

Construction Traffic Management Plan - Area 2

Willows SFA, the Willows Access Tunnel, and supporting infrastructure

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OceanaGold NZ Limited

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Acronyms / Abbreviations

Acronym / Abbreviation	Full Name
AADT	Annual Average Daily Traffic
CTMP	Construction Traffic Management Plan
HDC	Hauraki District Council
NZTA	New Zealand Transport Agency
SSTMP	Site Specific Traffic Management Plan
STMS	Site Traffic Management Specialist
TC	Traffic Controller
TMP	Traffic Management Plan
TTM	Temporary Traffic Management
vpd	Vehicles per day
vph	Vehicles per hour

Table



1 Introduction

1.1 Purpose

This Construction Traffic Management Plan (CTMP) has been prepared to outline the procedures and controls for managing construction-related traffic associated with Area 2 of the Waihi North Project (WNP), which includes the Willows Surface Facilities Area, the Willows Access Tunnel to the Wharekirauponga Underground Mine (WUG), and supporting infrastructure.

It has been developed to ensure that construction traffic effects on the public road network, adjacent properties, and the wider community are appropriately managed, mitigated, and monitored in accordance with best practice and the requirements of the Hauraki District Council (HDC) and NZ Transport Agency (NZTA).

For wider project context please refer to the Integrated Transport Assessment (ITA) (dated 19 February 2025) was prepared by Stantec as part of the Fast Track Approvals Act consent application.

1.2 Objectives

The objective of the CTMP is to detail the best practicable option to avoid adverse safety and efficiency effects caused by construction and to mitigate any such effects should they occur.

Condition 85 of the WNP consent states the objectives of the Construction Traffic Management Plan are to set out how the Consent Holder will manage traffic to and from each Area to:

- a) Protect public safety; and
- b) Minimise delays to road users.

The full CTMP conditions as set out in the WNP consent are included in **Appendix A**.

1.3 Scope and Review

This CTMP applies to all construction activities generating traffic to and from the Willows Road site, and as part of works on Willows Road.

The CTMP includes details on the following:

- Description of Construction activities that generate a change in traffic patterns and might create road safety and/or efficiency effects;
- Management procedures and mitigation methods;
- Roles and responsibilities;
- Training of staff in relation to traffic management;
- Monitoring methods; and
- Methods for managing complaints and keeping compliance records.

All Contractors and Sub-Contractors engaged on the project shall be required to conform to the requirements of this CTMP.



1.4 Review and Updates to the CTMP

The initial version of the CTMP is to be certified by HDC as per condition 84.

The CTMP is a live document and will be reviewed and updated as construction progresses, or as required by changes in methodology, feedback from HDC/NZTA, or consent conditions.

A review process is described in Section 10.4 of this Plan.

The CTMP is considered a core document and will be accompanied by Site Specific TMP's as the project progresses.

2 Project Description and Construction Methodology

2.1 Project Overview

Area 2 of the WNP involves the development of an underground mine portal and associated surface facilities at the end of Willows Road, including internal access roads, laydown areas, workshops, and stockpiles. All ore and rock movement will occur internally or via tunnel.

The Area 2 geographic area subject to this CTMP is shown in Figure 2-1.



Construction Traffic Management Plan - Area 2

2 Project Description and Construction Methodology

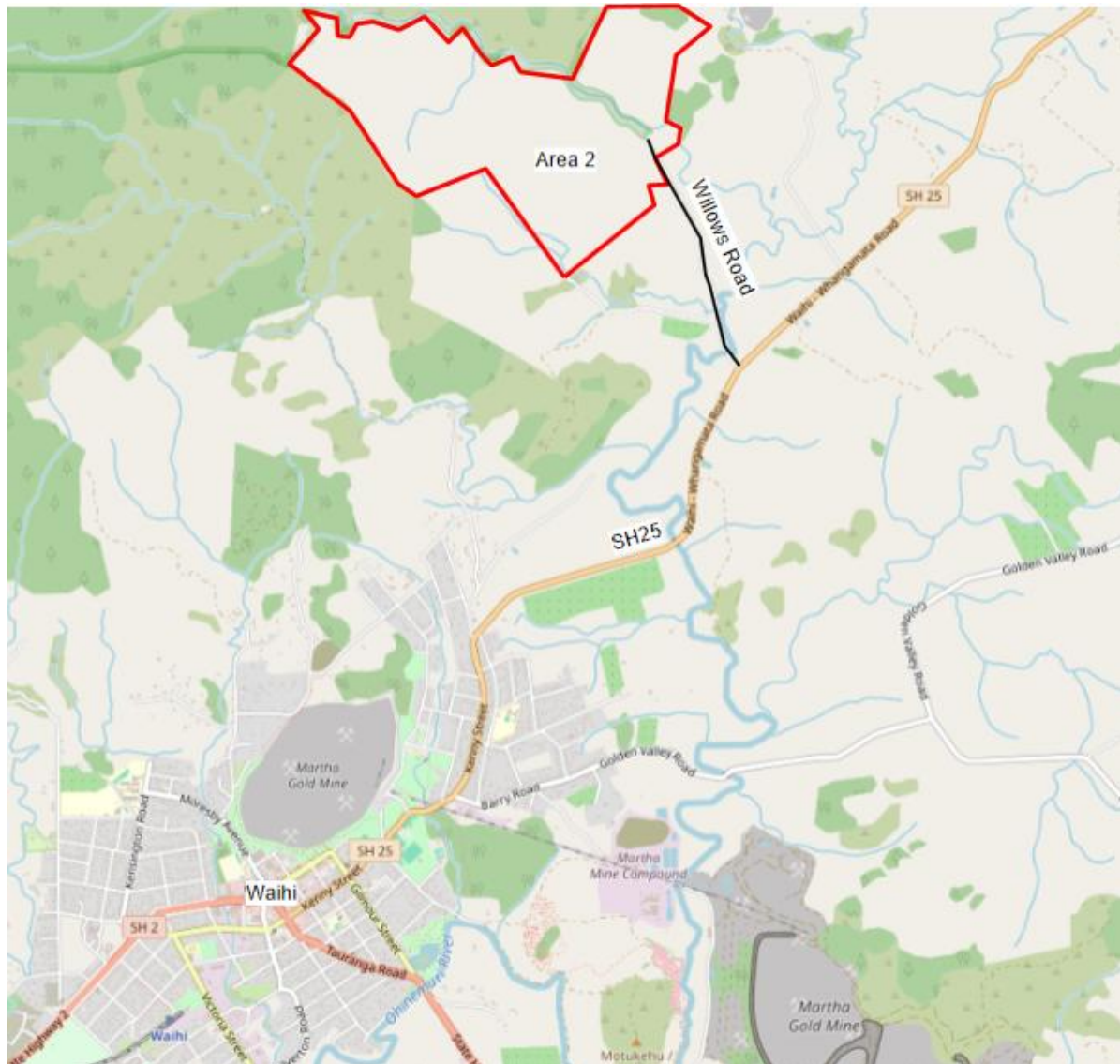


Figure 2-1: WNP Area 2 Setting (Source Argonaut Roadrunner)

The public road network and an internal road network will be used for transport of construction materials and construction workers, and some improvements to this road network as a result of the Area 2 development are required in the vicinity of the site. Area 2 was part of the transport assessment included in Part C of the ITA.

Works required on Willows Road are set out in the following conditions of consent:

- Condition 72: Upgrade Willows Road and the intersection of State Highway 25 and Willows Road, ahead of high traffic generating activity
- Condition 73: Upgrade of SH25 / Willows Road (including reference to the trigger in Condition 72)
- Condition 74. Upgrades of Willows Road, including road marking, curve widening, and improvements at the single lane bridge approaches.



- Condition 75 to 78: Maintenance monitoring and cost reimbursement of Willows Road through construction, operation, rehabilitation, and closure.

The works at Area 2 are located away from Waihi and the existing mine site. The consent application proposed a high proportion of workers will be bused to Site from Kenny Street, and the CTMP condition of consent includes a requirement to include measures to facilitate and manage the bussing of shift workers to the Willows Road Surface Area Facilities.

Whilst Area 2 was described and assessed in detailed in the ITA, the following scope change has occurred since the preparation of that report:

- Area 2 access will be achieved prior to the narrow single lane section of Willows Road (1.2km from SH25), removing the need to widen Willows Road north of the proposed access.

2.2 Area 2 Project Staging and Programme

The WNP is intended to be staged over time, with activity associated with the WUG accessed via Area 2 set out below. For the purpose of the CTMP, construction activities are focused on Year 1 and Year 2, which includes bulk earthworks, surface infrastructure development, and start of tunnelling.

Table 2-1: Indicative WUG Phasing

Phase	Duration	Indicative Years	Included in this CTMP
Road network improvements	1 year	Year 1	Yes
Bulk earthworks and planting	2 years	Year 1-2	Yes
Surface infrastructure development	1 year	Year 2	Yes
Tunnelling	4 years	Years 2-5	Yes
Exploration	10 years	Years 3-13	No
Mining	10+ years	Years 6 – 15+	No
Site rehabilitation and closure	1 year, 2+ years	Year 11, Years 15-17	No

A project programme for the first two years is to be included in **Appendix B**.

2.3 Working Hours

The planned working hours relevant to this CTMP are as follows, as set out in the AEE and ITA:

- Initial works through years 1 and 2 to establish surface infrastructure (including earthworks) will be undertaken on a day shift basis, from Monday to Saturday and 7:00 am – 6:00 pm.
- Heavy vehicle deliveries to and from Willows Road are expected to substantially be planned for between 9am and 4pm.
- Following construction, tunnelling work will progress on a 24 hours per day, 7 days per week basis.



3 Existing Site Environment

Access to the proposed Wharekirauponga Underground Mine (WUG) surface facilities area is via Willows Road which is accessed from SH25. Key characteristics of Willows Road and SH25 are provided in Figure 3-1 and Table 3-1 below.

Table 3-1: Key roading parameters

Road Name	Average Daily Traffic (ADT)	Heavy Vehicle %	Posted Speed Limit	Existing Typical Carriageway Width (m)	Road Markings
Willows Road	97 vpd	5%	100km/h	5.7-7.3m	No
State Highway 25	3,426 vpd	12.5%	100km/h	7-8m	Yes



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3 Existing Site Environment



Figure 3-1: Willows Road Characteristics

Although Willows Road operates under a posted speed limit of 100 km/h, although actual travel speeds are lower due to geometry and width constraints. Several culverts and embankments along the road present localised narrowing and shoulder steepening, which are typically addressed through routine maintenance.

The intersection of Willows Road and SH25 is a standard T-intersection situated on the outside of a horizontal curve on SH25, approximately 2.3 km north of Waihi. Sight distance from Willows Road exceeds 335 m in both directions, meeting recommended standards for the operating speeds. However, forward visibility for southbound vehicles on SH25 is restricted to approximately 120 m due to the curve. The intersection currently lacks dedicated turning lanes.



Road safety records¹ for Willows Road and its intersection with SH25 indicate a low crash history, with no recorded crashes on Willows Road itself and two minor injury crashes within 250 m of the SH25 intersection over the most recent five-year period. These incidents were not directly related to turning movements at the intersection. The overall safety performance of the road and intersection is considered satisfactory for the existing traffic environment, with no significant concerns identified.

4 Roothing Upgrades

4.1 SH25 / Willows Road Upgrades

Condition 73 sets out the requirements for the Willows Road / SH25 upgrade to support the long-term use of Willows Road for access to Area 2.

Design work on the proposed upgrades has been progressed, and a preliminary design plan is shown in Figure 4-1, encompassing the following:

- Left turn slip lane from SH25
- Right turn bay from SH25
- Widened Willows Road at the intersection.

¹ The NZTA CAS Database was searched for all reported crashes over the full length of Willows Road plus the SH25/ Willows Road intersection in the period 2020-2024.



Construction Traffic Management Plan - Area 2

4 Roding Upgrades

Works are due to commence Feb / March 2026 and will take 4 weeks.

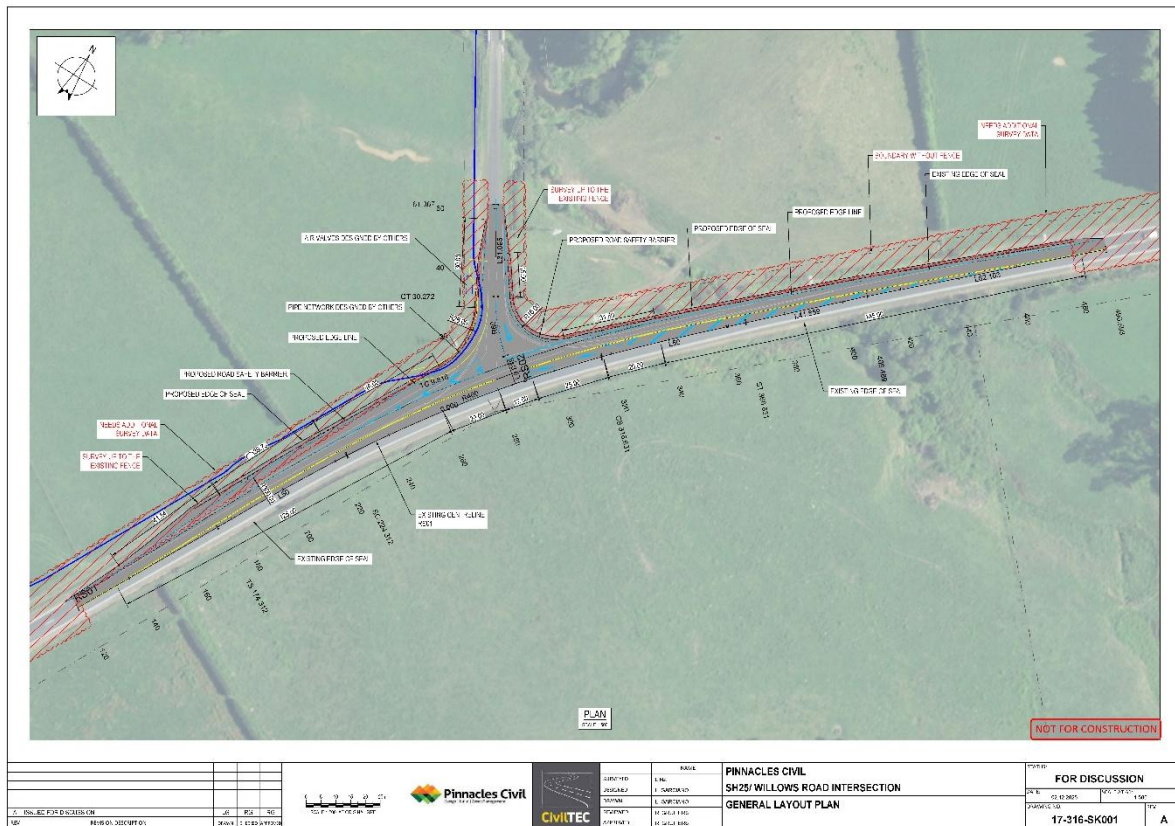


Figure 4-1: SH25 / Willows Road Intersection Upgrade Preliminary Design

As part of construction planning, and prior to work being carried out, a site specific temporary traffic management plan is required to be prepared and approved by the Road Controlling Authorities (RCA).

4.2 Willows Road Upgrades

Condition 74 sets out the requirements for upgrade of Willows Road. The condition requires:

- Upgrade Willows Road to a minimum 6 m sealed width (except for existing one-lane bridge and localised constraints).
- Curve widening and centreline marking at restricted visibility locations.
- Upgrade single-lane bridge approaches and install roadside barriers at identified culverts.

Preliminary design is included in **Appendix C**. Willows road shoulder widening will commence February/March 2026 and will take approx. 5 weeks. Work involves widening the running surface between 200mm – 1200mm, road and intersection markings, and installing safety barriers at bridge #3. The nature of the work is likely to involve one or two work crews working progressively up the road.

As part of construction planning, and prior to work being carried out, a specific temporary traffic management plan is required to be prepared and approved by the Road Controlling Authorities.



4.3 Willows Road Site Access

As part of mobilisation works, the site access will be developed to provide an entrance from Willows Road to the Area 2 site.

The location has been modified during consenting, and is now proposed 1.2km north of Willows Road (prior to the unsealed section of Willows Road). It is expected that the design of access will address road priority, and turn around facilities, as included in the preliminary Willows Road design included in Appendix C. Boom gates are being installed, and connected to Cardex, with security to log visitors.



Figure 4-2: Area 2 Access Location

4.4 Summary

All of the above works are required to be completed as lead projects prior to the bulk earthworks, subsurface infrastructure and tunnelling works.

As part of construction planning, and prior to work being carried out, specific temporary traffic management plan will be prepared and supplied to the relevant to the Road Controlling Authorities for approval for the various construction work activities.

It is intended to maintain access along SH25 and Willows Road through these works, albeit that some activities stages may require the implementation of additional traffic controls (e.g. TSL or Stop/ Go).

5 Construction Traffic Generation and Effects

5.1 Traffic Generation

Traffic generation during construction will be related to two main activities, transportation of workforce, and transportation of materials.

5.1.1 Workforce Transportation

Initial works on the road network the contractor will be using pooled utes to access the work site.

Later in the project it is anticipated that many of the staff will use pooled vehicles and / or be bused (using midi-buses or minivans) from a Park & Ride site at Kenny Street in Waihi, minimising private vehicle use on Willows Road;

Some light vehicles will be used to access the Site directly, including specialists, supervisors and managers. A driving direct to site ratio of 10% for mining, 25% for contractors has been adopted.

Buses assumed to travel back to an off-site depot after each shift, whereas likely many min-vans will remain on-site.

The estimated traffic volumes are shown below for the first 4 years².

Table 5-1. Willows Road Workforce Related Traffic Movements (Daily Movements)

Mode	Year 1	Year 2	Year 3	Year 4
Worker Bus	0	0	6	8
Contractor Mini-Van	0	28	58	20
Light vehicle movements	0	35	86	45

² Based on the listed assumptions and forecast employee numbers provided by Oceana and assessed in the ITA.



5.1.2 Material Transportation

Heavy vehicle transportation of supplies to and from Area 2 were forecast and included in the ITA. The expected detailed contribution of each activity to the peak within year 2 is included in **Appendix D**.

Total heavy vehicle movements are forecast at up to approximately 200 movements per day (100 to site, and 100 from site) at peak if all tasks and activities overlap. In all likelihood, this full overlap is unlikely, and some further averaging and dampening of this absolute peak will occur, albeit with occasional higher daily peaks during short periods.

5.1.3 Combined Traffic Volumes

The combined traffic generation of the site to Willows Road is indicated in Figure 5-1 (where heavy vehicle movements are averaged across each quarter of the year).

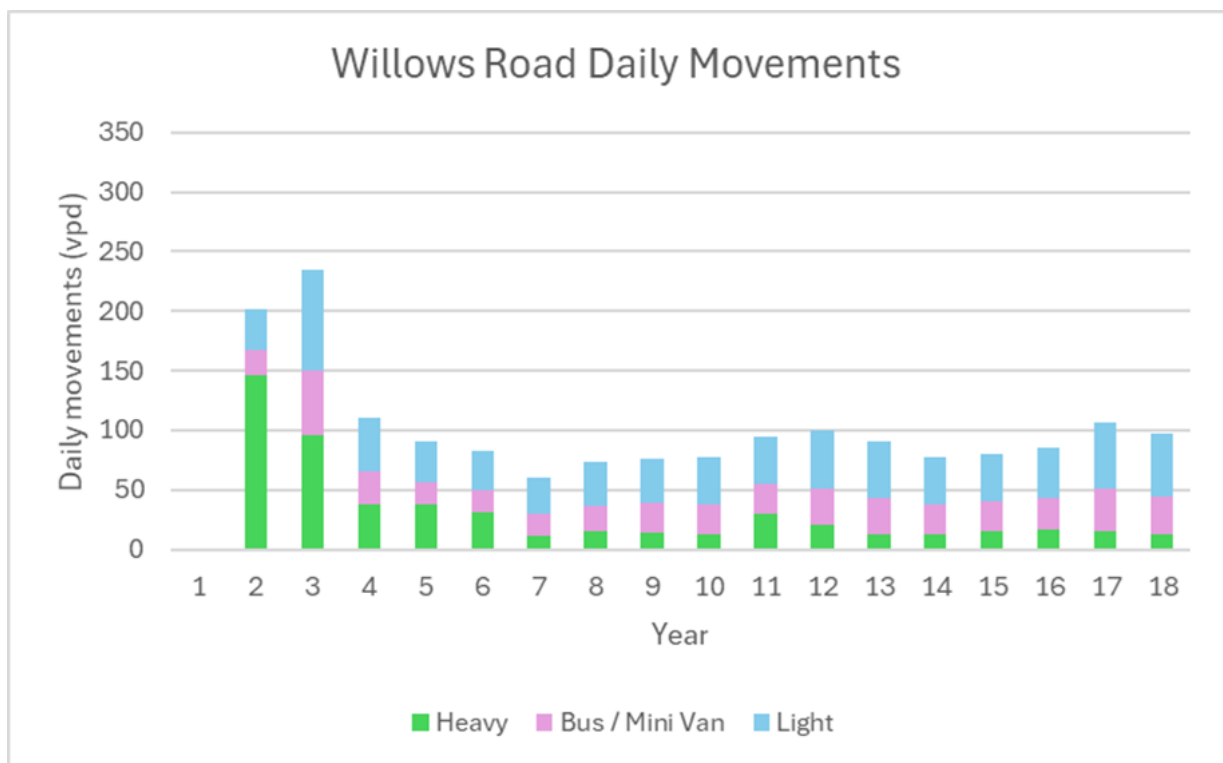


Figure 5-1:: Willows Road Daily Traffic Generation (weekdays) (Source ITA)

This indicates that during the period of construction key traffic volumes to manage are:

- Peak heavy vehicles in years 2-3;
- Peak bus and min-van transport in year 3;
- Peak light vehicles in year 3.

