

BAL – AS3959 – Construction Requirements

	BAL – LOW	BAL – 12.5	BAL – 19	BAL – 29	BAL – 40	BAL – FZ
SUBFLOOR SUPPORTS	No special construction requirements	No special construction requirements	No special construction requirements	Enclosure by external wall or by steel, bronze or aluminium mesh, non-combustible supports where the subfloor is unenclosed, naturally fire resistant timber stumps or posts on 75mm metal stirrups	If enclosed by external wall refer below 'External Walls' section in table or non-combustible subfloor supports or tested for bushfire resistance to AS1530.8.1	Subfloor supports – enclosure by external wall or non-combustible with an FRL of 30/-/- or be tested for bushfire resistance to AS1530.8.2
FLOORS	No special construction requirements	No special construction requirements	No special construction requirements	Concrete slab on ground, enclosure by external wall, metal mesh as above or flooring less than 400mm above ground level to be non-combustible, naturally fire resistant timber or protected on the underside with sarking or mineral wool insulation	Concrete slab on ground, enclosed by external wall or protection of underside with non-combustible material such as fibre cement sheet or be non-combustible or be tested for bushfire resistance to AS1530.8.1	Concrete slab on ground or enclosure by external wall or an FRL of 30/30/30 or protection of underside with 30 minute incipient spread of fire system or to be tested for bushfire resistance to AS1530.8.2
EXTERNAL WALLS	No special construction requirements	As for BAL-19	External walls – Parts less than 400m above ground or decks etc to be of non-combustible material, 6mm fibre cement clad or bushfire resistant/naturally fire resistant timber	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 6mm fibre content sheeting or steel sheeting or bushfire resisting timber	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 9mm fibre content sheeting or steel sheeting or be tested for bushfire resistance to AS1530.8.1	Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete) with minimum thickness of 90mm or an FRL of -/30/30 when tested from outside or be tested for bushfire resistance to AS1530.8.2
EXTERNAL WINDOWS	No special construction requirements	As for BAL-19 except that 4mm Grade A safety glass can be used in place of 5 mm toughened glass	Protected by bushfire shutter, completely screened with steel, bronze or aluminium mesh or 5mm toughened glass or glass blocks within 400mm of ground, deck etc. Openable portion metal screened with frame of metal or metal reinforced PVC-U or bushfire resisting timber	Protected by bushfire shutter, completely screened with steel, bronze or aluminium mesh or 5mm toughened glass or glass with openable portion metal screened and frame of metal or metal reinforced PVC-U or bushfire resisting timber and portion within 400mm of ground level screened.	Protected by bushfire shutter or 5mm toughened glass. Openable portion screened with steel or bronze mesh.	Protected by bushfire shutter or FRL of -/30/- and openable portion screened with steel or bronze mesh or be tested for bushfire resistance to AS1530.8.2

	BAL – LOW	BAL – 12.5	BAL – 19	BAL – 29	BAL – 40	BAL – FZ
EXTERNAL DOORS	No special construction requirements	As for BAL-19 except that door framing can be naturally fire resistant (high density) timber	Protected by bushfire shutter, or screened with steel bronze or aluminium mesh or glazed with 5mm toughened glass, non-combustible or 35mm solid timber for 400mm above threshold, metal or bushfire resisting timber framed for 400mm above ground, decking, etc tight fitting with weather strips at base.	Protected by bushfire shutter, or screened with steel bronze or aluminium mesh or non-combustible or 35mm solid timber for 400mm above threshold. Metal or bushfire resisting timber framed tight fitting with weather strips at base.	Protected by bushfire shutter, non-combustible or 35mm solid timber, metal framed tight-fitting with weather strips at base	Protected by bushfire shutter or tight-fitting with weather strips at base and an FRL or -/30/-
ROOFS	No special construction requirements	As for BAL-19	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked.	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked.	Non-combustible covering. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. Roof to be fully sarked and no roof mounted evaporative coolers	Roof with FRL of 30/30/30 or tested for bushfire resistance to AS1530.8.2. Roof/wall junction sealed. Openings fitted with non-combustible ember guards. No roof mounted evaporative coolers
VERANDAHS DECKS ETC	No special construction requirements	As for BAL-19	Enclosed sub-floor space – no special required for materials except within 400mm of ground. No special requirements for supports or framing. Decking to be non combustible or bushfire resistant within 300mm horizontally and 400mm vertically from a glazed element.	Enclosed sub –floor space or non-combustible or bushfire resistant timber supports. Decking to be non-combustible	Enclosed sub-floor space or non-combustible supports. Decking to be non-combustible	Enclosed sub-floor space or non-combustible supports. Decking to have no gaps and be non-combustible



**DALTON
CONSULTING
ENGINEERS**

Palmerston Substation BESS STORMWATER MANAGEMENT STRATEGY

September 2023

DCE Ref: 23154

FOR



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Executive Summary

This report presents the stormwater management strategy (SWMS) for the proposed Battery Energy Storage System (BESS) project at Palmerston Substation located in Northern Midlands Council, Tasmania. The proposed project (subject site) comprises approximately 1.2 hectares and will be developed as battery storage. The site also will contain a maintenance facility, carpark, water tank and fire break.

The SWMS discusses appropriate management of external stormwater and groundwater flows to avoid inundation or changes to existing flow regimes. The SWMS also addresses containment of water used for firefighting at the facility—the report recommends a location to block to isolate surface water from the subject site.

In the existing condition, two existing overland flow paths, naturalised open swales, convey stormwater through the south of the subject site. An existing pit and underground drain, located at the east of the site, captures stormwater runoff and potentially saline groundwater. Conversations with stakeholders have highlighted the potential risk the groundwater poses to surrounding farmland. Ensuring safe conveyance of the groundwater as well as maintaining groundwater discharge to the existing discharge point is critical to managing surface water at the subject site.

In the developed condition, a Southern Swale, Western Catch Drain, and Eastern Swale are proposed to ensure external and internal stormwater and groundwater flows are conveyed to the existing outlet pit. External stormwater from the existing overland flow paths and internal runoff from the southern battery storage area will be conveyed via the Southern Swale to the outlet point. The Western Catch Drain will capture saline groundwater seep along with upstream external stormwater. The Eastern Swale will provide conveyance of captured flows from the western drain as well as internal stormwater runoff from the northern battery storage areas to the existing outlet. The swales have been sized to convey 1% annual exceedance probability (AEP) peak flows. Peak flows have been determined using both Rational Method and TUFLOW hydraulic modelling.

As well as conveying the flows, the swales provide stormwater treatment. Whilst full best practice environmental management (BPEM) treatment is not achieved, stormwater does receive substantial treatment prior to discharging to the existing outlet point.

There are limitations to address in detailed design to achieve the conceptual layout of the BESS facility and required flow conveyance. The location of the Southern Swale (inside of or adjacent to the subject site) should be finalised. Conceptually, the Eastern Swale requires steep batter grades of 1 in 2 to 1 in 3 to meet 1% AEP flow capacity within the existing site topographical conditions. Minor reconfiguration of the proposed layout of the facility are recommended to minimise these limitations.



Contents

Executive Summary	ii
Contents	iii
1. Introduction.....	1
2. Site Overview	2
2.1 Subject Site	2
2.2 Existing External Catchments	4
2.3 Existing Outlet	5
2.4 Flood Modelling	6
3. Proposed Project	9
4. Stormwater Management	10
4.1 Subject Site Stormwater Management.....	10
4.2 Southern Swale	11
4.3 Western Catch Drain	13
4.4 Eastern Swale	13
4.5 Proposed Geometry.....	14
4.6 On-Site Detention	14
4.7 Stormwater Quality Treatment	14
4.8 Surface Water Isolation Location	15
5. Limitations and Further Investigations	16
5.1 Flood (Hydraulic) Modelling	16
5.2 Potential Sensitive flora and fauna.....	16
5.3 External Work.....	16
6. Conclusion.....	17
Appendices	18

List of Appendices

Appendix A	Hydrological Flood Modelling (TUFLOW)
Appendix B	Project Layout Plan
Appendix C	Peak Flow Calculations
Appendix D	MUSIC Modelling Schematic

List of Tables

Table 1: Existing Condition Internal Peak Flows (Rational Method)	3
Table 2: EOFP Peak Flows from Rational Method	4
Table 3: EOFP Peak Flows from TUFLOW Modelling.....	7
Table 4: Internal Catchment Developed Condition Peak Flows	11
Table 5: Proposed Geometry of Swales and Catch Drain	14
Table 6: Stormwater Quality Treatment at the subject site	14

List of Figures

Figure 1: Locality Plan of Site [Google]	1
Figure 2: Subject site in existing topographic condition	2
Figure 3: Internal Catchment Plan.....	3
Figure 4: Existing Catchments	4
Figure 5: Existing Outlet Location	5
Figure 6: Existing Outlet Site Photo (August 2023)	5
Figure 7: TUFLOW model extents and 1% AEP flood depths	6



Figure 8: Flood Depths at Subject Site..... 7
Figure 9: Proposed Concept Layout Plan..... 9
Figure 10: Proposed Stormwater Management Strategy..... 10
Figure 11: Southern Swale Layout 11
Figure 12: Southern Swale - Indicative Cross-Section [Section A] 12
Figure 13: Western Catch Drain Layout 13
Figure 14: Western Catch Drain - Indicative Cross-Section [Section B]..... 13
Figure 15: Surface Water Isolation Location..... 15



1. Introduction

This report presents the stormwater management strategy (SWMS) for the proposed Battery Energy Storage System (BESS) project at Palmerston Substation located in Northern Midlands Council, Tasmania, as shown in Figure 1. The proposed project (subject site) comprises approximately 1.2 hectares (ha) and will be developed as battery storage. The site also will contain a maintenance facility, carpark, water tank and fire break. The subject site is shown in Figure 2.

Currently, the subject site is rural and is zoned as a Farming Zone. The subject site is located north-west of Palmerston Substation. The BESS facility will share the existing substation access road. The existing access road connects into highway B51, Poatina Road north of the subject site. The Great Lake or *yingina* is located west, upstream, of the subject site. The Great Lake is used for hydroelectric power generation at Poatina Power Station. Electricity generated at Poatina is conveyed via high voltage transmission routes to Palmerston Substation. Renewable energy will be stored in the proposed Battery Energy Storage System in Palmerston.

Elevation data used for preparing this report has been extracted from *Elvis Elevation and Depth Spatial Data*. Existing elevation contours are shown in Figure 2.

All calculations and drainage design in this report are also compliant with *Australian Rainfall and Runoff 2019 (ARR19)* and reflect industry best practice approaches.

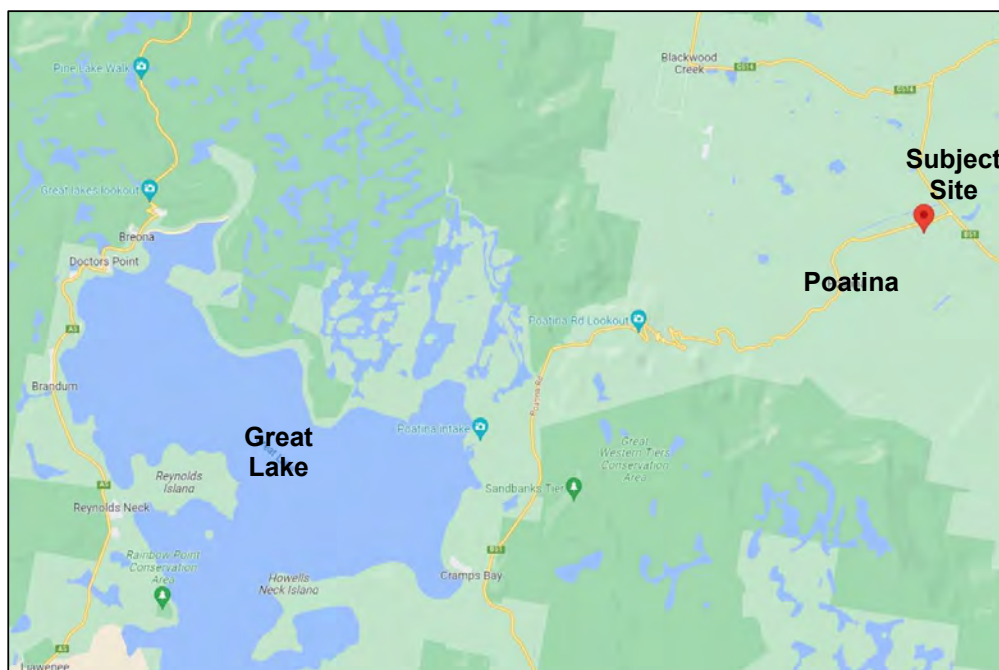


Figure 1: Locality Plan of Site [Google]



2. Site Overview

2.1 Subject Site

The subject site grades from the south-west to the north-east at approximately 2%. Currently the high point of the site is approximately 180.85 m AHD, as shown in Figure 2.

The key stormwater features of the site are the existing overland flow paths to the south and a swale adjacent to the access road. The existing overland flow paths convey overland flows through the subject site. They have been denoted as Existing Overland Flow Path (EOFP) A, B, and C in this SWMS. The existing overland flow paths are shown in Figure 2. Runoff that traverses towards the northeast is collected by the existing access road swale and conveyed to the existing outlet, a grated entry pit.

Preliminary TUFLOW hydrological modelling has been undertaken to estimate existing 1% annual exceedance probability (AEP) flows and existing 1% AEP flood extents associated with the existing overland flow paths. Existing condition TUFLOW results are discussed in Section 2.4.

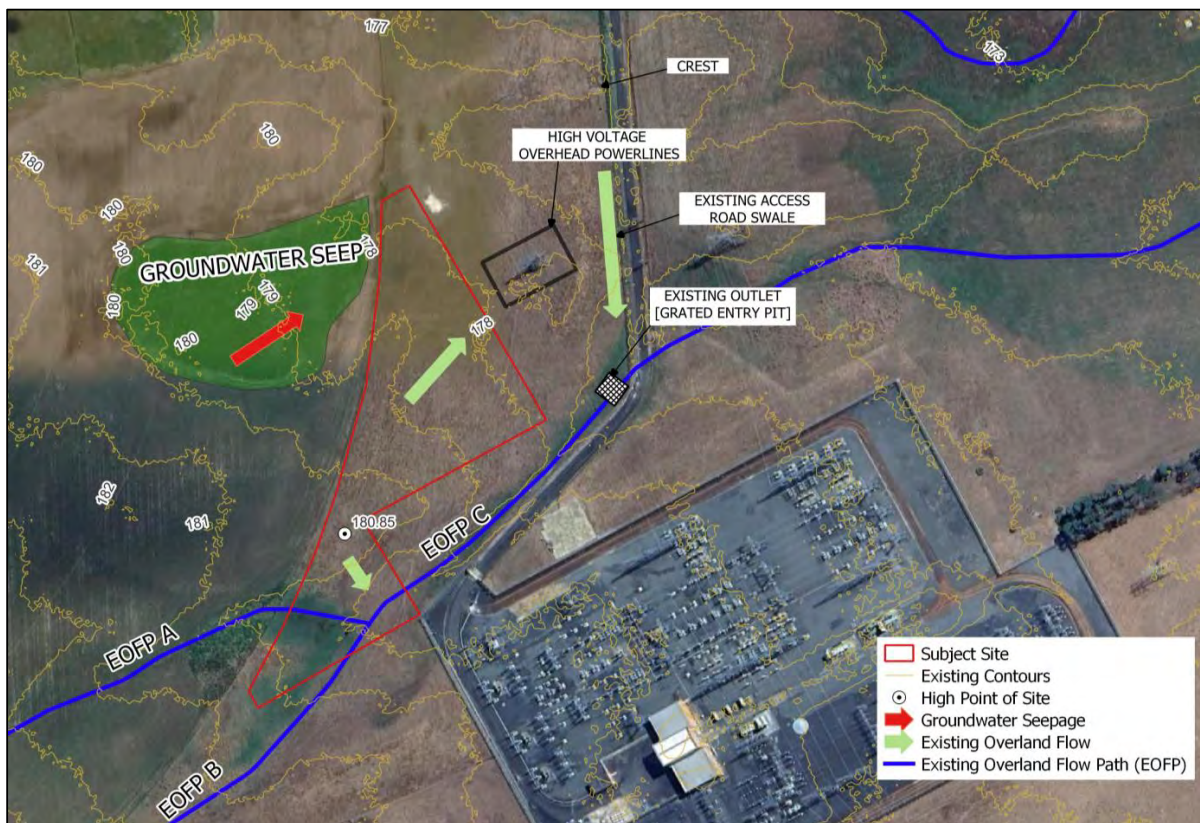


Figure 2: Subject site in existing topographic condition



2.1.1 Groundwater Seep

Following a site visit, groundwater flows were identified as traversing the site from west to east as shown in Figure 2. The groundwater poses potential risks downstream of the subject site if the existing management of groundwater is changed.

This SWMS ensures that the existing groundwater seep is effectively managed and directed to the existing outlet in the developed condition to protect the existing groundwater flow regime.

2.1.2 Existing Internal Catchments

The site grades as a result of the natural high point that creates two internal catchments, A and B, as shown in Figure 3. The Rational Method has been used to calculate peak existing flows from the existing internal catchments. Peak flows are shown in Table 1.



Figure 3: Internal Catchment Plan

Table 1: Existing Condition Internal Peak Flows (Rational Method)

	Peak Flow (m ³ /s)
Internal Catchment A	0.09
Internal Catchment B	0.04



2.2 Existing External Catchments

2.2.1 External Catchments

Publicly available lidar data (ELVIS) and aerial imagery have been used to determine the catchments contributing to the existing overland flow paths at the southern boundary of the subject site. Catchments have been delineated for Existing Overland Flow Paths (EOFP) A and B, as shown in Figure 4. External Catchments A and B combine south-east of proposed development into EOFP C.

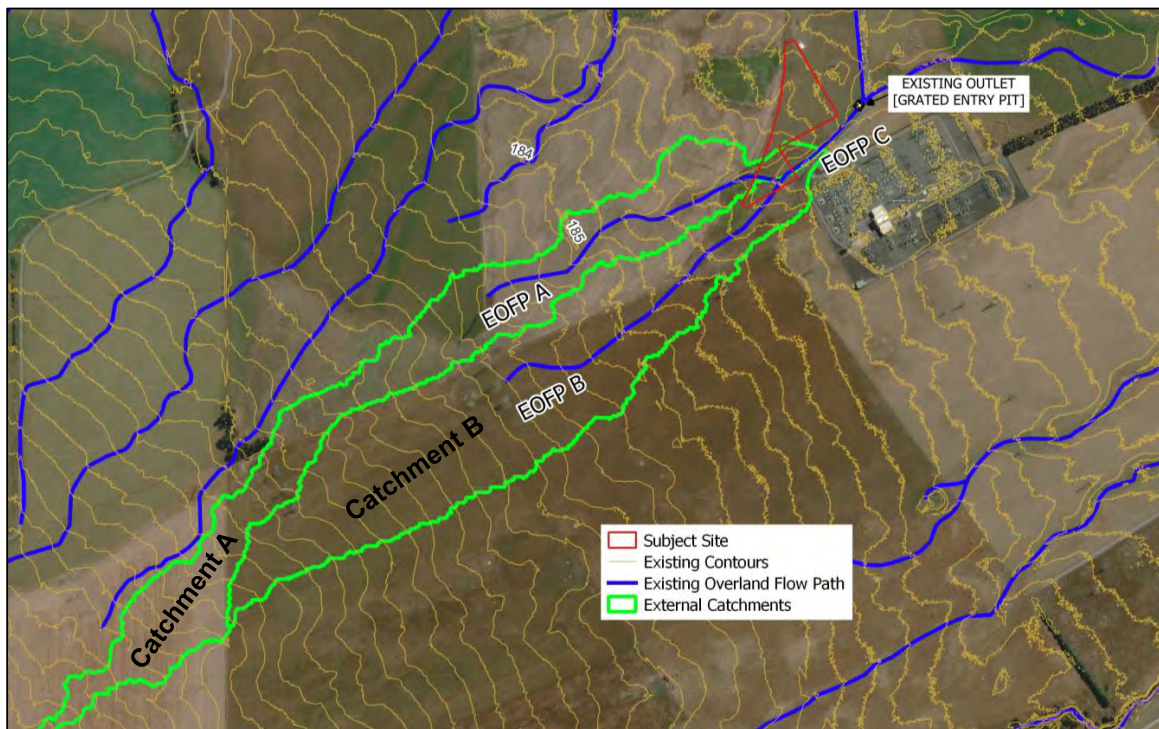


Figure 4: Existing Catchments

2.2.2 Existing Overland Flow Paths

The catchment areas have been used in the Rational Method to estimate peak 1% AEP flows as shown in Table 2. Supporting calculations for peak flow are included in Appendix C.

Table 2: EOFP Peak Flows from Rational Method

	Peak Flow (m ³ /s)
EOFP Catchment A	0.34
EOFP Catchment B	0.52
Combined Flow (EOFP C)	0.78



2.3 Existing Outlet

As shown in Figure 5, the site is located near, but not adjacent to, the existing discharge point. In the existing condition, the existing discharge point is a grated pit located within the roadside swale of the access road, as shown in Figure 6.



Figure 5: Existing Outlet Location



Figure 6: Existing Outlet Site Photo (August 2023)



2.4 Flood Modelling

Preliminary hydraulic modelling of the 1% annual exceedance probability (AEP) flood event has been undertaken using TUFLOW software. The TUFLOW modelling was completed to determine if the subject site is flooded by the many existing overland flow paths that exist nearby. The TUFLOW modelling also provided a check of the Rational Method calculations for peak flows in the existing overland flow paths through the subject site.

To create the TUFLOW model, a large area of approximately 118 km² was modelled. This area encompasses the catchment areas that drain through the subject site as well as the catchments of the other tributaries that exist nearby. The model is coarse, but it achieves the primary goal of indicatively determining flood extents and flood levels around the subject site during an extreme event.

The flood depth results of the TUFLOW modelling are shown in Figure 7. Complete TUFLOW results are included in Appendix A. As shown in Figure 7, the subject site is not subject to flooding from adjacent tributaries.

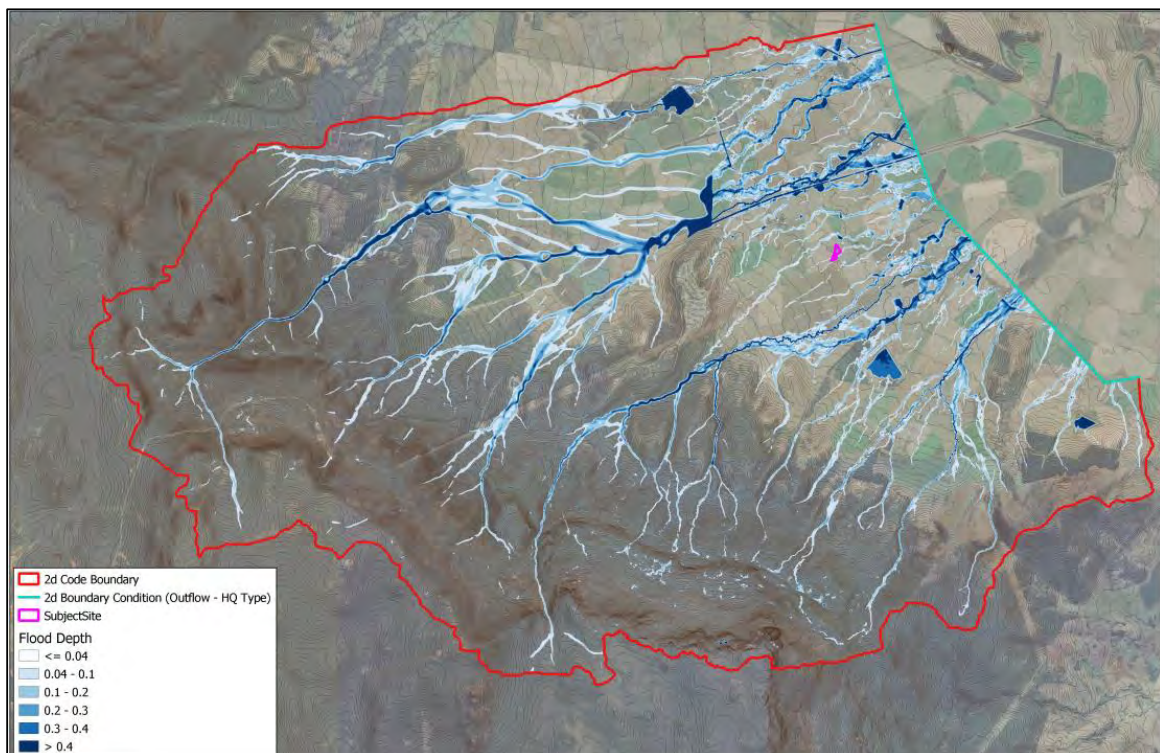


Figure 7: TUFLOW model extents and 1% AEP flood depths



2.4.1 Flood Modelling Results at the subject site

Preliminary TUFLOW modelling for the existing condition shows flood depths within the existing overland flow paths at the subject site of approximately 100 mm, as shown in Figure 8. The flow is contained within the identified Existing Overland Flow Paths (EOFPs). There is no flood extent across the property from other tributaries.

Figure 8 also shows the locations in the TUFLOW model where peak flows in the tributaries were reported by the model (2d PO Lines). The TUFLOW peak flows were compared to the peak flows estimated by the Rational Method for the existing overland flow paths within the subject site. As shown in Table 3, the peak flows are generally similar. The TUFLOW peak flows were adopted for the design of the proposed conveyance swales in the SWMS. The TUFLOW peak flows are slightly higher than the Rational Method peak flows, and adopting the higher flows ensures that the proposed developed condition swales have a conservative design.

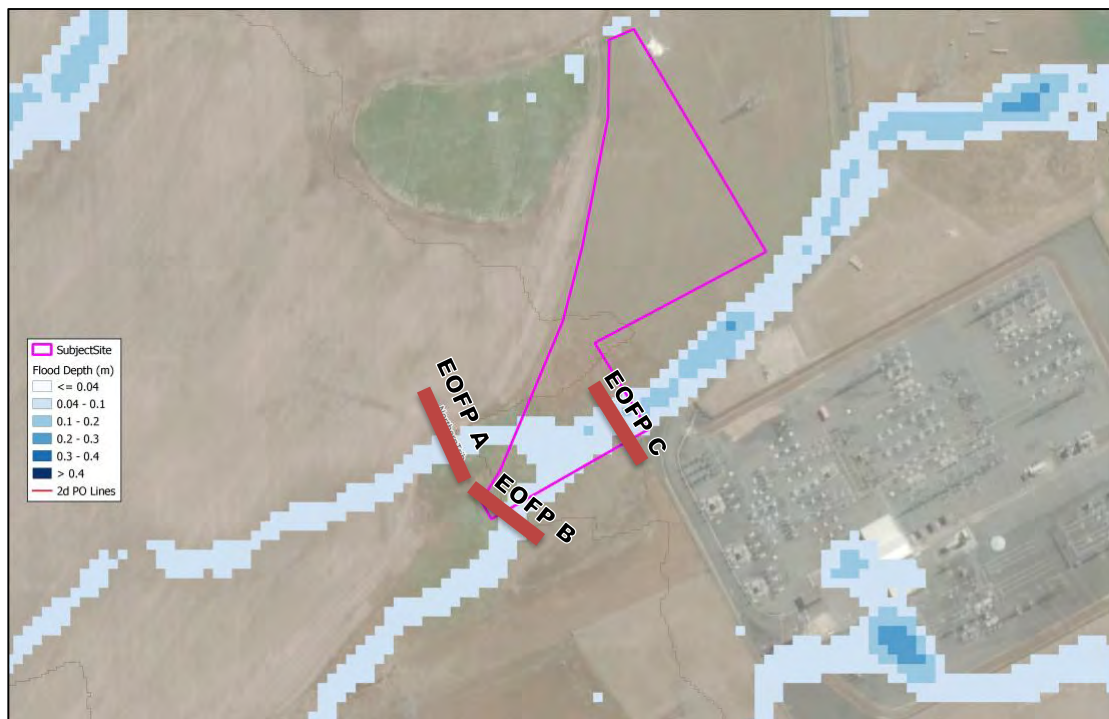


Figure 8: Flood Depths at Subject Site

Table 3: EOFP Peak Flows from TUFLOW Modelling

	Peak Flow (m ³ /s)
External Catchment A	0.60
External Catchment B	0.65
Combined Flow (EOFP C)	1.2



2.4.2 TUFLOW flood modelling methodology

TUFLOW modelling was undertaken to provide an indicative understanding of the subject site. Details of the modelling are provided in the SWMS for reference.

