION
60755376-SHT-LD-0306	PUHINUI BRIDGE SECTIONS

This drawing is confidential and shall only be used for the purpose of this project. The signing of this title block confirms the design and drafting of this project have been prepared and checked in accordance with the AECOM quality assurance system to ISO 9001:2000.

CONSULTANT

AECOM

Beca

AECOM New Zealand Ltd

NZ.B.N 9429032091335

www.aecom.com

CLIENT

NZ TRANSPORT
AGENCY
WAKA KOTAHĪ

PROJECT

Mill Road – Stage 1

Consenting Design

Roads of
National
Significance

REGISTRATION

FOR CONSENT

PROJECT MANAGEMENT INITIALS

MBe/DH/SLa	ACH	TLi
DESIGNER	CHECKED	APPROVED

PROJECT DATA

DATUM	AUK46	SURVEY	NZTM
-------	-------	--------	------

ISSUE/REVISION

G	24.08.26	100% CONSENTING DESIGN
F	04.02.26	100% CONSENTING DESIGN
E	16.12.25	100% CONSENTING DESIGN
D	18.11.25	100% CONSENTING DESIGN
C	19.09.25	100% CONSENTING DESIGN
B	21.07.25	50% DEVELOPED DESIGN
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60755376

SHEET TITLE

Mill Road RoNS Stage 1 FTA
COVER SHEET

SHEET NUMBER

60755376-SHT-LD-0000

GENERAL NOTES:

Landscape preparatory works drawings capture landscape related features and works only. Drawings to be read in conjunction with other disciplines/ consultants' drawings.

Determine exact location and depth of all underground services prior to commencement of demolition works and ensure use of heavy machinery does not cause damage to these services.

Refer to Engineer's Drawings for all required works, including existing services, road alignment, earthworks and stormwater design.

All redundant infrastructure (such as street furniture, footpaths, kerb and channel, road signs and pavement) on the portion of roads that are closed are to be physically removed and replaced with appropriate landscape treatment. All removed elements should be recycled or reused where possible.

The contractor shall endeavor to retain existing farm fences within the designation where they align within the proposed new farm-style fencing, where practicable and subject to fence condition and compatibility with works.

Where stock-proof fencing is required this should be replaced like for like in consideration of existing land uses.

Inspect and document all items to be retained, relocated or removed for existing damage prior to works commencing. Notify the Contract Administrator of any damage and liaise with relevant authority, stakeholders or company to arrange for the damage to be repaired.

Any damage present during the works or on completion, which has not been notified to the Contract Administrator and agreed on site before works commencing shall be made good by the Contractor at their own expense.

All existing trees retained to be adequately protected during works. The methodology to be reviewed and approved by Project Arborist.

All planting to be in accordance with 'Standardised Designs: NZTA Standardised design solutions for use on State Highway Roads of National Significance May 2025 Version 3.0 (RoNS)' and 'NZTA p3 Standard Specification for Highway Landscape Treatments (NZTA P39: 2013)' unless otherwise stated.

Content referred to in NZTA P39: 2013 includes:

- Quality Control; Inspections and Reporting
- Site Preparation
- Plant Pest Control and Animal Pest Control
- Plant Propagation
- Topsoil Supply
- Planting
- Grassed Surfaces
- Hydro-seeding grassed (& specialist) surfaces
- Irrigation (Design and Build)
- Defects Liability And Maintenance
- Maintenance Only

Location specific details of site preparation, planting, maintenance operations, weed and pest control measures, planting methodology and mulching shall refer to NZTA P39: 2013 and RoNs in conjunction. The RoNS standards takes precedence in the following areas:

- Highway planting mulch depths:
75mm mulch (stringy rather than bark)
- Highway planting (engineered slopes / soils) topsoil depths:
250mm with ripped subsoil surface
- Mown grassland (including hydroseeded areas):
100mm topsoil
- All planted and grassed areas to receive soil testing

Noted: Good soil depths contribute to good plant establishment. Where possible good, reused site soils and imported soils to be above the minimum where possible. To mitigate plant loss during long periods of drought.

Mulching not to be used in areas indicated as Lizard Habitat as mulching reduces habitat suitability for ground-dwelling lizards and invertebrates.

Landscape architect to approve sample of imported topsoil.

Contractor to refer to the Typical Engineered soils / slope approach (Figure 18) in RoNs, which captures mulch or matting, topsoil, ground preparation, slope system planting, highway edge planting, wetlands and swales.

The Contractor shall take particular notice of the plant supply and watering requirements set out by the NZTA P39: 2013 Specification clause G-3.11 and 3.14. No plants are to be delivered to site more than three days before planting. Any plants not used within three days of being delivered on site are to be donated to a local school or charity.

Retain all existing native vegetation where possible. Intersperse proposed planting under the canopy of retained vegetation to avoid a delineated line. The Contractor shall seek advice from Principal Engineer's Landscape Architect giving at least 48 hours notice through Engineer on alternative planting location of any excess plants as a result of retaining existing vegetation.

Contractor to read the Landscape Planting Plans in conjunction the ecological documents prepared by AECOM, including the Habitat Restoration and Enhancement Management Plan, Freshwater Management and Monitoring Plan, Lizard Management Plan and Terrestrial Management Plan.

Felled trees and logs to be used as woody debris in ecological areas and stream diversions where possible. Logs to be pinned and secured on site. Placement to be determined with site landscape architect and ecologist.

Native species to be sourced through eco-sourcing where from the Manukau Ecological District. Via the Project Partnership Plan and client commitment for social and environmental outcomes, engagement of a local Mana Whenua iwi base nursery for the plant supply is preferred.

The Contractor shall supply a methodology for eco-sourcing from each plant supplier for the approval from the Engineer prior to any plants being delivered to site, and post supply shall provide a producer statement stating that the approved methodology has been complied with. Final sign off from mana whenua representatives are required.