5.2 Traffic Effects

The potential traffic effects of the increase in traffic are as assessed in the ITA.



Construction Traffic Management Plan - Area 2

5 Construction Traffic Generation and Effects

Effects were primarily related to road safety on Willows Road and the SH25/Willows Road intersection, and the potential for increases pavement wear and hence increased maintenance requirements on Willows Road. Conditions of consent have been developed to require a suite of upgrades along Willows Road and at the SH25/ Willows Road intersection and a need to monitor the pavement condition on Willows Road. These matters are being addressed as part of the proposed works programme.

The required upgrades on Willows Road and at the Willows Road / SH25 intersection will also generate a change in the normal operating condition of the road network during construction of those improvements, requiring temporary traffic management.

As set out in this CTMP it is proposed to further manage construction staff traffic volumes via the use of staff buses/ mini-vans where practical. Materials will be transported to and from site via heavy vehicles. While potentially heavy vehicle movements could reach 200 per day, the probable spacing of activities will likely dampen this peak, and heavy vehicle volumes are likely to peak around 150 vehicles movements per day.

Overall daily traffic generation by the construction activities (staff and trucks) is likely to peak at 200-240 vehicles per day in Years 2 and 3 of the works. While proportionally this represents a significant additional traffic volume on the current Willows Road AADT (~100 vpd) as outlined in the ITA it is nonetheless considered that the total traffic volume is within the capacity of Willows Road, and the SH25/ Willows Road intersection

5.3 Heavy Vehicle Routes

Figure 5-2 shows the proposed heavy vehicle routes to access the construction areas.





Figure 5-2: Heavy Vehicle Routes

It is expected most traffic will be to and from the west on SH25. Conditions of consent address the road upgrades, including the upgrade of the SH25/ Willows Road intersection, and pavement maintenance required to support the additional traffic and maintain road safety.

6 Staff Travel Plan

Over 200 hundred employees or contractors are forecast to work onsite daily during the first four years of construction. To manage traffic volumes associated with staff movements, a Park n Ride location will be investigated and subsequently established on Kenny Street to minimise the need for private travel on Willows Road.

The following operating protocols / procedures are proposed for the Kenny Street Park n Ride site.



- OGNZL is to carry out demand calculations to forecast bus and mini-van requirements for contractors and workers, and secure buses and min-vans to support the travel to Willows Road by bus and min-van.
- Staff shall be advised of the requirement to use the Park n Ride, unless approved for direct access to the Area 2 site (eg managers, supervisors and specialists).
- All parking associated with the Park n Ride shall be planned for within land owned by OGNZL.
- The car park access shall operate in a way that does not require queuing back from within the Kenny Road site to SH25.
- Parking demand shall be monitored, and additional area assigned to satisfy parking demand where practicable.
- Where no additional space is available, alternative spillover park and ride locations within OGNZL sites shall be considered.
- Passenger waiting areas will be located outside of the manoeuvring areas for the buses / minivans.
- Sufficient manoeuvring area is to be retained in the Kenny Street Park and Ride site to ensure no vehicles (especially buses and mini-vans) are required to reverse onto or from the SH25.

The following operating protocols / procedures are proposed for the Area 2 terminus of the Park n Ride route .

- Sufficient parking and manoeuvring area is to be made available for vehicle parking demand including buses.

These matters are to be updated within **Appendix E** of this CTMP.

7 Traffic Management Strategy

7.1 Principles

The traffic management strategy is based on the following:

- Engagement with affected parties and stakeholders.
- Maximising safety for public and site staff.
- Minimising disruption and delays to road users.
- Enable construction efficiencies.
- Maintaining emergency access at all times.
- Providing clear, timely information to the public.



7.2 Roles and Responsibilities

Table 7-1. CTMP Roles and Responsibilities

Role	Organisation	Responsibility
Safety Manager	OGNZL	Oversight and advice on the safety of the interfaces with the travelling public
Project Manager	OGNZL / Contractors	Ensure the approved CTMP is implemented Ensure staff are trained to the required level Ensure Temporary Traffic Management (TTM) records / monitoring results are kept and TTM audits undertaken Coordinate Changes to the CTMP with the RCA
Project Engineer	OGNZL or delegated contractor	Prepare and submit Temporary Traffic Management Plans (TMPs) for local roads Audit TTM
Site Traffic Management Specialist (STMS)	OGNZL or delegated contractor	Implement TTM on public roads in accordance with approved Traffic Management Plans Maintain TTM records
Traffic Controller (TC)	OGNZL or delegated contractor	Fulfil manual traffic control roles on-site as directed by the STMS
Mine workers and contractors	OGNZL / Contractors	Adhere to relevant CTMP requirements
CTMP Certifier	HDC and NZTA	Review and certify CTMP(s), audit compliance
Traffic Management Coordinator	HDC and NZTA	Review and approve TMP(s), audit compliance

8 Management Procedures

8.1 Site Staff

All staff involved in the project will attend a project induction prior to the commencement of work to ensure a common basis for approaching their work. The induction will include environmental, health and safety and hazard management in relation to the project area, along with temporary traffic control.

8.2 Personal Protective Equipment (PPE)

As a minimum, all personnel working on a public road work site must wear standard PPE, including the following (or as otherwise defined by the relevant TTMP):

- High visibility vest or garment.
- Cuff to ankle cover (long trousers and long sleeves)
- Safety boots
- Hard hat
- Eye protection

Construction workers will therefore be clearly visible, and will set a consistently high level of PPE and appearance across the work site.



8.3 Staff Training and Induction

General training requirements in relation to the construction of the Project are outlined in the HSE Management Plan.

8.4 Construction and Temporary Traffic Planning

Temporary Traffic Management Plans (TMPs) will be required for all work within the live road corridor, namely the upgrades at SH25 / Willows Road and Willows Road. These are expected to include, but not be limited to:

Willows Road:

- A TMP for Willows Road for a shoulder closure for various works adjacent to the road carriageway.
- A TMP for Willows Road for an alternating flow single lane operation while works impact the live traffic lane(s), including during road widening, barrier installation, and while line marking and signage changes are implemented.
- A TMP for construction of the site access.

Willows Road / SH25

- Various TMPs as the works progress, including shoulder closure and single lane operation

The TMPs will follow the format set in the NZGTTM (NZ Guide to Temporary Traffic Management) or Code of Practice for Temporary Traffic Management if still applicable (currently being superseded).

They will describe the measures to be implemented to manage the temporary traffic effects associated with temporary road layouts or traffic controls required for specific corridor works.

TMPs will be submitted to, and approved by, the Traffic Management Coordinator responsible for the section of road involved, in this case the Road Controlling Authority (HDC) for Willows Road and the site entrance access works, and NZTA for the SH25/ Willows Road site.

The standard process is that TMPs will be assessed by the Traffic Management Coordinator for compliance with the NZGTTM (or CoPTTM if still applicable) and the ability to avoid adverse effects on the travelling public.

Construction methodologies shall as far as practical, seek to balance minimising day to day disruption to other road users, whilst supporting safe and efficient project works and the safe operation of the road network.

8.5 Site Access and Controls

The main site access will be near the end of Willows Road, designed for safe entry/exit of heavy vehicles.

Gates will be positioned at a location well set back from Willows Road, to be determined through design processes. A sealed surface will be provided at least up to the gates.



The access intersection with Willows Road will initially be designed with a Give Way control on exit, as Willows Road is a through route, albeit low volume.

It is recommended that a method of recording inbound and outbound vehicles is set up for correlation with pavement maintenance, and informing charges in the CTMP. As a minimum, a record of heavy vehicle movements on a daily basis will be kept.

8.6 Traffic Control Measures

Willows Road is remain open to traffic at all times, except where temporary traffic control (as per Section 8.4 may be employed to partially close lanes or shoulders, provided that any traffic delays do not exceed five minutes at any one time during the day, or a cumulative period of 30 minutes within an hour, unless otherwise agreed upon as part of the temporary traffic management plan process.

When the site is unattended the maximum length of single lane shall be managed by automated signals to minimise delays to less than one minute. These will be managed through the temporary traffic management plan process, and subject to monitoring by on-site traffic control.

Temporary speed limits (TSL) may be sought for Willows Road during construction as required, including at any time that manual traffic control is required or where workers are in the carriageway without the protection of barriers. It is noted that implementation and approval of TSLs requires their location, hours of operation and duration to be specified and these details will be supplied as part of the relevant temporary traffic management plan.

It is expected that all construction vehicles will display amber beacons when operating at a worksite on the public road network, and that will be specified in relevant temporary traffic management plans.

8.7 Emergency Access

Any traffic management installed on Willows Road is to maintain 24/7 emergency services access, noting access is constrained to the single road in and out of existing properties and the Area 2 site.

Details of traffic management provisions for emergency services are to be detailed in the TTMP for each work-site, and include application of standard traffic lane widths for accommodating heavy vehicles in a temporary traffic management environment.

Any temporary or planned closure must only occur after an emergency action plan has been developed and agreed with emergency services.

9 Mitigation Measures

9.1 Pavement Maintenance and Monitoring

Attention is drawn to road maintenance requirements for Willows Road, which is included in consent conditions 75 to 78.



To ensure suitable ability to record heavy vehicle usage of the road, heavy vehicle arrivals and departures from Area 2 are to be recorded on a daily basis. This is to be stored in a format enabling efficient analysis.

9.2 Property Access

Access to all properties will be maintained at all times, with advance notice of any temporary restrictions.

Exceptions will be detailed and approved through Temporary Traffic Management Plans, subject to road operating requirements set out in Section 8.6.

Temporary alternative access or shuttle arrangements will be provided if required.

9.3 Stock Droving

Willows Road is in a rural area and may experience stock movement or crossing on occasion.

Hauraki District Council has a Stock Crossing Bylaw 2022³ to provide for the orderly movement of livestock along and across local roads within the District while protecting the surface and structure of the road, and the safety and wellbeing of road users.

There are two properties identified with land either side of Willows Road that need to specifically be considered.

- 407 Waihi - Whangamata (SH25) Road, Waihi: One landowner between SH25 and Highland Road has 44.5ha land both sides of Willows Road, no obvious regular stock crossing.

³ <https://www.hauraki-dc.govt.nz/repository/libraries/id:2jpo4nuxg17q9srdjc4b/hierarchy/Bylaws/Stock-Crossing-Bylaw-2022.pdf>





Figure 9-1: 407 Waihi - Whangamata (SH25) Road

- 65 Willows Road, Waihi: One landowner north of Highlands Road has land both sides with a dairy cow stock crossing to service a 53.0ha landholding. Approximately 35% of the land is located on the east side of Willows Road, requiring a crossing to the shed. The owner will be consulted to confirm their usage of the stock crossing and to agree a stock crossing management process that can be incorporated in the CTMP. It is considered that the existing crossing would still be considered as suitable for a stock crossing, and project traffic will need to make allowance for the presence of stock crossing.

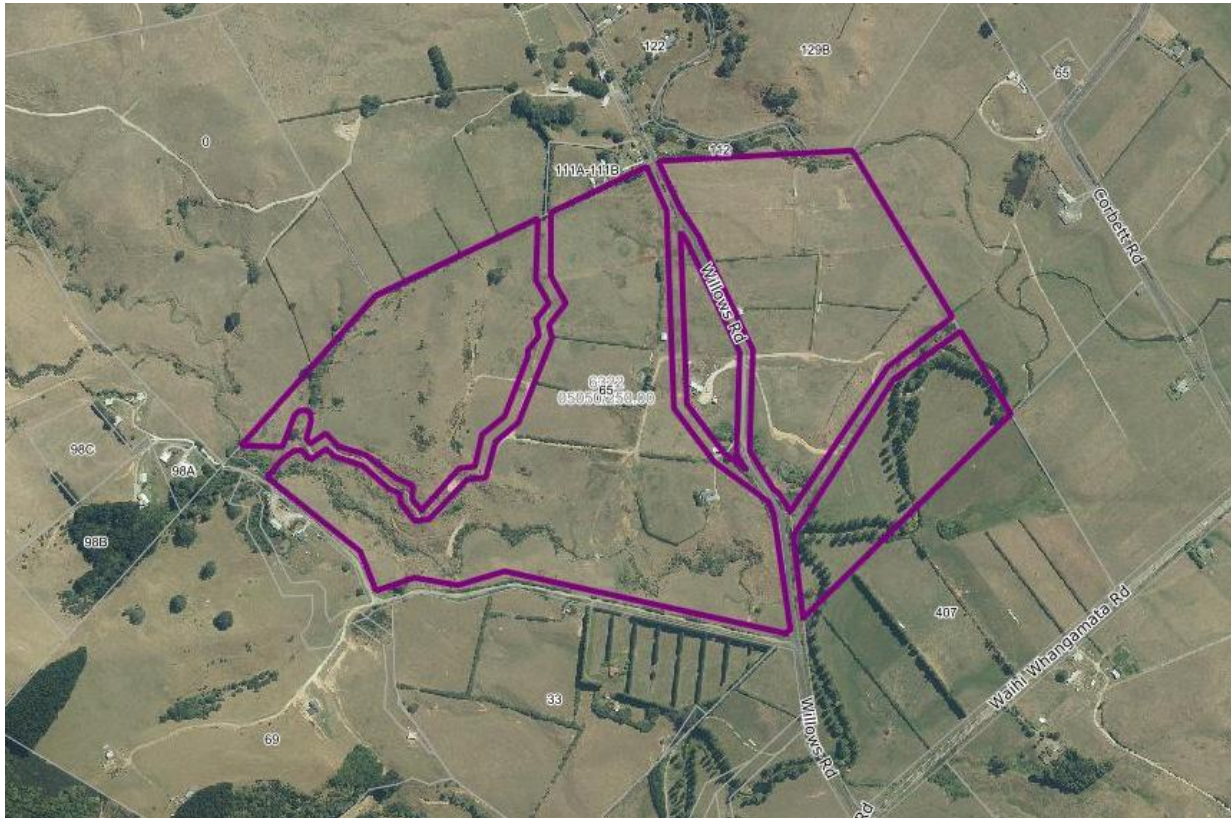


Figure 9-2:65 Willows Road

Where stock crossings are permitted, or operate with a permit it is expected that OGNZL will instruct drivers of the following through driver induction and updates as required:

- The location of the stock crossing;
- Likely timings of usage of the stock crossing;
- Actions when arriving at the stock crossing, and potential delay times, noting the stock crossing is under the control of the stock drover and passage may be restricted.

It is also expected that contact details are recorded in the CTMP for both the stock drover and the OGNZL representative to support effective communication in relation to traffic and stock movements. Provision for this is included in **Appendix F**.

9.4 Parking

All workforce and visitor parking will be provided on-site within Area 2.

Signage to parking areas is to be provided within the site, and all Visitors are to report to security and /or reception for induction to the site.

No parking will be permitted on Willows Road or SH25, except as provided for through an approved Temporary Traffic Management Plan for works on those roads.



9.5 School Bus

School bus routes relevant to the Area 2 site are to be confirmed by review of the Ministry of Education school bus route website.

<https://www.education.govt.nz/school/property-and-transport/transport/school-bus-route-maps>

As at 2025, a school bus route travels along SH25 past Willows Road, with the current route indicated in Figure 9-3 below. As Willows Road and Highlands Road provide a catchment, the school bus may stop at or in the vicinity of the SH25 / Willows Road intersection, subject to eligibility and demand. No stop facilities are available, and the traffic passing the School Bus will be subject to Land Transport User Rules.

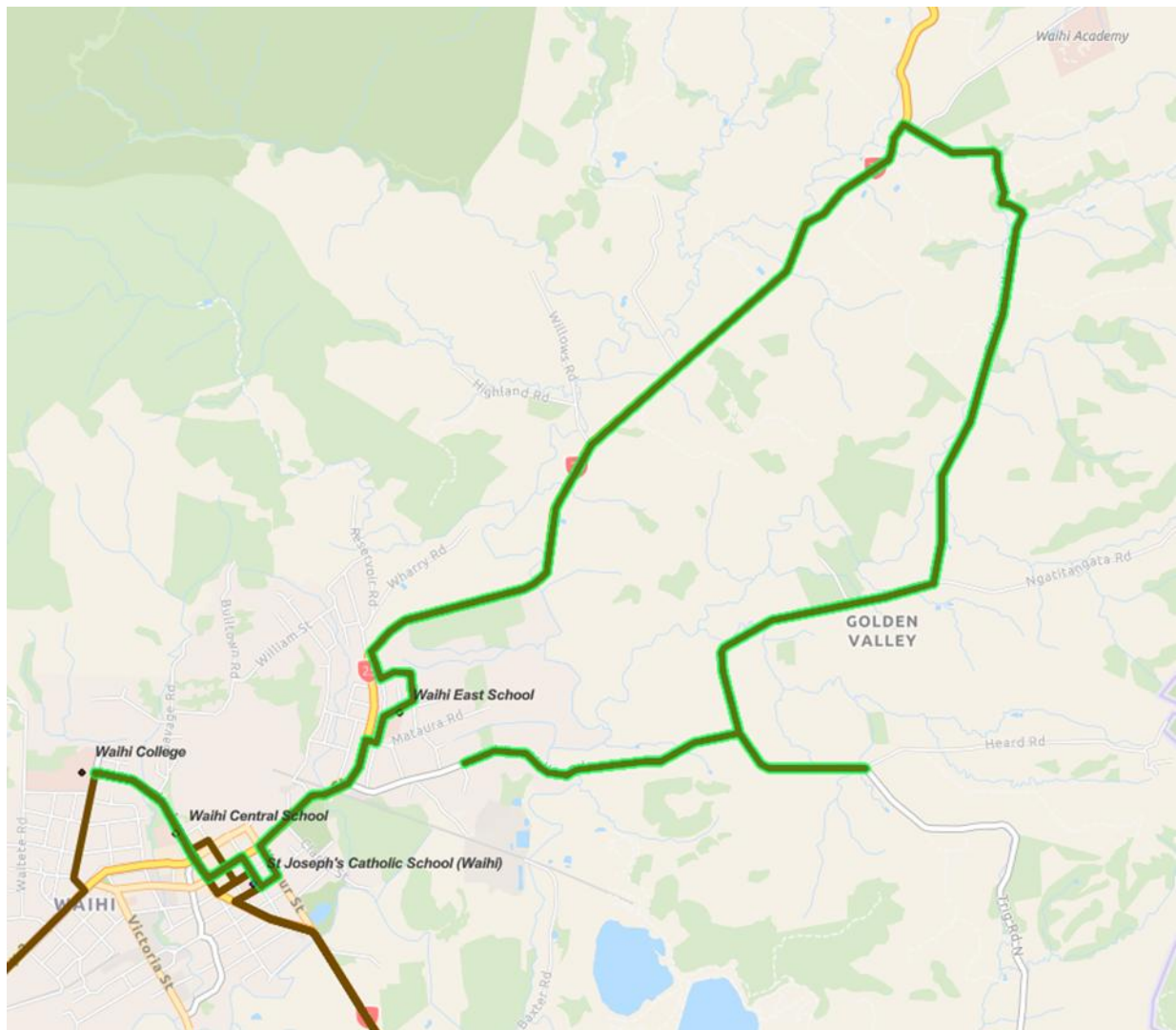


Figure 9-3: Waihi School Bus Route on SH25 (Route D03911)

It is recommended that at the commencement of each year the Project Manager for OGNZL ensures contact is made with the schools in Waihi to determine whether the school bus stop is planning to operate and stop on SH25 at Willows Road, or use Willows Road directly. Contact phone numbers of

the relevant OGNZL contact and the School Bus operator are to be exchanged and recorded in **Appendix G** of this CTMP.

The presence of a school bus stop on SH25 at Willows Road, or on Willows Road must be recorded in **Appendix G** of this CTMP, with information about timing and requirements for passing a stationary school bus incorporated in induction material.

Where the school bus stop is expected to be in place for longer than 1 year, OGNZL will provide assistance with establishment of a safe waiting zone for pupils, clear of the road carriageway.

Where construction works or the traffic controls for the works, potentially impact on a school bus stop location then the OGNZL will work with the school bus operator, local residents and school to identify a safe and practical solution. This may include:

- providing an alternative stop location;
- clearing the site at the start / end of the school day end when the bus is operating; or
- other acceptable solution.

9.6 Over-weight and Over-dimension Loads

The Willows Road bridge has been strengthened to take 50MAX trucks.

Prior to transport of over-weight or over-dimension loads to site, a route assessment is to be carried out in consultation with the road controlling authorities to ensure the loads proposed to be carried can be supported by the transport network. Over-weight and over-dimension loads are subject to separate permit processes administered by Hauraki District Council and NZTA. All appropriate permits shall be obtained before the transport of an over-weight/ over-dimension load occurs. Any traffic management, road improvement, and piloting requirements or other conditions determined by the permit process shall be implemented prior to the load movement.