The preliminary TUFLOW modelling is two-dimensional modelling. The TUFLOW model adopts a coarse, 10-m terrain grid.

A rainfall excess on grid modelling approach has been adopted. Rainfall excess was determined using the hydrological modelling software RORB with appropriate inputs for the subject site. The rainfall excess was applied evenly to all cells in the TUFLOW modelling extent. The modelled catchment is generally rural and undeveloped. Therefore, a fraction impervious of 0.10 has been adopted throughout. The 118-km² catchment extent modelled in TUFLOW is shown in Figure 7.

A Manning's 'n' value of 0.080 has been adopted for the portion of the catchment with dense vegetation. A Manning's 'n' value of 0.040 has been adopted for the portion of the catchment used for agriculture, including the subject site.



3. Proposed Project

The proposed layout plan for the BESS facility is shown in Figure 9 and Appendix B



Figure 9: Proposed Concept Layout Plan



4. Stormwater Management

4.1 Subject Site Stormwater Management

Stormwater can be effectively managed at the subject site in the proposed condition. Management of stormwater can both protect the project from major flows while causing minimal changes to the existing flow regime.

As shown in Figure 10, the existing overland flow paths through the subject site will be filled to allow for development. An alternative flow path for external flows will be provided by a new open swale along the southern boundary of the subject site. A western catch drain will convey internal stormwater flows and capture saline groundwater to avoid changing existing flow regimes. An eastern swale will convey stormwater runoff and diverted groundwater seepage towards an existing outlet.

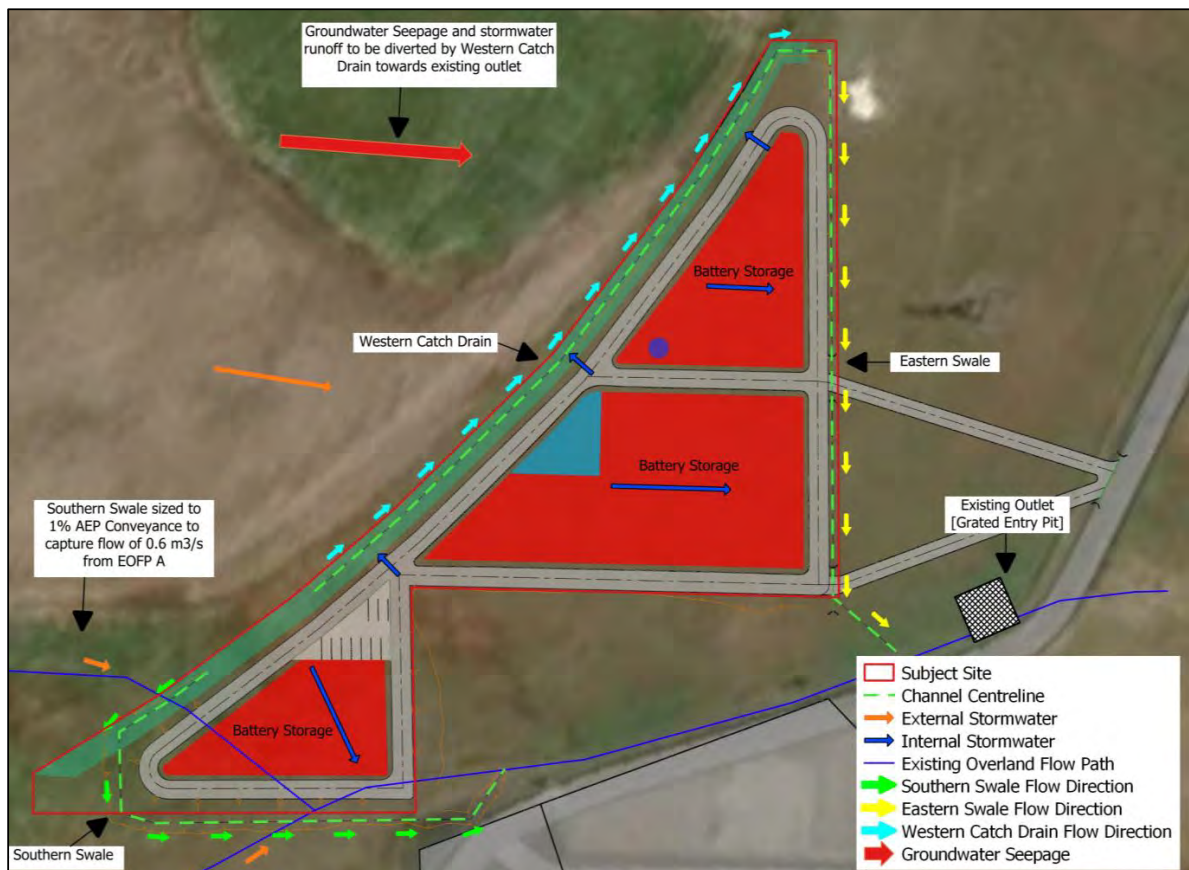


Figure 10: Proposed Stormwater Management Strategy



As shown in Figure 10 and Figure 3, development of the subject site will not change the internal catchments at the subject site. The proposed development will utilise the existing terrain to minimise cut-fill volumes. The Rational Method has been used to calculate peak developed flows for the internal catchments. Peak developed internal flows are shown in in Table 4.

Table 4: Internal Catchment Developed Condition Peak Flows

	Peak Flow (m ³ /s)
Internal Catchment A	0.32
Internal Catchment B	0.14

The proposed eastern swale has been sized to accommodate flows from internal catchment A in the developed condition. The proposed southern swale has been sized to cater for external catchments A and B shown in Figure 4. The western catch drain is included in the development to provide an overland flow path for overland flows from stormwater and groundwater seep to reach the eastern swale. All flows internal and external to the subject site are conveyed to the existing discharge point. The existing flow regime is unchanged in the developed condition.

The proposed swales and catch drains are discussed in more detail in the following sections of this SWMS.

4.2 Southern Swale

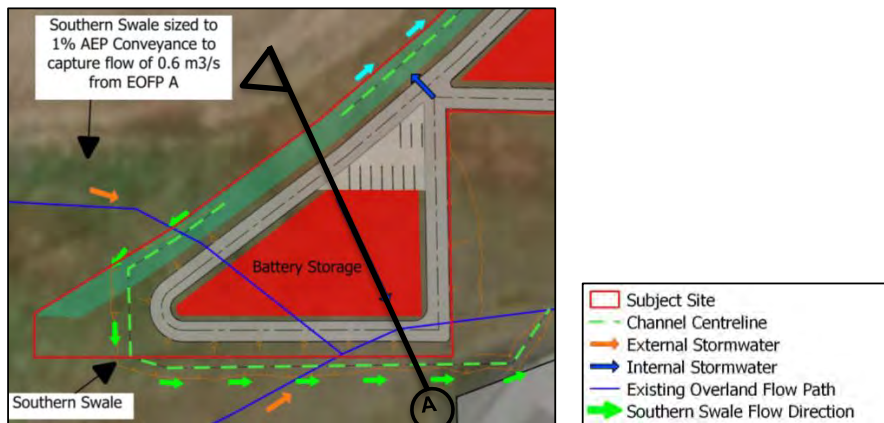


Figure 11: Southern Swale Layout

The southern battery storage area, shown in Figure 11, will drain to the southern swale shown in green. The swale has been preliminarily sized to convey the total 1% AEP flows from the internal catchment and the external catchments while providing a minimum 300mm freeboard to the BESS units.

Flood modelling and Rational Method computations have been used to calculate 1% AEP external flows, as detailed in Section 2. The contribution of the subject site to peak flows in the southern swale is based on a conservative time of concentration.

In the proposed developed condition, Internal Catchment B at the subject site has been assumed to have a 5 minute time of concentration, meaning that stormwater runoff generated by Internal



Catchment B enters the southern swale approximately 5 minutes after rainfall occurs. Conversely, the peak flows generated from the catchments contributing to the existing overland flow paths have, based on Rational Method calculations, a 60-minute time of concentration. This means that stormwater runoff in the existing overland flow paths occurs approximately 60 minutes after the 1% AEP storm occurs.

Owing to the substantial difference in time of concentration, it is appropriate to assume that the internal stormwater runoff will be conveyed by the southern swale prior to external flows entering the southern swale. For the conceptual sizing of the southern swale, the peak 1% external flow of 1.2 m³/s has been adopted. Complete peak flow calculations are included in Appendix C. The southern swale will grade into the existing flow path downstream of, and external to, the subject site.

The conceptual dimensions of the southern swale are shown in Table 5. A conceptual cross-section, showing the width of the southern swale, is shown in Figure 12. The dimensions of the swale will be finalised during detailed design. However, the dimensions will be in general accordance with Figure 12 and Table 5.

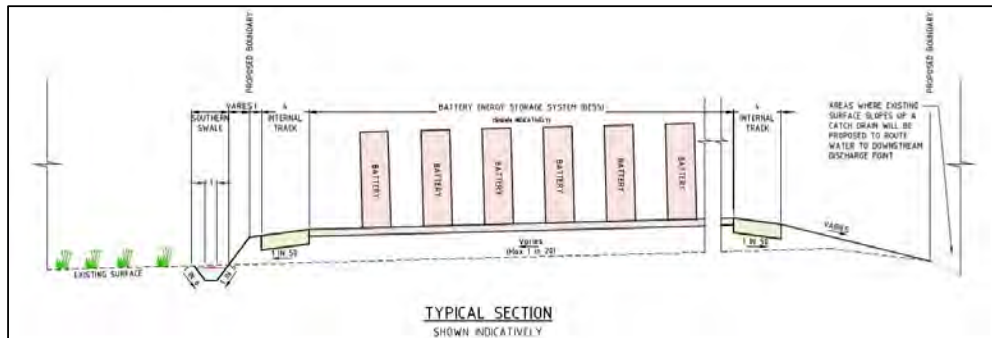


Figure 12: Southern Swale - Indicative Cross-Section [Section A]



4.3 Western Catch Drain

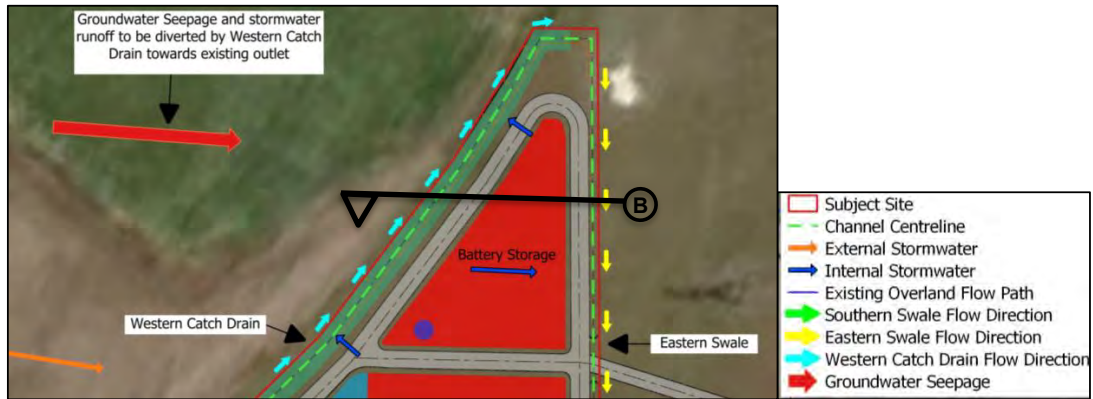


Figure 13: Western Catch Drain Layout

The Western Catch Drain is proposed to capture the minor runoff from adjacent land that incorporates both stormwater runoff and groundwater seep. The alignment of the Western Catch Drain is shown with cyan arrows in Figure 13. The level of the battery storage areas will be raised in fill and graded to drain towards the eastern boundary of the subject site. The dimensions will be finalised during detailed design. However, the dimensions will be in general accordance with Figure 14 and Table 5.

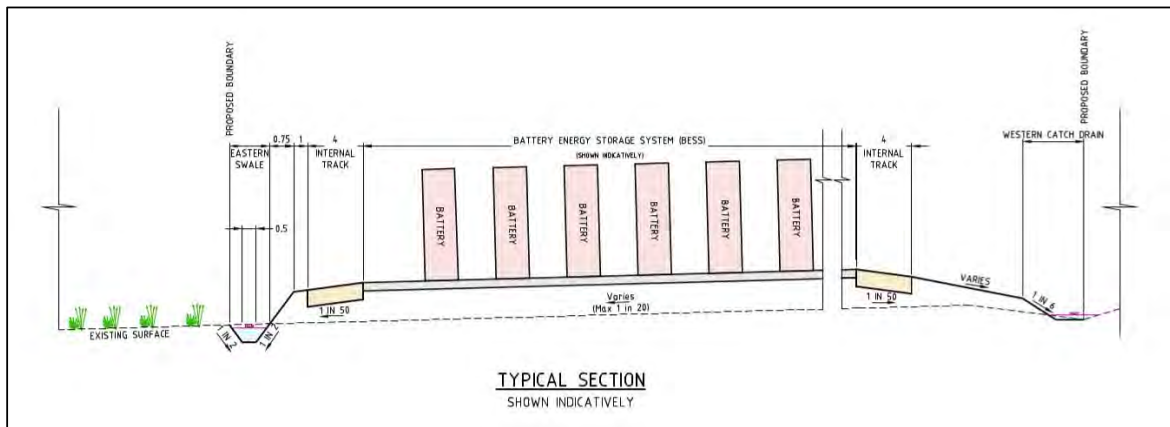


Figure 14: Western Catch Drain - Indicative Cross-Section [Section B]

4.4 Eastern Swale

The Eastern Swale is shown in Figure 13 in yellow. The full extents of the Eastern Swale are shown in Figure 10. The swale has been sized as a trapezoidal channel to convey internal subject site runoff as well flows from the Western Catch Drain. Based on the Concept Layout Plan in Figure 9, two culvert crossings will be required along the eastern site boundary to allow the proposed access roads to cross the Eastern Swale and provide vehicular entry into the subject site.



The largest design consideration for the Eastern Swale is that it will have to run against grade in certain locations to provide conveyance of stormwater and groundwater around the subject site. The dimensions of the Eastern Swale will be finalised during detailed design. However, the dimensions will be in general accordance with Figure 14 and Table 5.

4.5 Proposed Geometry

The conceptual geometry of the proposed swales is shown in Table 5.

Table 5: Proposed Geometry of Swales and Catch Drain

	Longitudinal Grade	Base Width (m)	Side Grade	Minimum Depth
Southern Swale	1 in 70	1	1 in 6	0.35
Western Catch Drain	1 in 50	1	1 in 6	As Required
Eastern Swale	1 in 1000	0.5	1 in 2	0.40

4.6 On-Site Detention

The Northern Midlands Council policy for On-Site Stormwater Detention (June 2019) specifies that on-site detention requirements apply to commercial, industrial, and special use areas. The subject site is a utility installation therefore the inclusion of on-site detention is not part of the current proposal.

4.7 Stormwater Quality Treatment

Stormwater quality treatment to achieve Best Practice Environmental Management Guidelines (BPEMG) standards is not part of the current proposal. The proposed development is a utility installation. Nevertheless, the proposed stormwater management at the subject site provides an opportunity to integrate stormwater quality treatment into the engineering of the site at minimal additional cost. Vegetated swales provide stormwater quality treatment.

MUSIC modelling has been undertaken for the proposed BESS development at the subject site, using the MUSIC template for Launceston (Rainfall Station 091237). Catchments within the subject site have been modelled with a fraction impervious of 0.70 to represent the proposed development. The MUSIC model schematic is included in Appendix D. During detailed design, the exact treatment performance of the proposed swales can be assessed in additional detail. Stormwater quality treatment provided by the SWMS presented in this report is shown in Table 6.

Table 6: Stormwater Quality Treatment at the subject site

Pollutant	BPEM Target reduction %	Subject Site reduction %
Total Suspended Solids (TSS)	80%	91.5%
Total Phosphorus (TP)	45%	65.9 %
Total Nitrogen (TN)	45%	36.7 %

The assessment of stormwater quality treatment did not include an evaluation of groundwater-related treatment. The proposed Western Catch Drain and Eastern Swale should be vegetated with salt-tolerant plants that can survive the local salinity. It's important to highlight that the conveyance of groundwater flow to the existing outlet remain unchanged from the existing condition.



4.8 Surface Water Isolation Location



Figure 15: Surface Water Isolation Location

The subject site will be graded to drain to the existing outlet, a grated pit located in the swale along the Palmerston Substation access road, as discussed in Section 2.3. As all runoff from the subject site is collected by the Existing Overland Flow Path C and isolated from external flows, water quality from the subject site can be managed. Blocking Existing Overland Flow Path C upstream of the outlet pit at the location shown in yellow in Figure 15 will allow for stormwater from the subject site to be disconnected from the surrounding hydrological system.



5. Limitations and Further Investigations

5.1 Flood (Hydraulic) Modelling

High-level TUFLOW modelling was undertaken on a coarse grid to understand existing major event flow paths around the subject site. If a more detailed understanding of flood conditions at the subject site is required, more detailed flood modelling should be undertaken. This can be incorporated as part of the detailed design process.

5.2 Potential Sensitive flora and fauna

The presence of sensitive flora and fauna was not identified by Nature Advisory in their 2023 study. It is assumed that considerations for sensitive flora and fauna are, in this case, not applicable to the subject site and proposed development.

5.3 External Work

5.3.1 Southern Swale:

The current development plan layout does not provide sufficient area for the Southern Swale to be located inside the proposed secure perimeter fenced area. Preliminary three-dimensional modelling indicates that moving the swale within the site whilst retaining the current layout results in steep slopes of approximately 1-in-10 to 1-in-15 across the battery storage area. This is considered to be unacceptably steep.

If the southern swale needs to be located within the subject site, it is recommended to investigate if the carparking requirements can be minimised. Minimising the carparking area and shifting the battery storage north can allow for the southern swale and batters to existing surface to be contained within the subject site.

5.3.2 Eastern Swale:

The entire extent of the eastern swale, including battering back to existing surface, can be incorporated into the subject site extents with the current layout plan. However, this does result in some steep batters. During detailed design, more detailed earthworks design based on a feature and level survey can be undertaken to ensure that the resultant swale appropriately ties into the surrounding BESS facility and adjacent land.



6. Conclusion

This report presents the stormwater management strategy (SWMS) for the proposed Battery Energy Storage System (BESS) project at Palmerston Substation located in Northern Midlands Council, Tasmania. The proposed project (subject site) comprises approximately 1.2 hectares and will be developed as battery storage.

In the developed condition, a Southern Swale, Western Catch Drain, and Eastern Swale are proposed to ensure external and internal stormwater and groundwater flows are conveyed to the existing outlet pit. External stormwater from the existing overland flow paths and internal runoff from the southern battery storage area will be conveyed via the Southern Swale to the outlet point. The Western Catch Drain will capture saline groundwater seep along with upstream external stormwater. The Eastern Swale will provide conveyance of captured flows from the western drain as well as internal stormwater runoff from the northern battery storage areas to the existing outlet. The swales have been sized to convey 1% annual exceedance probability (AEP) peak flows. Peak flows have been determined using a combination of Rational Method and TUFLOW hydraulic modelling.

The SWMS discusses appropriate management of external stormwater and groundwater flows to avoid inundation or changes to existing flow regimes. The SWMS also addresses containment of water used for firefighting at the facility—the report recommends a location to block to isolate surface water from the subject site.

As well as conveying the flows, the swales provide stormwater treatment. Whilst full best practice environmental management (BPEM) treatment is not achieved, stormwater does receive substantial treatment prior to discharging to the existing outlet point.

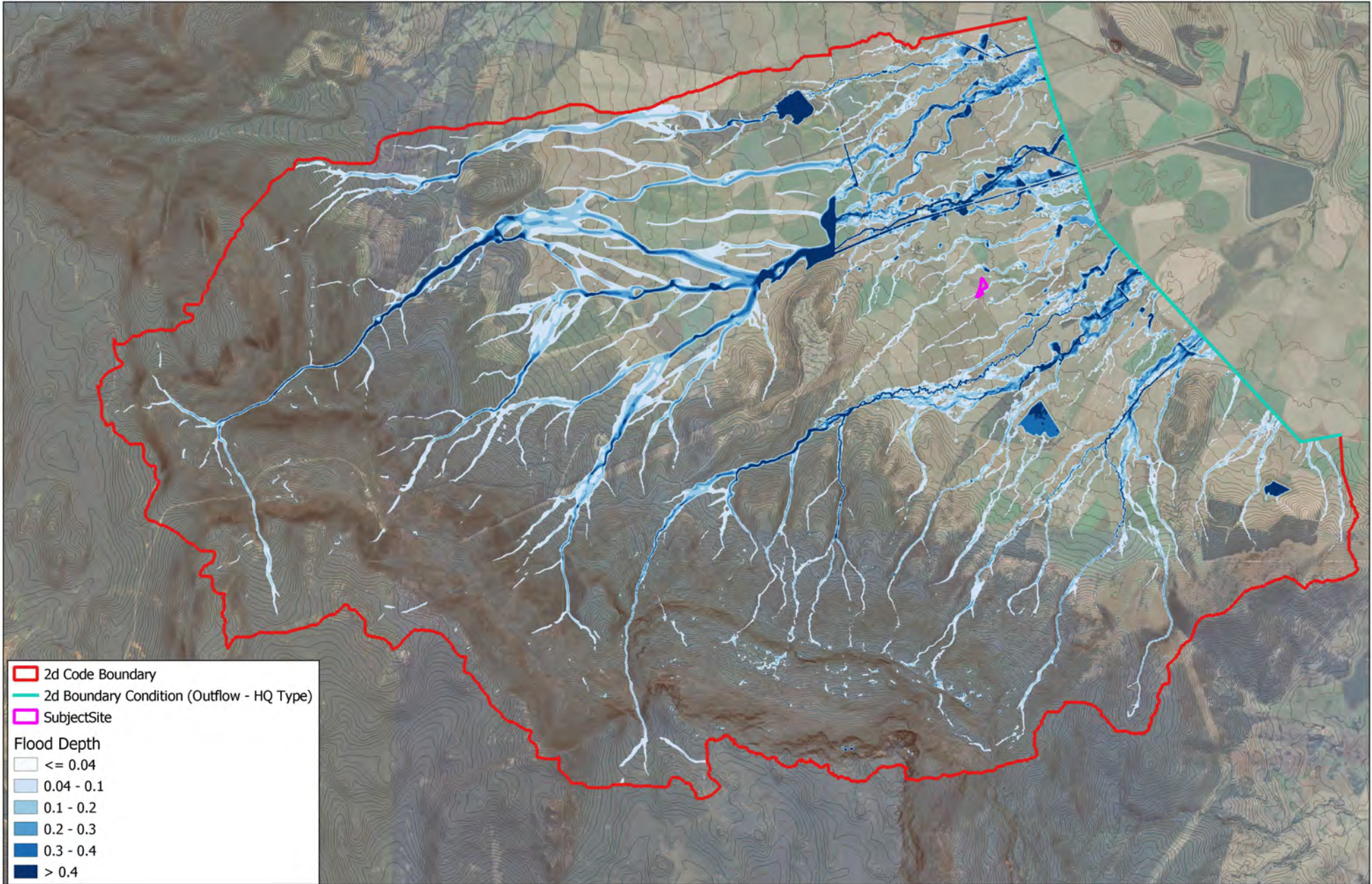
Most importantly, the SWMS maintains the existing flow regime at the subject site and the surrounding area to ensure that saline groundwater continues to be managed as it is in the existing condition.