All planting shall be undertaken in accordance with the planting schedule. Any changes to this schedule are to be agreed with the Principal Engineer's Landscape/Urban Design Advisor. Final sign off of plant species from mana whenua representatives are required.

All planting shall in installed at the appropriate timing reflecting the planting typology, in accordance with NZTA P39: 2013, unless otherwise stated in the ecological documents prepared by AECOM.

- Section E: Plant Propagation - installed within the planting season beginning 1st April and ends 1st September
- Section G: Planting - Work shall only be undertaken when the weather is suitable, ie. mild, dull and moist, and when the ground is moist and workable. All planting operations shall be suspended during periods of severe frosts, waterlogging, drought or persistent drying winds.
- Section G: Planting - Item 5.4.2 Wetland & Swale Planting: Timing of Operations - Wetland and Swale plantings shall be carried out in spring (August through to Late October) when plants are emerging from dormancy and the water temperature is starting to rise. Timing of planting associated with stormwater devices should also align with the device coming on line. All strength testing of stormwater devices shall be carried out prior to planting to avoid damage to the plants.

The Contractor shall provide the Engineer with a schedule of landscape works, indicating which month/year each section of planting is to be undertaken.

Engineer's Landscape architect to inspect plants at nursery to approve sample selections, 10 days' notice shall be provided given to arrange visit.

Species to be planted in a 'quincunx' arrangement, in clusters of 7, 11 or 15, in accordance with the plant spaces identified in the species table, unless otherwise noted on the plans. Avoid repeating patterns of plants.

All planting shall have a minimum set back of 1m from Shared Used Path. All mānuka and kānuka to be set back 2m from the margins of planted areas to prevent weed intrusion as canopy matures. All toetoe, flax and non-upright form plants to be set back 1.5m from Shared Used Path. All Cordyline australis to be set back 2.5m from SUP. All tree species with a mature height of > 5m to be positioned at a minimum distance of 2m from any adjacent underground services. The Contractor is to confirm underground service locations prior to undertaking any planting work.

Consideration should be made on site for planting specified around stormwater channels. Landscape contractor shall not plant dense or large plants in the channels as this will block the function of the stormwater asset. Engineer's Landscape architect to approve site set out in these areas.

Planting and vegetation to be kept clear of pits/chambers and equipment so they do not obstruct or restrict opening of lids etc or restrict functionality of equipment.

Allow a minimum of 2m offset to adjacent property for tree planting where space allows.

Any areas affected by earthworks due to temporary works that aren't shown in these drawings shall be hydroseeded with Option B Woody / Native vegetation as per NZTA P39: 2013 Specifications.

Irrigation not required. Section of NZTA P39: 2013 to be omitted from landscape specification requirements.

Planting to maintained for a period of 5 years from date of completion. Responsibility of maintenance is a per the project contract documents. Final sign off from mana whenua representatives required as a hold point. Maintenance visits shall be undertaken as required to achieve plant establishment. Generally, maintenance required under a contract shall be on a decreasing scale.

- In the first year, 6 - 8 maintenance visits per year
- In the second year, 4 - 6 maintenance visits per year
- In the third, fourth and fifth year, 4 maintenance visits per year.

The Contractor shall undertake maintenance visits at the frequency set out and shall carry out maintenance specified P39:2013 3, 3.1, 4, 5 & 6. In addition the Contractor shall make a full inspection of the works and present a Maintenance Report to the Principal 4 times per annum.

Handover of any of the maintenance responsibilities shall be agreed with the Engineer. With the remaining maintenance requirements to be documented in the asset owner manual. (To ensure the requirements outlined above are met).

Working assumptions have been made around land or areas where property is being acquired for the development of the road within the designation boundary, with residual land hatched as 'Reinstatement Treatments' which occurs mostly within the urban section of The Project.

- Boundary treatments have been added to the logical interface that would be considered the corridor edge to delineate a consistent urban corridor.
- Where partial acquisition occurs i.e. for construction works only, negotiations with property owners to determine the reinstatement planting required. These plantings to be maintained by those property owners where they will have ownership.
- Where land area is large enough to go back to market; to be sold as a development sites, temporary or low-cost treatments to be added such as hydro seed turf.

The Contractor to refer to the UDLMP for urban and landscape elements such as;

- Bridge environments
- Retaining walls
- Noise walls and screens
- Road furniture- Boundary treatment fences
- Planting strategy and palette
- Cut / fill + soil strategy
- Culverts, stream diversions, swales and stormwater wetlands

This drawing is confidential and shall only be used for the purpose of this project. The signing of this title block confirms the design and drafting of this project have been prepared and checked in accordance with the AECOM quality assurance system to ISO 9001-2000.

CONSULTANT





AECOM New Zealand Ltd

NZ.B.N 9429032091335

www.aecom.com

CLIENT



PROJECT

Mill Road – Stage 1

Consenting Design

Roads of National Significance

REGISTRATION

FOR CONSENT

PROJECT MANAGEMENT INITIALS		
MBe SLa	SLa	TLi
DESIGNER	CHECKED	APPROVED
PROJECT DATA		
DATUM	AUK46	SURVEY NZTM

ISSUE/REVISION		
E	04.02.26	100% CONSENTING DESIGN
D	18.11.25	100% CONSENTING DESIGN
C	19.09.25	100% CONSENTING DESIGN
B	12.09.25	100% CONSENTING DESIGN
A	21.07.25	50% CONSENTING DESIGN
I/R	DATE	DESCRIPTION

PROJECT NUMBER

60755376

SHEET TITLE

Mill Road RoNS Stage 1 FTA OUTLINE SPEC

SHEET NUMBER

60755376-SHT-LD-0050