The size and number of over-dimension and over-weight loads are to be recorded in **Appendix H**, and as part of this CTMP are to be confirmed as having approvals in place. Any constraints identified in the route assessment shall also be summarised in **Appendix H** of this CTMP for future reference.

Any traffic management, road improvement, and piloting requirements determined by the permit process shall be implemented.



10 Monitoring, Reporting, and Review

10.1 Monitoring

Table 10-1 outlines the temporary traffic monitoring to be undertaken during construction of the project.

Table 10-1. Construction Traffic Management Monitoring Plan

Monitoring Activities	Frequency	Responsibility
CTMP review	Annual	Project Manager (or respective delegate)
Check method statement reflects requirements and requisite TMP has been approved	Prior to approving Work Packs	Project Manager (or respective delegate)
Inspect temporary traffic management layout	As required while site is in operation	STMS / TC
Documented check of all temporary traffic management	Daily and as layouts change	STMS / TC
TTM Audit in accordance with NZGTTM	As required, but not less than monthly	Project Engineer
Road Condition	Weekly	Site Engineer
Complaints Register	Continuous	OGNZL Stakeholder Liaison

Furthermore, the site will retain a video record of all vehicles travelling in and out of the site for a rolling two-week period to assist with review of any complaints.

10.2 Complaints and Incidents

A project contact phone number will operate during the project duration and will be publicised at the entrance to site and recorded within this CTMP.

Complaints Phone Number: 0800 WAIHI GOLD

A record will be kept of all calls, and a summary provided to the Roding Managers of HDC within 5 working days of any request.

The summary will also include a review of the effectiveness of the CTMP.

Any complaints will be investigated to identify the driver if possible and the circumstances of the complaint. Any drivers breaching the requirements of the CTMP or road rules will be subject to disciplinary procedures which may include:

- Verbal warning;
- Written warning;
- Vehicle tracking systems (with driver behaviour functionality) installed in their vehicles
- Removal from the project.



10.3 Reporting

Any injury events or serious near misses will be reported immediately to the Project Manager and to OGNZL for discussion with external authorities as appropriate.

Annual summary reports will be collated and can be provided to HDC on traffic management performance, incidents, and maintenance.

10.4 Review

A review of the CTMP will be undertaken by the Project Management team if required. The review will take into consideration:

- Compliance with the project consent conditions, the Construction Environmental Management Plan and any other relevant management plans;
- Any significant changes to construction activities or methods;
- Key changes to roles and responsibilities within the Project team;
- Results or inspections, monitoring and reporting procedures associated with the monitoring of adverse effects during construction;
- Comments or recommendations from Hauraki District Council or NZTA; and
- Unresolved complaints and any response to complaints and remedial action taken to address the complaint.

11 Communications and Stakeholder Engagement

Project information will be provided via newsletters, website, and direct notifications to affected residents.

Advance notice of any significant traffic disruptions on SH25 (>5 min delay) will be provided via social media, and roadside VMS or signage as approved by NZTA.

A central point of contact will be established for community queries and complaints as per Section 10.2 of this CTMP.

12 CTMP Content Checklist

Appendix I provides a checklist and cross reference of Condition 83 requirements against the content of this CTMP.

13 References

1. **Stantec (2025)**. Waihi North Project Transportation Assessment Report. *310206197 WNP TA - Final 250219.pdf*.



Construction Traffic Management Plan - Area 2

13 References

2. **Hauraki District Council (2025).** HDC Comments received on Waihi North.pdf (including consent conditions and specialist feedback).



Appendices



Appendix A CTMP Conditions of Consent

Draft Conditions of Consent as part of HDC Feedback

Condition 84

For each Area described in Condition C1(a) of Schedule One the Consent Holder must submit a Construction Traffic Management Plan for certification under Condition C5 of Schedule One.

Certification is required to verify that the Construction Traffic Management Plan:

- a. Includes actions, methods and monitoring programmes as appropriate to meet the objectives in Condition 85; and
- b. Satisfies the requirements in Condition 86.

Advice Note: Construction Traffic Management Plans may be submitted for each Area separately or multiple Areas combined.

Advice Note: While no direct traffic access provisions are associated with Areas 1 and 3 of the project, the Construction Traffic Management Plan(s) are to provide coverage of matters relating to the transportation of workers to and from these areas (including parking provisions for these workers).

Condition 85

The objectives of the Construction Traffic Management Plan are to set out how the Consent Holder will manage traffic to and from each Area to:

- a. Protect public safety; and
- b. Minimise delays to road users.

Condition 86

The Construction Traffic Management Plan must include, as a minimum:

- a) Details of how legislative requirements and consent conditions in relation to construction traffic will be satisfied;
- b) The proposed construction programme, traffic volumes and routes;
- c) Driver protocols;
- d) Measures to manage over-weight and over-dimension loads;
- e) Measures to maintain access to manage effects on adjacent properties and farm operations, including stock crossings;
- f) School bus routes and timetables;
- g) Communication arrangements;
- h) Monitoring requirements (including in relation to road pavements);
- i) Management measures for work within the public road corridor, including:
 - i) To manage existing road users with respect to construction traffic associated with work in the road corridor;



Construction Traffic Management Plan - Area 2

Appendix A CTMP Conditions of Consent

- ii) To ensure that all roads remain open to traffic at all times, except where temporary traffic control may be employed to partially close lanes or shoulders, provided that any traffic delays do not exceed five minutes at any one time during the day, or a cumulative period of 30 minutes within an hour, unless otherwise agreed upon with the Consent Authority. When the site is unattended the maximum length of single lane shall be managed by automated signals to minimise delays to less than one minute;
- iii) To ensure access to properties is maintained at all times unless otherwise agreed with the property owner;
- j) Measures to manage arrivals and departures over the construction period, including:
 - i) Monitoring of traffic distribution and performance at the intersection of Baxter Road and State Highway 2 during periods of high traffic volume; and
 - ii) An adaptive management approach which triggers modification of management measures where monitoring shows the acceptable levels of service at the intersection are not being achieved;
- k) Management of aggregate cartage routes, including any necessary measures relating to the use of Crean Road by heavy vehicles travelling to and from Areas 5, 6 and 7 via Baxter Road;
- l) Identification and provision of adequate on-site (or offsite) parking for each Area for the project duration to ensure compliance with Condition 83;
- m) Measures to facilitate and manage the bussing of shift workers to the Willows Road Surface Area Facilities located in Area 2;
- n) Management of deliveries to each Area; and
- o) For Areas 5, 6 or 7, management of any use of Moore Street to gain access in the event of a flooding event should this be required.

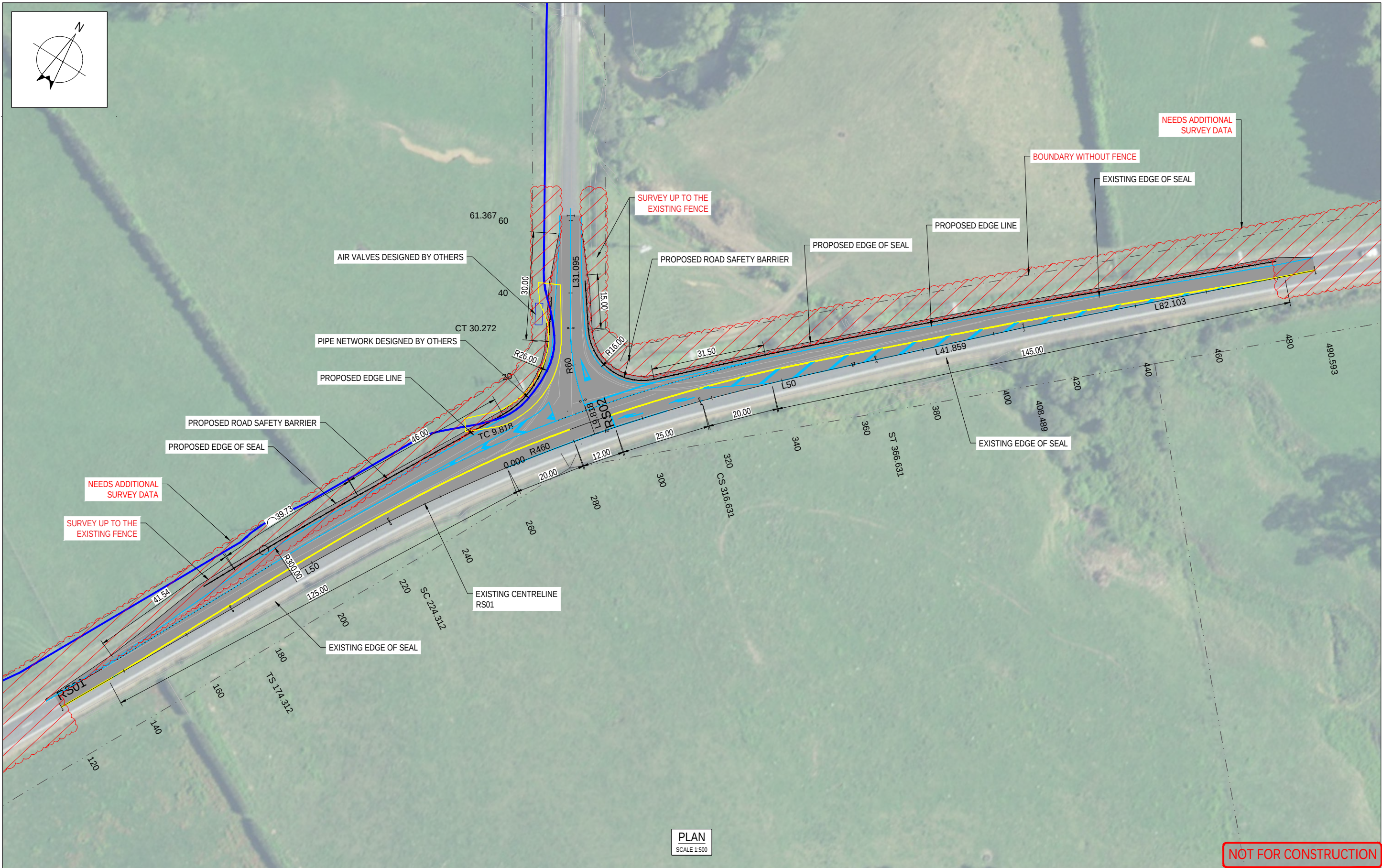


Appendix B Project Programme



Appendix C Willows Road Upgrade Plans





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SCALE 1:500 AT ORIGINAL SIZE



	NAME
SURVEYED	LINZ
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

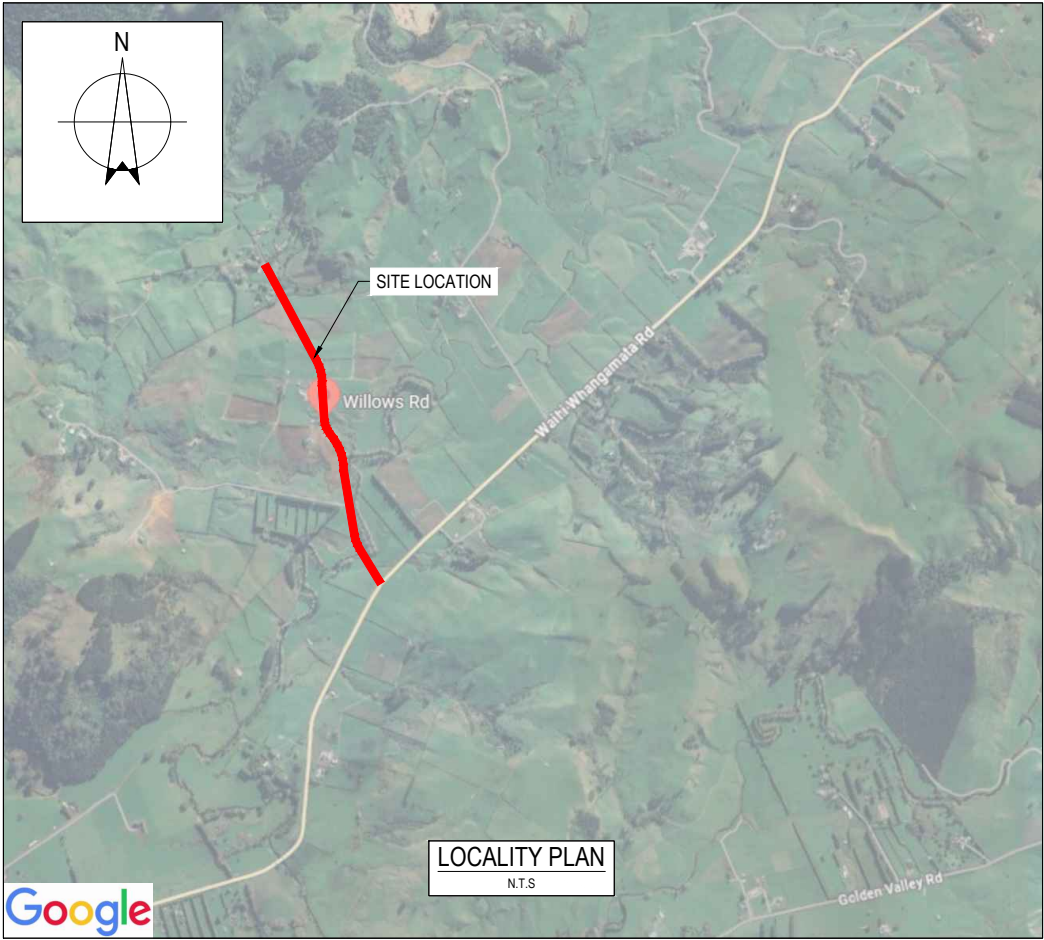
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SH25/ WILLOWS ROAD INTERSECTION
GENERAL LAYOUT PLAN

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REV	A

PINNACLES CIVIL

WILLOWS ROAD WIDENING

WILLOWS ROAD, WAIHI

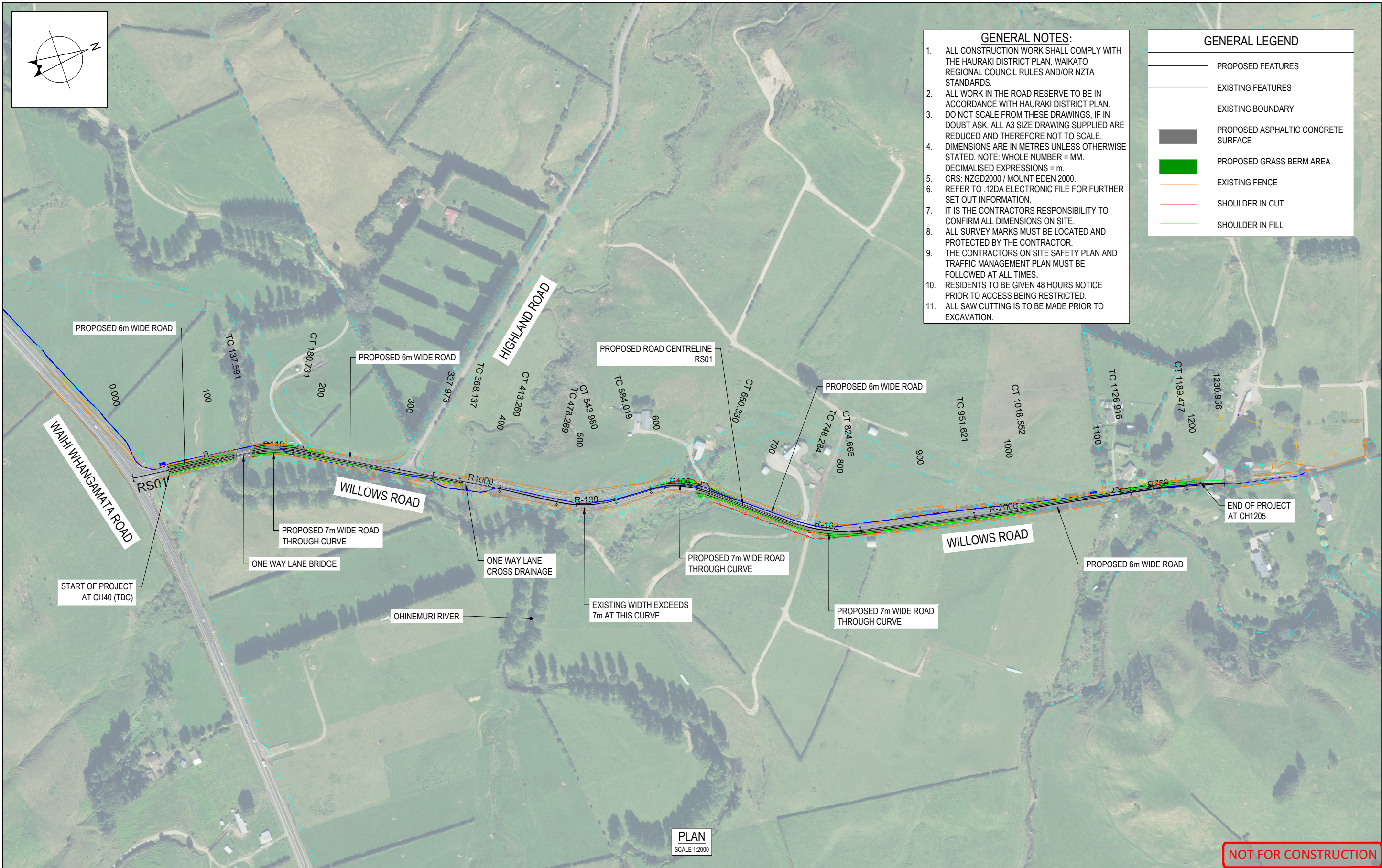


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WAI-985-000-DWG-CI-1130	OVERALL LAYOUT PLAN WITH SERVICES	E
WAI-985-000-DWG-CI-1131	LAYOUT PLAN - CH0 TO CH600	E
WAI-985-000-DWG-CI-1132	LAYOUT PLAN - CH600 TO CH1205	E
WAI-985-000-DWG-CI-1133	TYPICAL SECTION - SHEET 1 OF 1	E
WAI-985-000-DWG-CI-1134	CROSS SECTIONS - SHEET 1 OF 7	E
WAI-985-000-DWG-CI-1135	CROSS SECTIONS - SHEET 2 OF 7	E
WAI-985-000-DWG-CI-1136	CROSS SECTIONS - SHEET 3 OF 7	E
WAI-985-000-DWG-CI-1137	CROSS SECTIONS - SHEET 4 OF 7	E
WAI-985-000-DWG-CI-1138	CROSS SECTIONS - SHEET 5 OF 7	E
WAI-985-000-DWG-CI-1139	CROSS SECTIONS - SHEET 6 OF 7	E
WAI-985-000-DWG-CI-1140	CROSS SECTIONS - SHEET 7 OF 7	E
WAI-985-000-DWG-CI-1141	ROADMARKING AND SIGNAGE PLAN - CH0 TO CH600	E
WAI-985-000-DWG-CI-1142	ROADMARKING AND SIGNAGE PLAN - CH600 TO CH1205	E

NOT FOR CONSTRUCTION

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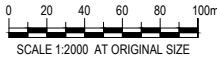
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A	ISSUED FOR DISCUSSION	LG	RG	RG			APPROVED	R. GRUITERS					
REV	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED									



- GENERAL NOTES:**
1. ALL CONSTRUCTION WORK SHALL COMPLY WITH THE HAURAKI DISTRICT PLAN, WAIKATO REGIONAL COUNCIL RULES AND/OR NZTA STANDARDS.
 2. ALL WORK IN THE ROAD RESERVE TO BE IN ACCORDANCE WITH HAURAKI DISTRICT PLAN. DO NOT SCALE FROM THESE DRAWINGS, IF IN DOUBT ASK. ALL A3 SIZE DRAWING SUPPLIED ARE REDUCED AND THEREFORE NOT TO SCALE.
 3. DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. NOTE: WHOLE NUMBER = MM. DECIMALISED EXPRESSIONS = m.
 4. CRS: NZGD2000 / MOUNT EDEN 2000.
 5. REFER TO .12DA ELECTRONIC FILE FOR FURTHER SET OUT INFORMATION.
 6. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM ALL DIMENSIONS ON SITE.
 7. ALL SURVEY MARKS MUST BE LOCATED AND PROTECTED BY THE CONTRACTOR.
 8. THE CONTRACTORS ON SITE SAFETY PLAN AND TRAFFIC MANAGEMENT PLAN MUST BE FOLLOWED AT ALL TIMES.
 9. RESIDENTS TO BE GIVEN 48 HOURS NOTICE PRIOR TO ACCESS BEING RESTRICTED.
 10. ALL SAW CUTTING IS TO BE MADE PRIOR TO EXCAVATION.