Appendices



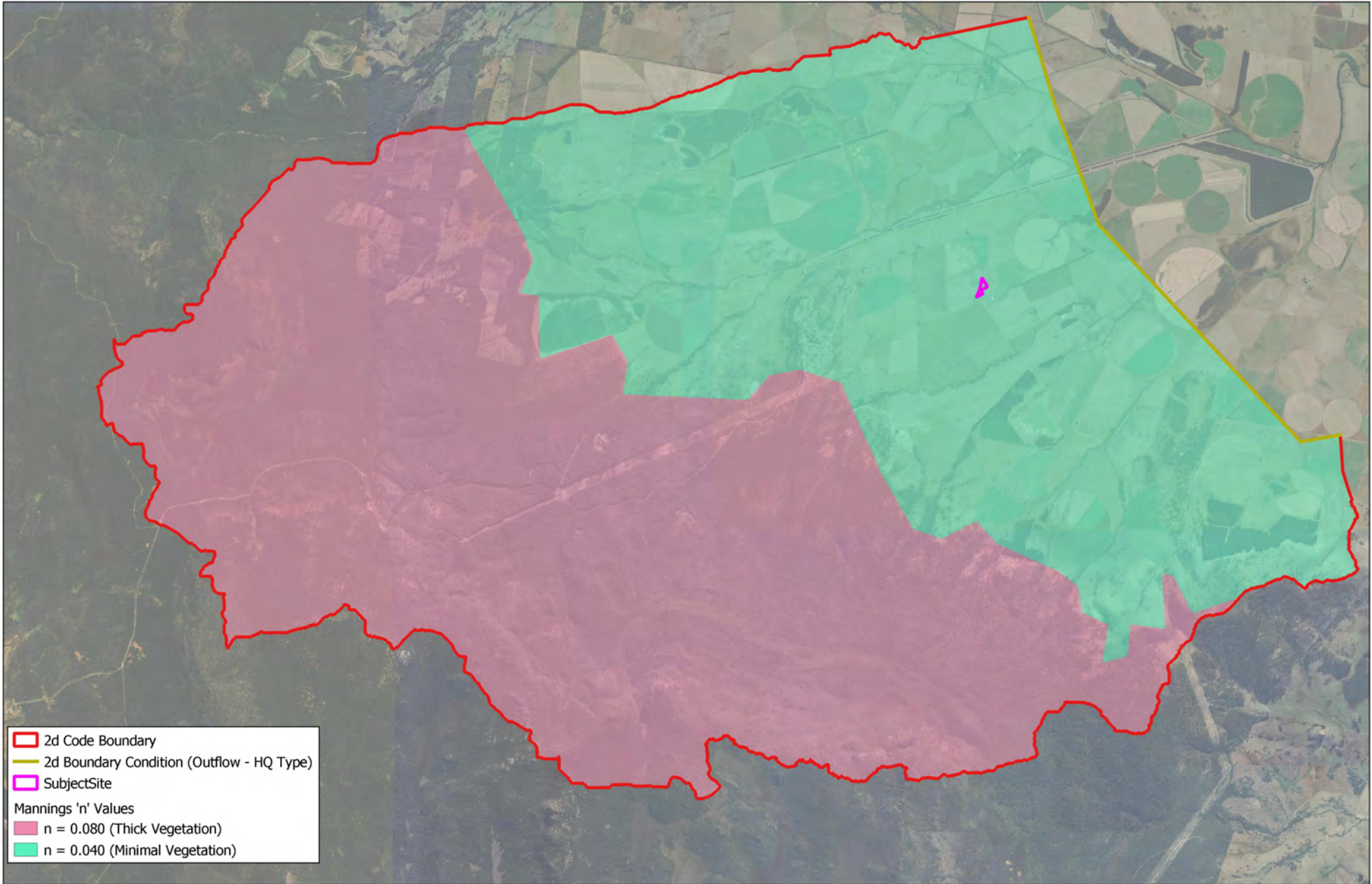
Appendix A Hydrological Flood Modelling (TUFLOW)



DESIGNED: M Wick
 CHECKED: J Baumann
 DATE OF ISSUE: 29/08/2023
 REVISION: A

**Preliminary 1% AEP Flood Depth with Code Boundary
 Palmerston Substation BESS**

August 2023



DESIGNED: M Wick
CHECKED: J Baumann
DATE OF ISSUE: 29/08/2023
REVISION: A

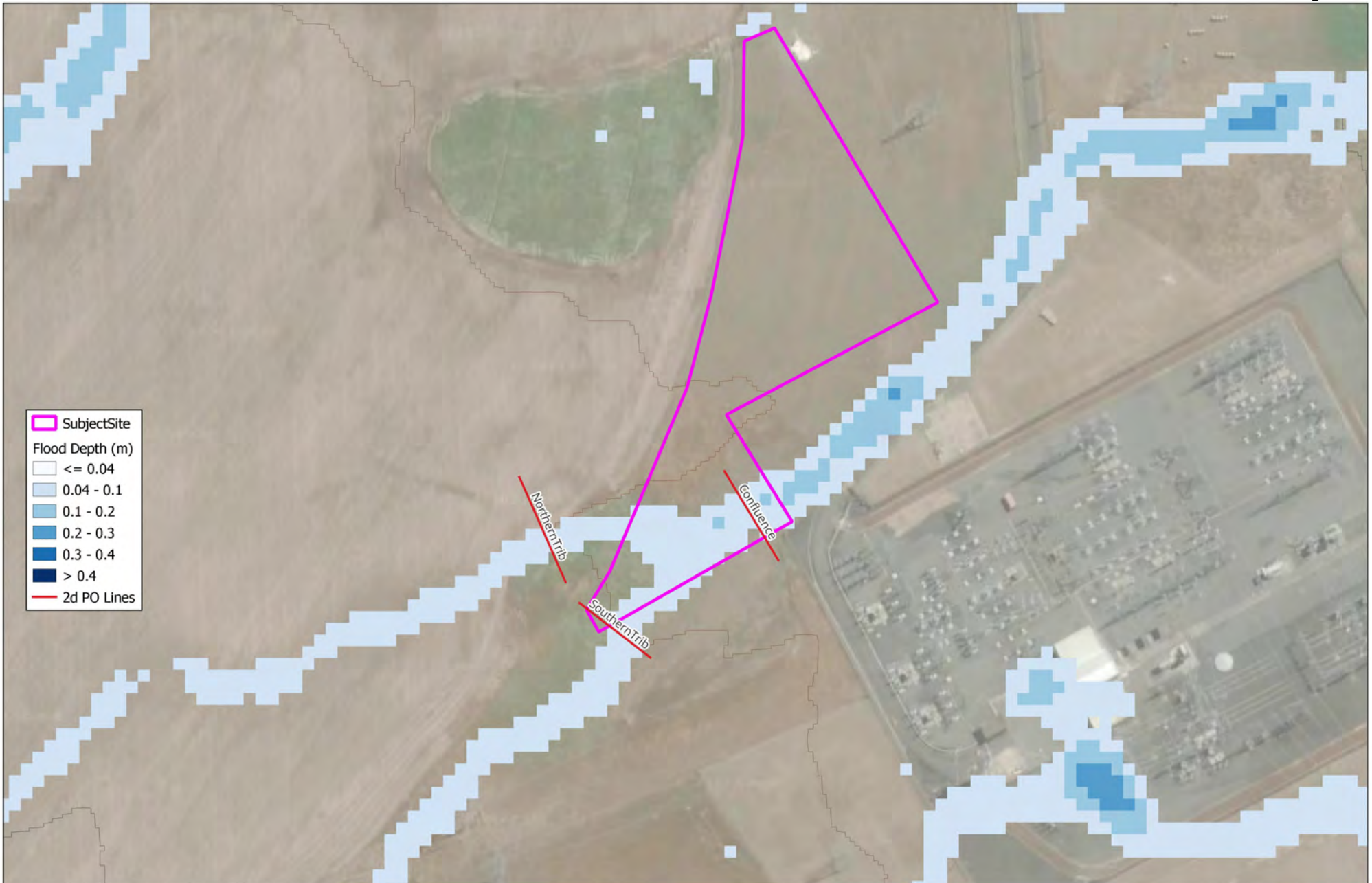
Attachment 11.2.13 23154 Palmerston Substation BESS SWMS Rev B









Code Boundary with Mannings 'n'
Palmerston Substation BESS

August 2023



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ENGINEERS
Page 628



	SubjectSite
Flood Depth (m)	
	<= 0.04
	0.04 - 0.1
	0.1 - 0.2
	0.2 - 0.3
	0.3 - 0.4
	> 0.4
	2d PO Lines

DESIGNED:	M Wick
CHECKED:	J Baumann
DATE OF ISSUE:	29/08/2023
REVISION:	A

Attachment 11.2.13 23 154 Palmerston Substation BESS SWMS Rev B

**Flood Depth at Subject Site
Palmerston Substation BESS**

August 2023



**DALTON
CONSULTING
ENGINEERS**
Page 629



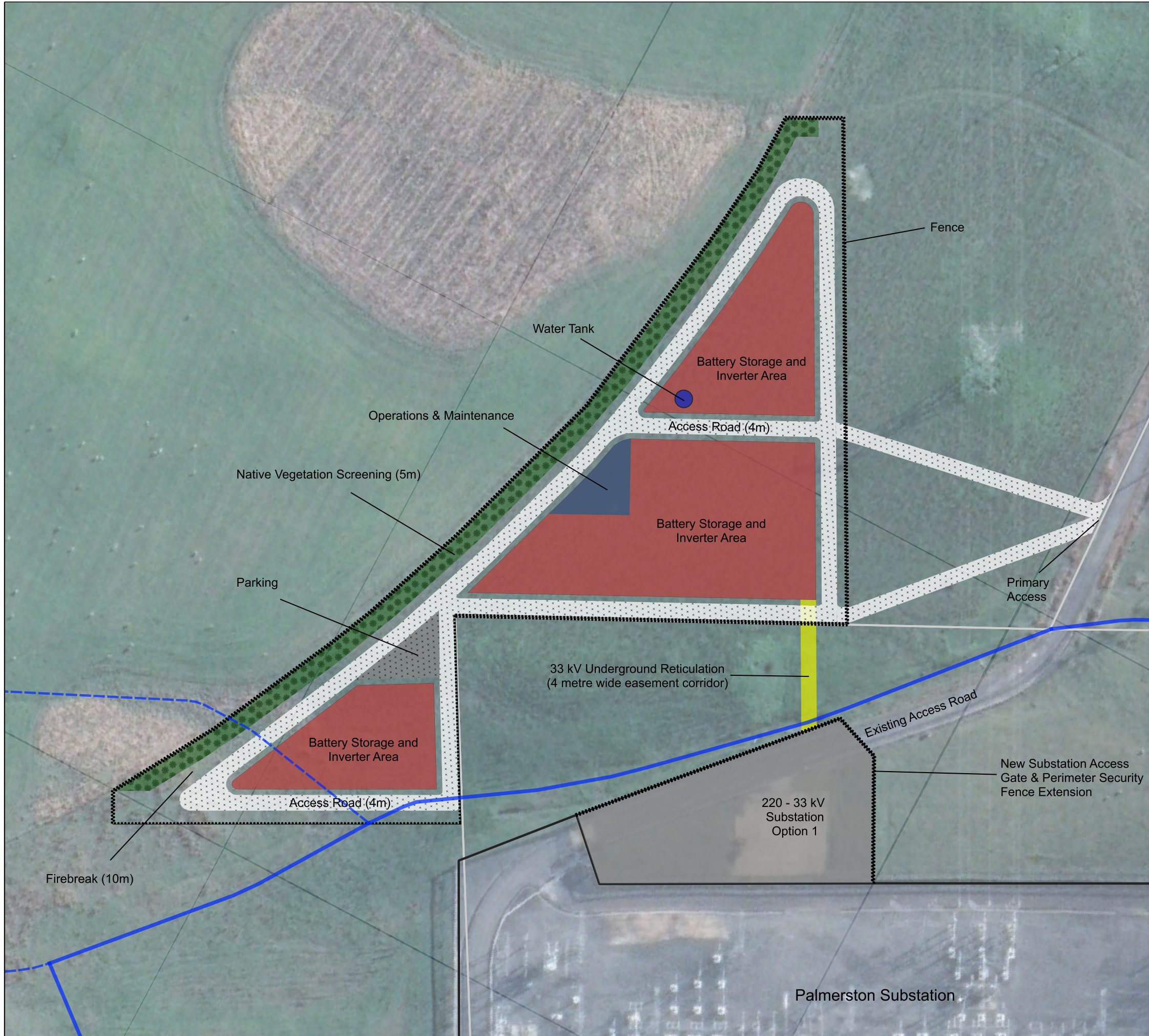
Appendix B Project Layout Plan



Concept Layout Plan

2225 - Palmerston BESS

- Parcels
- Minor Tributary
- Tributary
- Palmerston Layout**
- Battery Storage and Inverter Area
- Operations and Maintenance
- Native Vegetation Screening (5m)
- Water Tank
- Access Roads (4m)
- Parking
- Fence
- 220 - 33 kV Substation
- 33 kV Underground Reticulation



Version: 6.0

Date: 22/06/2023

0 10 20 30 m

1:900 at A3





Appendix C Peak Flow Calculations



Stormwater Calculations

Palmerston Substation BESS

Rev B - September 2023

**DALTON
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ENGINEERS**

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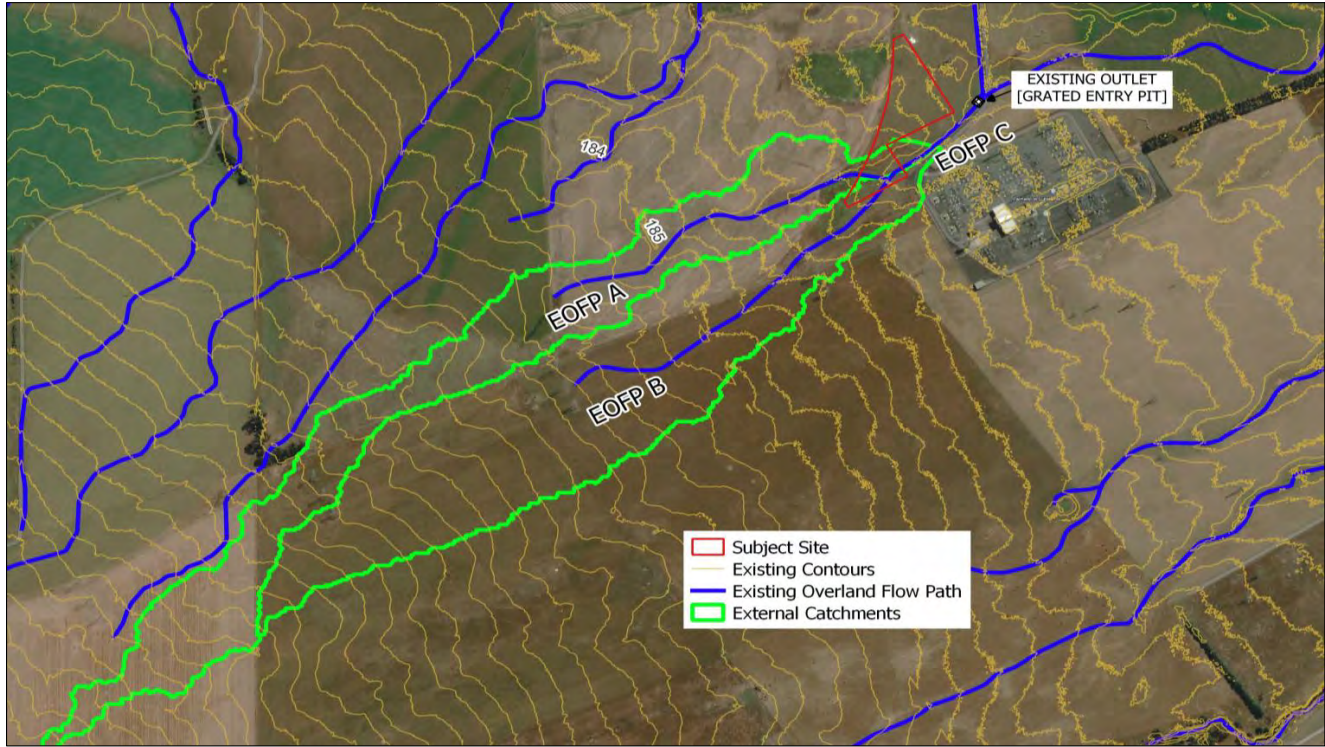
ABN 78 429 221 049

MAJOR STORM EVENT CATCHMENT PLAN

PROJECT DETAILS	
Job Description:	Palmerston BESS
Job Number:	23154
Compiled by:	Neel Moudgil
Date:	21/08/2023



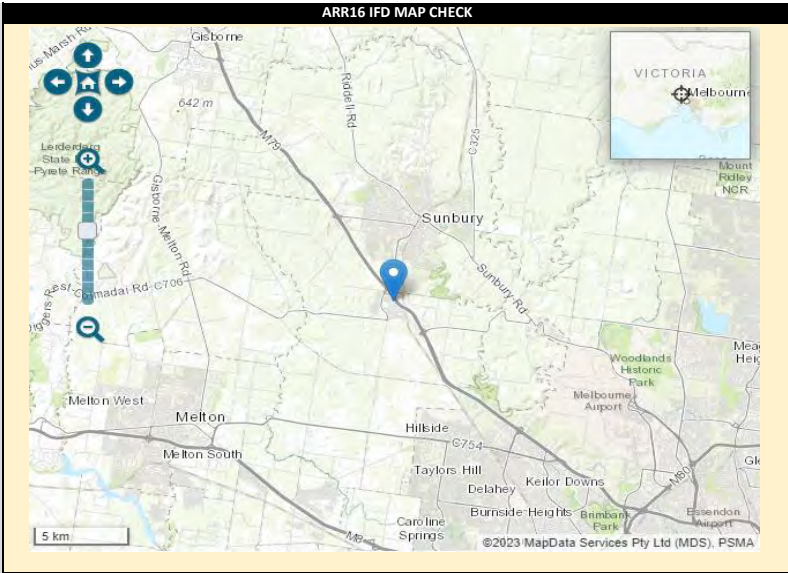
Paste Catchment Plan Here



RAINFALL DATA										
Source	Australian Government Bureau of Meteorology - Rainfall IFDs 2016									
Latitude	-41.7902	Longitude	146.9821	Zone	n/a	Date	21/08/2023			
Annual Exceedance Probability (AEP) Coefficients										
	4EY	2EY	1EY	0.2EY	50% AEP*	20% AEP*	10% AEP	5% AEP	2% AEP	1% AEP
C0	-0.45062456	-0.13554342	0.14558022	0.59752738	0.26183754	0.57772481	0.76171881	0.92465705	1.1207242	1.2588447
C1	0.87294376	0.8712877	0.84608805	0.7598123	0.82921004	0.7598123	0.70424497	0.64611834	0.48769358	0.34641135
C2	-0.10943492	-0.094626285	-0.057401184	0.035094295	-0.038936686	0.035094321	0.093673974	0.15471329	0.33648524	0.49945506
C3	0.006076457	-0.00884552	-0.030372534	-0.063607037	-0.037225403	-0.063607045	-0.084066331	-0.1052396	-0.17858653	-0.24495065
C4	0.003157009	0.007159446	0.011913367	0.016852126	0.012993989	0.016852127	0.019723499	0.02265151	0.035853855	0.047961071
C5	-0.000608663	-0.001035071	-0.001486628	-0.001792319	-0.001561767	-0.001792319	-0.001947492	-0.002099453	-0.003193122	-0.00421226
C6	3.01E-05	4.62E-05	6.19E-05	6.77E-05	6.37E-05	6.77E-05	6.95E-05	7.09E-05	0.0001049	0.000137187

NOTE:
 The coefficients can be applied to estimate the design rainfall depth for a full range of durations from 1 minute to 7 days.
 It is recommended that only three significant figures are used when undertaking calculations using design rainfalls generated in this way.
 * The 50% AEP IFD does not correspond to the 2 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 1.44 ARI.
 * The 20% AEP IFD does not correspond to the 5 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 4.48 ARI.

Duration (mins)	4EY	2EY	1EY	0.2EY	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1% AEP
1	38.234	52.394	69.403	109.057	77.959	106.919	128.517	151.260	184.024	211.281
2	33.306	45.726	60.224	92.266	67.320	90.457	106.946	123.704	144.017	159.009
3	29.482	40.460	53.323	82.090	59.664	80.480	95.437	110.738	130.173	144.971
4	26.635	36.467	48.046	74.472	53.832	73.012	86.963	101.371	120.608	135.765
5	24.440	33.359	43.898	68.438	49.239	67.096	80.219	93.879	112.791	128.064
6	22.691	30.868	40.550	63.505	45.523	62.260	74.658	87.645	106.076	121.221
7	21.259	28.822	37.787	59.382	42.449	58.218	69.969	82.337	100.192	115.043
8	20.060	27.107	35.464	55.875	39.859	54.779	65.950	77.748	94.989	109.435
9	19.039	25.646	33.480	52.849	37.642	51.813	62.458	73.731	90.328	104.332
10	18.155	24.383	31.763	50.207	35.720	49.223	59.392	70.181	86.148	99.676
11	17.382	23.279	30.260	47.878	34.036	46.939	56.674	67.016	82.373	95.418
12	16.698	22.303	28.932	45.806	32.546	44.908	54.245	64.175	78.946	91.515
13	16.088	21.434	27.749	43.949	31.217	43.087	52.061	61.609	75.822	87.927
14	15.539	20.654	26.687	42.274	30.023	41.445	50.083	59.277	72.962	84.621
15	15.041	19.949	25.728	40.754	28.944	39.955	48.284	57.149	70.334	81.565
16	14.588	19.307	24.857	39.368	27.962	38.596	46.638	55.196	67.911	78.735
17	14.174	18.721	24.061	38.098	27.065	37.351	45.126	53.399	65.670	76.107
18	13.792	18.183	23.331	36.928	26.242	36.204	43.732	51.738	63.591	73.661
19	13.439	17.687	22.658	35.848	25.483	35.145	42.441	50.197	61.656	71.379
20	13.112	17.227	22.036	34.847	24.781	34.163	41.243	48.764	59.852	69.247
21	12.808	16.800	21.459	33.915	24.129	33.250	40.127	47.428	58.165	67.248
22	12.523	16.403	20.921	33.046	23.522	32.398	39.084	46.178	56.584	65.373
23	12.257	16.031	20.419	32.233	22.955	31.601	38.108	45.006	55.099	63.610
24	12.007	15.682	19.949	31.471	22.424	30.854	37.191	43.904	53.702	61.949
25	11.771	15.354	19.508	30.755	21.925	30.152	36.329	42.867	52.385	60.382
26	11.549	15.046	19.093	30.080	21.456	29.490	35.516	41.889	51.141	58.901
27	11.339	14.755	18.702	29.443	21.013	28.865	34.748	40.964	49.965	57.500
28	11.139	14.479	18.333	28.840	20.595	28.275	34.021	40.088	48.850	56.171
29	10.950	14.218	17.983	28.269	20.199	27.715	33.333	39.257	47.792	54.911
30	10.770	13.970	17.651	27.728	19.824	27.184	32.679	38.468	46.787	53.712
31	10.599	13.734	17.336	27.213	19.467	26.679	32.057	37.717	45.830	52.572
32	10.436	13.510	17.036	26.723	19.128	26.199	31.464	37.002	44.919	51.486
33	10.280	13.296	16.751	26.256	18.805	25.741	30.900	36.320	44.050	50.450
34	10.130	13.091	16.478	25.810	18.496	25.304	30.361	35.669	43.220	49.461
35	9.987	12.896	16.218	25.384	18.202	24.886	29.845	35.046	42.427	48.516
36	9.850	12.708	15.969	24.976	17.920	24.486	29.352	34.450	41.668	47.612
37	9.718	12.529	15.731	24.586	17.650	24.103	28.880	33.879	40.940	46.746
38	9.592	12.356	15.502	24.211	17.391	23.736	28.427	33.331	40.243	45.915
39	9.470	12.191	15.283	23.852	17.143	23.384	27.991	32.805	39.574	45.119
40	9.353	12.032	15.073	23.506	16.904	23.045	27.573	32.299	38.931	44.354
41	9.240	11.878	14.870	23.174	16.675	22.720	27.171	31.813	38.312	43.619
42	9.130	11.731	14.675	22.854	16.454	22.406	26.784	31.345	37.717	42.912
43	9.025	11.588	14.487	22.546	16.241	22.104	26.411	30.894	37.145	42.231
44	8.923	11.451	14.306	22.249	16.036	21.813	26.052	30.459	36.593	41.576
45	8.825	11.318	14.131	21.963	15.838	21.532	25.705	30.040	36.060	40.944
46	8.729	11.190	13.963	21.686	15.647	21.261	25.370	29.635	35.547	40.335
47	8.637	11.066	13.800	21.418	15.462	20.998	25.046	29.243	35.051	39.747
48	8.548	10.946	13.642	21.160	15.283	20.745	24.733	28.865	34.571	39.179
49	8.461	10.829	13.489	20.909	15.111	20.499	24.430	28.499	34.108	38.630
50	8.377	10.716	13.341	20.667	14.943	20.262	24.137	28.145	33.659	38.100
55	7.990	10.200	12.667	19.561	14.179	19.178	22.800	26.529	31.619	35.689
60	7.651	9.750	12.082	18.604	13.517	18.239	21.643	25.133	29.862	33.619
65	7.352	9.354	11.569	17.766	12.936	17.418	20.631	23.914	28.332	31.822
70	7.085	9.002	11.115	17.025	12.422	16.691	19.737	22.837	26.986	30.246
75	6.844	8.686	10.709	16.363	11.963	16.042	18.941	21.880	25.793	28.853
80	6.625	8.401	10.343	15.769	11.550	15.460	18.226	21.021	24.727	27.612
85	6.426	8.141	10.012	15.231	11.175	14.932	17.579	20.246	23.768	26.498
90	6.243	7.904	9.709	14.741	10.833	14.452	16.992	19.543	22.900	25.493



Council		C*10
CARDINIA	0.11508008	
CASEY	0.11508008	
HUME	0.16031382	
MELTON	0.15445632	
WHITTLESEA	0.16031382	
WYNDHAM	0.15445632	
OTHER	0.05535246	

Zone	Frac. Impervious
Lot <450sq.m	0.8
Lot 450-600sq.m	0.7
Lot 600-1000sq.m	0.6
Lot 1000-4000sq.m	0.3
Major Roads	0.8
Local Roads	0.7
Drainage Reserve	0.25
Open Space	0.1
Schools	0.7
Mixed Use Zone	0.7
Industrial	0.9
Medium Density	0.9
Health/Community	0.7
Impervious	1

Pit Type
SEP
GEP

Co-Ordinate Type	
Easting	Latitude
Northing	Longitude

CONSTANTS	
Frequency Factor	
4EY	0.80
2EY	0.80
1EY	0.80
0.2EY	0.95
50% AEP	0.85
20% AEP	0.95
10% AEP	1.00
5% AEP	1.05
2% AEP	1.15
1% AEP	1.20

Surface		FR
Smooth Concrete	0.013	
Asphalt	0.015	
Road Reserve	0.02	
Earth Channel	0.025	
Grass Channel	0.035	
OTHER		

Pipe Type		Mannings
PE	0.01	
PP	0.01	
PVC	0.01	
RC	0.013	
VC	0.015	

Y or N?
Y
N

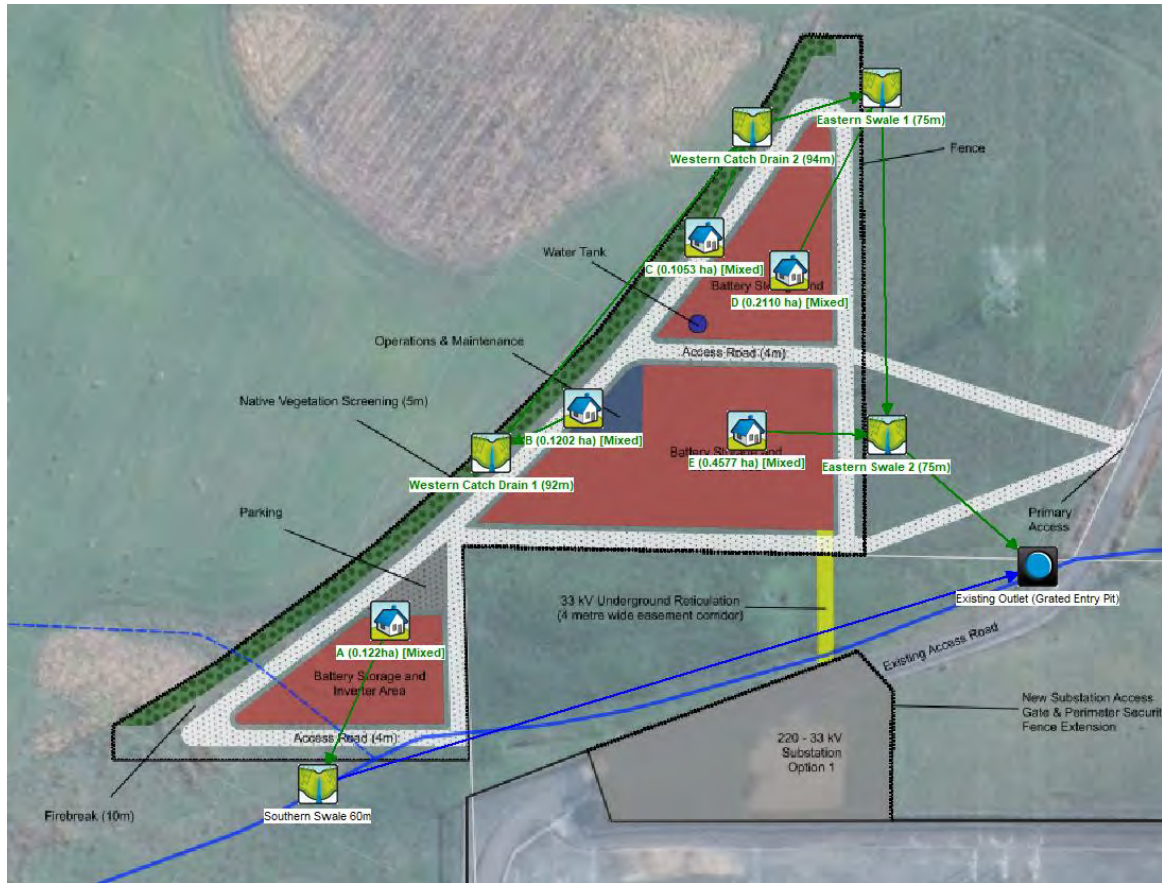
1 or 2?
1
2

Pipe Sizes	No. of Pipes
225	1
300	2
375	3
450	4
525	5
600	
675	
750	
825	
900	
1050	
1200	
1350	
1500	
1650	
1800	

Storm
Minor 1
Minor 2
Major
Overland



Appendix D MUSIC Modelling Schematic



	Sources	Residual Load	% Reduction
Flow (ML/yr)	4.56	4.57	-0.1
Total Suspended Solids (kg/yr)	870	74.1	91.5
Total Phosphorus (kg/yr)	1.8	0.615	65.9
Total Nitrogen (kg/yr)	12.9	8.16	36.7
Gross Pollutants (kg/yr)	171	0	100

Rosemary Jones

From: Siale, Vili <Vili.Siale@stategrowth.tas.gov.au>
Sent: Wednesday, 30 August 2023 12:00 PM
To: NMC Planning
Cc: Bentley, Judd
Subject: RE: Referral to Department of State Growth of Planning Application PLN-23-0160 - 1440 Saundridge Road, Cressy TAS 7302

Our References: D23/211903 and D23/189826

Dear Rosemary,
 Thank you for your email regarding the above matter.

Following a review of the related documents, the proposed development won't have adverse impacts on the Poatina Road in accordance with the findings of the TIA and subject to the before and after assessments of the sections of the road involved including any remedial works required. However, this development must be considered in conjunction with the development PLN-23-0134 (as per our reference D23/189826 above), which is of the same nature and within the same TasNetworks site and access onto Poatina Road.

Consequently, appropriate Traffic Management may be required during construction in order to coordinate the movements of construction traffic, especially heavy vehicles, within the narrow access. A permit will be required prior to any Traffic Management devices are placed on Poatina Road for these projects. It is also understood that the proponent will be applying for relevant NHVR permit for the use of State Roads for any oversize and over mass loads/vehicles.

If you have any further queries regarding the above matter, please let me know.

Regards,
 Vili.

Vili Siale | [Traffic Engineering Liaison Officer](#)
 Traffic Engineering | Network Performance
 Infrastructure Tasmania | Department of State Growth
 11A Goodman Court, INVERMAY TAS 7248 | GPO Box 536, Hobart TAS 7001
 Ph. (03) 6777 1951 | Mb. 0439 101 614
www.stategrowth.tas.gov.au

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My current work pattern:

Monday	Tuesday	Wednesday	Thursday	Friday
Office	Office	Office	WFH	WFH

From: NMC Planning <planning@nmc.tas.gov.au>
Sent: Monday, 28 August 2023 2:17 PM
To: Development <Development@stategrowth.tas.gov.au>
Subject: RE: Referral to Department of State Growth of Planning Application PLN-23-0160 - 1440 Saundridge Road, Cressy TAS 7302

Good afternoon,

Documents uploaded as requested,

Rosemary Jones



Community & Development | Northern Midlands Council
 Council Office, 13 Smith Street (PO Box 156), Longford Tasmania 7301
 T: (03) 6397 7303 | F: (03) 6397 7331
 E: planning@nmc.tas.gov.au | W: www.northernmidlands.tas.gov.au



From: Development <Development@stategrowth.tas.gov.au>
Sent: Monday, August 28, 2023 1:56 PM
To: NMC Planning <planning@nmc.tas.gov.au>
Subject: RE: Referral to Department of State Growth of Planning Application PLN-23-0160 - 1440 Saundridge Road, Cressy TAS 7302

Good Afternoon

Please be advised that it is a requirement of the Department of State Growth's Information, Communications and Technology Branch that to meet the Department's cyber security policy, the transferring of large files between the Department and external clients is only to occur via the web based service StateGrowth Files.

Can you please either email the listed documents individually or follow the link below to upload any Development Applications / Planning Applications for the Department of State Growth to action.

- <https://files.stategrowth.tas.gov.au/index.php/s/S9prFiTEv9HqE3v>

After documents are uploaded, could you please send an email to this mailbox advising the document/s are ready to be actioned?

Kind regards

Sue

Support Services Branch State Roads | Department of State Growth
 Level 2, 4 Salamanca Place, Hobart TAS 7000 | GPO Box 536, Hobart TAS 7001
www.stategrowth.tas.gov.au

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TEAMWORK | INTEGRITY | RESPECT | EXCELLENCE

In recognition of the deep history and culture of this island, I acknowledge and pay my respects to all Tasmanian Aboriginal people; the past, and present custodians of the Land.

From: NMC Planning <planning@nmc.tas.gov.au>
Sent: Monday, 28 August 2023 1:41 PM
To: Development <Development@stategrowth.tas.gov.au>
Subject: Referral to Department of State Growth of Planning Application PLN-23-0160 - 1440 Saundridge Road, Cressy TAS 7302
 28/08/2023
 Department of State Growth
 via email to: Development@stategrowth.tas.gov.au
Referral to Department of State Growth of Planning Application PLN-23-0160 - 1440 Saundridge Road, Cressy TAS 7302

The following planning application has been received under the *Northern Midlands Interim Planning Scheme 2013*.

NMC ref no:	PLN-23-0160
Site:	1440 Saundridge Road, Cressy TAS 7302
Proposal:	Utilities - Palmerston Battery Energy Storage System Project
Applicant:	Akaysha Pty Ltd
Use class:	Utilities
Zone:	21.0 Agriculture 26.0 Utilities
Development status:	Discretionary
Notes:	The subject site is in a 100kph zone. No changes to access proposed.

Below is a link to the application, plans/documentation relating to the proposal. It would be appreciated if you could return any comments, or notification that you do not wish to comment on the application, within fourteen (14) days of the date of this letter. If you have any queries, please telephone Council's Development Services Department on 6397 7303 or e-mail planning@nmc.tas.gov.au

<https://www.dropbox.com/scl/fo/w8z26u1axz958ab9na5vv/h?rlkey=o9ryiwf3w68abtghqdoqlv78u&dl=0>

Kind regards,
Rosemary Jones



Community & Development | Northern Midlands Council
Council Office, 13 Smith Street (PO Box 156), Longford Tasmania 7301
T: (03) 6397 7303 | F: (03) 6397 7331
E: planning@nmc.tas.gov.au | W: www.northernmidlands.tas.gov.au



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NORTHERN
MIDLANDS
COUNCIL

2023-08-21 Ordinary Meeting of Council - Open Council - Minutes

17.1 CLOSED COUNCIL DECISIONS RELEASED

4.1 SALE OF TOWN HALL, CAMPBELL TOWN

MINUTE NO. 23/0296

DECISION

Cr Adams/Cr Brooks

That Council

- a) initiate and commence the rezoning process of the property such that the property is zoned 'Business General';
- b) in relation to this matter
 - i) consider whether any discussion, decision, report or document is kept confidential or released to the public; and
 - ii) determined to **release the decision only** to the public.

Carried

Voting for the Motion:

Mayor Knowles, Deputy Mayor Lambert, Cr Adams, Cr Andrews, Cr Brooks and Cr Goss

Voting Against the Motion:

Cr Archer and Cr Terrett

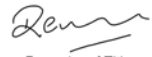


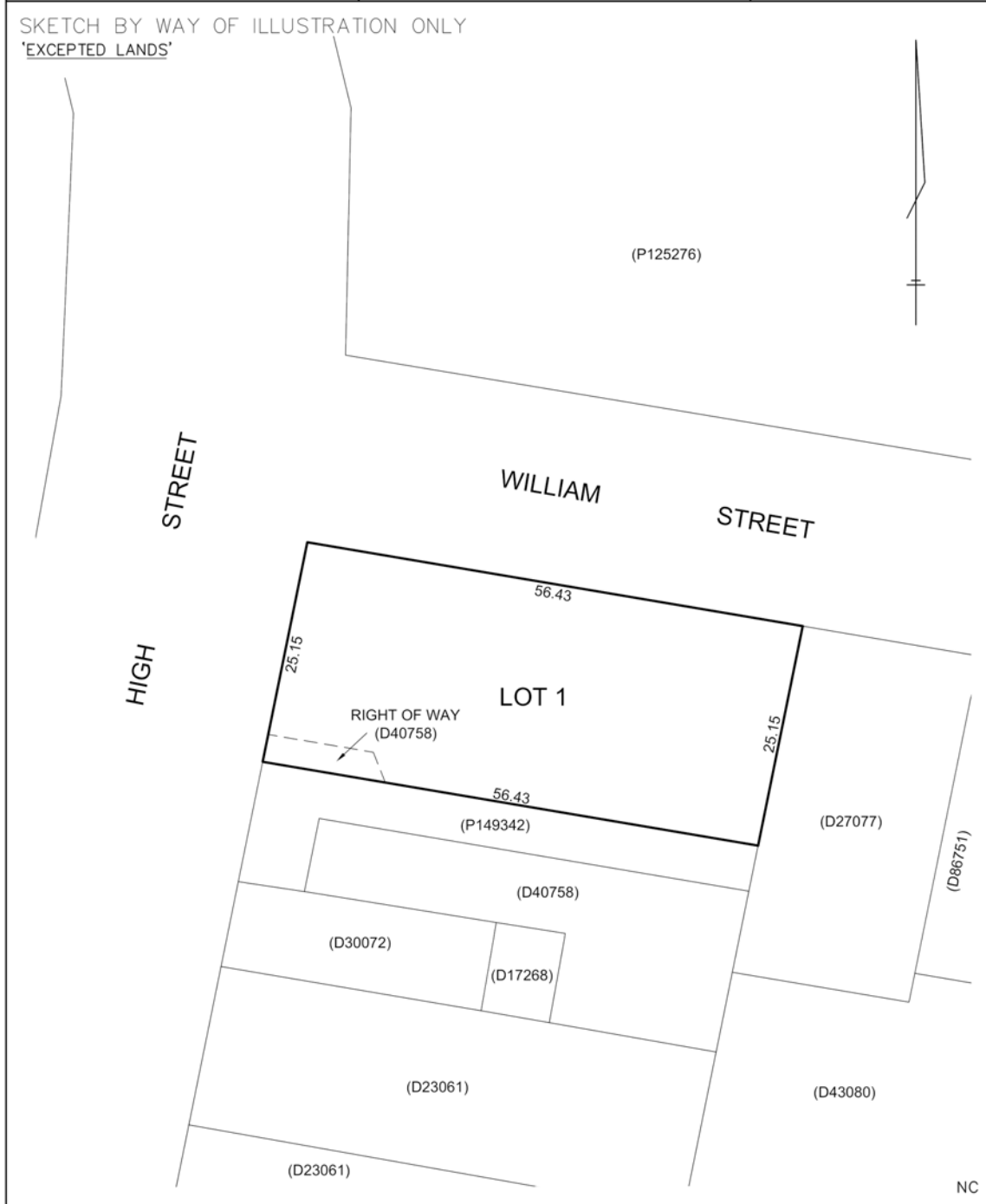
FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



FILE NUMBER: A23002 GRANTEE: PART OF 5A-0R-0P GTD TO JOHN HELDER WEDGE.	CONVERSION PLAN LOCATION: TOWN OF CAMPBELL TOWN (SECTION E) CONVERTED FROM: 20/5821 NOT TO SCALE LENGTHS IN METRES	Registered Number P.149212 APPROVED 2 JUL 2021  Recorder of Titles
	SKETCH BY WAY OF ILLUSTRATION ONLY 'EXCEPTED LANDS'	





RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 149212	FOLIO 1
EDITION 1	DATE OF ISSUE 12-Oct-2022

SEARCH DATE : 09-Nov-2023

SEARCH TIME : 03.39 PM

DESCRIPTION OF LAND

Town of CAMPBELL TOWN
 Lot 1 on Plan 149212
 Being the land described in Conveyance No.20/5821
 Derivation : Part of 5A-0R-0P Gtd to John Helder Wedge
 Derived from A23002

SCHEDULE 1

NORTHERN MIDLANDS COUNCIL

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
 65/6198 BURDENING EASEMENT: Right of Carriageway (appurtenant
 to Lot 1 on D.40758) over the Right of Way shown on
 Plan No.149212

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

PLANNING APPLICATION Proposal

Description of proposal:

Campbell Town High Street, Streetscape Improvements. Consisting of kerb realignment, pedestrian barriers, street furniture, garden beds, signage, new pavement replacement kerbs, new pedestrian nodes and carriageway pavement.

.....
.....
.....

(attach additional sheets if necessary)

If applying for a subdivision which creates a new road, please supply three proposed names for the road, in order of preference:

1..... NA 2..... 3.....

Site address: The Intersection of William and Main Street to 115 Main Street Campbell Town

.....

CT no: NA

Estimated cost of project \$..... 3.5 - 4M *(include cost of landscaping, car parks etc for commercial/industrial uses)*

Are there any existing buildings on this property? Yes / No
If yes – main building is used as Road Infrastructure and associated items

If variation to Planning Scheme provisions requested, justification to be provided:

.....
.....
.....
.....
.....

(attach additional sheets if necessary)

Is any signage required? As per documents
(if yes, provide details)

Department of State Growth

Salamanca Building Parliament Square
4 Salamanca Place, Hobart TAS
GPO Box 536, Hobart TAS 7001 Australia
Email permits@stategrowth.tas.gov.au Web www.stategrowth.tas.gov.au
Ref: SRA-23-624



Trent Atkinson
Northern Midlands Council
By email: trent.atkinson@nmc.tas.gov.au

Dear Trent

Crown Landowner Consent Granted - High Street (Midland Highway) Campbell Town

I refer to your recent request for Crown landowner consent relating to the development application at High Street Campbell Town for streetscape improvements.

I, Vincent Tang, Director Asset Management, the Department of State Growth, having been duly delegated by the Minister under section 52 (1F) of the *Land Use Planning and Approvals Act 1993* (the Act), and in accordance with the provisions of section 52 (1B) (b) of the Act, hereby give my consent to the making of the application, insofar as it affects the State road network and any Crown land under the jurisdiction of this Department.

The consent given by this letter is for the making of the application only insofar as that it impacts Department of State Growth administered Crown land and is with reference to your application dated 15 September 2023, and the approved documents, as accessible via the link below:

<https://files.stategrowth.tas.gov.au/index.php/s/d3dl6C4m9dwsEcC>

A copy of the Instrument of Delegation from the Minister authorising the delegate to sign under section 52 of the Act can also be accessed via the above link.

Please access and download these documents for your records as soon as possible as this link will expire six months from the date of this letter.

In giving consent to lodge the subject development application, the Department notes the following applicable advice:

Other types of works (pipeline, etc.) OR Construction of infrastructure in the road reserve/on Crown land (Works permit required)

In giving consent to lodge the subject development application, the Department notes that the works in the State road network will require the following additional consent:

The consent of the Minister under Section 16 of the *Roads and Jetties Act 1935* to undertake works within the State road reservation.

For further information please visit https://www.transport.tas.gov.au/roads_and_traffic_management/permits_and_bookings or contact permits@stategrowth.tas.gov.au.

- 2 -

The Department reserves the right to make a representation to the relevant Council in relation to any aspect of the proposed development relating to its road network and/or property.

Yours sincerely



Vincent Tang
DIRECTOR ASSET MANAGEMENT

Delegate of
Minister for Infrastructure and Transport
Michael Ferguson MP

29 September 2023

cc: General Manager, Northern Midlands Council

CLIENT:
NORTHERN MIDLANDS COUNCIL

PROJECT:
URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS

ADDRESS:
MIDLANDS HIGHWAY (HIGH STREET), CAMPBELL TOWN

PROJECT No:
17.340

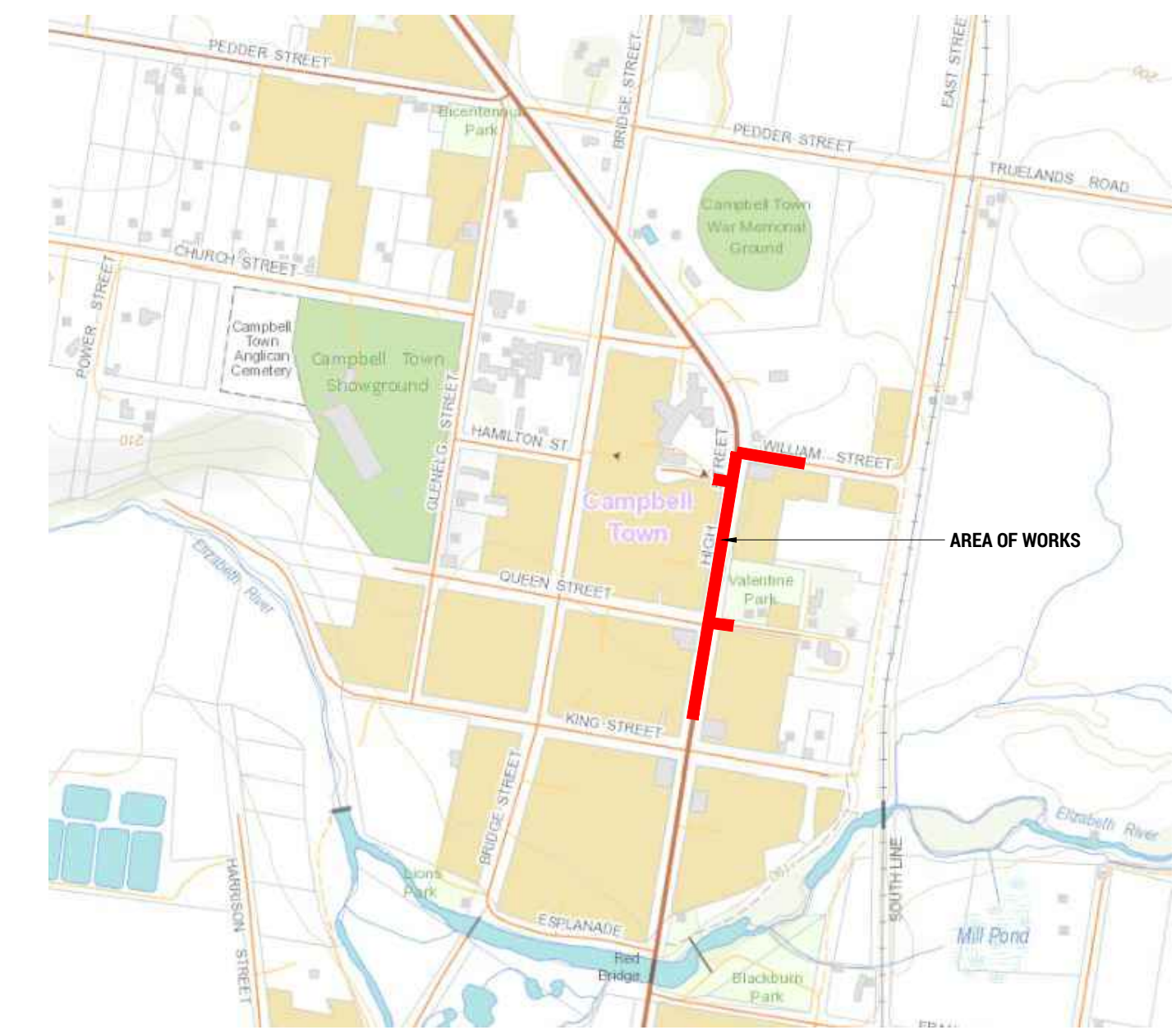
STATUS:
PRELIMINARY / INFORMATION

ISSUED FOR / DESCRIPTION:
APPROVAL / TENDER




DRAWINGS:

COV - COVER SHEET

- | | |
|---|---|
| <p>C000 - CIVIL NOTES</p> <p>C101 - EXISTING SURVEY / DEMOLITION PLAN - PART 1</p> <p>C102 - EXISTING SURVEY / DEMOLITION PLAN - PART 2</p> <p>C103 - EXISTING SURVEY / DEMOLITION PLAN - PART 3</p> <p>C104 - EXISTING SURVEY / DEMOLITION PLAN - PART 4</p>
<p>C201 - BULK EARTHWORKS PLAN - PART 1</p> <p>C202 - BULK EARTHWORKS PLAN - PART 2</p> <p>C203 - BULK EARTHWORKS PLAN - PART 3</p> <p>C204 - BULK EARTHWORKS PLAN - PART 4</p>
<p>C301 - EROSION CONTROL PLAN - PART 1</p> <p>C302 - EROSION CONTROL PLAN - PART 2</p> <p>C303 - EROSION CONTROL PLAN - PART 3</p> <p>C304 - EROSION CONTROL PLAN - PART 4</p>
<p>C400 - CIVIL WORK PLAN - OVERALL</p> <p>C401 - CIVIL WORKS PLAN - CH:-20 - CH:40</p> <p>C402 - CIVIL WORKS PLAN - CH:20 - CH:140</p> <p>C403 - CIVIL WORKS PLAN - CH:140 - CH:240</p> <p>C404 - CIVIL WORKS PLAN - CH:240 - CH:333</p>
<p>C411 - PAVEMENT JOINTING PLAN - PART 1</p> <p>C412 - PAVEMENT JOINTING PLAN - PART 2</p> <p>C413 - PAVEMENT JOINTING PLAN - PART 3</p> <p>C414 - PAVEMENT JOINTING PLAN - PART 4</p>
<p>C421 - CIVIL CHAINAGES & SPOT LEVEL PLAN - CH:-20 - CH:40</p> <p>C422 - CIVIL CHAINAGES & SPOT LEVEL PLAN - CH:20 - CH:140</p> <p>C423 - CIVIL CHAINAGES & SPOT LEVEL PLAN - CH:140 - CH:240</p> <p>C424 - CIVIL CHAINAGES & SPOT LEVEL PLAN - CH:240 - CH:333</p>
<p>C431 - CIVIL LONGITUDINAL SECTIONS - SHEET 1</p> <p>C432 - CIVIL LONGITUDINAL SECTIONS - SHEET 2</p> | <p>C441 - CIVIL CROSS SECTIONS - MIDLAND HWY - SHEET 1</p> <p>C442 - CIVIL CROSS SECTIONS - MIDLAND HWY - SHEET 2</p> <p>C443 - CIVIL CROSS SECTIONS - MIDLAND HWY - SHEET 3</p> <p>C444 - CIVIL CROSS SECTIONS - MIDLAND HWY - SHEET 4</p> <p>C445 - CIVIL CROSS SECTIONS - MIDLAND HWY - SHEET 5</p> <p>C446 - CIVIL CROSS SECTIONS - MIDLAND HWY - SHEET 6</p> <p>C447 - CIVIL CROSS SECTIONS - MIDLAND HWY - SHEET 7</p>
<p>C451 - CIVIL CROSS SECTIONS - WILLIAM STREET</p> <p>C452 - CIVIL CROSS SECTIONS - ELIZABETH COURT & COMMONWEALTH LANE</p>
<p>C461 - LINE MARKING & SIGNAGE PLAN - CH:-20 - CH:40</p> <p>C462 - LINE MARKING & SIGNAGE PLAN - CH:20 - CH:140</p> <p>C463 - LINE MARKING & SIGNAGE PLAN - CH:140 - CH:240</p> <p>C464 - LINE MARKING & SIGNAGE PLAN - CH:240 - CH:333</p>
<p>C501 - DRAINAGE PLAN - CH:-20 - CH:40</p> <p>C502 - DRAINAGE PLAN - CH:20 - CH:140</p> <p>C503 - DRAINAGE PLAN - CH:140 - CH:240</p> <p>C504 - DRAINAGE PLAN - CH:240 - CH:333</p>
<p>C521 - DRAINAGE LONGITUDINAL SECTIONS - EAST KERB - SHEET 1</p> <p>C522 - DRAINAGE LONGITUDINAL SECTIONS - EAST KERB - SHEET 2</p> <p>C523 - DRAINAGE LONGITUDINAL SECTIONS - WEST KERB</p>
<p>C601 - WATER RETICULATION PLAN - CH:-20 - CH:40</p> <p>C602 - WATER RETICULATION PLAN - CH:20 - CH:140</p> <p>C603 - WATER RETICULATION PLAN - CH:140 - CH:240</p> <p>C604 - WATER RETICULATION PLAN - CH:240 - CH:333</p>
<p>C611 - WATER MAIN LONGITUDINAL SECTIONS</p>
<p>C701 - TYPICAL CIVIL SECTIONS</p>
<p>C711 - CIVIL SECTIONS & DETAILS - SHEET 1</p> <p>C712 - CIVIL SECTIONS & DETAILS - SHEET 2</p> <p>C713 - CIVIL SECTIONS & DETAILS - SHEET 3</p> |
|---|---|



LOCALITY PLAN
SCALE N.T.S

 <p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	  <p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: COVER SHEET</p> <p>SCALE: - SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: COV REV: 0</p>
	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p> <p>DATE: 00-00-00</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>					

GENERAL

1. NOTICE TO TENDERER

THE CONTRACTOR / TENDERER IS TO MAKE THEMSELVES AWARE OF THE LOCAL COUNCIL AND THE DEPARTMENT OF STATE GROWTH (D.S.G.) STANDARDS FOR CIVIL WORKS. CONSTRUCTION IS TO BE CARRIED OUT TO THESE STANDARDS. TENDERER IS TO ALLOW FOR THESE STANDARDS DURING PRICING. COPIES OF THE STANDARDS ARE AVAILABLE FOR INSPECTION UPON REQUEST FROM THE LOCAL COUNCIL OR D.S.G.'S WEB SITE.

2. NOTIFICATION

THE CONTRACTOR IS TO NOTIFY ALL RELEVANT STATUTORY AUTHORITIES PRIOR TO COMMENCING ANY WORK FOR THE POSSIBLE LOCATION OF ANY EXISTING SERVICES NOT SHOWN ON THESE PLANS, AND IS TO NOTIFY THE SUPERINTENDENT OF THE SAME. ALL EXISTING SERVICES ARE TO BE PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO EXISTING SERVICES IS TO BE MADE GOOD AT THE CONTRACTOR'S EXPENSE.

3. DRAWINGS AND SPECIFICATIONS

THESE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED FOR THE PURPOSE OF OBTAINING COUNCIL APPROVAL AND CALLING OF TENDERS. THEY ARE NOT TO BE USED FOR CONSTRUCTION. A CONSTRUCTION SET OF DRAWINGS STAMPED "CONSTRUCTION SET" WILL BE ISSUED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

4. COMMON TRENCHING

WHERE ANY COMMON TRENCHING IS REQUIRED, THE FOLLOWING CLEARANCE DISTANCES (BARRIER TO BARREL) MUST BE MAINTAINED FROM EXISTING OR PROPOSED SERVICES:

- HORIZONTALLY:**
- 300mm ALONG A LENGTH GREATER THAN 2 METRES.
 - 500mm MINIMUM FROM ANY MAIN GREATER THAN 200mm DIA.
 - 150mm MINIMUM ALONG A LENGTH LESS THAN 2 METRES.
- VERTICALLY:**
- 150mm MINIMUM
 - 300mm MINIMUM FROM ANY MAIN GREATER THAN 200mm DIA.
- ELECTRICAL CABLES SHOULD BE LOCATED ON THE OPPOSITE SIDE OF THE STREET, WHERE THIS IS NOT POSSIBLE A 400mm MINIMUM DISTANCE MUST BE OBSERVED OF WHICH 300mm SHOULD BE IN NATURAL AND UNDISTURBED MATERIAL.