GENERAL LEGEND	
	PROPOSED FEATURES
	EXISTING FEATURES
	EXISTING BOUNDARY
	PROPOSED ASPHALTIC CONCRETE SURFACE
	PROPOSED GRASS BERM AREA
	EXISTING FENCE
	SHOULDER IN CUT
	SHOULDER IN FILL

REV	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED
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B	UPDATE BASED ON FEEDBACK	LG	RG	RG
A	ISSUED FOR DISCUSSION	LG	RG	RG



	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
OVERALL LAYOUT PLAN

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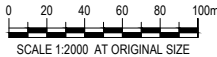
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SERVICES LEGEND	
	EXISTING STORMWATER SUMP
	EXISTING UNDERGROUND POWER
	EXISTING LIGHT POLE
	EXISTING OVERHEAD POWER
	EXISTING CHORUS
	EXISTING CULVERT

- SERVICES NOTES:**
- ALL EXISTING SERVICES SHOWN ARE INDICATIVE ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING SERVICES.
 - THE CONTRACTOR IS TO GIVE 48 HOURS NOTICE TO ALL SERVICE AUTHORITIES AND TO CONFIRM WITH THE RELEVANT AUTHORITY THE LOCATION OF THEIR SERVICE POSITIONS PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION.

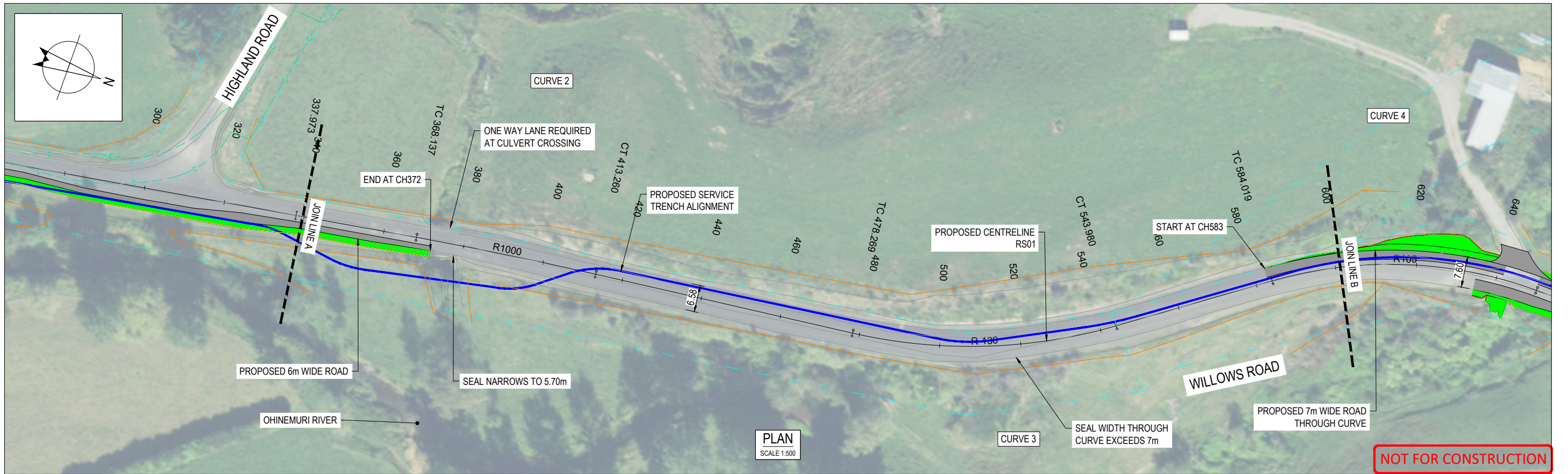
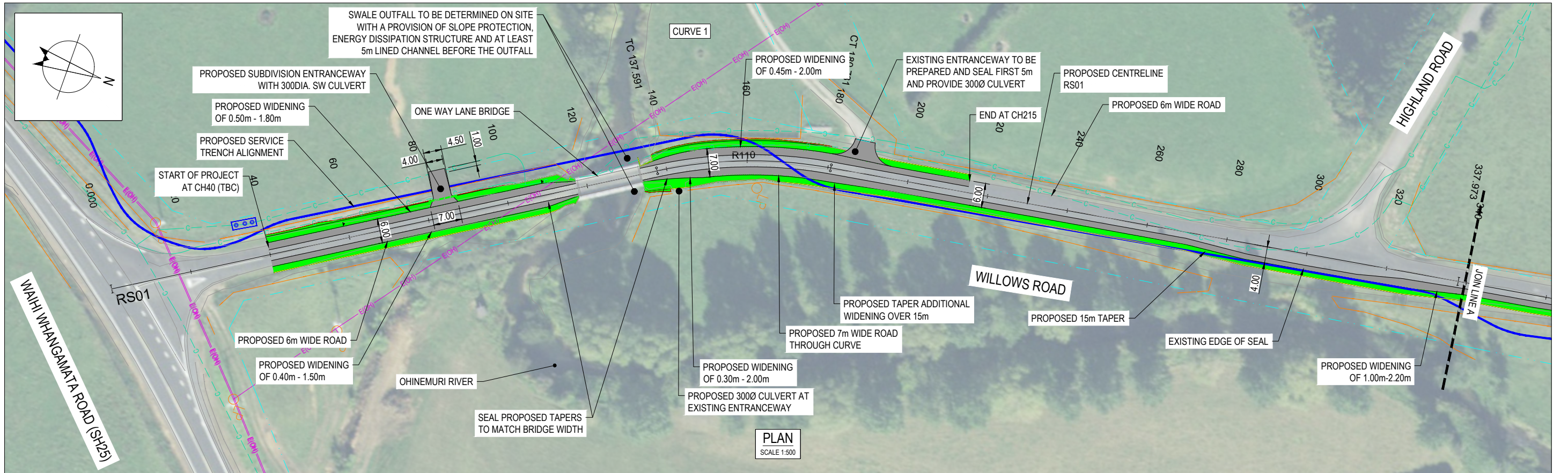
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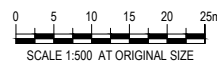
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SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
OVERALL LAYOUT PLAN WITH SERVICES

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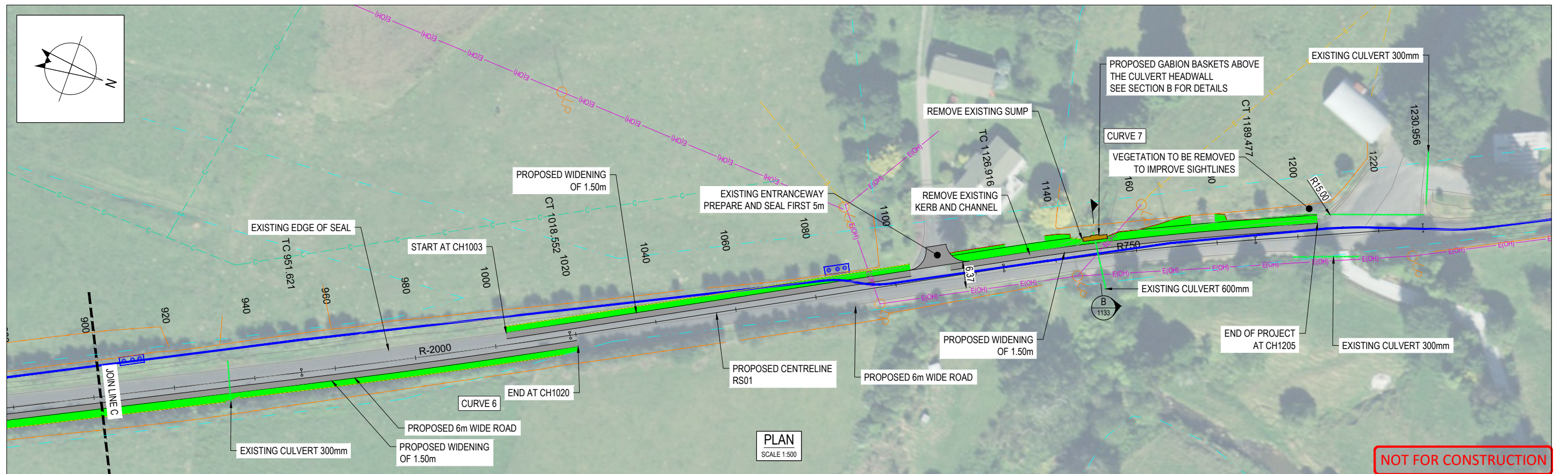
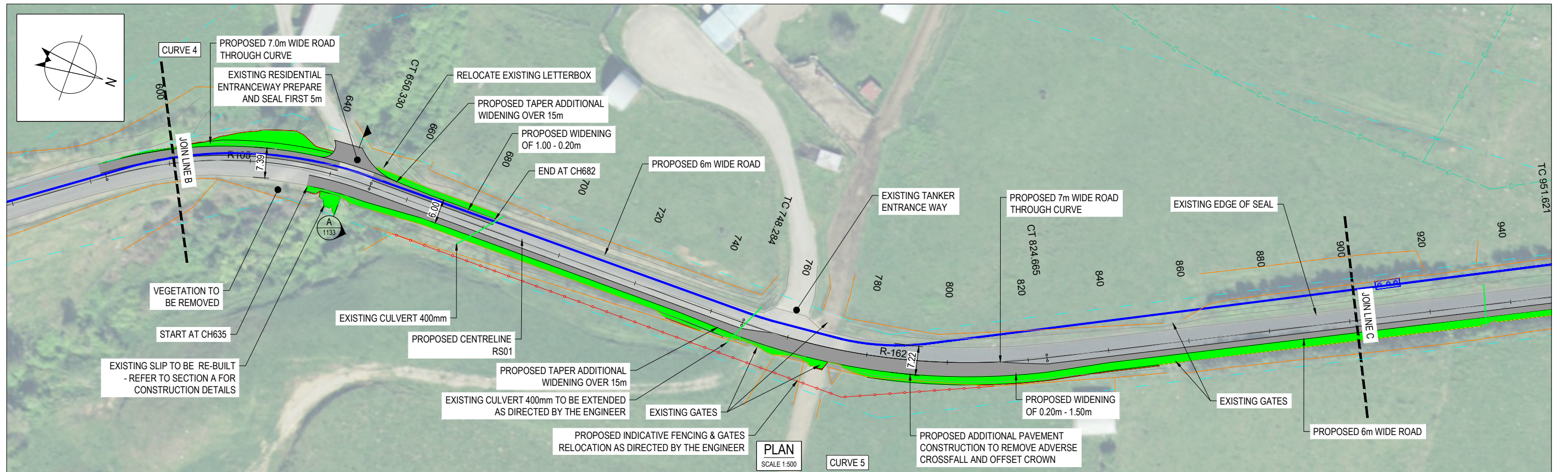
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	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
LAYOUT PLAN
CH0 TO CH600

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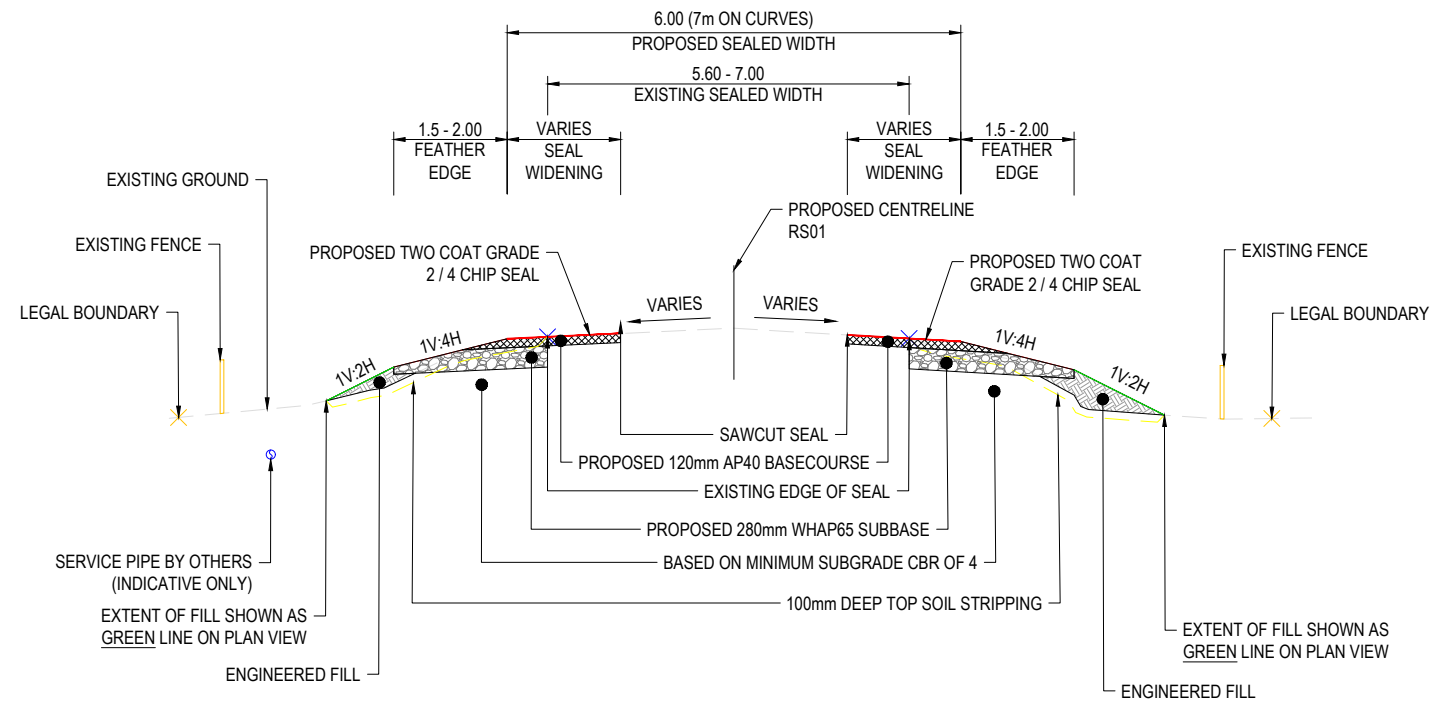
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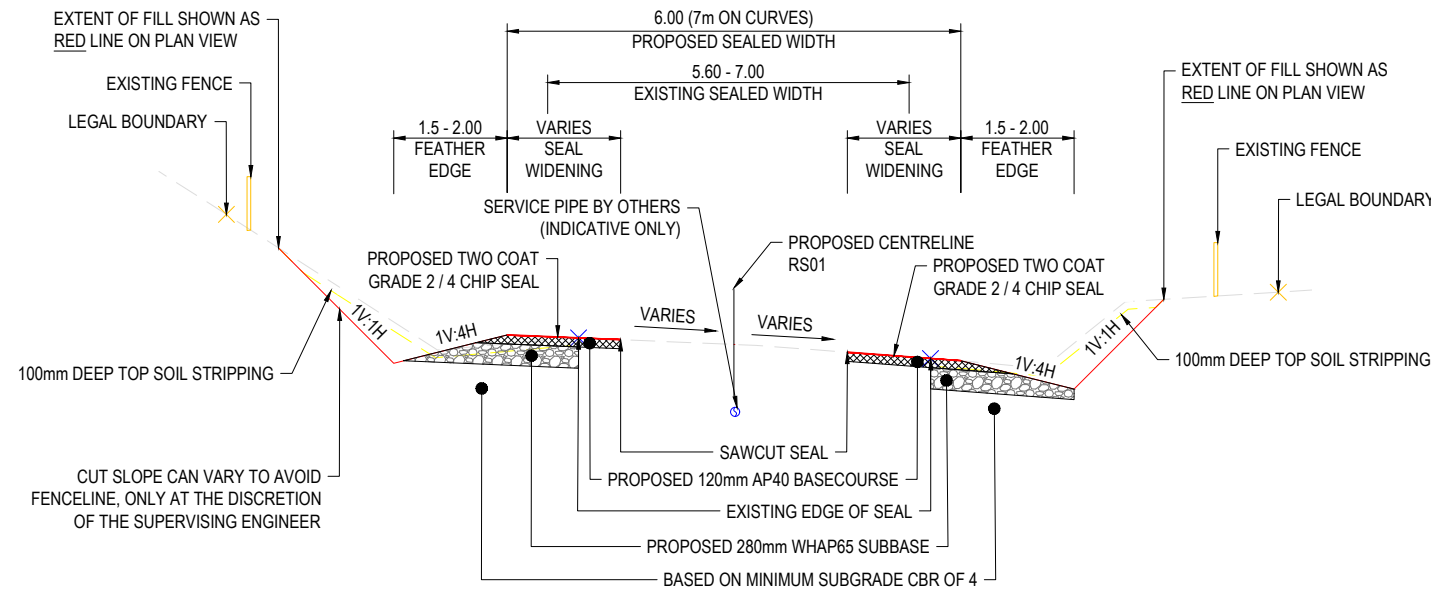
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DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
LAYOUT PLAN
CH600 TO CH1205

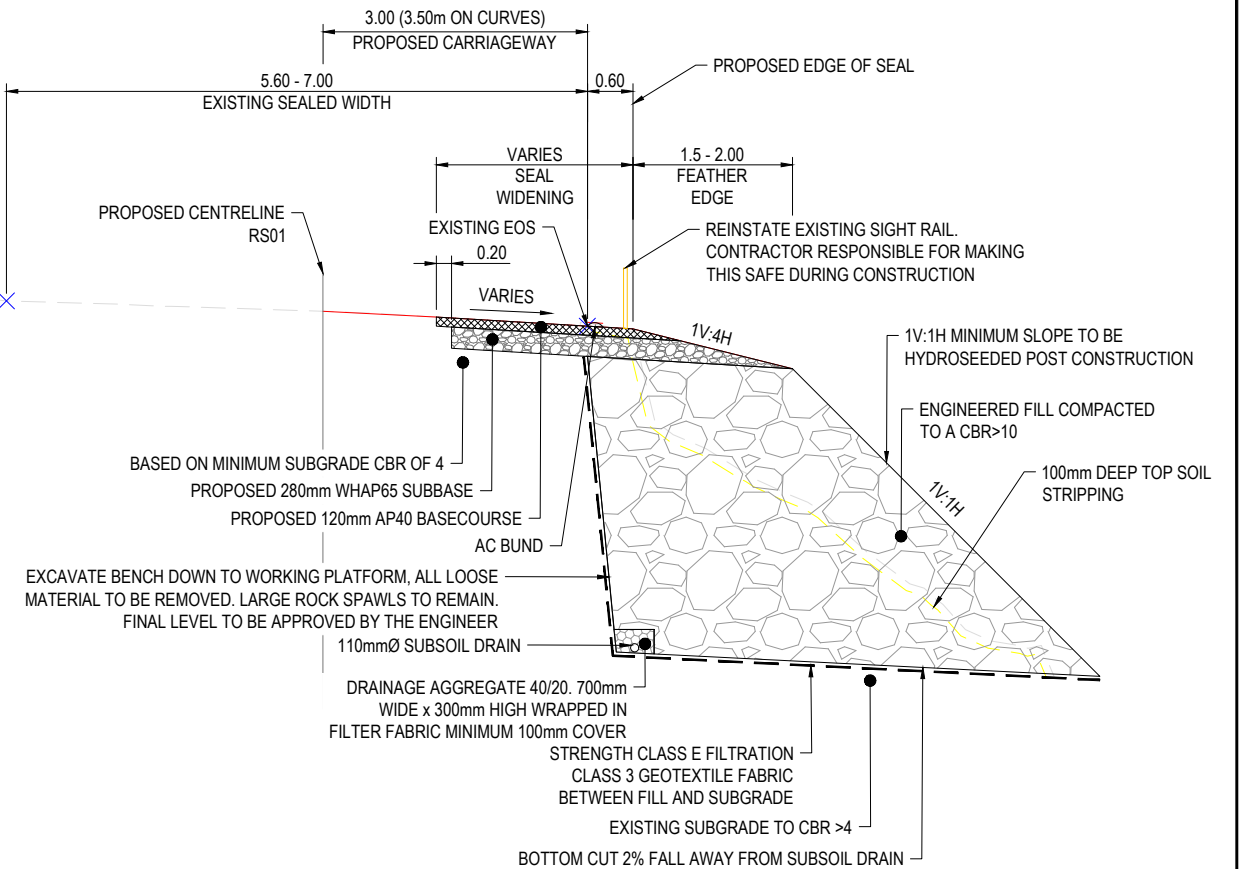
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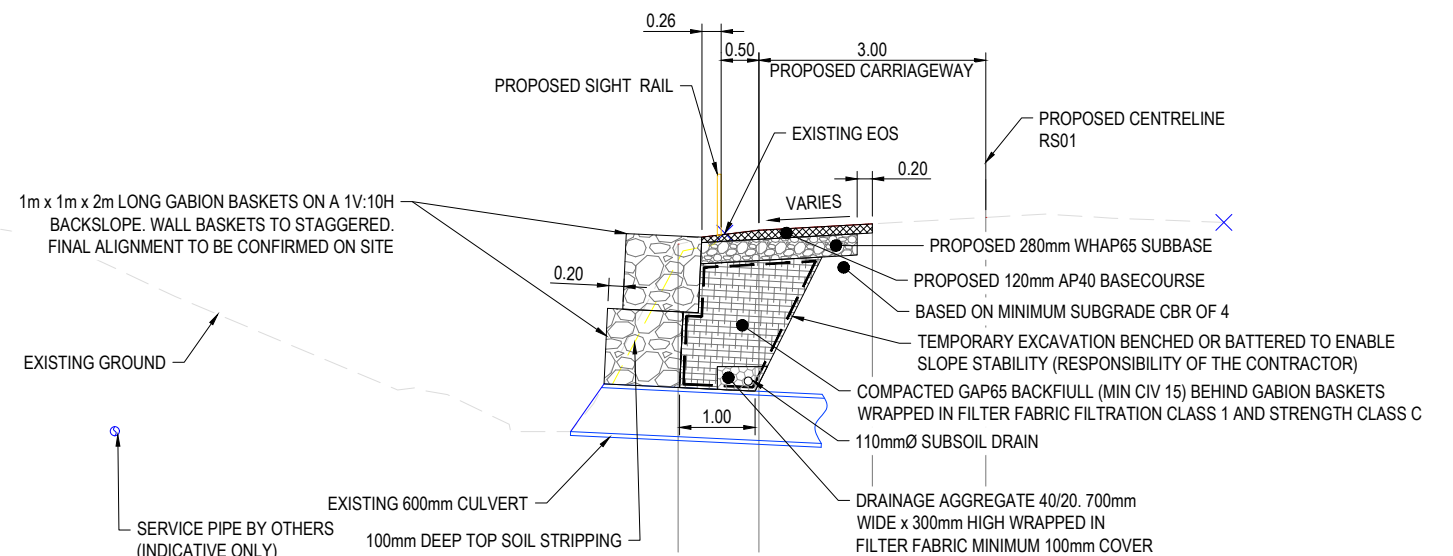
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**TYPICAL SECTION
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A TYPICAL CROSS SECTION
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NOT FOR CONSTRUCTION