5. TASNETWORKS TRENCHING

THE CONTRACTOR IS TO ALLOW FOR EXCAVATION AND BACKFILLING OF ALL TRENCHES FOR THE INSTALLATION OF TASNETWORKS CABLES. CONTRACTOR IS TO LAISE WITH THE TASNETWORKS FOR THE EXTENT OF CABLE TRENCHING, CONDUITS & PITS.

6. COMMUNICATION TRENCHING

THE CONTRACTOR IS TO ALLOW FOR EXCAVATION AND BACKFILLING OF ALL TRENCHES FOR THE INSTALLATION OF COMMUNICATIONS CABLES. CONTRACTOR IS TO LAISE WITH COMMUNICATION AUTHORITY FOR THE EXTENT OF CABLE TRENCHING.

7. EXISTING SERVICES

LOCATE EXISTING SERVICES PRIOR TO COMMENCING DEMOLITION AND SITE WORKS. THE CONTRACTOR IS TO ARRANGE AND PAY FOR THE ON SITE MARKING AND CONFIRMATION OF DEPTH OF SERVICE LOCATIONS FOR ALL UNDERGROUND SERVICES INCLUDING COMMUNICATIONS, TASNETWORKS, TASNATER (WATER & SEWER) AND COUNCIL SERVICES (ie. STORMWATER) IN THE AREA OF NEW WORKS. LOCATION TO BE CONFIRMED USING CABLE LOCATORS AND HAND DIGGING METHODS. PRIOR TO ANY WORKS ON SITE, ANY CLASHES WITH DESIGN SERVICES ON FOLLOWING DRAWINGS ARE TO BE REPORTED TO DESIGN ENGINEER FOR DIRECTION.

8. COUNCIL & AUTHORITIES APPROVALS

ALL WORKS ARE TO BE IN ACCORDANCE WITH THE FOLLOWING APPROVALS:

- NIL

9. SIGNAGE

ALL SIGN WORKS AND INSTALLATION TO BE IN ACCORDANCE WITH CURRENT VERSION OF MUTCD & AUSTRADRS FOR SIGNAGE DETAILS.

10. SCOPE OF WORKS

THE SCOPE OF WORKS ARE SHOWN IN THESE DOCUMENTS AND THE SPECIFICATION. IT IS EXPECTED THE CONTRACTOR WILL RESOLVE ALL ISSUES UNCOVERED ON SITE THAT ARE NOT DETAILED IN CONJUNCTION WITH THE SUPERINTENDENT.

GENERAL CONT.

11. LINE TYPE LEGEND

- DN100 AGG PIPE OR MEGAFLOW DRAIN AS NOTED @ 1:100 FALL TO STORM WATER SYSTEM
- eSW--- DENOTES EXISTING STORM WATER MAIN (CONFIRM EXACT LOCATION)
- SW--- DENOTES PROPOSED STORM WATER MAIN
- eS--- DENOTES EXISTING SEWER MAIN (CONFIRM EXACT LOCATION)
- S--- DENOTES PROPOSED SEWER MAIN
- eW--- DENOTES EXISTING WATER MAIN (CONFIRM EXACT LOCATION)
- W--- DENOTES PROPOSED WATER MAIN
- eGAS--- DENOTES EXISTING GAS MAIN (CONFIRM EXACT LOCATION)
- GAS--- DENOTES PROPOSED GAS MAIN
- eCOM--- DENOTES EXISTING UNDERGROUND TELECOM / FIBRE OPTIC LINE (CONFIRM EXACT LOCATION)
- --- DEMOLITION

12. SITE WORKS SYMBOLS LEGEND

- PEDESTRIAN RAMP
- TYPE BK BARRIER KERB
- TYPE KC KERB AND CHANNEL
- TYPE KCS KERB AND CHANNEL - SMALL
- TYPE KCM MOUNTABLE KERB AND CHANNEL
- TYPE KCV VEHICULAR CROSSING
- BOLLARD, REFER DETAIL
- HUDSON CIVIL PRECAST CONCRETE WHEEL STOP (2000 LONG x 100 HIGH)
- WS1 TELECOMMUNICATION PIT

13. BUILDING SERVICES SYMBOLS LEGEND

- TELECOMMUNICATION PIT

14. SURVEY SYMBOLS LEGEND

- EXISTING
- SPOT LEVEL WITH DESCRIPTION
- EXISTING SPOT LEVEL

15. DRAINAGE SYMBOLS LEGEND

- STORMWATER MANHOLE
- SEWER MANHOLE
- GRATED/GULLY PIT - STORM WATER
- GRATED DRAIN - STORM WATER
- SIDE ENTRY PIT - STORM WATER
- UNPLASTICIZED POLYVINYL CHLORIDE
- REINFORCED CONCRETE PIPE (DN FCR) CLASS 4 (2)
- NOMINAL DIAMETER
- COVER LEVEL
- INVERT LEVEL
- DOWN PIPE
- INSPECTION OPENING
- INSPECTION OPENING TO SURFACE
- GRATED PIT

16. WATER RETICULATION SYMBOLS LEGEND

- DN100 METER
- METER
- CHECK METER
- FIRE PLUG
- ISOLATION VALVE
- CHECK VALVE
- STRAINER
- MONITORED VALVE
- BALANCE VALVE
- STOP VALVE
- DN100 LOCKABLE STOP VALVE
- DN100 REFLEX VALVE
- BACK FLOW PREVENTION DEVICE
- PRESSURE REDUCING VALVE
- HOSE BIB COCK
- FIRE HYDRANT
- DUAL HEAD FIRE HYDRANT
- FIRE HOSE REEL

EARTHWORKS

1. GENERAL

GENERAL EARTHWORKS, MATERIAL AND WORKMANSHIP SHALL COMPLY WITH THIS SPECIFICATION AND THE CURRENT EDITION OF THE S.A.A. CODES FOR EARTHWORKS AS 2798 TOGETHER WITH ANY CODES, STANDARDS OR REGULATIONS REFERRED TO THEREIN.

2. INSPECTIONS

THE CONTRACTOR IS TO ENGAGE AN APPROVED GEOTECHNICAL ENGINEER TO CARRY OUT LEVEL 2 TESTING OF ALL EARTH WORKS TO AS 3798, INCLUDING:

- SUBGRADE
- FILLS
- PAVEMENTS
- BACKFILLING OF SERVICE TRENCHES

CERTIFICATION OF THESE ELEMENTS IS TO BE PROVIDED PRIOR TO PRACTICAL COMPLETION

3. AREAS OF FILL

- A. REMOVE TOP SOIL AND ORGANIC MATERIAL
- B. PROOF ROLL SUBGRADE IN ACCORDANCE WITH AS1289 TO:
 - 98% STANDARD DRY DENSITY UNDER BUILDING
 - 98% STANDARD DRY DENSITY UNDER ROADS AND CARPARKS
 - REMOVE ANY SOFT SPOTS AND COMPACT WITH 2% OF OPTIMUM MOISTURE CONTENT TO STANDARD DRY DENSITY AS STATED ABOVE
- C. PLACE FILL AS SPECIFIED AND COMPACT WITHIN 2% OF OPTIMUM MOISTURE CONTENT TO STANDARD DRY DENSITY AS STATED ABOVE
- D. SUB GRADE IMPROVEMENT MATERIAL TO BE PLACED AND TESTED IN ACCORDANCE WITH DSG SPEC SECTION 204 FOR EMBANKMENT MATERIAL.

4. AREAS OF CUT

- A. REMOVE TOP SOIL AND ORGANIC MATERIAL
- B. PROOF ROLL SUBGRADE IN ACCORDANCE WITH AS1289 TO:
 - 98% STANDARD DRY DENSITY UNDER BUILDINGS
 - 98% STANDARD DRY DENSITY UNDER ROADS AND CAR PARKS
 - REMOVE ANY SOFT SPOTS AND COMPACT WITH 2% OF OPTIMUM MOISTURE CONTENT TO STANDARD DRY DENSITY AS STATED ABOVE

SOIL & WATER MANAGEMENT

1. GENERAL

ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH 'SOIL & WATER MANAGEMENT ON BUILDING & CONSTRUCTION SITES' GUIDELINES AVAILABLE FROM NORTHERN RESOURCE MANAGEMENT (NRM).

2. SOIL EROSION CONTROL

- SOIL EROSION CONTROL IN ACCORDANCE WITH NRM GUIDELINES. CONTRACTOR TO ALLOW TO:
 - LIMIT DISTURBANCE WHEN EXACTING BY PRESERVING VEGETATED AREAS AS MUCH AS POSSIBLE
 - DIVER T UP-SLOPE WATER WHERE PRACTICAL
 - INSTALL SEDIMENT FENCES DOWN SLOPE OF ALL DISTURBED LANDS TO FILTER LARGE PARTICLES PRIOR TO STORM WATER SYSTEM
 - WASH EQUIPMENT IN DESIGNATED AREA THAT DOES NOT DRAIN TO STORM WATER SYSTEM
 - PLACE STOCK PILES AWAY FROM ON-SITE DRAINAGE & UP-SLOPE FROM SEDIMENT FENCES
 - LEAVE & MAINTAIN VEGETATED FOOT PATH
 - STORE ALL HARD WASTE & LITTER IN A DESIGNATED AREA THAT WILL PREVENT IT FROM BEING BLOWN AWAY & WASHED INTO THE STORM WATER SYSTEM
 - RESTRICT VEHICLE MOVEMENT TO A STABILISED ACCESS

3. NRM GUIDELINES

- CONTRACTOR TO COMPLETE ALL WORKS IN ACCORDANCE WITH NRM SOIL & WATER MANAGEMENT ON BUILDING & CONSTRUCTION SITE USING THE FACT SHEETS.
- FACT SHEET 1: SOIL & WATER MANAGEMENT ON LARGE BUILDING & CONSTRUCTION SITES
 - FACT SHEET 2: SOIL & WATER MANAGEMENT ON STANDARD BUILDING & CONSTRUCTION SITES
 - FACT SHEET 3: SOIL & WATER MANAGEMENT PLANS
 - FACT SHEET 4: DISPERSIVE SOILS - HIGH RISK OF TUNNEL EROSION
 - FACT SHEET 5: MINIMISE SOIL DISTURBANCE
 - FACT SHEET 6: PRESERVE VEGETATION
 - FACT SHEET 7: DIVER T UP-SLOPE WATER
 - FACT SHEET 8: EROSION CONTROL MATS & BLANKETS
 - FACT SHEET 9: PROTECT SERVICE TRENCHES & STOCKPILES
 - FACT SHEET 10: EARLY ROOF DRAINAGE CONNECTION
 - FACT SHEET 11: SOULR PROTECTION - STORM WATER PIPE OUTFALLS & CHECK DAMS
 - FACT SHEET 12: STABILISED SITE ACCESS
 - FACT SHEET 13: WHEEL WASH
 - FACT SHEET 14: SEDIMENT FENCES & FIBRE ROLLS
 - FACT SHEET 15: PROTECTION OF STORM WATER PITS
 - FACT SHEET 16: MANAGE CONCRETE, BRICK & LIME CUTTING
 - FACT SHEET 17: SEDIMENT BASINS
 - FACT SHEET 18: DUST CONTROL
 - FACT SHEET 19: SITE RE-VEGETATION

ROAD WORKS

1. GENERAL

ALL WORKS ARE TO BE CARRIED OUT TO THE LOCAL COUNCIL AND D.S.G. STANDARDS. ANY DEPARTURES FROM THESE STANDARDS REQUIRES THE PRIOR APPROVAL OF THE SUPERINTENDENT AND THE LOCAL COUNCIL WORKS SUPERVISOR.

2. INSPECTIONS

THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING THE FOLLOWING INSPECTIONS WITH THE SUPERINTENDENT. 48 HOURS NOTICE IS REQUIRED TO BE GIVEN TO THE SUPERINTENDENT PRIOR TO THE INSPECTION.

- SUBGRADE PREPARATION
- SUB-BASE FOR ROADS, CARPARKS AND KERBS
- BASE COURSE
- FINAL TRIM PRIOR TO PLACING KERBS
- FINAL TRIM PRIOR TO SEALING

3. TESTING

THE CONTRACTOR IS TO BE RESPONSIBLE FOR ORGANISING AND PAYING ALL COSTS ASSOCIATED WITH TESTING IN ACCORDANCE WITH D.S.G. SPEC SECTION 113 EXAMINATION AND TESTING OF MATERIALS AND WORK (ROADWORKS).

4. BASE COURSE LAYERS

- SUB-BASE TYPE 3 MATERIAL TO BE PLACED AND TESTED IN ACCORDANCE WITH DSG SPEC SECTION 304 FOR SUB-BASE CLASS 3 MATERIAL
- BASE CLASS 2 MATERIAL TO BE PLACED AND TESTED IN ACCORDANCE WITH DSG SPEC SECTION 304 FOR BASE CLASS 2 MATERIAL

4. HOTMIX

ALL HOTMIX IS TO BE BLACK IN COLOUR AND IS TO MEET AND BE PLACED IN ACCORDANCE WITH D.S.G. SPEC SECTION 407-HOT MIX ASPHALT.

5. KERBS

ALL KERBS ARE TO BE AS SHOWN ON THE DRAWINGS AND BE IN ACCORDANCE WITH IPWEA L041 STANDARD DRAWINGS.

6. ROAD RESERVE WORKS

ALL WORKS IN (OR REQUIRING OCCUPATION) IN THE ROAD RESERVE MUST BE UNDER TAKEN BY CONTRACTOR REGISTERED WITH COUNCIL'S (REGISTERED CONTRACTOR).

7. FOOTPATHS

CONSTRUCT FOOTPATHS INCLUDING EXPANSION / CONTROL / WEAKENED PLANE JOINTS IN ACCORDANCE WITH IPWEA STD DWG TSD-R11-v3

8. LANDSCAPE / STREET FURNITURE

- BOLLARDS, REFER DETAILS / SUPERINTENDENTS SPEC.
- LANDSCAPING & STREET FURNITURE BY CONTRACTOR - UN-0

STORMWATER

1. GENERAL

ALL WORKS ARE TO BE CARRIED OUT TO THE LOCAL COUNCIL AND DSG STANDARDS. ANY DEPARTURES FROM THESE STANDARDS REQUIRES THE PRIOR APPROVAL OF THE SUPERINTENDENT AND THE LOCAL COUNCIL WORKS SUPERVISOR. ALL STORM WATER PLUMBING & DRAINAGE TO COMPLY WITH AS 3500.3:2003 STORM WATER DRAINAGE.

2. TESTING

ALL DRAINAGE WORKS SHALL BE SUBJECT TO THE TESTS PRESCRIBED BY THE AUTHORITIES HAVING JURISDICTION OVER THE VARIOUS SERVICES. ANY SECTION FAILING SUCH TESTS SHALL BE REMOVED AND PROPERLY INSTALLED AT THE CONTRACTORS EXPENSE.

3. MANHOLES

MANHOLES ARE TO BE 1050 I.D. U.N.O PRECAST CONCRETE INSTALLED TO LOCAL COUNCIL STANDARDS. ALL MANHOLES IN TRAFFICED AREAS ARE TO BE FITTED WITH HEAVY DUTY GATIC COVERS AND SURROUNDS. ALL MANHOLES ARE TO HAVE A 5 METRE LENGTH OF 75mm AG PIPE CONNECTED TO THEM AND LAID IN THE UPSTREAM PIPE TRENCH IMMEDIATELY ADJACENT TO AND AT THE INVERT OF THE LOWEST PIPE WORK.

4. SIDE ENTRY PIT (SEP)

- PIT INVERT DEPTHS VARY, REFER SITE PLAN.
- BENCH OUT IN A NEAT AND TIDY MANNER TO ENGINEERS APPROVAL.
- GRATED PIT - GULLY HINGED OR OTHER TYPE APPROVED
- CONCRETE KERB LINTEL - STEEL KERB LINTEL AND 1200 LONG GALV BAR

5. TRENCHING AND BACKFILL

ALL TRENCHES ARE TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE DRAWINGS AND THE LOCAL COUNCIL STANDARDS.

6. INSPECTIONS

THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING THE FOLLOWING INSPECTIONS WITH THE SUPERINTENDENT. 48 HOURS NOTICE IS REQUIRED TO BE GIVEN TO THE SUPERINTENDENT PRIOR TO THE INSPECTION.

- PIPEWORK BEDDING
- INSTALLED PIPE PRIOR TO BACKFILLING
- BACKFILLING

7. AS CONSTRUCTED DRAWINGS

THE CONTRACTOR WILL BE RESPONSIBLE FOR PRODUCING 'AS CONSTRUCTED' DRAWINGS TO THE STANDARD REQUIRED BY THE LOCAL COUNCIL. THE DRAWINGS SHALL BE CERTIFIED AS BEING CORRECT BY EITHER A CHARTERED CIVIL ENGINEER OR A REGISTERED SURVEYOR. RARE CAN PROVIDE THIS SERVICE, HOWEVER THE CONTRACTOR WILL BE CHARGED FOR THIS SERVICE AND SHOULD BE AWARE OF THIS WHEN PRICING.

8. TESTING

CONTRACTOR SHALL CAMERA TEST ALL PIPES AND SUBMIT FOOTAGE TO LOCAL COUNCIL FOR APPROVAL.

9. REDUNDANT PIPE WORK

FILL REDUNDANT SECTION OF PIPEWORK WITH 'LIQUIFILL' (GRADE PC.1 - 0.5-2.0 MPa)

SEWERAGE

1. GENERAL

ALL SEWER WORKS TO BE IN ACCORDANCE WITH THE WSA SEWER CODE (WSA 02-2014-3.1 MRWA) AND AS AMENDED BY THE TASNATER SUPPLEMENT. TASNATER APPROVED PRODUCTS ARE CONTAINED ON THE CITY WEST WATER WEBSITE [HTTP://WWW.MRWA.COM.AU/PAGES/PRODUCTS.ASPX](http://www.mrwa.com.au/PAGES/PRODUCTS.ASPX) ANY DEPARTURES FROM THESE STANDARDS REQUIRES THE PRIOR APPROVAL OF THE SUPERINTENDENT AND TASNATER FIELD SERVICES OFFICER.

2. TESTING

ALL DRAINAGE WORKS SHALL BE SUBJECT TO THE TESTS PRESCRIBED BY THE AUTHORITIES HAVING JURISDICTION OVER THE VARIOUS SERVICES. ANY SECTION FAILING SUCH TESTS SHALL BE REMOVED AND PROPERLY INSTALLED AT THE CONTRACTORS EXPENSE.

3. SEWER MAIN CONNECTIONS

ALL NEW LIVE CONNECTIONS TO EXISTING TASNATER SEWER INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO SEWER MAINS / MANHOLES TO BE COMPLETED BY TASNATER (UNLESS PRIOR WRITTEN APPROVAL) AT OWNERS COST. INSTALL PROPERTY SEWER CONNECTIONS (STANDARD OR SLOPED) WITH SURFACE I.D. NOMINALLY 150mm WITHIN EACH NEW LOT IN ACCORDANCE WITH SECTION 5 OF WSA 02-2014-3.1.

4. MANHOLES

MANHOLES ARE TO BE 1050 I.D. PRECAST CONCRETE INSTALLED TO WSA STANDARDS CONSTRUCT ALL MANHOLES (MH) AND MANHOLE COVERS IN ACCORDANCE WITH THE SEWERAGE CODE OF AUSTRALIA - MELBOURNE RETAIL WATER AGENCIES INTEGRATED CODE - WSA 02-2014-3.1 MRWA VERSION 2.0 AND TASNATER'S SUPPLEMENT TO THIS CODE. ALL MANHOLES IN TRAFFICABLE AREAS ARE TO BE FITTED WITH HEAVY DUTY CLASS D GATIC COVERS AND SURROUNDS. ALL MANHOLES IN NON-TRAFFICABLE AREAS ARE TO BE FITTED WITH MEDIUM DUTY CLASS B GATIC COVERS AND SURROUNDS. BENCHING TO BE FULL DEPTH OF PIPE DIAMETER AS PER DETAILS IN WSA 02-2014-3.1 MRWA VERSION 2.0

5. TRENCHING AND BACKFILL

ALL TRENCHES ARE TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE DRAWINGS AND TASNATER STANDARDS INCLUDING ELECTROMAGNETIC METAL IMPREGATED TAPE IN ALL NON METALLIC PIPE TRENCHES.

CEMENT STABILISED EMBEDMENT:

THE LATEST VERSION OF DRAWING MRWA-W-208 (REV 3) INCLUDES TABLE 208.A WITH NOTE G INDICATING THAT WHEN TRENCHSTOPS OR BULKHEADS ARE USED (GRADES GREATER THAN 5%) CEMENT STABILISED EMBEDMENT MUST BE USED. THIS IS NOT TASNATER'S PREFERRED STANDARD.

FOR PIPES UP TO 10% GRADE TASNATER WILL ACCEPT THE PREVIOUS REVISION OF MRWA (REV 2), IE. PIPES UP TO 10% GRADE DO NOT REQUIRE CEMENT STABILISED EMBEDMENT UNLESS THE CONDITIONS OF NOTE H APPLY. WHEN SOCKETED MAINS ARE LAID AT -5% SLOPE IN AREAS THAT ARE LIKELY TO HAVE HIGH GROUND WATER, CEMENT STABILISED EMBEDMENT SHALL BE USED. " FOR PIPES AT GRADE GREATER THAN 10% MRWA-W-208 REV 3 REMAINS VALID.

NOTE C REMAINS VALID "WHEN SOCKETED MAINS ARE LAID AT +1 IN 20 SLOPE IN AREAS THAT ARE LIKELY TO HAVE HIGH GROUND WATER, CEMENT STABILISED EMBEDMENT SHALL BE USED AS PER MRWA-S-207"

6. INSPECTIONS

THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING THE FOLLOWING INSPECTIONS WITH THE SUPERINTENDENT (LIAS WITH TASNATER). 48 HOURS NOTICE IS REQUIRED TO BE GIVEN TO THE SUPERINTENDENT PRIOR TO THE INSPECTION.

- PIPEWORK BEDDING
- INSTALLED PIPE PRIOR TO BACKFILLING
- BACKFILLING

7. AS CONSTRUCTED DRAWINGS

THE CONTRACTOR WILL BE RESPONSIBLE FOR PRODUCING 'AS INSTALLED' DRAWINGS TO THE STANDARD REQUIRED BY TASNATER. THE DRAWINGS SHALL BE CERTIFIED AS BEING CORRECT BY EITHER A CHARTERED CIVIL ENGINEER OR A REGISTERED SURVEYOR. RARE CAN PROVIDE THIS SERVICE, HOWEVER THE CONTRACTOR WILL BE CHARGED FOR THIS SERVICE AND SHOULD BE AWARE OF THIS WHEN PRICING.

8. TESTING

CONTRACTOR SHALL CCTV ALL PIPES AND SUBMIT FOOTAGE TO TASNATER FOR APPROVAL.

9. REDUNDANT PIPE WORK

FILL REDUNDANT SECTION OF PIPEWORK WITH 'LIQUIFILL' (GRADE PC.1 - 0.5-2.0 MPa)

WATER RETICULATION

1. GENERAL

ALL WATER SUPPLY CONSTRUCTION TO:

- WATER SUPPLY CODE OF AUSTRALIA (WSA 03-2011-3.1) VERSION MRWA EDITION V2.0 - PART 2: CONSTRUCTION
- WATER SERVICES ASSOCIATION OF AUSTRALIA - TASNATER SUPPLEMENT
- TASNATER'S STANDARD DRAWINGS TWS-W-0002 SERIES
- WATER METERING POLICY/METERING GUIDELINES
- TASNATER'S STANDARD DRAWINGS TWS W-0003 - FOR PROPERTY SERVICE CONNECTIONS - GAGE FOR WATER METER ASSEMBLY
- BOUNDARY BACKFLOW CONTAINMENT REQUIREMENTS AND ASS900 1:2003.

2. TESTING

ALL DRAINAGE WORKS SHALL BE SUBJECT TO THE TESTS PRESCRIBED BY THE AUTHORITIES HAVING JURISDICTION OVER THE VARIOUS SERVICES. ANY SECTION FAILING SUCH TESTS SHALL BE REMOVED AND PROPERLY INSTALLED AT THE CONTRACTORS EXPENSE.

3. FIRE HYDRANTS

FIRE HYDRANTS ARE TO BE AS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS TO ALLOW TO PLACE STANDARD MARKERS AS REQUIRED BY THE LOCAL AUTHORITY.

4. THRUST AND ANCHOR BLOCKS

THRUST AND ANCHOR BLOCKS ARE TO BE PROVIDED AT BENDS. VALVES, HYDRANTS AND LINE ENDS IN ACCORDANCE WITH TASNATER STANDARDS.

5. TRENCHING AND BACKFILL

ALL TRENCHES ARE TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH THE DRAWINGS AND TASNATER STANDARDS INCLUDING ELECTROMAGNETIC METAL IMPREGATED TAPE IN ALL NON METALLIC PIPE TRENCHES. CEMENT STABILISED EMBEDMENT:

THE LATEST VERSION OF DRAWING MRWA-W-208 (REV 3) INCLUDES TABLE 208.A WITH NOTE G INDICATING THAT WHEN TRENCHSTOPS OR BULKHEADS ARE USED (GRADES GREATER THAN 5%) CEMENT STABILISED EMBEDMENT MUST BE USED. THIS IS NOT TASNATER'S PREFERRED STANDARD.

FOR PIPES UP TO 10% GRADE TASNATER WILL ACCEPT THE PREVIOUS REVISION OF MRWA (REV 2), IE. PIPES UP TO 10% GRADE DO NOT REQUIRE CEMENT STABILISED EMBEDMENT UNLESS THE CONDITIONS OF NOTE H APPLY. WHEN SOCKETED MAINS ARE LAID AT -5% SLOPE IN AREAS THAT ARE LIKELY TO HAVE HIGH GROUND WATER, CEMENT STABILISED EMBEDMENT SHALL BE USED. " FOR PIPES AT GRADE GREATER THAN 10% MRWA-W-208 REV 3 REMAINS VALID.

THE LATEST VERSION OF MRWA-W-203 (REV 2) EMBEDMENT SHALL BE ADOPTED NOTING THAT THE REQUIREMENT IDENTIFIED IN THE THIRD DOT POINT FOR TYPE B IN THE NOTES REGARDING TABLE 203.A SHALL BE AMENDED TO READ "WHERE WATER MAIN GRADE >10%".

FURTHER TO THIS IT SHOULD BE NOTED THAT MOST WATER MAINS ARE LIKELY TO REQUIRE A TYPE A EMBEDMENT SYSTEM. THE VARIOUS MATERIALS AVAILABLE FOR THIS SYSTEM ARE IDENTIFIED IN TABLE 203.B PRIOR TO THE INSPECTION.

6. INSPECTIONS

THE CONTRACTOR IS RESPONSIBLE FOR ORGANISING THE FOLLOWING INSPECTIONS WITH THE SUPERINTENDENT. 48 HOURS NOTICE IS REQUIRED TO BE GIVEN TO THE SUPERINTENDENT PRIOR TO THE INSPECTION.

- PIPEWORK BEDDING
- INSTALLED PIPE PRIOR TO BACKFILLING
- BACKFILLING

7. PIPE CLEANING - 'DISINFECTION'

THE CONTRACTOR IS TO ALLOW TO CLEANSE WATER MAINS BY FLUSHING WITH SODIUM HYPOCHLORIDE AS DIRECTED BY THE LOCAL AUTHORITY.

8. AS CONSTRUCTED DRAWINGS

THE CONTRACTOR WILL BE RESPONSIBLE FOR PRODUCING 'AS INSTALLED' DRAWINGS TO THE STANDARD REQUIRED BY TASNATER. THE DRAWINGS SHALL BE CERTIFIED AS BEING CORRECT BY EITHER A CHARTERED CIVIL ENGINEER OR A REGISTERED SURVEYOR. RARE CAN PROVIDE THIS SERVICE, HOWEVER THE CONTRACTOR WILL BE CHARGED FOR THIS SERVICE AND SHOULD BE AWARE OF THIS WHEN PRICING.

9. PROPERTY WATER CONNECTIONS

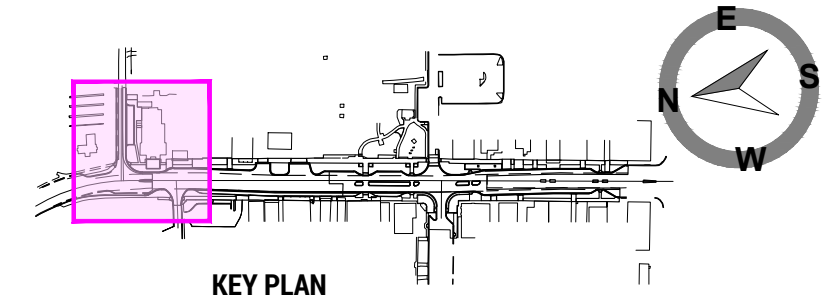
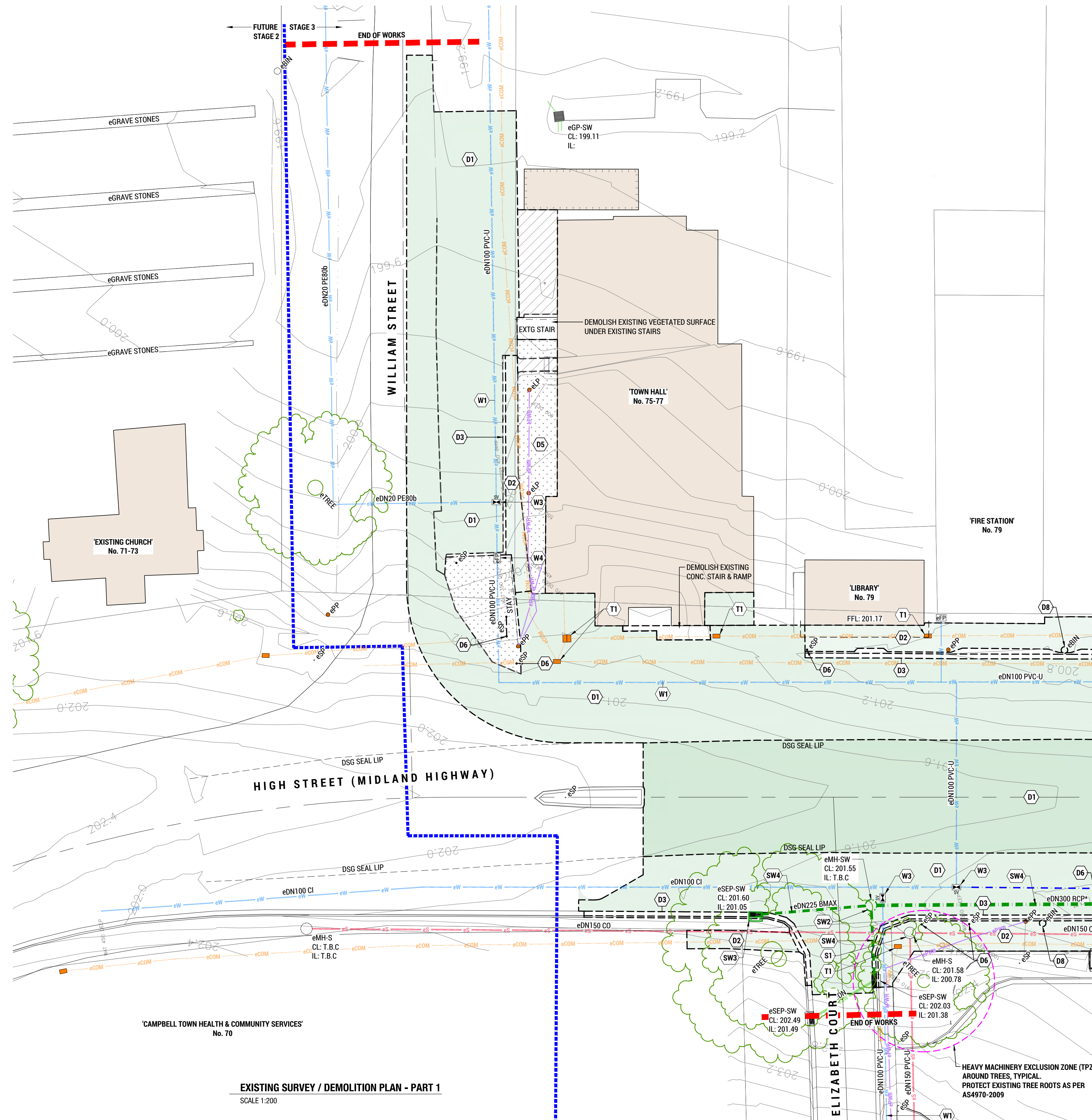
ALL PROPERTY CONNECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MRWA-W-110 AND MRWA-W-111 AND TASNATER STANDARD DRAWING

TW-W-0002 SERIES. THEY SHALL BE DN250 I.D. 200 HYPE (PE100) SDR 11 PN16 PIPE. WHERE UNDER ROADS PIPES SHALL BE SLEEVED IN DN100 SNA4 PIPE FITTED WITH TRACE AND TIGHT FITTING RUBBER WRAPS AT 2M INTERVALS TO PREVENT WATER HAMMER

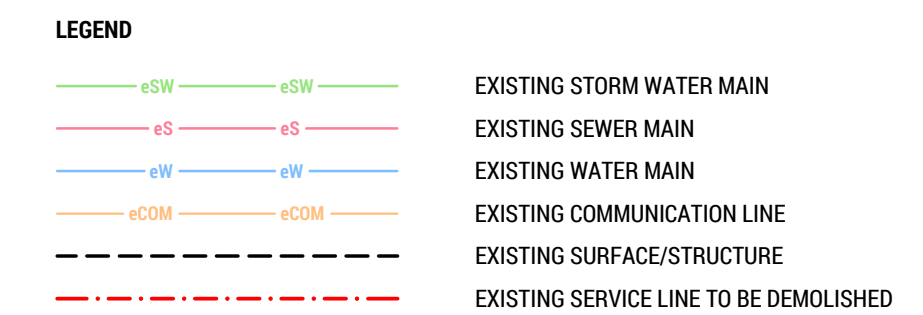
10. WATER MAINS CONNECTIONS

ALL NEW LIVE CONNECTIONS TO EXISTING TASNATER WATER INFRASTRUCTURE TO BE COMPLETED BY TASNATER AT OWNERS COST.

11. MINIMUM COVER



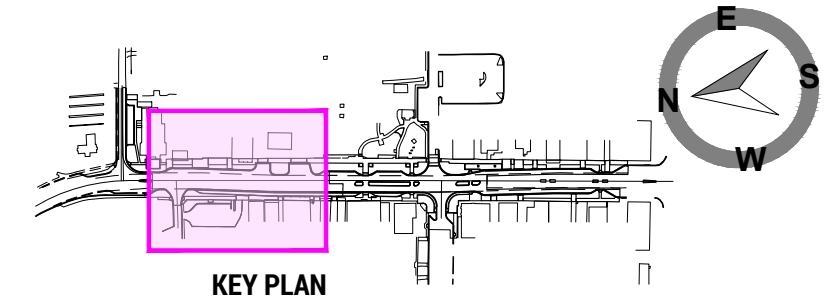
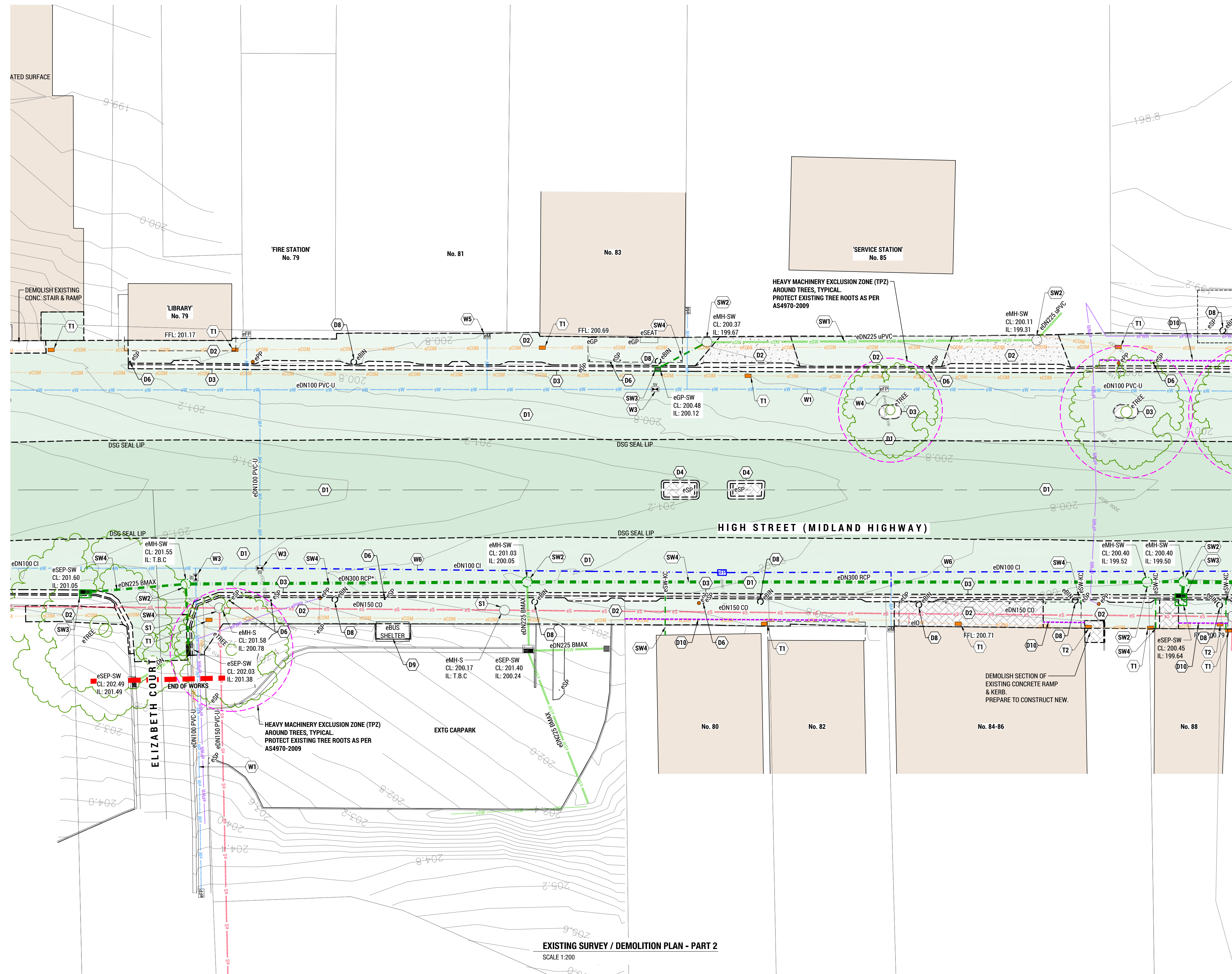
- DEMOLITION NOTES**
- PRIOR TO COMMENCING DEMOLITION AND SITE WORKS, THE CONTRACTOR IS TO ARRANGE AND PAY FOR THE ON SITE MARKING AND CONFIRMATION OF DEPTH OF SERVICE LOCATIONS FOR ALL UNDERGROUND SERVICES INCLUDING TELSTRA, TASKNET WORKS, TASSAS AND COUNCIL SERVICES (ie WATER, STORMWATER AND SEWER) IN THE AREA OF NEW WORKS. LOCATION TO BE CONFIRMED USING CABLE LOCATORS AND HAND DIGGING METHODS. PRIOR TO ANY WORKS ON SITE, ANY CLASHES WITH DESIGNED SERVICES ON FOLLOWING DRAWINGS ARE TO BE REPORTED TO DESIGN ENGINEER FOR DIRECTION.
 - REFER DRAWINGS FOR SET OUT DIMENSIONS & COORDINATE ALL LEVELS, CONTRACTOR TO REFER ENGINEER FOR ANY DISCREPANCIES / CLASHES.
 - CAP & TERMINATE & REMOVE REDUNDANT DISUSED DRAINAGE SERVICES TO SATISFACTION OF ENGINEER & LOCAL AUTHORITIES
 - INSTALL SILT FENCES & TRAPS TO PREVENT SEDIMENTS & POLLUTANTS ENTERING STORM WATER SYSTEM OR NATURAL DRAINAGE LINES
 - STOCK PILING OF SOILS OR MATERIALS AFFECTED BY WATER TO BE STORED CLEAR OF ANY DRAINAGE PATH
 - CLEAN SITE VEHICLES BEFORE EXITING SITE
 - DISPOSE OF EXCAVATED MATERIAL TO LICENSED WASTE FACILITY OR APPROVED LAND FILL SITE
 - TRENCHES WHERE SERVICES ARE REMOVED ARE TO BE FILLED WITH AN APPROVED COMPACTED MATERIAL & TO ENGINEERS COMPACTION SPECIFICATIONS. MATCH & MAKE GOOD EXISTING SURFACES TO MATCH EXISTING SURROUNDINGS.
- STRIPPING NOTES**
- CONTRACTOR TO ALLOW TO EXCAVATE TO 200mm NOM. BELOW EXISTING SURFACE LEVEL OR TO DESIGN SURFACE SUB-GRADE LEVEL - WHICH EVER IS LOWER. NOTE NO VARIATION WILL BE PAID FOR UNDER / OVER EXCAVATION, UNLESS PRIOR APPROVAL FROM ENGINEER.



- DEMOLITION**
- D1** DEMOLISH EXISTING HOTMIX PAVEMENT AS SHOWN (HATCHED AREA). PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D2** DEMOLISH EXISTING FOOTPATH / DRIVEWAY TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D3** DEMOLISH EXISTING KERBS TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS.
 - D4** DEMOLISH EXISTING KERB ISLAND INCLUDING SIGN. PREPARE AREA FOR NEW WORKS. MAKE GOOD EXISTING SURFACE WHERE NO NEW WORKS.
 - D5** DEMOLISH EXISTING VEGETATED SURFACE. PREPARE FOR NEW WORKS.
 - D6** REMOVE EXTG. SIGN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT. RE-INSTATE IN NEW LOCATIONS AS DIRECTED.
 - D7** REMOVE EXTG. SEAT & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D8** REMOVE EXTG. RUBBISH BIN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D9** REMOVE EXTG. BASE SLAB / FOOTING.
 - D9** REMOVE EXTG. BUS STOP SHELTER & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D10** CAREFULLY REMOVE, CLEAN, STOCK PILE ON PALLETS SPECIALITY NAMED PAVERS AND HAND OVER TO LOCAL COUNCIL.
- SEWER**
- S1** DEMOLISH EXISTING MANHOLE COVER & SURROUND. ADJUST COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL. INSTALL NEW CLASS 'D' GATIC LID & SURROUND IN ACCORDANCE WITH WSAA STD. TASKWATER TO COMPLETE WORKS AT DEVELOPERS COST.
- STORMWATER**
- SW1** LOCATION & SIZE OF STORMWATER UNKNOWN.
 - SW2** DEMOLISH EXISTING MANHOLE COVER & SURROUND. ADJUST COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL. INSTALL NEW CLASS 'D' GATIC LID IN ACCORDANCE WITH LGAT STD.
 - SW3** DEMOLISH EXISTING STORMWATER PITS. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH AS3500.
 - SW4** DEMOLISH EXISTING STORMWATER LINE. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH AS3500.
- WATER**
- W1** LOCATION OF WATER MAIN UNKNOWN.
 - W2** POT HOLE EXISTING WATER & VERIFY DEPTH & ALIGNMENT WITH ENGINEER 14 DAYS PRIOR TO COMMENCING NEARBY WORKS. REFER ANY SERVICE CLASHES TO ENGINEER FOR DIRECTION, TYPICAL.
 - W3** ADJUST EXTG STOP VALVE COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH LGAT STD. TASKWATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W4** ADJUST EXTG FIRE PLUG COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH WSAA STD. TASKWATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W5** ADJUST EXTG METER BOX COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH WSAA STD. TASKWATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W6** DEMOLISH SECTION OF EXISTING WATER MAIN TO EXTENT SHOWN. DISCONNECTION WORKS BY TASKWATER AT PRINCIPALS COST.
- TELECOMMUNICATIONS**
- T1** DEMOLISH EXISTING TELECOMMUNICATIONS PIT REINSTATE WITH NEW. MATCH PROPOSED SURFACE LEVELS.

EXISTING SURVEY / DEMOLITION PLAN - PART 1
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: EXISTING SURVEY / DEMOLITION PLAN - PART 1</p>
								<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C101 REV: 0</p>



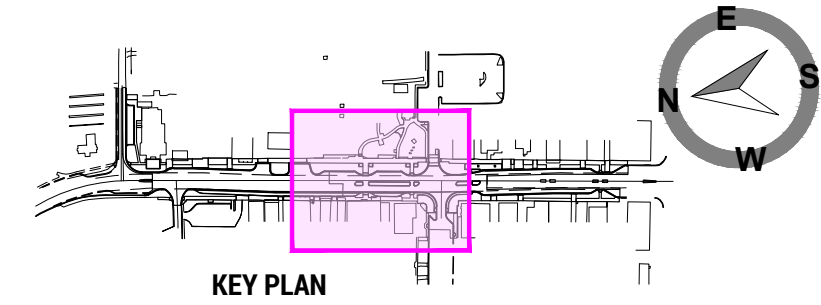
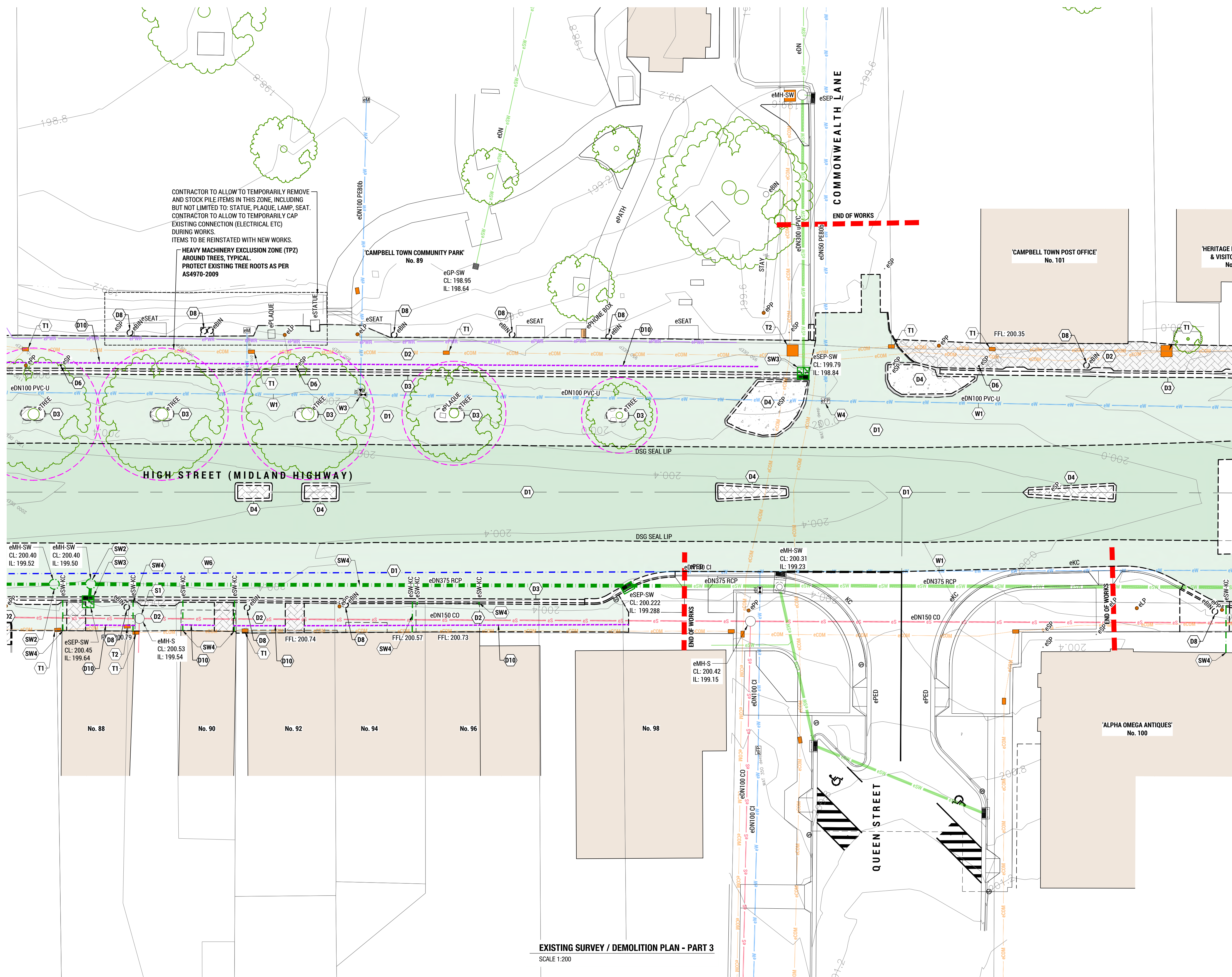
- DEMOLITION NOTES**
- PRIOR TO COMMENCING DEMOLITION AND SITE WORKS, THE CONTRACTOR IS TO ARRANGE AND PAY FOR THE ON SITE MARKING AND CONFIRMATION OF DEPTH, OF SERVICE LOCATIONS FOR ALL UNDERGROUND SERVICES INCLUDING TELSTRA, TASKNETWORKS, TAGSAS AND COUNCIL SERVICES (ie WATER, STORMWATER AND SEWER) IN THE AREA OF NEW WORKS. LOCATION TO BE CONFIRMED USING CABLE LOCATORS AND HAND DIGGING METHODS. PRIOR TO ANY WORKS ON SITE, ANY CLASHES WITH DESIGNED SERVICES ON FOLLOWING DRAWINGS ARE TO BE REPORTED TO DESIGN ENGINEER FOR DIRECTION.
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 - CLEAN SITE VEHICLES BEFORE EXITING SITE
 - DISPOSE OF EXCAVATED MATERIAL TO LICENSED WASTE FACILITY OR APPROVED LAND FILL SITE
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- STRIPPING NOTES**
- CONTRACTOR TO ALLOW TO EXCAVATE TO 200mm NOM. BELOW EXISTING SURFACE LEVEL OR TO DESIGN SURFACE SUB-GRADE LEVEL - WHICH EVER IS LOWER. NOTE NO VARIATION WILL BE PAID FOR UNDER / OVER EXCAVATION, UNLESS PRIOR APPROVAL FROM ENGINEER.

- LEGEND**
- eSW — eSW EXISTING STORM WATER MAIN
 - eS — eS EXISTING SEWER MAIN
 - eW — eW EXISTING WATER MAIN
 - eCOM — eCOM EXISTING COMMUNICATION LINE
 - - - EXISTING SURFACE/STRUCTURE
 - - - EXISTING SERVICE LINE TO BE DEMOLISHED

- DEMOLITION**
- D1** DEMOLISH EXISTING HOTMIX PAVEMENT AS SHOWN (HATCHED AREA). PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D2** DEMOLISH EXISTING FOOTPATH / DRIVEWAY TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D3** DEMOLISH EXISTING KERBS TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS.
 - D4** DEMOLISH EXISTING KERB ISLAND INCLUDING SIGN. PREPARE AREA FOR NEW WORKS. MAKE GOOD EXISTING SURFACE WHERE NO NEW WORKS.
 - D5** DEMOLISH EXISTING VEGETATED SURFACE. PREPARE FOR NEW WORKS.
 - D6** REMOVE EXTG. SIGN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT. RE-INSTATE IN NEW LOCATIONS AS DIRECTED.
 - D7** REMOVE EXTG. SEAT & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D8** REMOVE EXTG. RUBBISH BIN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D9** REMOVE EXTG. BUS STOP SHELTER & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D10** CAREFULLY REMOVE, CLEAN, STOCK PILE ON PALLETS SPECIALITY NAMED PAVERS AND HAND OVER TO LOCAL COUNCIL.
- SEWER**
- S1** DEMOLISH EXISTING MANHOLE COVER & SURROUND. ADJUST COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL. INSTALL NEW CLASS 'D' GATIC LID & SURROUND IN ACCORDANCE WITH WSAA STD. TASKWATER TO COMPLETE WORKS AT DEVELOPERS COST.
- STORMWATER**
- SW1** LOCATION & SIZE OF STORMWATER UNKNOWN.
 - SW2** DEMOLISH EXISTING MANHOLE COVER & SURROUND. ADJUST COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL. INSTALL NEW CLASS 'D' GATIC LID IN ACCORDANCE WITH LGAT STD. TASKWATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - SW3** DEMOLISH EXISTING STORMWATER PITS. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH ASS300.
 - SW4** DEMOLISH EXISTING STORMWATER LINE. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH ASS300.
- WATER**
- W1** LOCATION OF WATER MAIN UNKNOWN.
 - W2** POT HOLE EXISTING WATER & VERIFY DEPTH & ALIGNMENT WITH ENGINEER 14 DAYS PRIOR TO COMMENCING NEARBY WORKS. REFER ANY SERVICE CLASHES TO ENGINEER FOR DIRECTION, TYPICAL.
 - W3** ADJUST EXTG STOP VALVE COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH LGAT STD. TASKWATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W4** ADJUST EXTG FIRE PLUG COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH WSAA STD. TASKWATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W5** ADJUST EXTG METER BOX COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH WSAA STD. TASKWATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W6** DEMOLISH SECTION OF EXISTING WATER MAIN TO EXTENT SHOWN. DISCONNECTION WORKS BY TASKWATER AT PRINCIPALS COST.
- TELECOMMUNICATIONS**
- T1** DEMOLISH EXISTING TELECOMMUNICATIONS PIT. REINSTATE WITH NEW. MATCH PROPOSED SURFACE LEVELS.