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A	ISSUED FOR DISCUSSION	LG	RG	RG

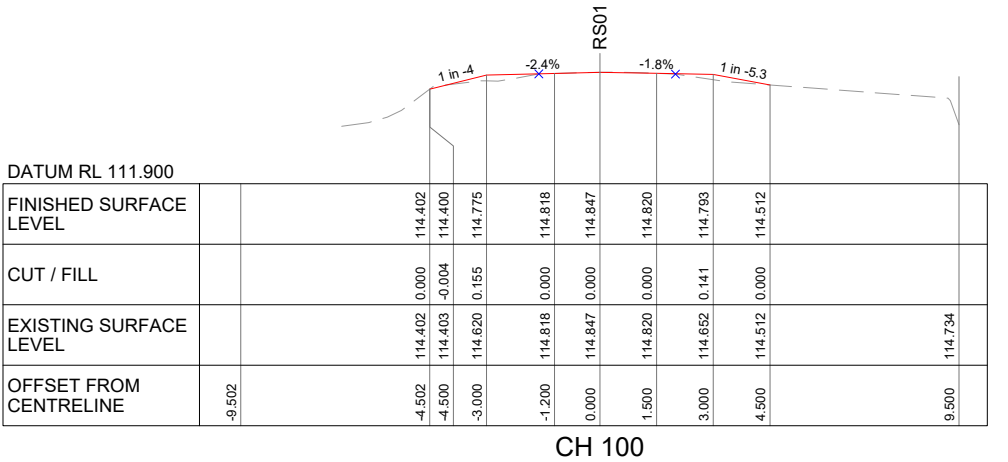
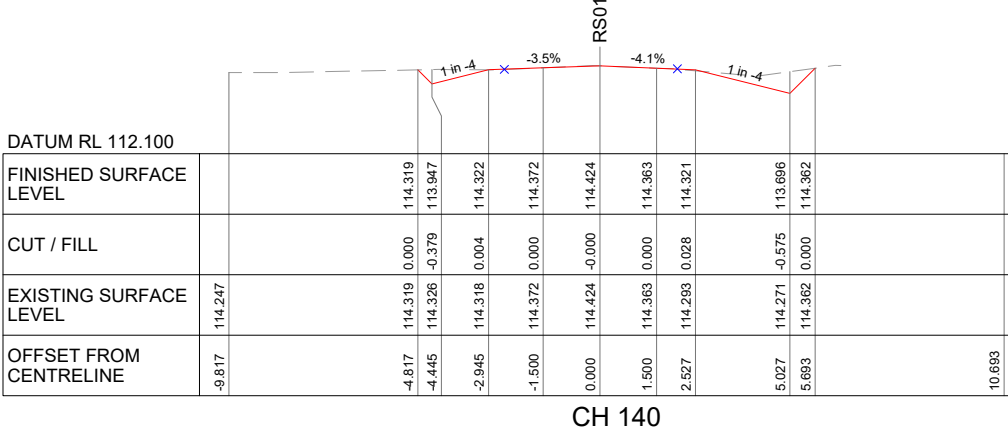
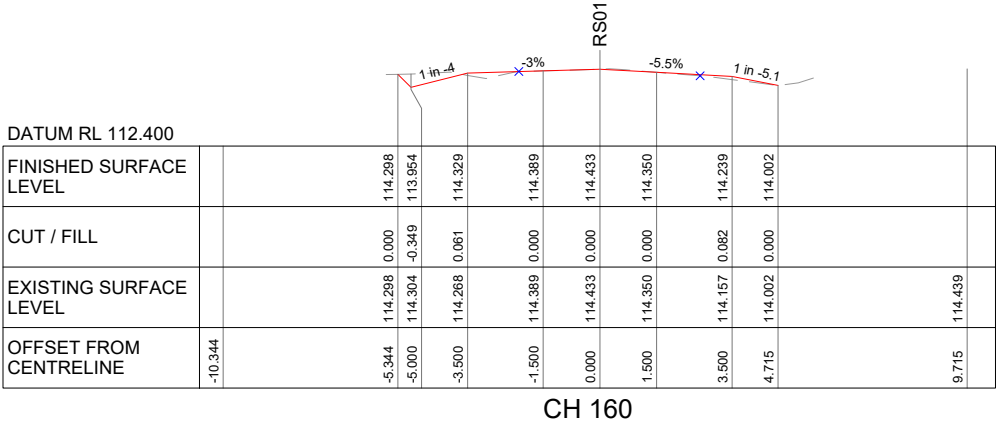
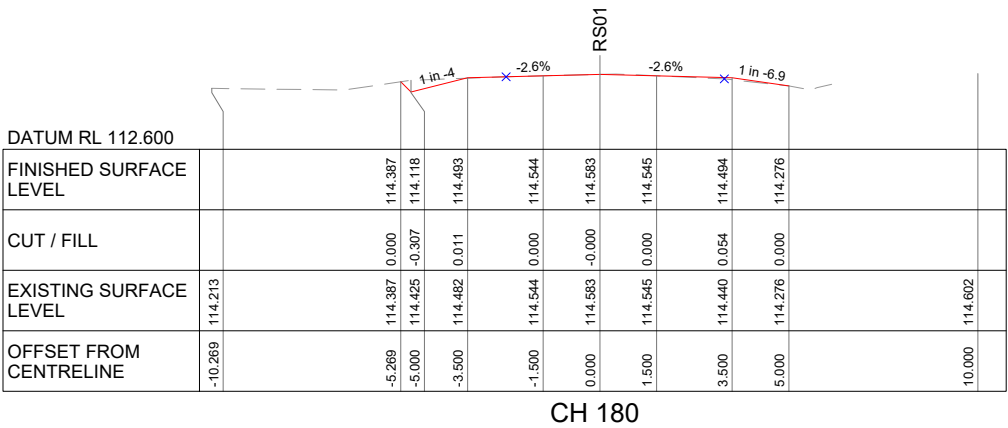
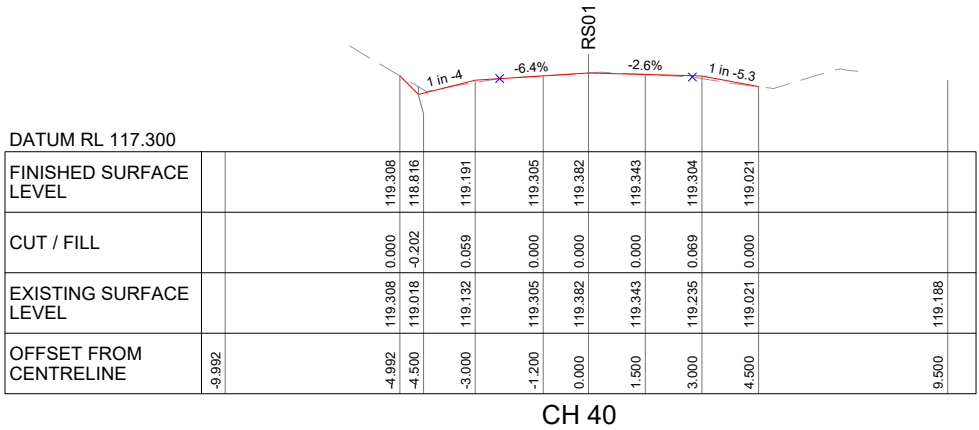
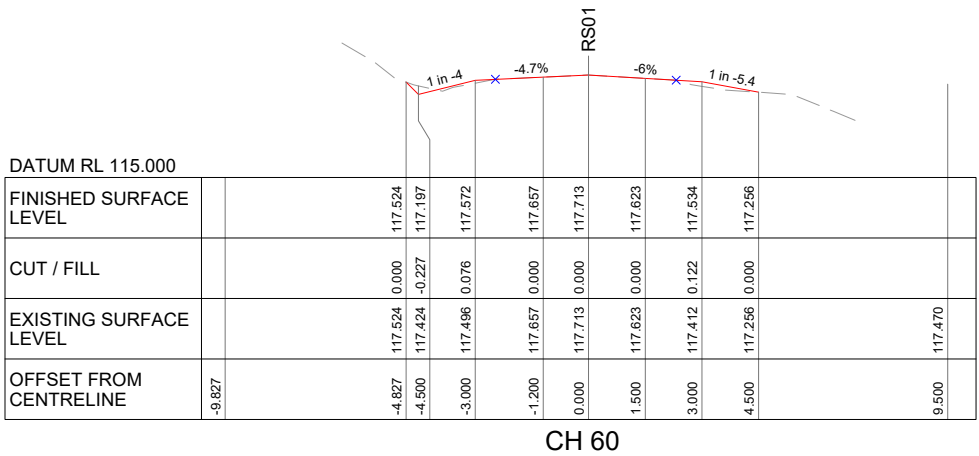
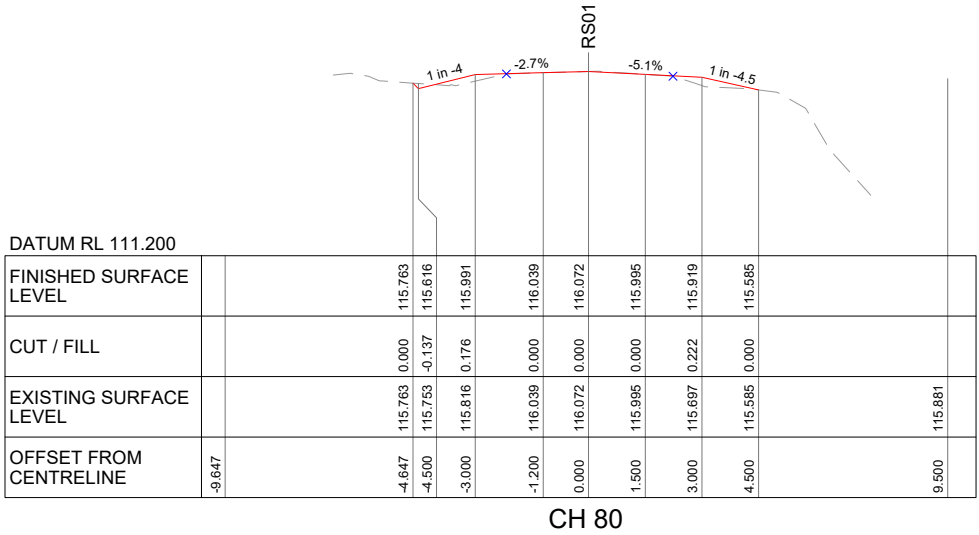
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DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
TYPICAL SECTION
SHEET 1 OF 1

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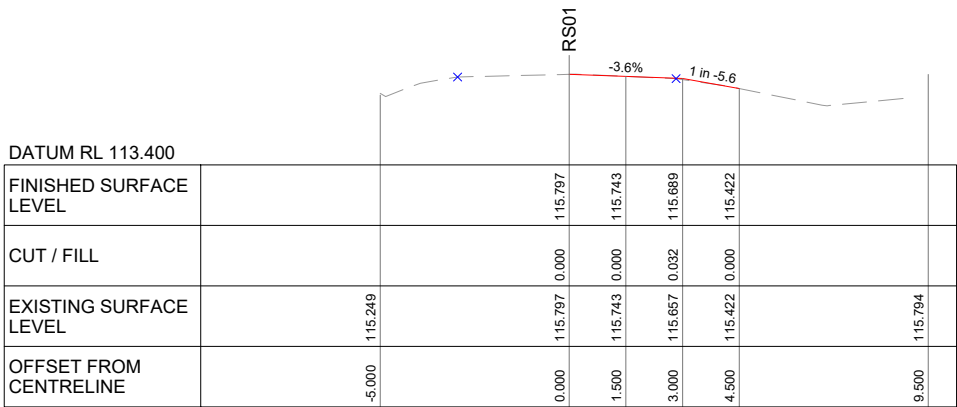
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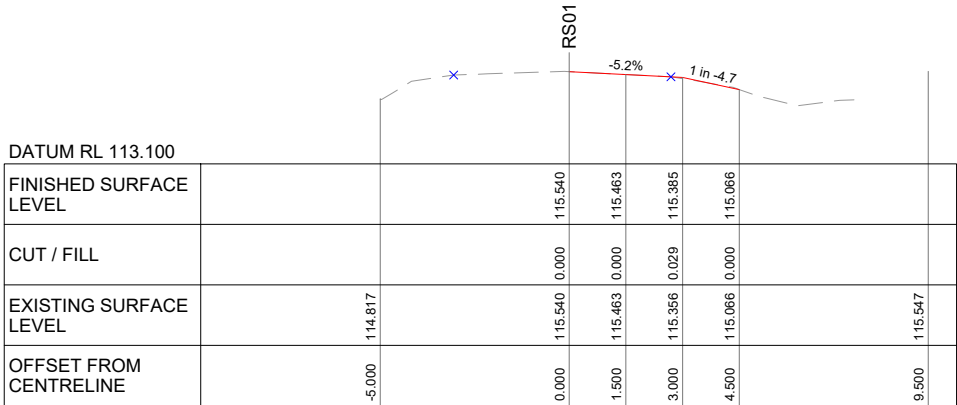
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SURVEYED	L. GARCIANO
DESIGNED	L. GARCIANO
DRAWN	R. GRUITERS
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
CROSS SECTIONS
SHEET 1 OF 7

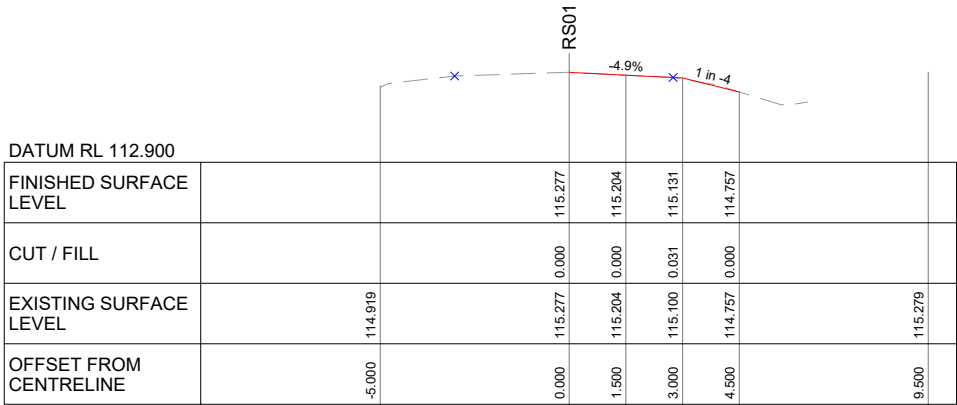
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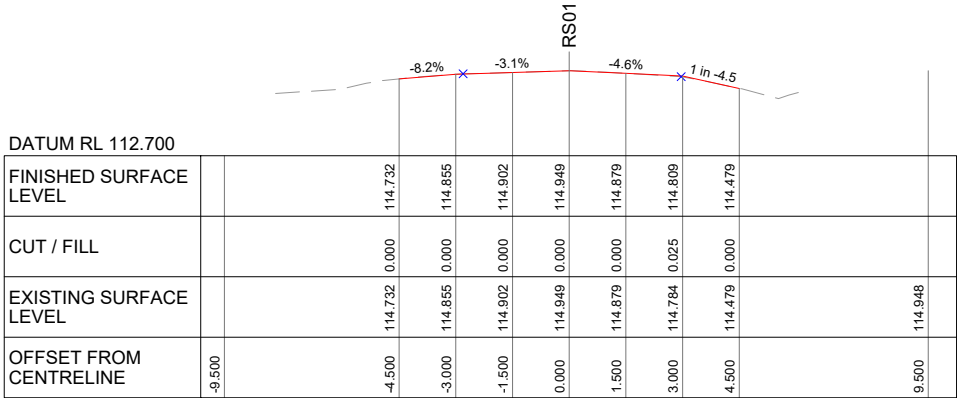
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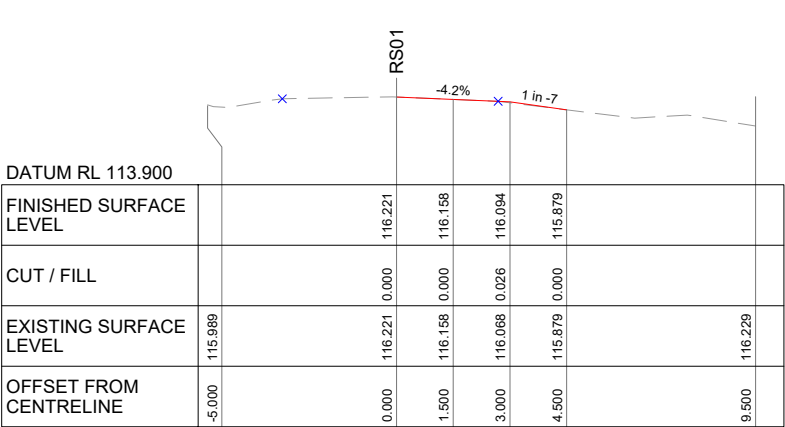
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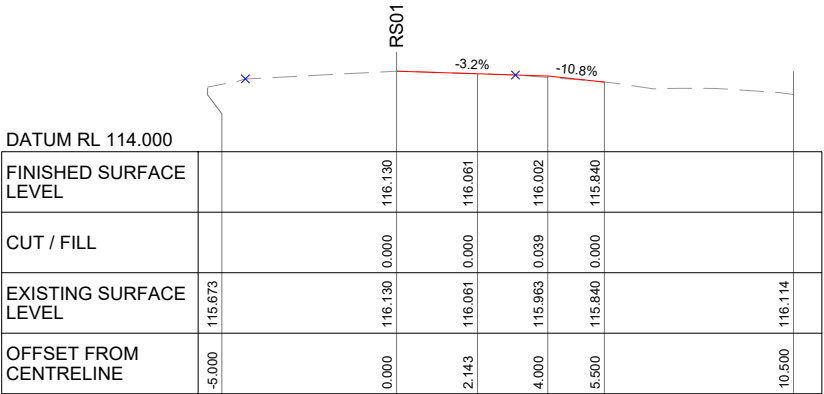
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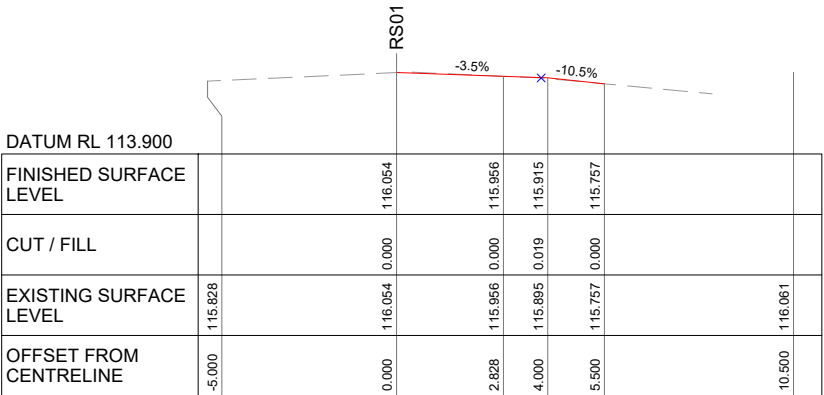
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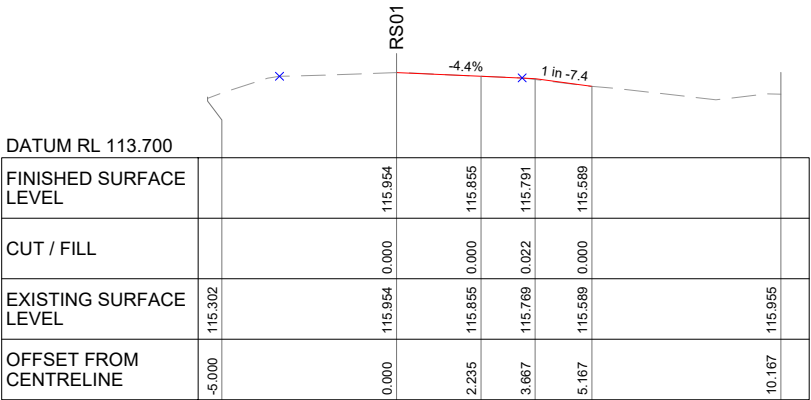
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CH 320



CH 300



CH 280

NOT FOR CONSTRUCTION

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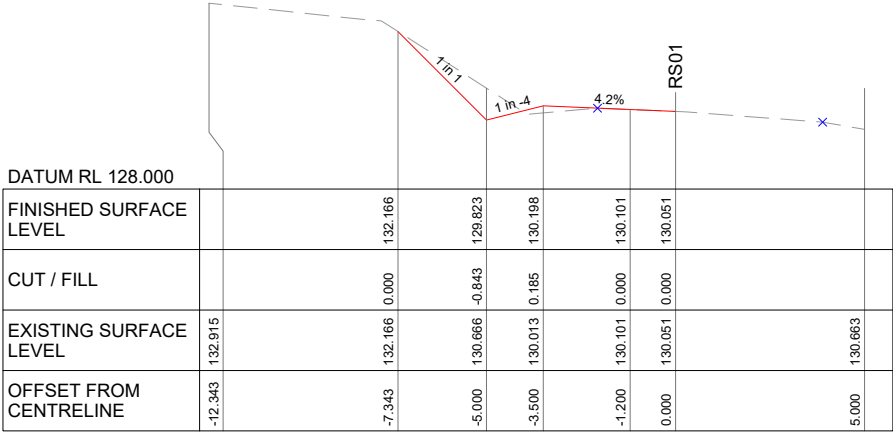
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A	ISSUED FOR DISCUSSION	LG	RG	RG
REV	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED



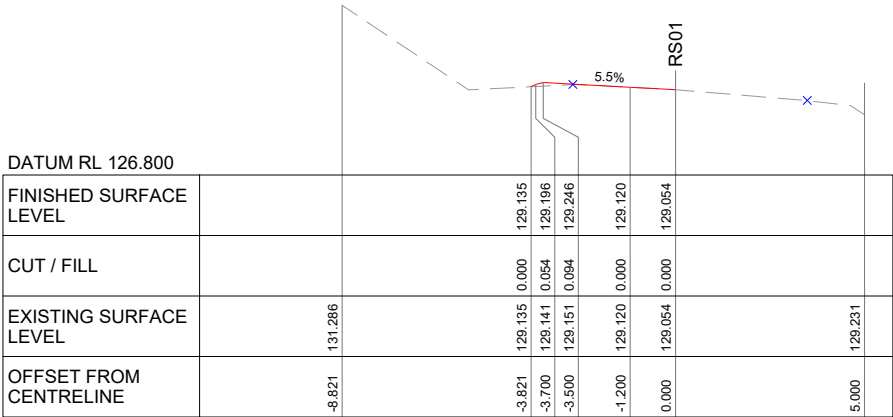
	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
CROSS SECTIONS
SHEET 2 OF 7

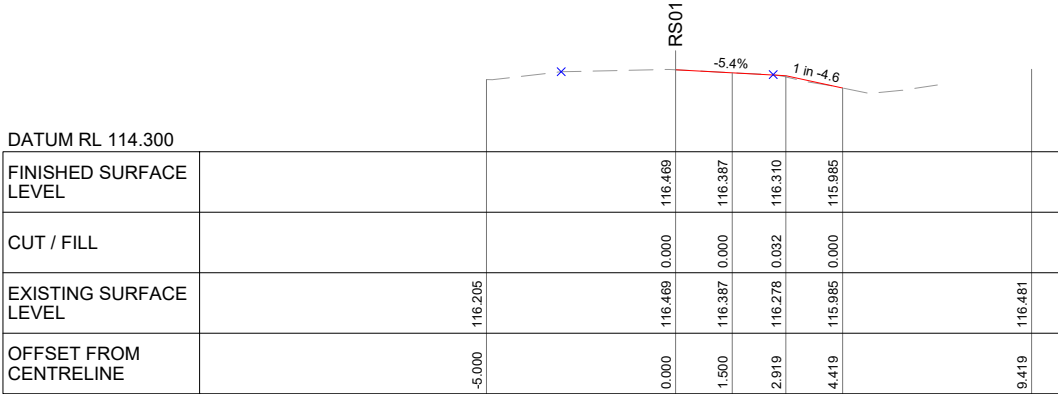
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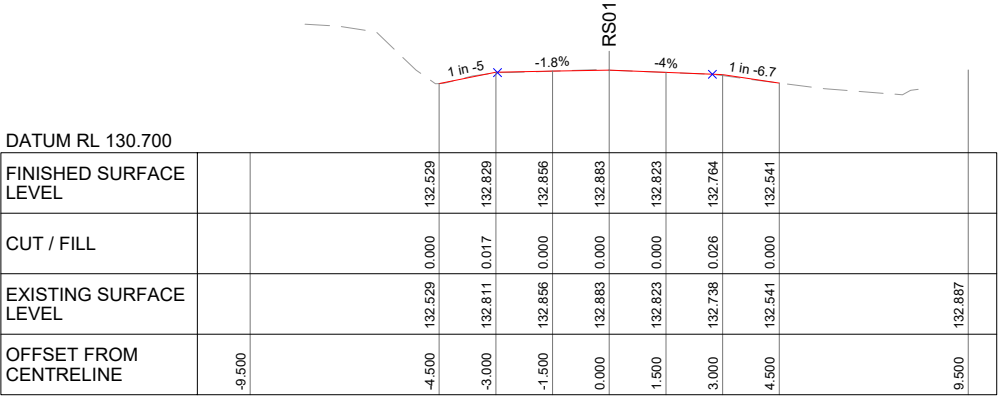
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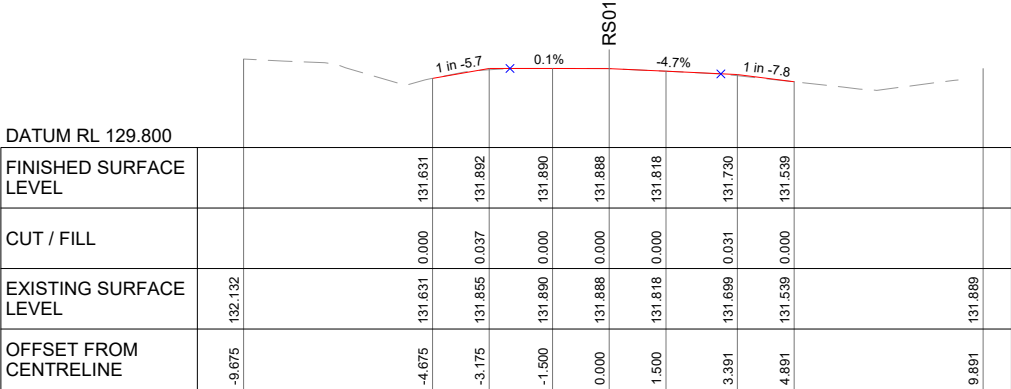
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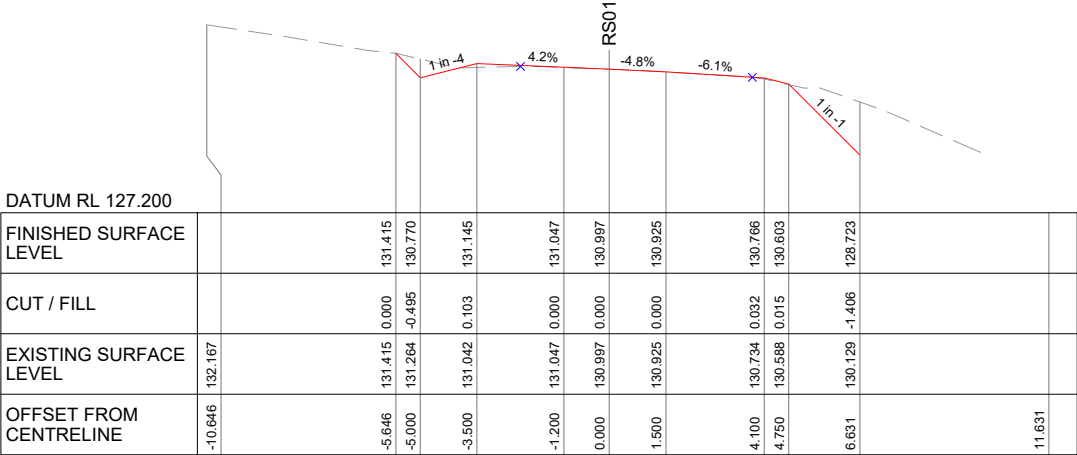
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CH 660



CH 640

NOT FOR CONSTRUCTION

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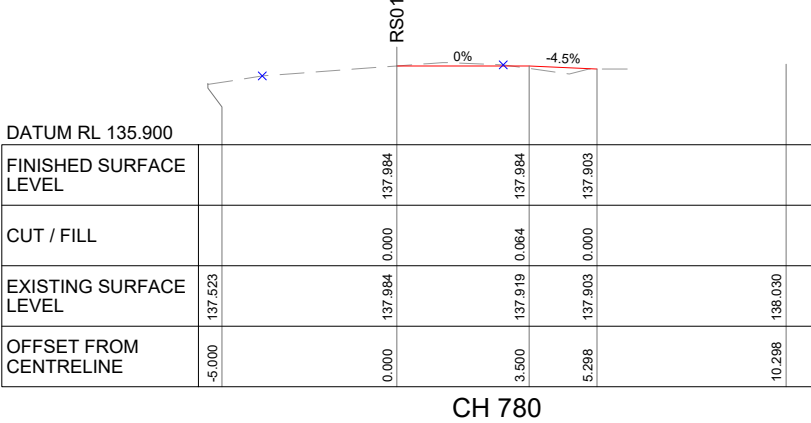
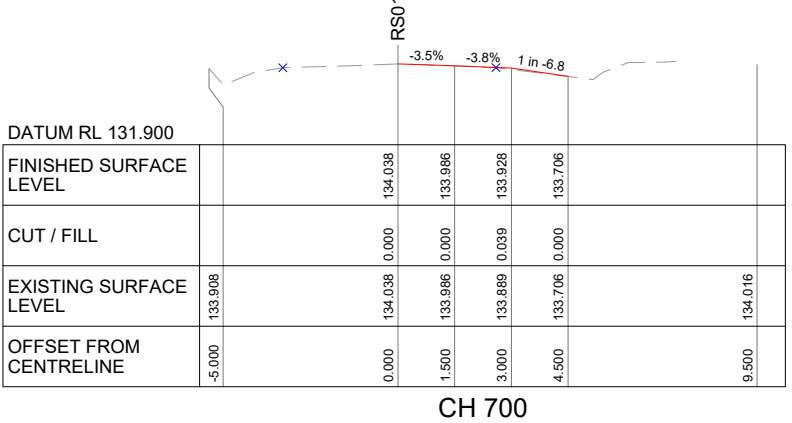
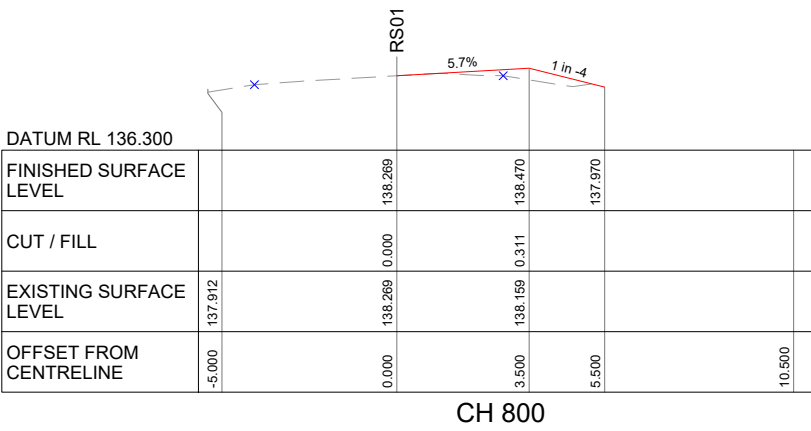
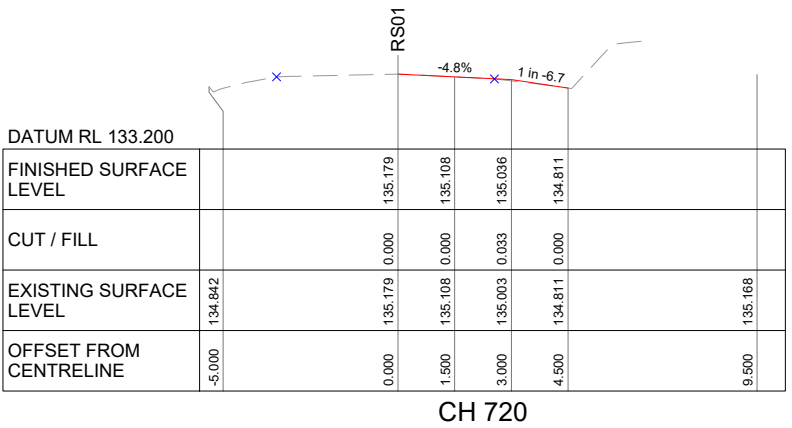
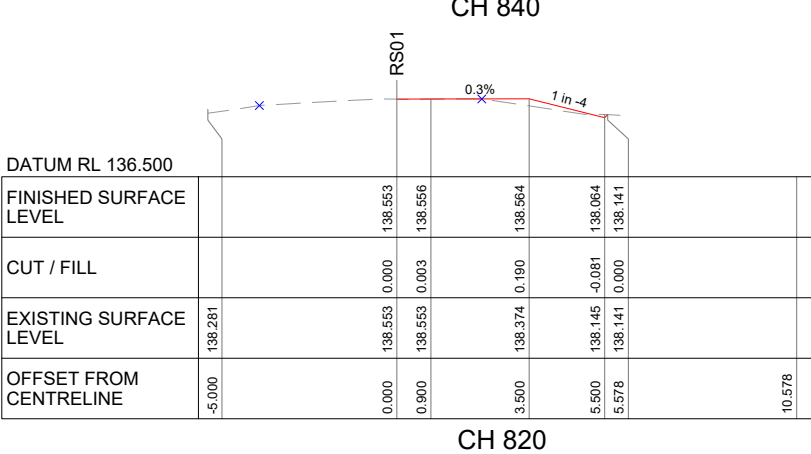
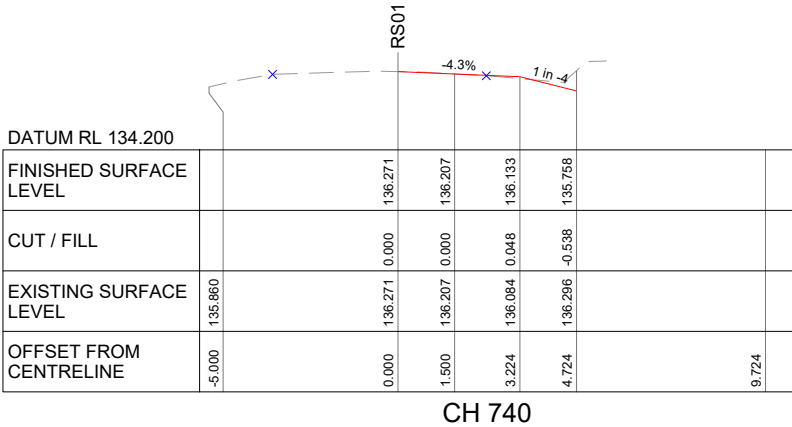
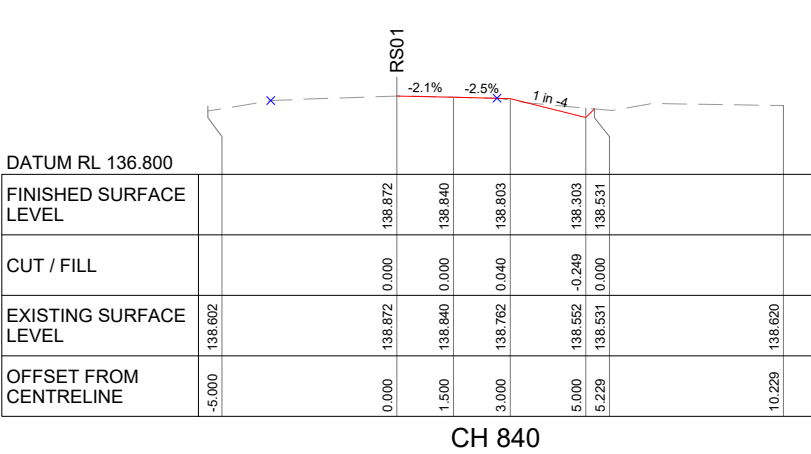
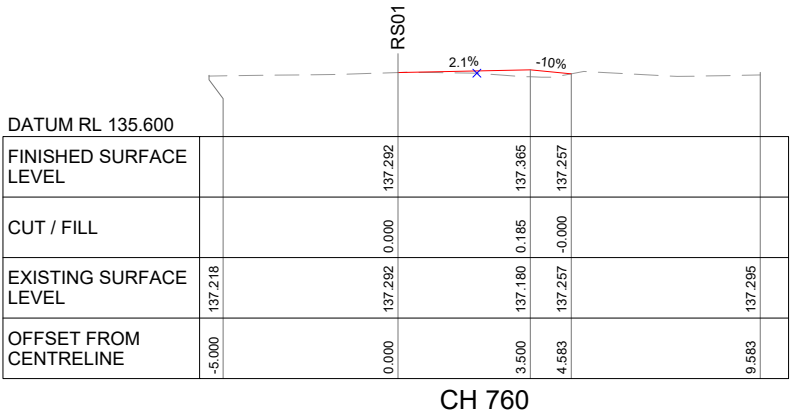
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C	UPDATED BASED ON FEEDBACK & ADDITIONAL DATA	LG	RG	RG
B	UPDATE BASED ON FEEDBACK	LG	RG	RG
A	ISSUED FOR DISCUSSION	LG	RG	RG
REV	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED



	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
CROSS SECTIONS
SHEET 3 OF 7

STATUS: FOR DISCUSSION	
DATE: 19.12.2025	SCALE AT A1: 1:100
DRAWING NO. WAI-985-000-DWG-CI-1136	REV E



NOT FOR CONSTRUCTION

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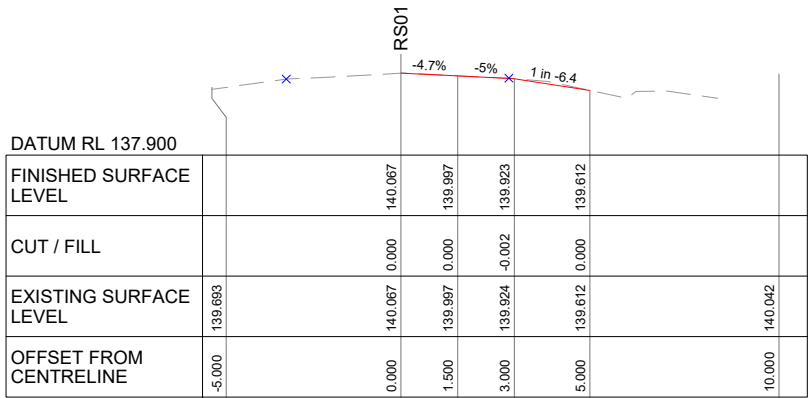
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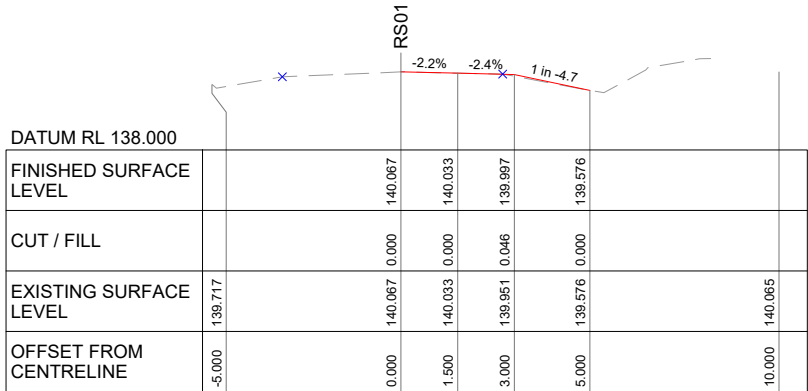
	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
CROSS SECTIONS
SHEET 4 OF 7