EXISTING SURVEY / DEMOLITION PLAN - PART 2
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: EXISTING SURVEY / DEMOLITION PLAN - PART 2</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C102 REV: 0</p>



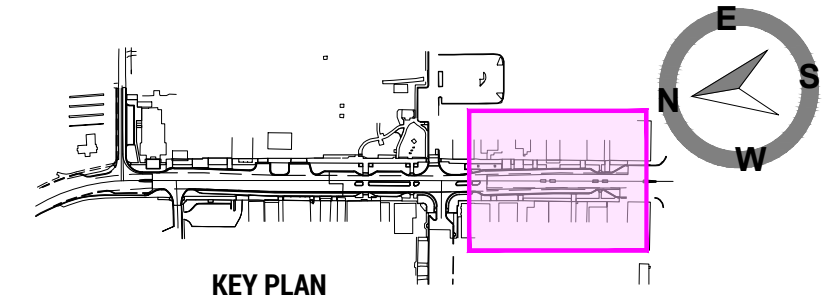
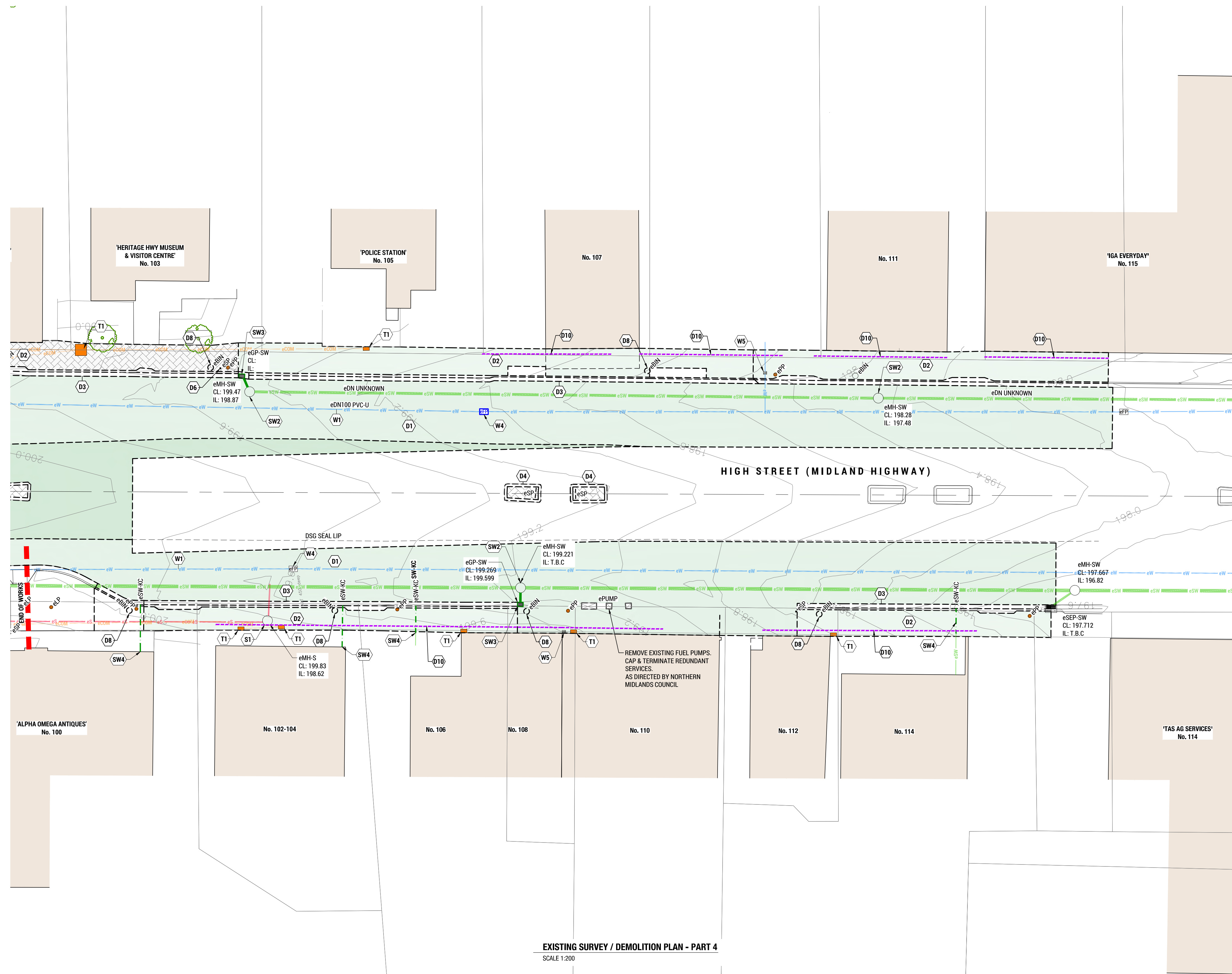
- DEMOLITION NOTES**
- PRIOR TO COMMENCING DEMOLITION AND SITE WORKS, THE CONTRACTOR IS TO ARRANGE AND PAY FOR THE ON SITE MARKING AND CONFIRMATION OF DEPTH OF SERVICE LOCATIONS FOR ALL UNDERGROUND SERVICES INCLUDING TELSTRA, TASKNETWORKS, TASSAS AND COUNCIL SERVICES (ie WATER, STORMWATER AND SEWER) IN THE AREA OF NEW WORKS. LOCATION TO BE CONFIRMED USING CABLE LOCATORS AND HAND DIGGING METHODS. PRIOR TO ANY WORKS ON SITE, ANY CLASHES WITH DESIGNED SERVICES ON FOLLOWING DRAWINGS ARE TO BE REPORTED TO DESIGN ENGINEER FOR DIRECTION.
 - REFER DRAWINGS FOR SET OUT DIMENSIONS & COORDINATE ALL LEVELS, CONTRACTOR TO REFER ENGINEER FOR ANY DISCREPANCIES / CLASHES.
 - CAP & TERMINATE & REMOVE REDUNDANT DISUSED DRAINAGE SERVICES TO SATISFACTION OF ENGINEER & LOCAL AUTHORITIES
 - INSTALL SILT FENCES & TRAPS TO PREVENT SEDIMENTS & POLLUTANTS ENTERING STORM WATER SYSTEM OR NATURAL DRAINAGE LINES
 - STOCK PILING OF SOILS OR MATERIALS AFFECTED BY WATER TO BE STORED CLEAR OF ANY DRAINAGE PATH
 - CLEAN SITE VEHICLES BEFORE EXITING SITE
 - DISPOSE OF EXCAVATED MATERIAL TO LICENSED WASTE FACILITY OR APPROVED LAND FILL SITE
 - TRENCHES WHERE SERVICES ARE REMOVED ARE TO BE FILLED WITH AN APPROVED COMPACTED MATERIAL & TO ENGINEERS COMPACTON SPECIFICATIONS. MATCH & MAKE GOOD EXISTING SURFACES TO MATCH EXISTING SURROUNDINGS.
- STRIPPING NOTES**
- CONTRACTOR TO ALLOW TO EXCAVATE TO 200mm NOM. BELOW EXISTING SURFACE LEVEL OR TO DESIGN SURFACE SUB-GRADE LEVEL - WHICH EVER IS LOWER. NOTE NO VARIATION WILL BE PAID FOR UNDER / OVER EXCAVATION, UNLESS PRIOR APPROVAL FROM ENGINEER.

- LEGEND**
- eSW - EXISTING STORM WATER MAIN
 - eS - EXISTING SEWER MAIN
 - eW - EXISTING WATER MAIN
 - eCOM - EXISTING COMMUNICATION LINE
 - - - - EXISTING SURFACE/STRUCTURE
 - - - - EXISTING SERVICE LINE TO BE DEMOLISHED

- DEMOLITION**
- D1 DEMOLISH EXISTING HOTMIX PAVEMENT AS SHOWN (HATCHED AREA). PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D2 DEMOLISH EXISTING FOOTPATH / DRIVEWAY TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D3 DEMOLISH EXISTING KERBS TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS.
 - D4 DEMOLISH EXISTING KERB ISLAND INCLUDING SIGN. PREPARE AREA FOR NEW WORKS. MAKE GOOD EXISTING SURFACE WHERE NO NEW WORKS.
 - D5 DEMOLISH EXISTING VEGETATED SURFACE. PREPARE FOR NEW WORKS.
 - D6 REMOVE EXTG. SIGN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT. RE-INSTATE IN NEW LOCATIONS AS DIRECTED.
 - D7 REMOVE EXTG. SEAT & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D8 REMOVE EXTG. RUBBISH BIN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D9 REMOVE EXTG. BUS STOP SHELTER & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D10 CAREFULLY REMOVE, CLEAN, STOCK PILE ON PALLETS SPECIALITY NAMED PAVERS AND HAND OVER TO LOCAL COUNCIL.
- SEWER**
- S1 DEMOLISH EXISTING MANHOLE COVER & SURROUND. ADJUST COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL. INSTALL NEW CLASS 'D' GATIC LID & SURROUND IN ACCORDANCE WITH WSAA STD. TASPATER TO COMPLETE WORKS AT DEVELOPERS COST.
- STORMWATER**
- SW1 LOCATION & SIZE OF STORMWATER UNKNOWN.
 - SW2 DEMOLISH EXISTING MANHOLE COVER & SURROUND. ADJUST COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL. INSTALL NEW CLASS 'D' GATIC LID IN ACCORDANCE WITH LGAT STD.
 - SW3 DEMOLISH EXISTING STORMWATER PITS. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH A33500.
 - SW4 DEMOLISH EXISTING STORMWATER LINE. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH A33500.
- WATER**
- W1 LOCATION OF WATER MAIN UNKNOWN.
 - W2 POT HOLE EXISTING WATER & VERIFY DEPTH & ALIGNMENT WITH ENGINEER 14 DAYS PRIOR TO COMMENCING NEARBY WORKS. REFER ANY SERVICE CLASHES TO ENGINEER FOR DIRECTION, TYPICAL.
 - W3 ADJUST EXTG STOP VALVE COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH LGAT STD. TASPATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W4 ADJUST EXTG FIRE PLUG COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH WSAA STD. TASPATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W5 ADJUST EXTG METER BOX COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH WSAA STD. TASPATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W6 DEMOLISH SECTION OF EXISTING WATER MAIN TO EXTENT SHOWN. DISCONNECTION WORKS BY TASPATER AT PRINCIPALS COST.
- TELECOMMUNICATIONS**
- T1 DEMOLISH EXISTING TELECOMMUNICATIONS PIT. REINSTATE WITH NEW. MATCH PROPOSED SURFACE LEVELS.

EXISTING SURVEY / DEMOLITION PLAN - PART 3
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>		<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>LANGE design landscape architecture</p>	<p>rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: EXISTING SURVEY / DEMOLITION PLAN - PART 3</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C103 REV: 0</p>
	<p>APPROVAL / TENDER</p> <p>0 00-00-00</p> <p>REVISIONS:</p>	<p>DATE: 00-00-00</p> <p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DATE: 00-00-00</p> <p>DRAFT CHK: JS</p>				



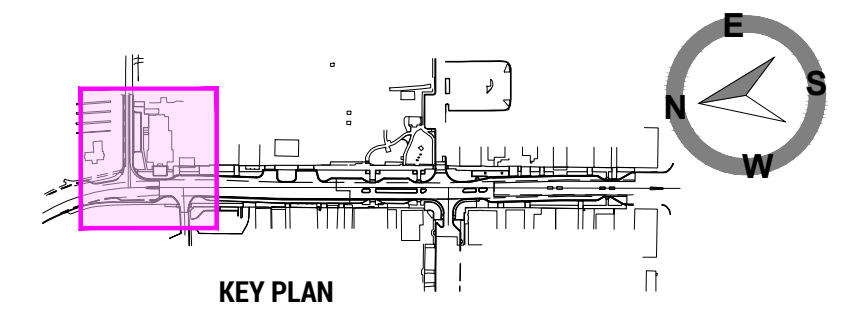
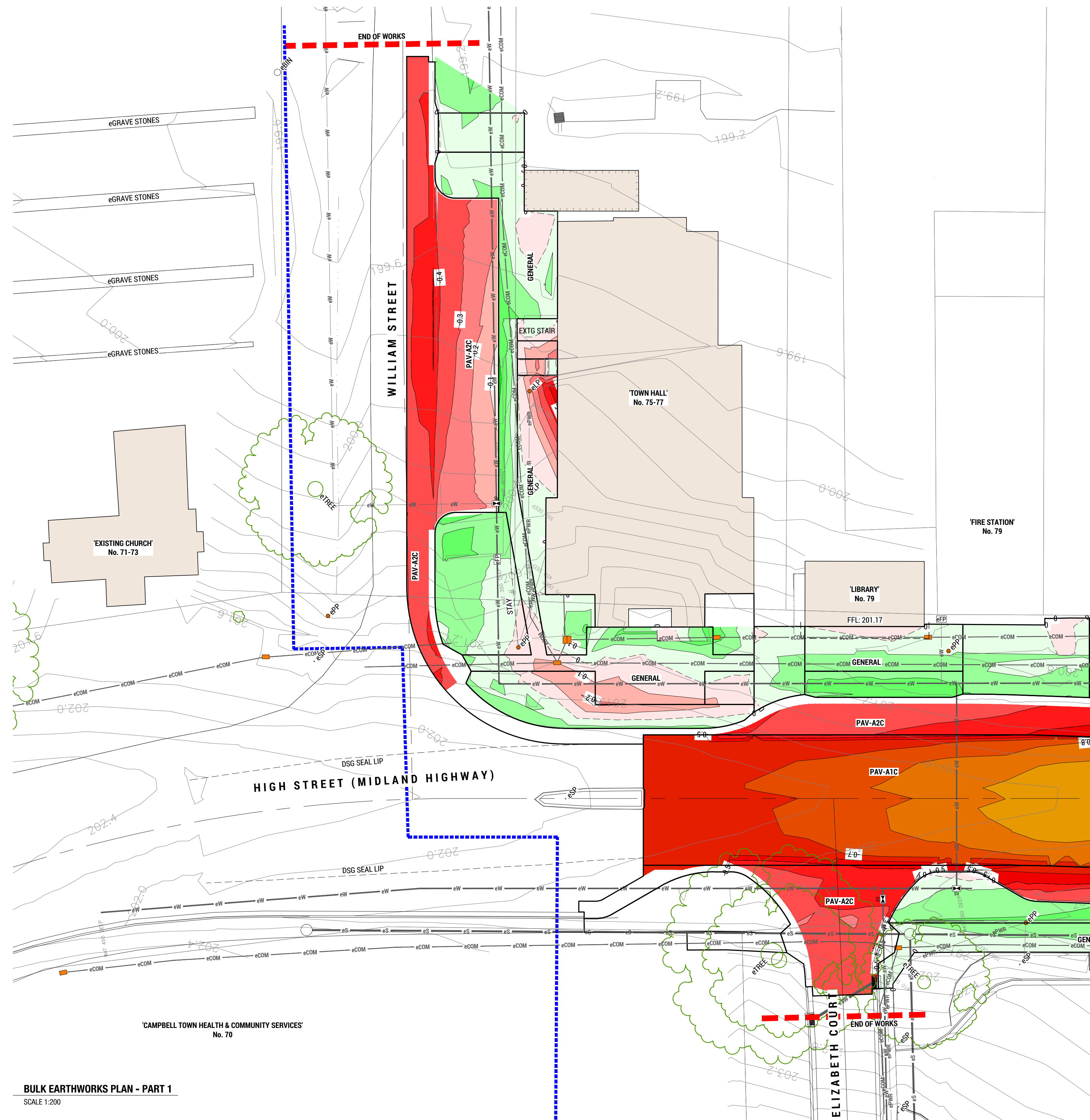
- DEMOLITION NOTES**
- PRIOR TO COMMENCING DEMOLITION AND SITE WORKS, THE CONTRACTOR IS TO ARRANGE AND PAY FOR THE ON SITE MARKING AND CONFIRMATION OF DEPTH, OF SERVICE LOCATIONS FOR ALL UNDERGROUND SERVICES INCLUDING TELSTRA, TASNETWORKS, TASSAS AND COUNCIL SERVICES (ie: WATER, STORMWATER AND SEWER) IN THE AREA OF NEW WORKS. LOCATION TO BE CONFIRMED USING CABLE LOCATORS AND HAND DIGGING METHODS. PRIOR TO ANY WORKS ON SITE, ANY CLASHES WITH DESIGNED SERVICES ON FOLLOWING DRAWINGS ARE TO BE REPORTED TO DESIGN ENGINEER FOR DIRECTION.
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 - CLEAN SITE VEHICLES BEFORE EXITING SITE
 - DISPOSE OF EXCAVATED MATERIAL TO LICENCED WASTE FACILITY OR APPROVED LAND FILL SITE
 - TRENCHES WHERE SERVICES ARE REMOVED ARE TO BE FILLED WITH AN APPROVED COMPACTED MATERIAL & TO ENGINEERS COMPACTION SPECIFICATIONS. MATCH & MAKE GOOD EXISTING SURFACES TO MATCH EXISTING SURROUNDINGS.
- STRIPPING NOTES**
- CONTRACTOR TO ALLOW TO EXCAVATE TO 200mm NOM. BELOW EXISTING SURFACE LEVEL OR TO DESIGN SURFACE SUB-GRADE LEVEL - WHICH EVER IS LOWER. NOTE NO VARIATION WILL BE PAID FOR UNDER / OVER EXCAVATION, UNLESS PRIOR APPROVAL FROM ENGINEER.

- LEGEND**
- eSW - EXISTING STORM WATER MAIN
 - eS - EXISTING SEWER MAIN
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 - - - - - EXISTING SURFACE/STRUCTURE
 - - - - - EXISTING SERVICE LINE TO BE DEMOLISHED

- DEMOLITION**
- D1 DEMOLISH EXISTING HOTMIX PAVEMENT AS SHOWN (HATCHED AREA). PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D2 DEMOLISH EXISTING FOOTPATH / DRIVEWAY TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS. ALL WORK TO A SAW CUT EDGE.
 - D3 DEMOLISH EXISTING KERBS TO EXTENT SHOWN. PREPARE AREA FOR NEW WORKS.
 - D4 DEMOLISH EXISTING KERB ISLAND INCLUDING SIGN. PREPARE AREA FOR NEW WORKS. MAKE GOOD EXISTING SURFACE WHERE NO NEW WORKS.
 - D5 DEMOLISH EXISTING VEGETATED SURFACE. PREPARE FOR NEW WORKS.
 - D6 REMOVE EXTG. SIGN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT. RE-INSTATE IN NEW LOCATIONS AS DIRECTED.
 - D7 REMOVE EXTG. SEAT & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D8 REMOVE EXTG. RUBBISH BIN & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D9 REMOVE EXTG. BASE SLAB / FOOTING.
 - D10 REMOVE EXTG. BUS STOP SHELTER & DELIVER TO COUNCIL APPROVED STORAGE DEPOT.
 - D11 CAREFULLY REMOVE, CLEAN, STOCK PILE ON PALLETS SPECIALITY NAMED PAVERS AND HAND OVER TO LOCAL COUNCIL.
- SEWER**
- S1 DEMOLISH EXISTING MANHOLE COVER & SURROUND. ADJUST COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL. INSTALL NEW CLASS 'D' GATIC LID & SURROUND IN ACCORDANCE WITH WSAA STD. TASNATER TO COMPLETE WORKS AT DEVELOPERS COST.
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- SW1 LOCATION & SIZE OF STORMWATER UNKNOWN
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 - SW3 DEMOLISH EXISTING STORMWATER PITS. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH A33500
 - SW4 DEMOLISH EXISTING STORMWATER LINE. CAP & TERMINATE REDUNDANT SERVICES IN ACCORDANCE WITH A33500
- WATER**
- W1 LOCATION OF WATER MAIN UNKNOWN
 - W2 POT HOLE EXISTING WATER & VERIFY DEPTH & ALIGNMENT WITH ENGINEER 14 DAYS PRIOR TO COMMENCING NEARBY WORKS. REFER ANY SERVICE CLASHES TO ENGINEER FOR DIRECTION, TYPICAL.
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 - W5 ADJUST EXTG METER BOX COVER LEVEL TO SUIT NEW FINISHED SURFACE LEVEL IN ACCORDANCE WITH WSAA STD. TASNATER TO COMPLETE WORKS AT PRINCIPALS COST.
 - W6 DEMOLISH SECTION OF EXISTING WATER MAIN TO EXTENT SHOWN. DISCONNECTION WORKS BY TASNATER AT PRINCIPALS COST.
- TELECOMMUNICATIONS**
- T1 DEMOLISH EXISTING TELECOMMUNICATIONS PIT REINSTATE WITH NEW. MATCH PROPOSED SURFACE LEVELS.

EXISTING SURVEY / DEMOLITION PLAN - PART 4
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: EXISTING SURVEY / DEMOLITION PLAN - PART 4</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C104 REV: 0</p>



- BULK EARTHWORKS LEGEND**
- PAV-A1C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE
 - PAV-A1R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE
 - PAV-A2C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE
 - PAV-A2R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE
 - GENERAL - VARIOUS SURFACES - DRIVEWAYS, FOOTPATHS, LANDSCAPING

- BULK EARTHWORKS NOTES**
1. VOLUMES CALCULATED BELOW ARE TAKEN FROM A DEMOLISHED / STRIPPED SURFACE 200 NOM. BELOW NATURAL SURFACE LEVEL.
 2. DEMOLISHED / STRIPPED SURFACE VOLUMES ARE TO BE INCLUDED IN DEMOLITION WORKS
 3. CLAY / ROCK SUBGRADE LINE HAS BEEN GENERALISED, THE CONTRACTOR IS TO KEEP RECORDS OF ADDITIONAL / REDUCED VOLUMES CROSSING OVER BETWEEN THESE TWO AREAS.

EARTHWORKS VOLUMES - PAV-A1C	
NS -0.2m vs FSL -0.81m	
	VOLUME
EMBANKMENT CUT	1359m ³
EMBANKMENT FILL	0m ³
TOTAL	1359m³ CUT

EARTHWORKS VOLUMES - PAV-A1R	
NS -0.2m vs FSL -0.275m	
	VOLUME
EMBANKMENT CUT	210m ³
EMBANKMENT FILL	0m ³
TOTAL	210m³ CUT

EARTHWORKS VOLUMES - PAV-A2C	
NS -0.2m vs FSL -0.585m	
	VOLUME
EMBANKMENT CUT	525m ³
EMBANKMENT FILL	0m ³
TOTAL	525m³ CUT

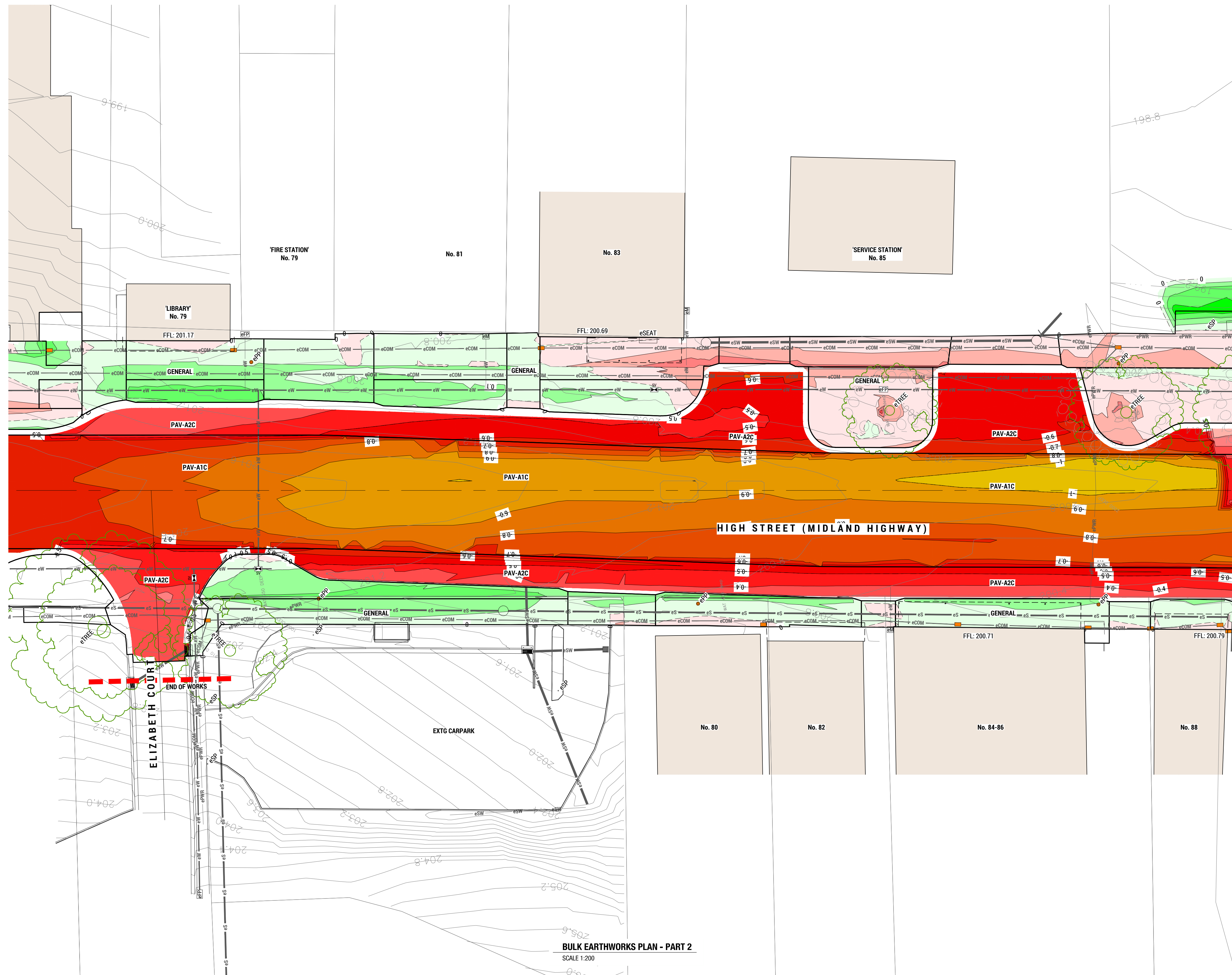
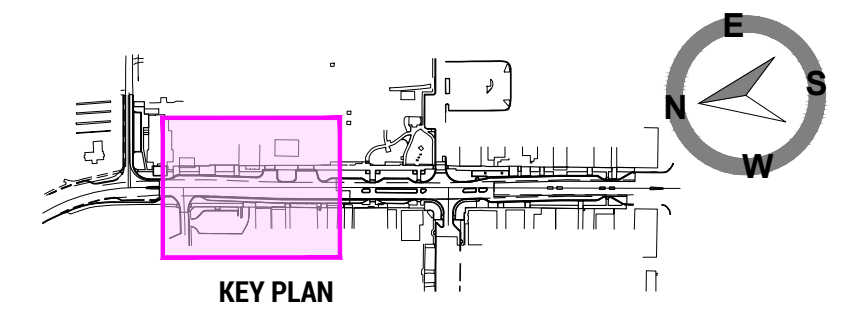
EARTHWORKS VOLUMES - PAV-A2R	
NS -0.2m vs FSL -0.225m	
	VOLUME
EMBANKMENT CUT	55m ³
EMBANKMENT FILL	9m ³
TOTAL	46m³ CUT

EARTHWORKS VOLUMES - GENERAL	
NS -0.2m vs FSL -0.2m	
	VOLUME
EMBANKMENT CUT	60m ³
EMBANKMENT FILL	372m ³
TOTAL	312m³ FILL

DEPTHS TABLE	
Elevation	Colour
-1.20 to -1.10	Dark Blue
-1.10 to -1.00	Blue
-1.00 to -0.90	Light Blue
-0.90 to -0.80	Very Light Blue
-0.80 to -0.70	Lightest Blue
-0.70 to -0.60	White
-0.60 to -0.50	Lightest Yellow
-0.50 to -0.40	Light Yellow
-0.40 to -0.30	Yellow
-0.30 to -0.20	Light Orange
-0.20 to -0.10	Orange
-0.10 to 0.00	Light Red
0.00 to 0.10	Red
0.10 to 0.20	Dark Red
0.20 to 0.30	Red-Orange
0.30 to 0.40	Orange-Red
0.40 to 0.50	Orange
0.50 to 0.60	Light Orange
0.60 to 0.70	Yellow-Orange
0.70 to 0.80	Yellow

BULK EARTHWORKS PLAN - PART 1
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: BULK EARTHWORKS PLAN - PART 1</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C201 REV: 0</p>
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- BULK EARTHWORKS LEGEND**
- PAV-A1C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE
 - PAV-A1R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE
 - PAV-A2C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE
 - PAV-A2R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE
 - GENERAL - VARIOUS SURFACES - DRIVEWAYS, FOOTPATHS, LANDSCAPING

- BULK EARTHWORKS NOTES**
- VOLUMES CALCULATED BELOW ARE TAKEN FROM A DEMOLISHED / STRIPPED SURFACE 200 NOM. BELOW NATURAL SURFACE LEVEL.
 - DEMOLISHED / STRIPPED SURFACE VOLUMES ARE TO BE INCLUDED IN DEMOLITION WORKS
 - CLAY / ROCK SUBGRADE LINE HAS BEEN GENERALISED, THE CONTRACTOR IS TO KEEP RECORDS OF ADDITIONAL / REDUCED VOLUMES CROSSING OVER BETWEEN THESE TWO AREAS.