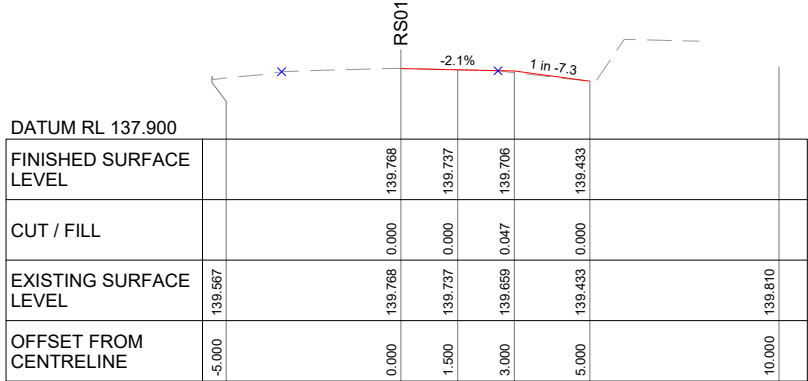
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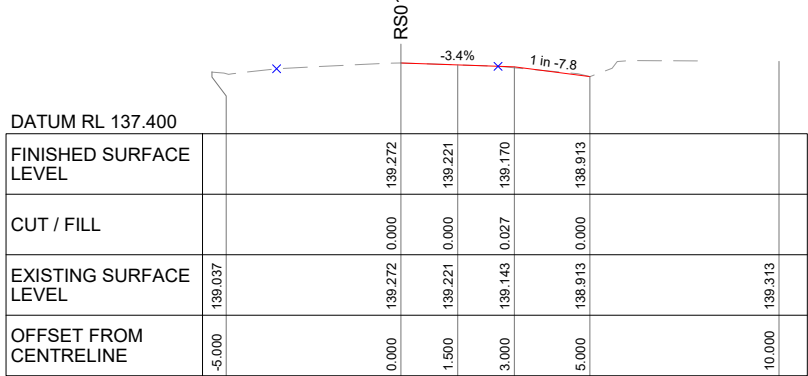
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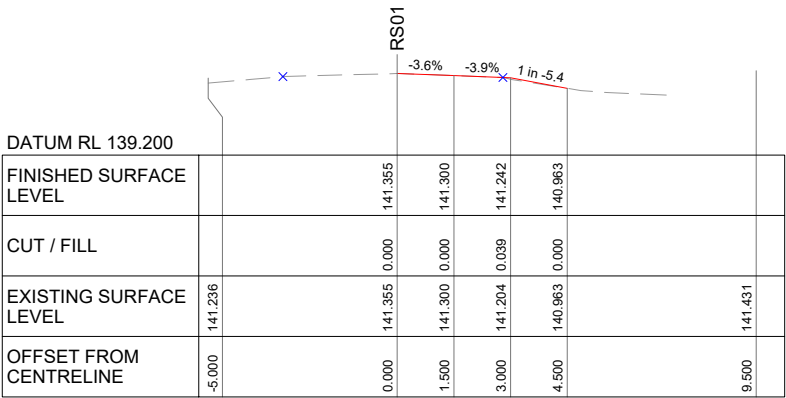
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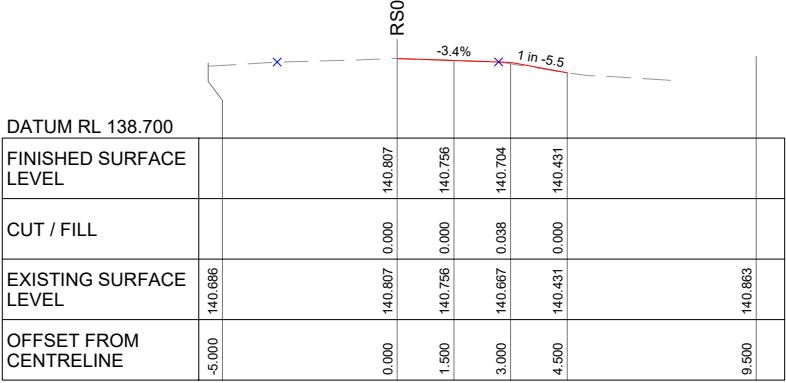
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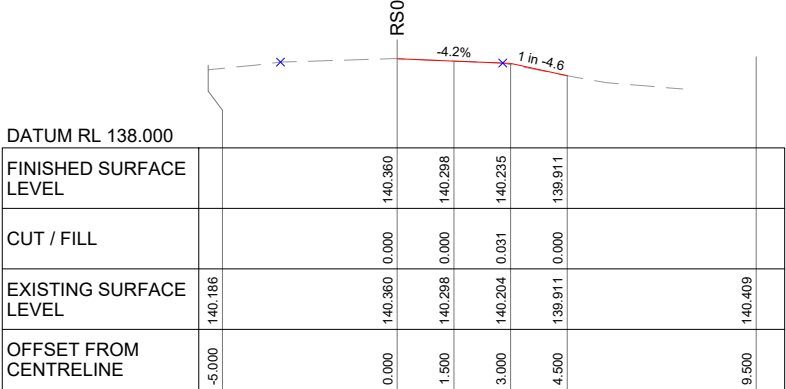
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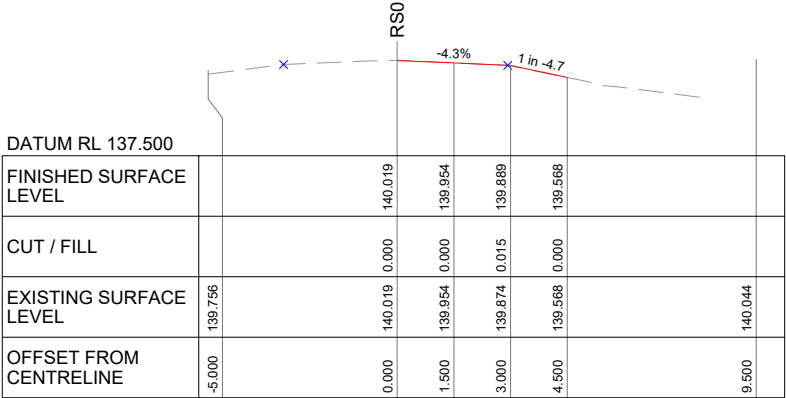
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CH 960



CH 940

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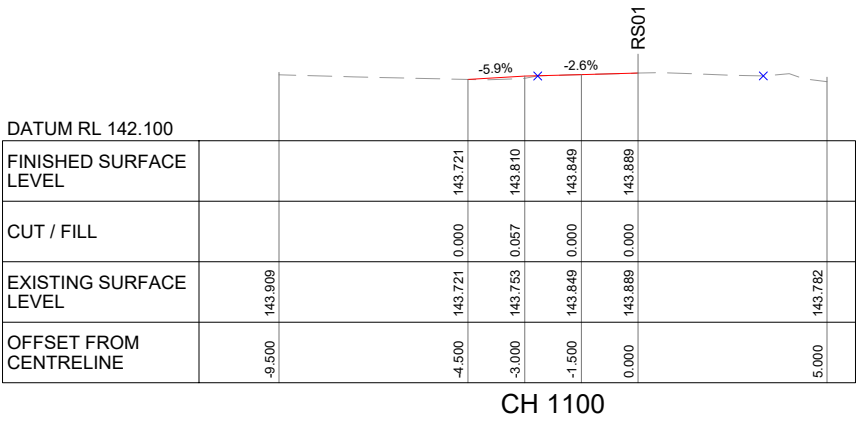
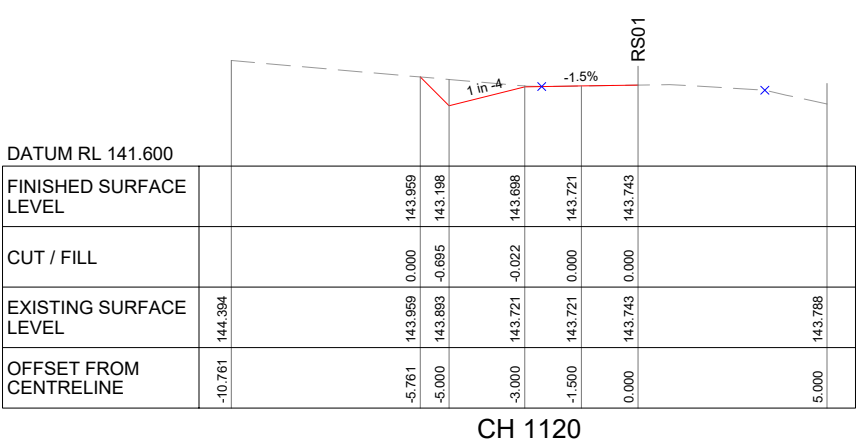
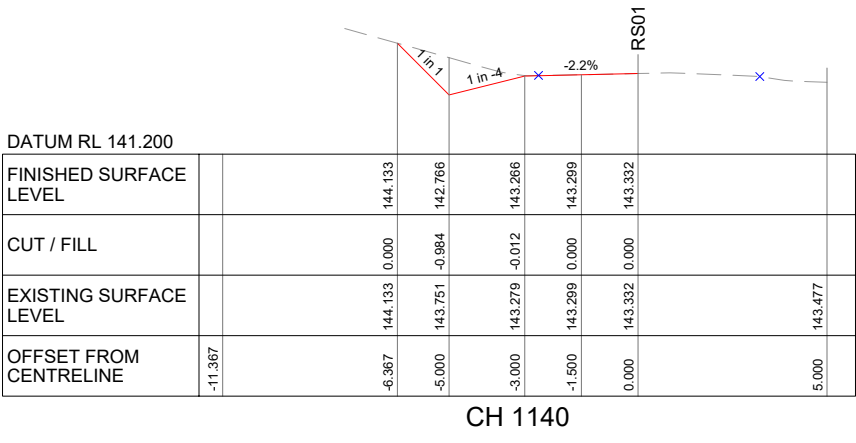
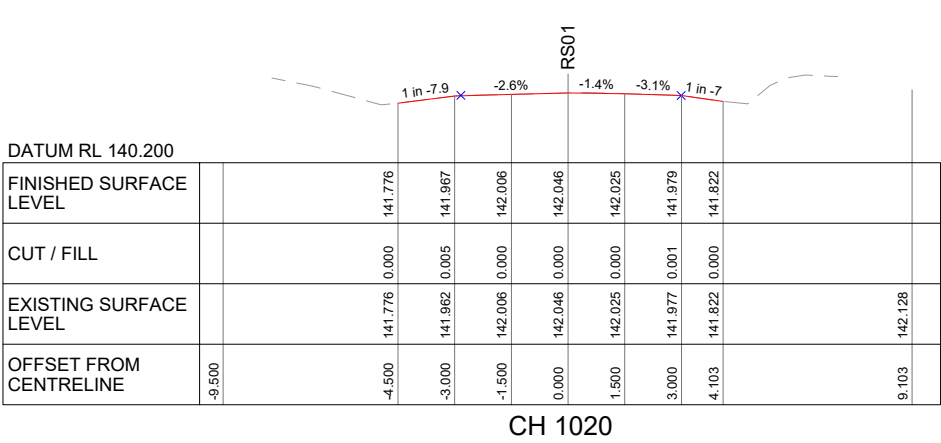
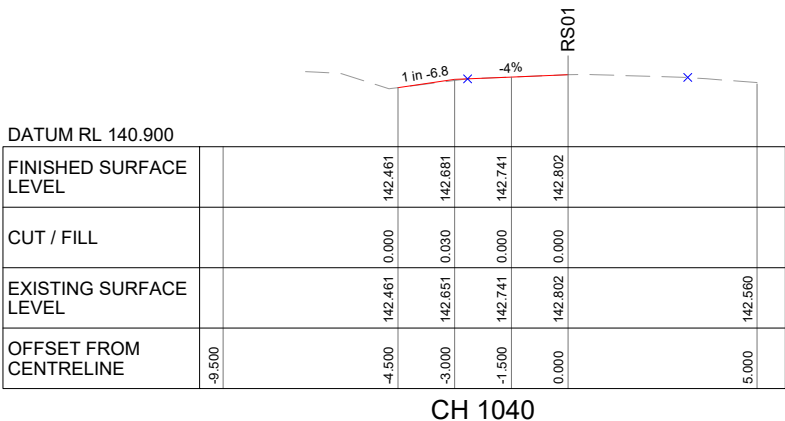
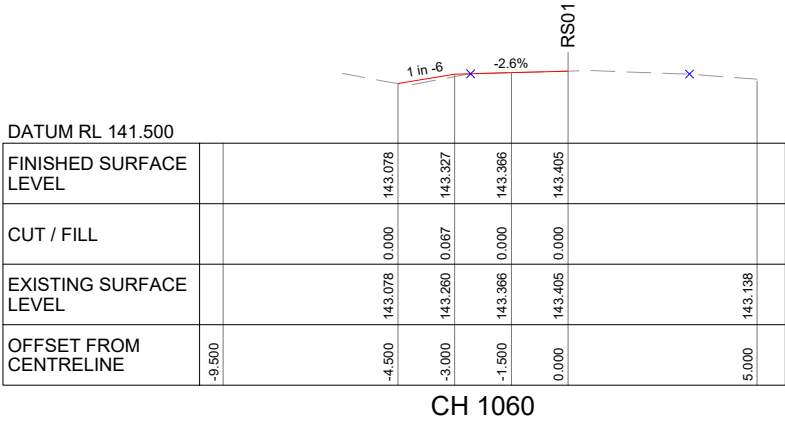
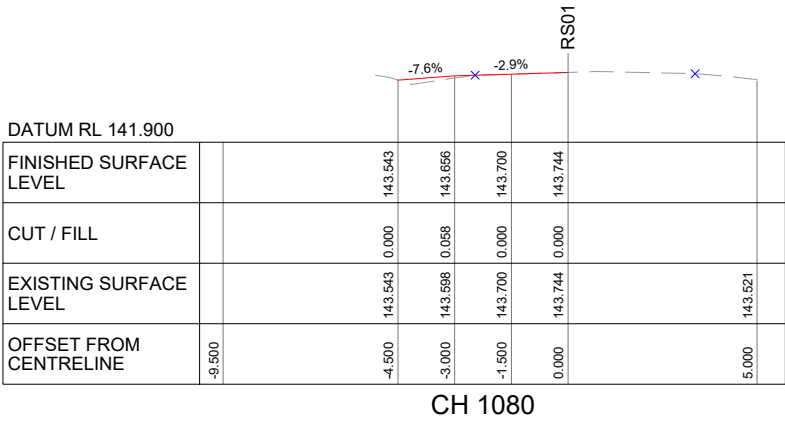
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C	UPDATED BASED ON FEEDBACK & ADDITIONAL DATA	LG	RG	RG
B	UPDATE BASED ON FEEDBACK	LG	RG	RG
A	ISSUED FOR DISCUSSION	LG	RG	RG



	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
CROSS SECTIONS
SHEET 5 OF 7

STATUS: FOR DISCUSSION	
DATE: 19.12.2025	SCALE AT A1: 1:100
DRAWING NO. WAI-985-000-DWG-CI-1138	REV E



NOT FOR CONSTRUCTION

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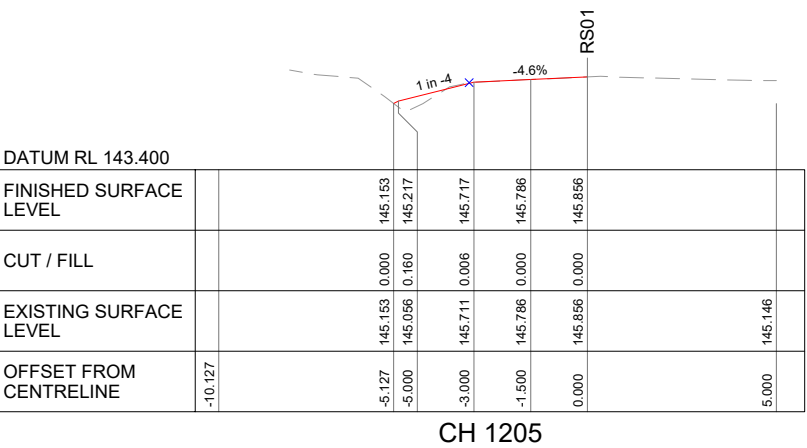
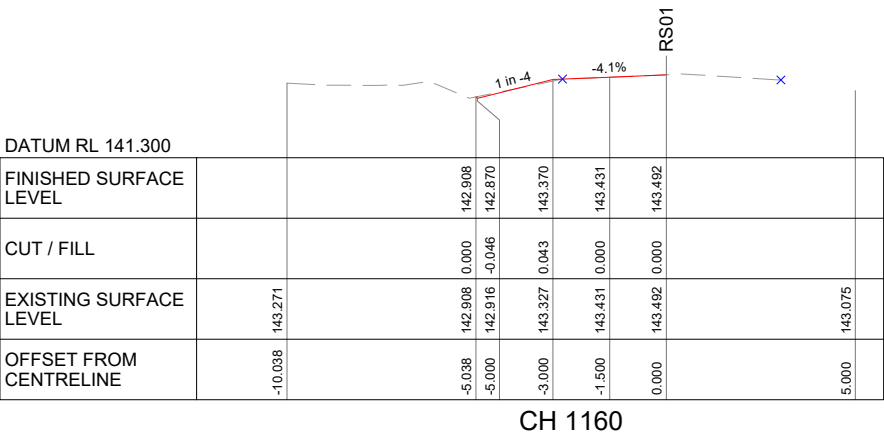
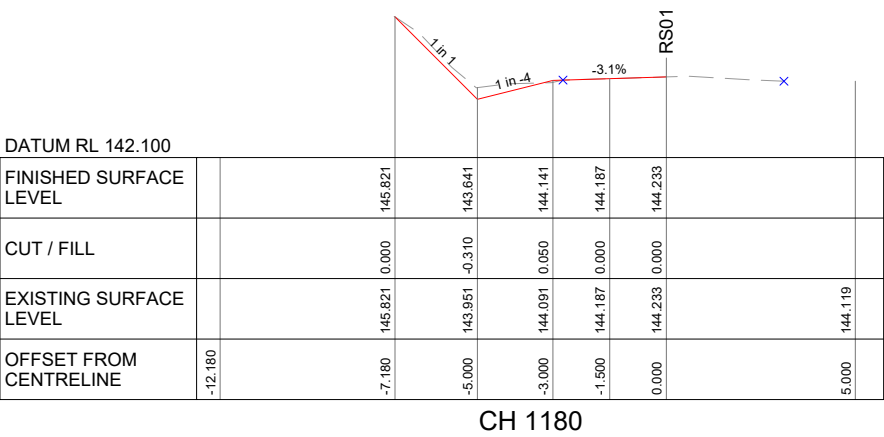
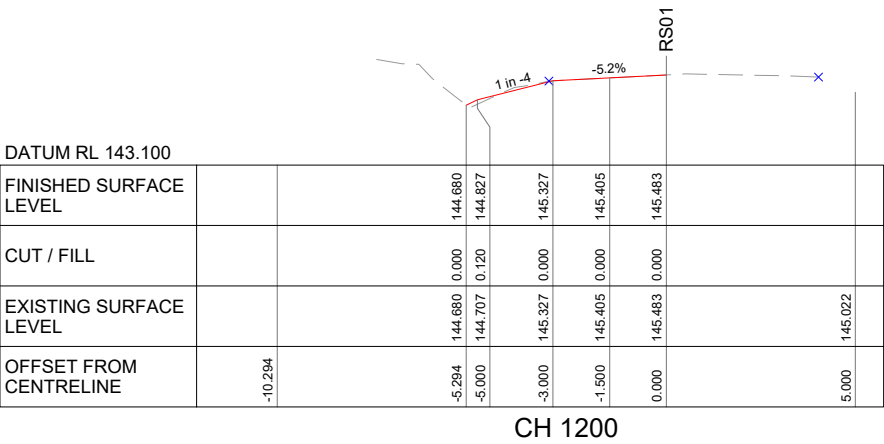
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REV	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED



	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
CROSS SECTIONS
SHEET 6 OF 7

STATUS: FOR DISCUSSION	
DATE: 19.12.2025	SCALE AT A1: 1:100
DRAWING NO. WAI-985-000-DWG-CI-1139	REV E



NOT FOR CONSTRUCTION

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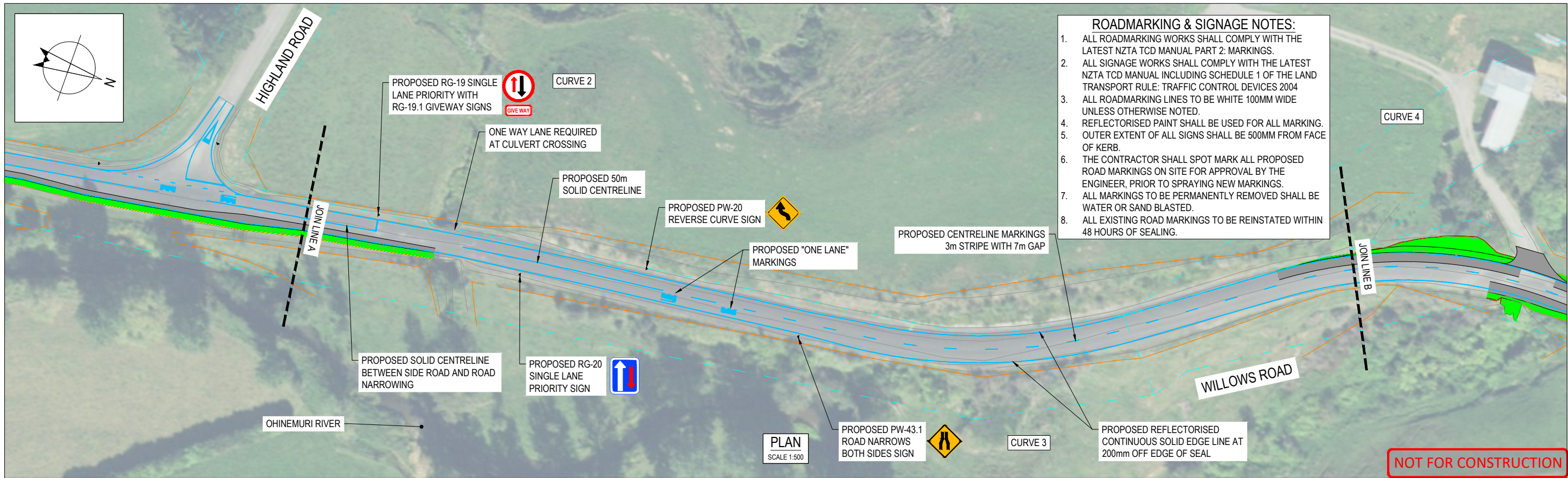
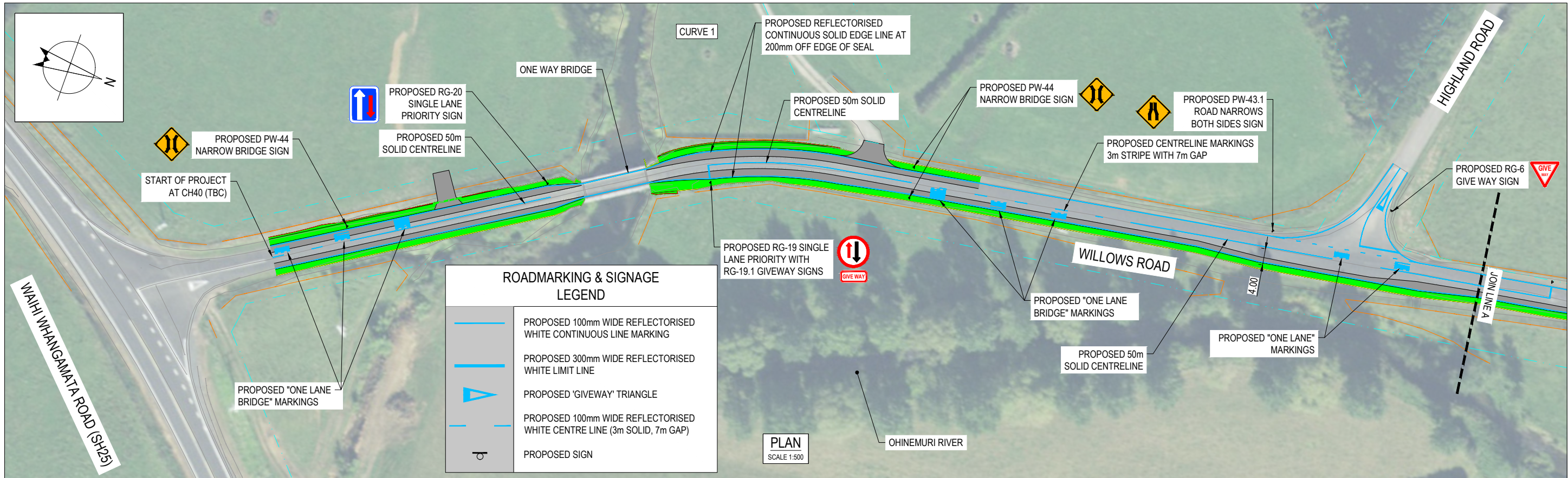
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REV	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED



	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
CROSS SECTIONS
SHEET 7 OF 7

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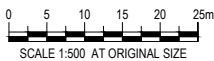


- ROADMARKING & SIGNAGE NOTES:**
1. ALL ROADMARKING WORKS SHALL COMPLY WITH THE LATEST NZTA TCD MANUAL PART 2: MARKINGS.
 2. ALL SIGNAGE WORKS SHALL COMPLY WITH THE LATEST NZTA TCD MANUAL INCLUDING SCHEDULE 1 OF THE LAND TRANSPORT RULE: TRAFFIC CONTROL DEVICES 2004
 3. ALL ROADMARKING LINES TO BE WHITE 100MM WIDE UNLESS OTHERWISE NOTED.
 4. REFLECTORISED PAINT SHALL BE USED FOR ALL MARKING.
 5. OUTER EXTENT OF ALL SIGNS SHALL BE 500MM FROM FACE OF KERB.
 6. THE CONTRACTOR SHALL SPOT MARK ALL PROPOSED ROAD MARKINGS ON SITE FOR APPROVAL BY THE ENGINEER, PRIOR TO SPRAYING NEW MARKINGS.
 7. ALL MARKINGS TO BE PERMANENTLY REMOVED SHALL BE WATER OR SAND BLASTED.
 8. ALL EXISTING ROAD MARKINGS TO BE REINSTATED WITHIN 48 HOURS OF SEALING.

NOT FOR CONSTRUCTION

CIVILTEC DRAWING NO. 17-313-C401

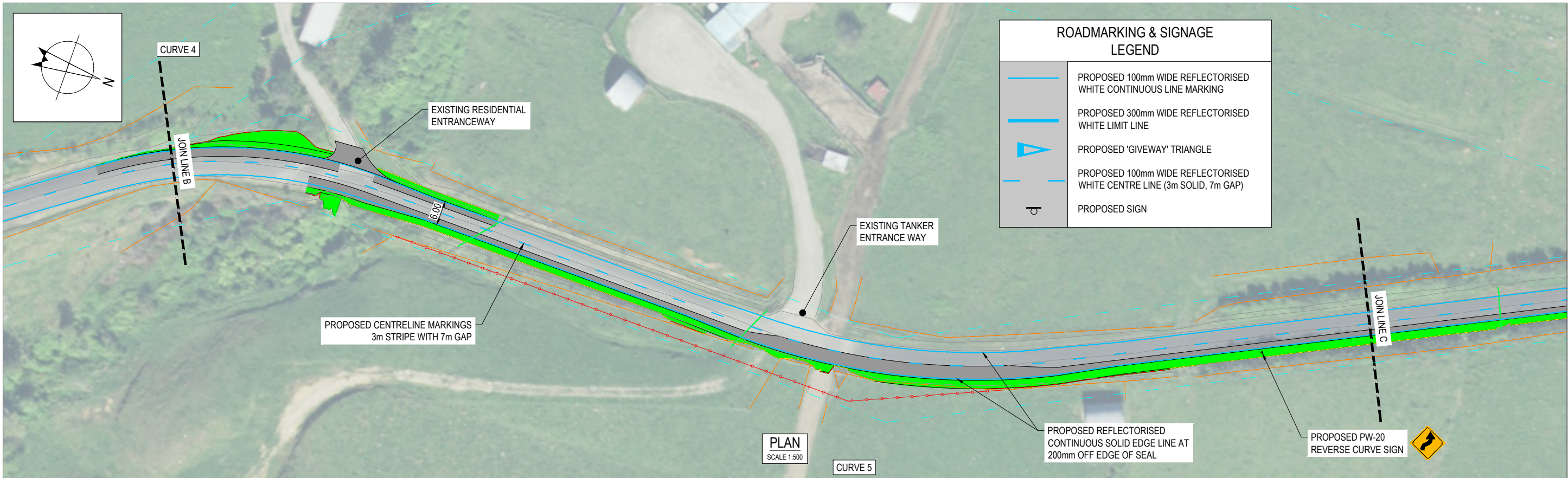
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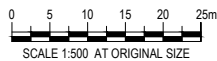
	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
ROADMARKING AND SIGNAGE PLAN
CH0 TO CH600

STATUS:	
FOR DISCUSSION	
DATE: 19.12.2025	SCALE AT A1: 1:500
DRAWING NO. WAI-985-000-DWG-CI-1141	REV E



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C	UPDATED BASED ON FEEDBACK & ADDITIONAL DATA	LG	RG	RG
B	UPDATE BASED ON FEEDBACK	LG	RG	RG
A	ISSUED FOR DISCUSSION	LG	RG	RG



	NAME
SURVEYED	PINNACLES CIVIL
DESIGNED	L. GARCIANO
DRAWN	L. GARCIANO
REVIEWED	R. GRUITERS
APPROVED	R. GRUITERS

PINNACLES CIVIL
WILLOWS ROAD WIDENING
ROADMARKING AND SIGNAGE PLAN
CH600 TO CH1205

STATUS:	FOR DISCUSSION
DATE:	19.12.2025
SCALE AT A1:	1:500
DRAWING NO.	WAI-985-000-DWG-CI-1142
REV	E

Appendix D Willows Road Peak Heavy Vehicle Activity

Table D-1. Willows Road Bulk Earthworks and Planting (At Year 1)

Task	Vehicle Type	Indicative Peak Traffic Movements (at approximately 1 year)	Comment
Trenching SH25 - Willows Farm	Trucks, equipment etc	0	Completed early (12 per day prior)
Machinery Delivery	Low Loader/own power	6	
Sheeting gravel deliveries	8 Wheel Truck and Dog	24	Over an extended period - cyclical
General deliveries	Semi trailer	10	Sporadic
Rip Rap	8 Wheel Truck and Dog	6	
Culverts	Semi trailer	0	
Stack Lining	Semi trailer	2	
Road Base and Pavement Materials	8 Wheel Truck and Dog	16	
Asphalt	Tipper	8	Campaign based - sporadic
Silt Pond and Drains	8 Wheel Truck and Dog	6	
Potable Water	Semi trailer	2	Daily assumed
Refuelling	6 Wheeler truck	2	Occasional
Waste/Refuse	6 Wheeler truck	4	Daily assumed
Machinery Returns	Low Loader/own power	4	Extremely infrequent. Max at mob/demob times.
Indicative Combined Total (Conservative addition of movements)		90	



Construction Traffic Management Plan - Area 2
Appendix D Willows Road Peak Heavy Vehicle Activity

Table D-2. Surface Infrastructure Development (At Year 1)

Task	Vehicle Type	Indicative Peak Traffic Movements (at approximately 1 year)	Comment
Machinery Delivery	Low Loader/own power	7	Peak.
General deliveries	Semi trailer/ HR/MR	10	Peak. Sporadic
Concrete Agitators	6m³ Capacity	16	Peak. Small pours largely sporadic
SH25 -Willows Intersection Upgrade	Various	24	
Machinery Return	Low Loader/own power	9	Peak.
Indicative Combined Total (Conservative addition of movements)		66	

Table D-3. Tunnelling (At Year 1)

Task	Vehicle Type	Expected Total Return Trips	Indicative Peak Traffic Movements (at approximately 1 year)	Comment
Machinery Delivery	Low Loader/own power	Not calculated	16	Peak.
General deliveries	Semi trailer/ HR/MR	Not calculated	12	Sporadic.
Spares	MR	Not calculated	0	Peak.
Poly	MR	Not calculated	4	Peak.
Ducting	MR	Not calculated	2	Peak.
Shotcrete/Grout	6m³ Agitator	Not calculated	12	Peak. Campaigns only and sporadic
Machinery Return	Low Loader/own power	Not calculated	0	Peak.
Indicative Combined Total (Conservative addition of movements)			46	



Appendix E Staff Travel Plan Provisions

E.1 Expected Parking Demand Calculations

Table E-1. Willows Road Employees by Activity and Point of Access

Mode	Year 1	Year 2	Year 3	Year 4
Kenny Street P&R Construction	0	70	143	50
Kenny Street P&R Mining (day)	0	0	22	34
Kenny Street P&R Mining (night)	0	0	19	28
Kenny Street P&R Total	0	70	184	112
Willows Road Construction	0	20	40	14
Willows Road Mining	0	0	8	10
Willows Road Total	0	20	48	24

Table E-2. Willows Road Employee Vehicles by Activity and Point of Access

Mode	Proportion Driver	Year 1	Year 2	Year 3	Year 4
Kenny Street P&R Construction	90%	0	63	129	45
Kenny Street P&R Mining (day)	90%	0	0	20	31
Kenny Street P&R Mining (night)	90%	0	0	17	25
Kenny Street P&R Total		0	63	166	101
Willows Road Construction	75%	0	15	30	11
Willows Road Mining	90%	0	0	7	9
Willows Road Total		0	15	37	20

Table E-3. Willows Road Bus / Mini-Van by Activity and Point of Access

Mode	Bus PAX	Year 1	Year 2	Year 3	Year 4
Kenny Street P&R Construction Min-Van	10	0	7	13	5
Kenny Street P&R Mining (day) - Bus	18	0	0	2	2
Kenny Street P&R Mining (night) - Bus	18	0	0	1	2
Kenny Street P&R Total Bus		0	7	16	9



Construction Traffic Management Plan - Area 2

Appendix E Staff Travel Plan Provisions

This indicates initial demand for parking approximately as follows:

Kenny Street Park and Ride Site:

- Short term peak demand of approximately 170 car parking spaces
- Short term peak mini-van parking for approximately 13 mini-vans. Expect that a staggered start and finish will enable mini-vans to do shuttle runs reducing requirements for number of mini-vans. Larger buses may also support more efficient transport outcomes.
- Bus parking for approximately 2 buses.

Willows Road Area 2 Site:

- Parking required for approximately 40 car parking spaces
- Short term peak mini-van parking for approximately 13 mini-vans. Expect that a staggered start and finish will enable mini-vans to do shuttle runs reducing requirements for number of mini-vans. Larger buses may also support more efficient transport outcomes.
- Bus parking for approximately 2 buses.



E.2 Plan of Kenny Street Staff and Bus Parking Areas



Appendix F Willows Road Stock Crossings

Known Stock Crossing Locations

- 407 Waihi - Whangamata (SH25) Road, Waihi: One landowner between SH25 and Highland Road has 44.5ha land both sides of Willows Road, no obvious regular stock crossing.



Figure F-1: 407 Waihi - Whangamata (SH25) Road

Known stock crossing movements: _____

Landowner Contact Details: _____



Construction Traffic Management Plan - Area 2
Appendix F Willows Road Stock Crossings

- 65 Willows Road, Waihi: One landowner north of Highlands Road has land both sides with a dairy cow stock crossing to service a 53.0ha landholding. Approximately 35% of the land is located on the east side of Willows Road, requiring a crossing to the shed.



Figure F-2: 65 Willows Road, Waihi

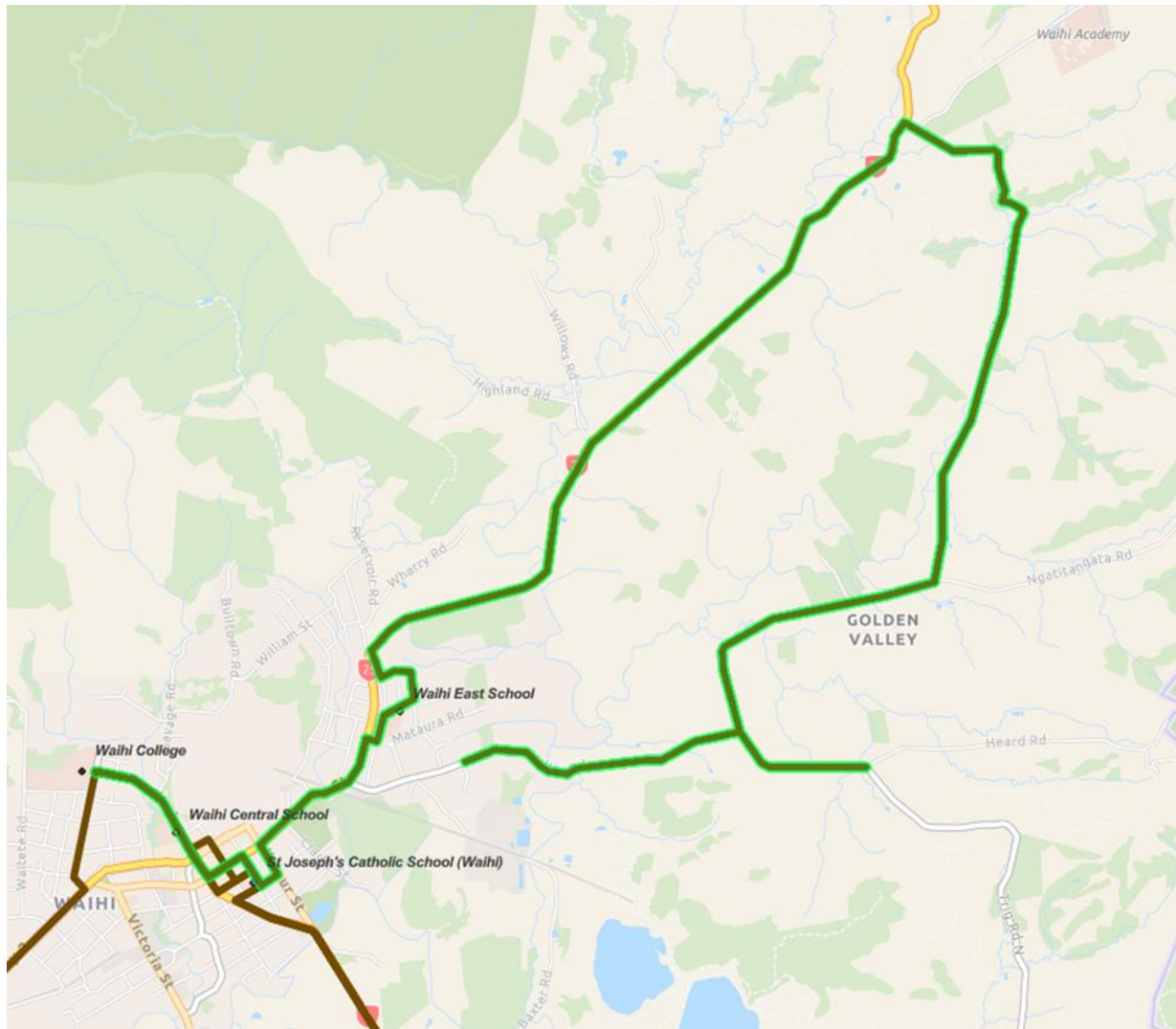
Known stock crossing movements: _____

Landowner Contact Details: _____



Appendix G School Bus Routes and Contact Details

Current School Bus Route Map – as at October 2025



Known Bus Stops on Willows Road or at SH25 in vicinity of Willows Road:

- Not known, to be confirmed in consultation with school bus operator and local community

Timing of School Bus movements on SH25 or Willows Road:

- Not known, to be confirmed in consultation with school bus operator and local community

Contact Details

School Bus operator contact details

Name. _____ ph. _____ Role



Appendix H Over-weight and Over-dimension Route Constraints

50 Max Routes –

<http://nzta.maps.arcgis.com/apps/webappviewer/index.html?id=28cdbf52c1664e92a1a84d6a5bdcf575>

- HDC Roads No restrictions identified for access to Site
- SH2 – No restrictions identified Tauranga to Site
- SH25 – No restrictions identified SH1 to Site

HPMV routes –

<https://experience.arcgis.com/experience/7a56fbc0c4fb47c78a5f1fc2e55cae7b>

- SH2 Waihi to Tauranga is full HPMV route
- SH2 west of Waihi is NOT a full HPMV route
- SH25 from SH2 to eastern edge of Waihi is a full HPMV route
- SH25 east of Waihi is NOT a full HPMV route



Appendix I Condition 86 Compliance Checklist

Condition 86 Requirement	CTMP Section Reference	HDC Certified	Further Comment
a) Details of how legislative requirements and consent conditions in relation to construction traffic will be satisfied;	1, 10		
b) The proposed construction programme, traffic volumes and routes;	2, 3, 4, 5		
c) Driver protocols;	8		
d) Measures to manage over-weight and over-dimension loads;	9.6		
e) Measures to maintain access to manage effects on adjacent properties and farm operations, including stock crossings;	9.2, 9.3		
f) School bus routes and timetables;	9.5		
g) Communication arrangements;	11		
h) Monitoring requirements (including in relation to road pavements);	9.1, 10		
i) Management measures for work within the public road corridor, including;	8		
i) To manage existing road users with respect to construction traffic associated with work in the road corridor;	8.4 - 8.7		
ii) To ensure that all roads remain open to traffic at all times, except where temporary traffic control may be employed to partially close lanes or shoulders, provided that any traffic delays do not exceed five minutes at any one time during the day, or a cumulative period of 30 minutes within an hour, unless otherwise agreed upon with the Consent Authority. When the site is unattended the maximum length of single lane shall be managed by automated signals to minimise delays to less than one minute;	8.4- 8.7		



Construction Traffic Management Plan - Area 2

Appendix I Condition 86 Compliance Checklist

iii) To ensure access to properties is maintained at all times unless otherwise agreed with the property owner;	9.2		
j) Measures to manage arrivals and departures over the construction period, including:	2.3		
i) Monitoring of traffic distribution and performance at the intersection of Baxter Road and State Highway 2 during periods of high traffic volume; and	Not Applicable		
ii) An adaptive management approach which triggers modification of management measures where monitoring shows the acceptable levels of service at the intersection are not being achieved;	Not Applicable		
k) Management of aggregate cartage routes, including any necessary measures relating to the use of Crean Road by heavy vehicles travelling to and from Areas 5, 6 and 7 via Baxter Road;	Not Applicable		
l) Identification and provision of adequate on-site (or offsite) parking for each Area for the project duration to ensure compliance with Condition 83;	9.4		
m) Measures to facilitate and manage the bussing of shift workers to the Willows Road Surface Area Facilities located in Area 2;	6		
n) Management of deliveries to each Area; and	5		
o) For Areas 5, 6 or 7, management of any use of Moore Street to gain access in the event of a flooding event should this be required.	Not Applicable		







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