EARTHWORKS VOLUMES - PAV-A1C	
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	VOLUME
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EMBANKMENT FILL	0m ³
TOTAL	1359m³ CUT

EARTHWORKS VOLUMES - PAV-A1R	
NS -0.2m vs FSL -0.275m	
	VOLUME
EMBANKMENT CUT	210m ³
EMBANKMENT FILL	0m ³
TOTAL	210m³ CUT

EARTHWORKS VOLUMES - PAV-A2C	
NS -0.2m vs FSL -0.585m	
	VOLUME
EMBANKMENT CUT	525m ³
EMBANKMENT FILL	0m ³
TOTAL	525m³ CUT

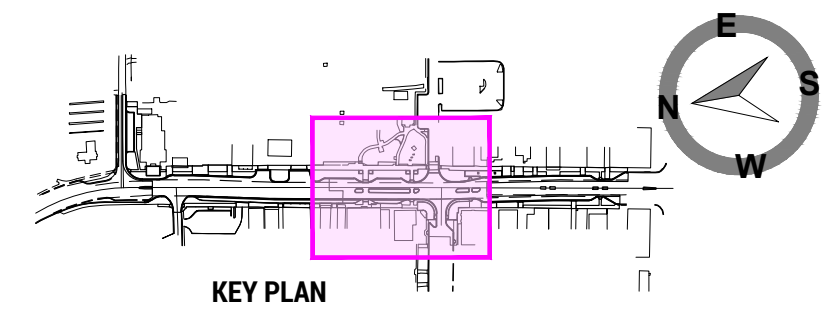
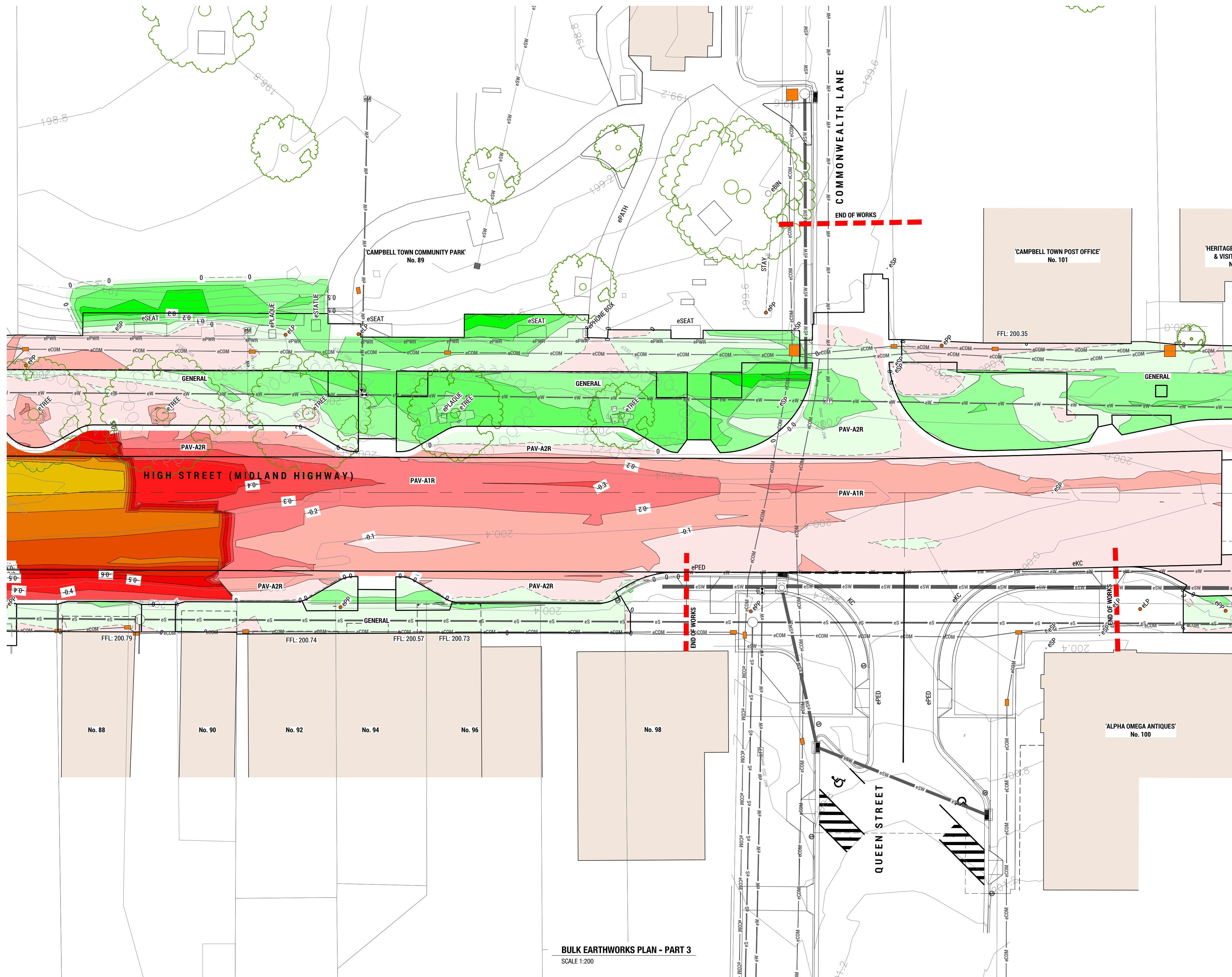
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EMBANKMENT CUT	55m ³
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TOTAL	46m³ CUT

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NS -0.2m vs FSL -0.2m	
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EMBANKMENT CUT	60m ³
EMBANKMENT FILL	372m ³
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-0.60 to -0.50	Green
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-0.30 to -0.20	Orange
-0.20 to -0.10	Red-Orange
-0.10 to 0.00	Red
0.00 to 0.10	Light Red
0.10 to 0.20	Light Orange
0.20 to 0.30	Orange
0.30 to 0.40	Light Green
0.40 to 0.50	Green
0.50 to 0.60	Light Green
0.60 to 0.70	Green
0.70 to 0.80	Light Green

BULK EARTHWORKS PLAN - PART 2
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p>	<p>DESIGN BY: RJ</p>			<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: BULK EARTHWORKS PLAN - PART 2</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DESIGN CHK: JS</p>				
<p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>			<p>DRAFT CHK: JS</p>	<p>DATE: 00-00-00</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>PROJECT No: 17.340 DWG No: C202 REV: 0</p>



BULK EARTHWORKS LEGEND

- PAV-A1C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE
- PAV-A1R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE
- PAV-A2C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE
- PAV-A2R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE
- GENERAL - VARIOUS SURFACES - DRIVEWAYS, FOOTPATHS, LANDSCAPING

BULK EARTHWORKS NOTES

1. VOLUMES CALCULATED BELOW ARE TAKEN FROM A DEMOLISHED / STRIPPED SURFACE 200 NOM. BELOW NATURAL SURFACE LEVEL.
2. DEMOLISHED / STRIPPED SURFACE VOLUMES ARE TO BE INCLUDED IN DEMOLITION WORKS
3. CLAY / ROCK SUBGRADE LINE HAS BEEN GENERALISED, THE CONTRACTOR IS TO KEEP RECORDS OF ADDITIONAL / REDUCED VOLUMES CROSSING OVER BETWEEN THESE TWO AREAS.

EARTHWORKS VOLUMES - PAV-A1C	
NS -0.2m vs FSL -0.81m	
	VOLUME
EMBANKMENT CUT	1359m³
EMBANKMENT FILL	0m³
TOTAL	1359m³ CUT

EARTHWORKS VOLUMES - PAV-A1R	
NS -0.2m vs FSL -0.275m	
	VOLUME
EMBANKMENT CUT	210m³
EMBANKMENT FILL	0m³
TOTAL	210m³ CUT

EARTHWORKS VOLUMES - PAV-A2C	
NS -0.2m vs FSL -0.585m	
	VOLUME
EMBANKMENT CUT	525m³
EMBANKMENT FILL	0m³
TOTAL	525m³ CUT

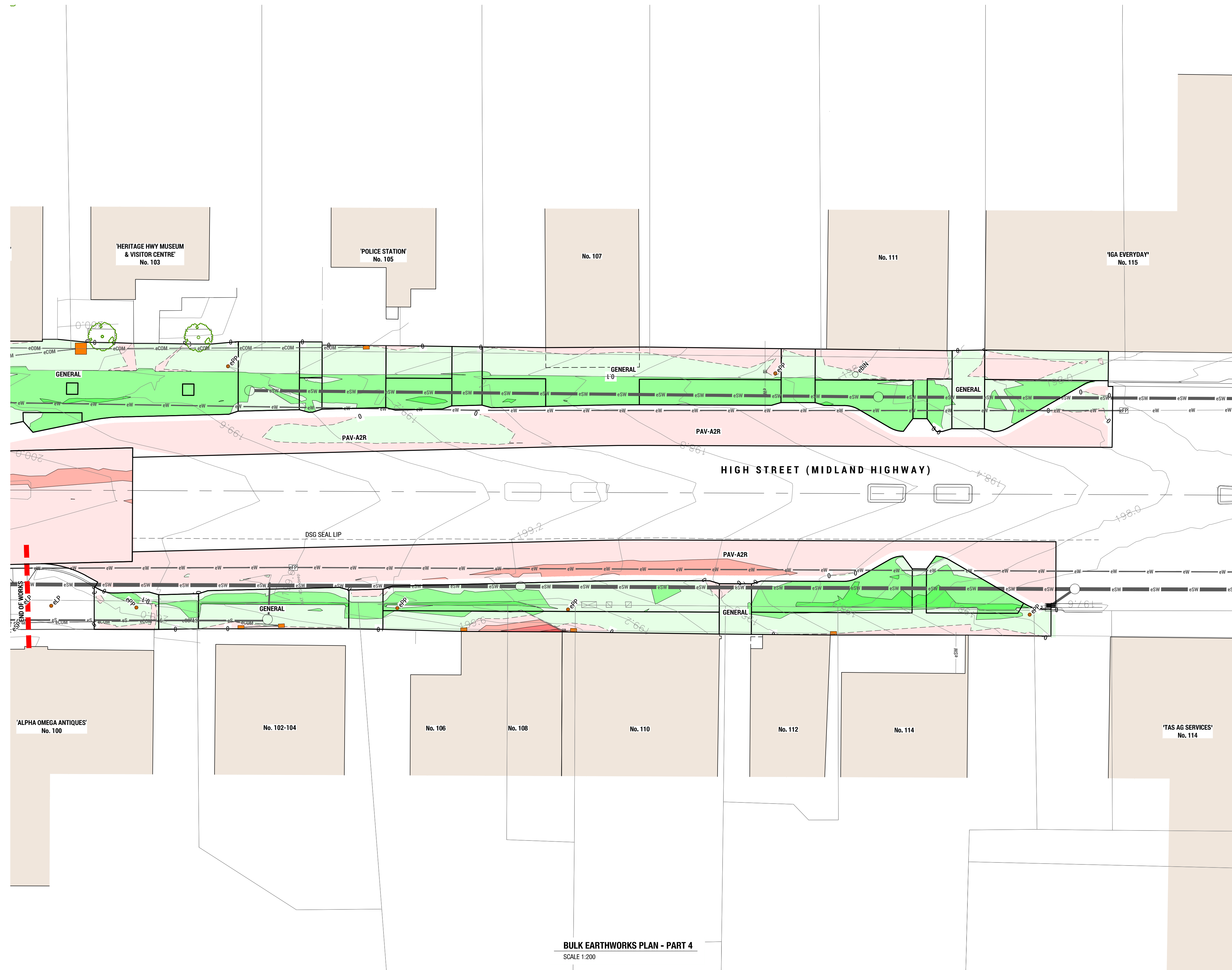
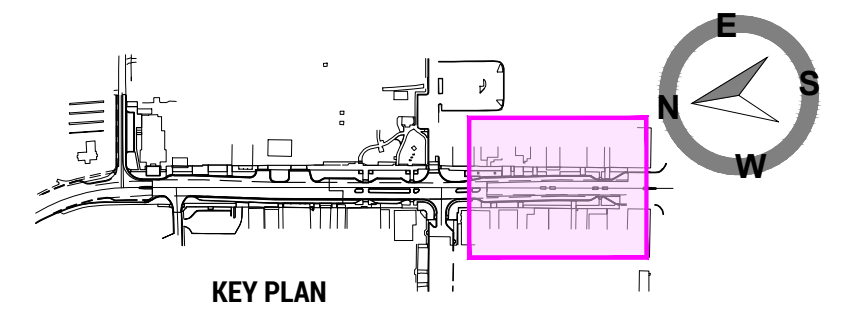
EARTHWORKS VOLUMES - PAV-A2R	
NS -0.2m vs FSL -0.225m	
	VOLUME
EMBANKMENT CUT	55m³
EMBANKMENT FILL	9m³
TOTAL	46m³ CUT

EARTHWORKS VOLUMES - GENERAL	
NS -0.2m vs FSL -0.2m	
	VOLUME
EMBANKMENT CUT	60m³
EMBANKMENT FILL	372m³
TOTAL	312m³ FILL

DEPTHS TABLE	
Elevation	Colour
-1.20 to -1.10	Dark Blue
-1.10 to -1.00	Blue
-1.00 to -0.90	Light Blue
-0.90 to -0.80	Very Light Blue
-0.80 to -0.70	White
-0.70 to -0.60	Light Yellow
-0.60 to -0.50	Yellow
-0.50 to -0.40	Orange
-0.40 to -0.30	Red-Orange
-0.30 to -0.20	Red
-0.20 to -0.10	Dark Red
-0.10 to 0.00	Black
0.00 to 0.10	White
0.10 to 0.20	Light Green
0.20 to 0.30	Green
0.30 to 0.40	Dark Green
0.40 to 0.50	Very Dark Green
0.50 to 0.60	Black
0.60 to 0.70	Dark Blue
0.70 to 0.80	Blue

BULK EARTHWORKS PLAN - PART 3
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: BULK EARTHWORKS PLAN - PART 3</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C203 REV: 0</p>



- BULK EARTHWORKS LEGEND**
- PAV-A1C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE
 - PAV-A1R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE
 - PAV-A2C - HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE
 - PAV-A2R - HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE
 - GENERAL - VARIOUS SURFACES - DRIVEWAYS, FOOTPATHS, LANDSCAPING

- BULK EARTHWORKS NOTES**
- VOLUMES CALCULATED BELOW ARE TAKEN FROM A DEMOLISHED / STRIPPED SURFACE 200 NOM. BELOW NATURAL SURFACE LEVEL.
 - DEMOLISHED / STRIPPED SURFACE VOLUMES ARE TO BE INCLUDED IN DEMOLITION WORKS
 - CLAY / ROCK SUBGRADE LINE HAS BEEN GENERALISED, THE CONTRACTOR IS TO KEEP RECORDS OF ADDITIONAL / REDUCED VOLUMES CROSSING OVER BETWEEN THESE TWO AREAS.

EARTHWORKS VOLUMES - PAV-A1C	
NS -0.2m vs FSL -0.81m	
	VOLUME
EMBANKMENT CUT	1359m ³
EMBANKMENT FILL	0m ³
TOTAL	1359m³ CUT

EARTHWORKS VOLUMES - PAV-A1R	
NS -0.2m vs FSL -0.275m	
	VOLUME
EMBANKMENT CUT	210m ³
EMBANKMENT FILL	0m ³
TOTAL	210m³ CUT

EARTHWORKS VOLUMES - PAV-A2C	
NS -0.2m vs FSL -0.585m	
	VOLUME
EMBANKMENT CUT	525m ³
EMBANKMENT FILL	0m ³
TOTAL	525m³ CUT

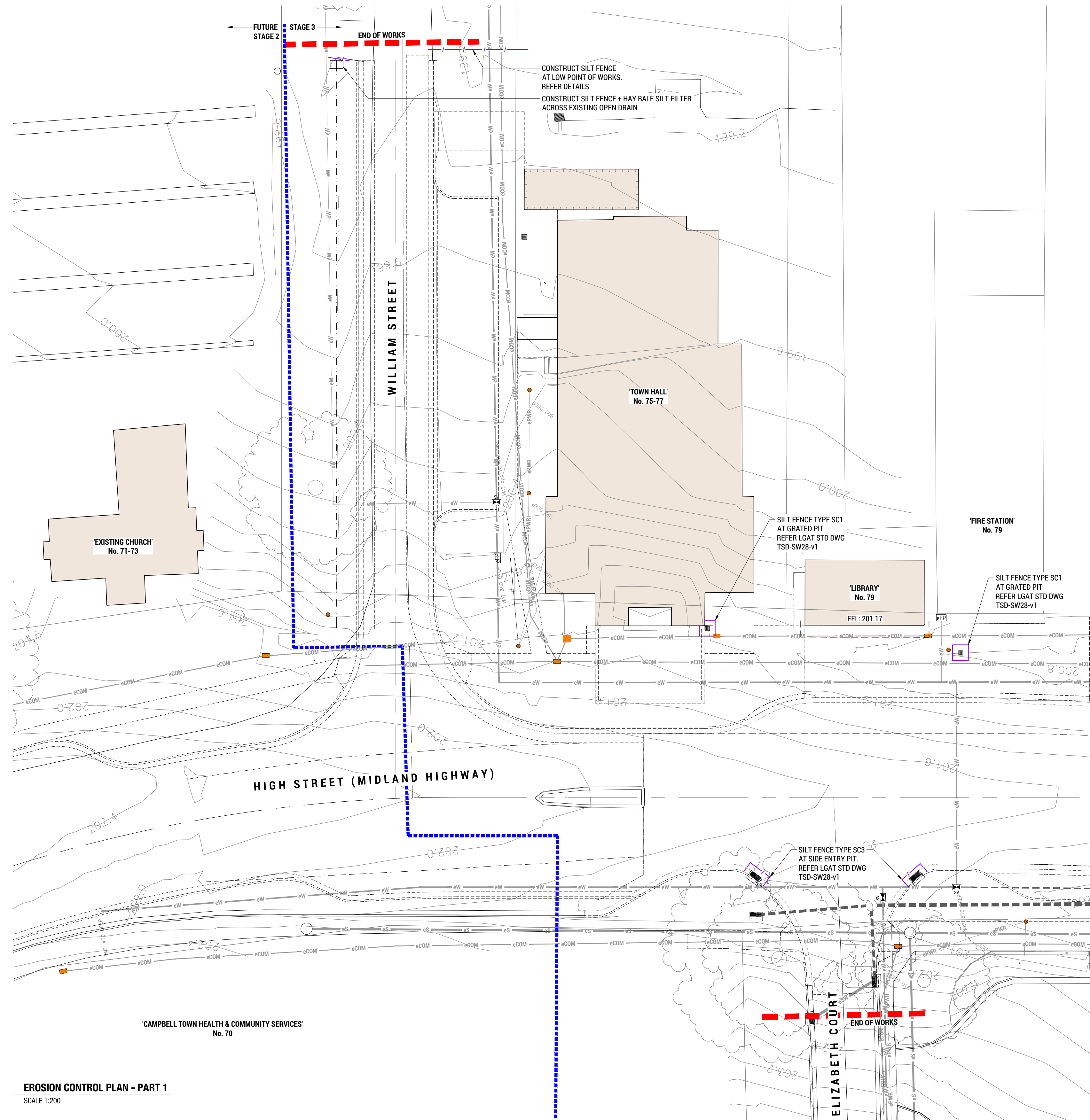
EARTHWORKS VOLUMES - PAV-A2R	
NS -0.2m vs FSL -0.225m	
	VOLUME
EMBANKMENT CUT	55m ³
EMBANKMENT FILL	9m ³
TOTAL	46m³ CUT

EARTHWORKS VOLUMES - GENERAL	
NS -0.2m vs FSL -0.2m	
	VOLUME
EMBANKMENT CUT	60m ³
EMBANKMENT FILL	372m ³
TOTAL	312m³ FILL

DEPTHS TABLE	
Elevation	Colour
-1.20 to -1.10	Red
-1.10 to -1.00	Orange
-1.00 to -0.90	Yellow-Orange
-0.90 to -0.80	Yellow
-0.80 to -0.70	Light Green
-0.70 to -0.60	Green
-0.60 to -0.50	Light Blue
-0.50 to -0.40	Blue
-0.40 to -0.30	Light Cyan
-0.30 to -0.20	Cyan
-0.20 to -0.10	Light Blue-Green
-0.10 to 0.00	Blue-Green
0.00 to 0.10	Green
0.10 to 0.20	Light Green
0.20 to 0.30	Green
0.30 to 0.40	Light Green
0.40 to 0.50	Green
0.50 to 0.60	Light Green
0.60 to 0.70	Green
0.70 to 0.80	Light Green

BULK EARTHWORKS PLAN - PART 4
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: BULK EARTHWORKS PLAN - PART 4</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C204 REV: 0</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>			<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	

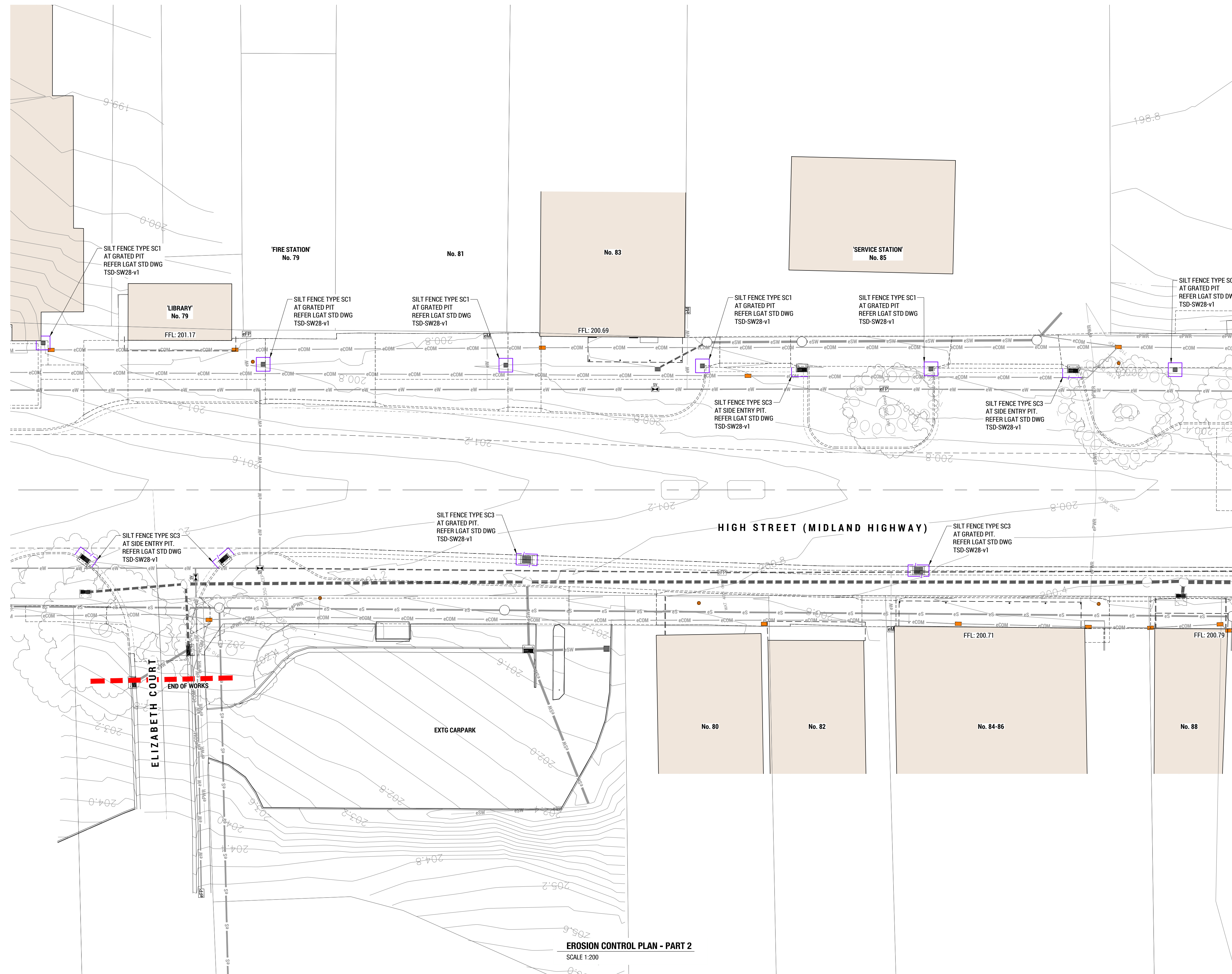
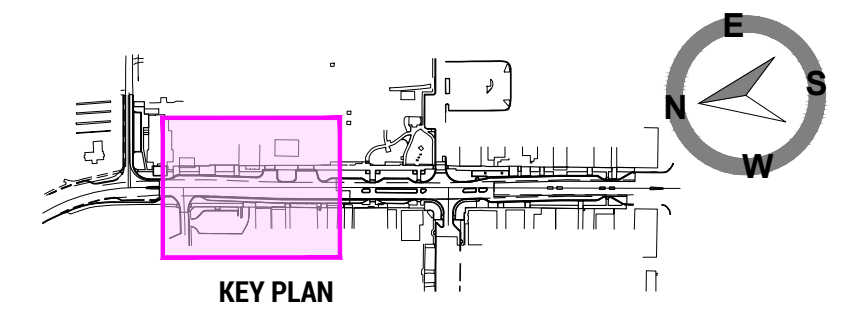


- EROSION AND SEDIMENT CONTROL NOTES**
1. ALL RUNOFF AND SEDIMENT CONTROL STRUCTURES TO BE INSPECTED EACH WORKING DAY MAINTAINED IN A FUNCTIONING CONDITION
 2. ALL VEGETATION OUTSIDE OF THE BUILDING ENVELOPE TO BE RETAINED
 3. REFER 'SOIL AND WATER' NOTES IN CIVIL NOTES FOR ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES
 4. EROSION AND SEDIMENT CONTROL MEASURES TO BE PLACED IN ACCORDANCE WITH NRM GUIDELINES & DETAILS SUPPLIED IN THESE DRAWINGS.

- LEGEND**
- EROSION CONTROL BARRIER
 - EXISTING STORM WATER MAIN
 - EXISTING SEWER MAIN
 - EXISTING WATER MAIN
 - EXISTING SERVICE LINE - TO BE DEMOLISHED

EROSION CONTROL PLAN - PART 1
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DATE: 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: EROSION CONTROL PLAN - PART 1</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C301 REV: 0</p>

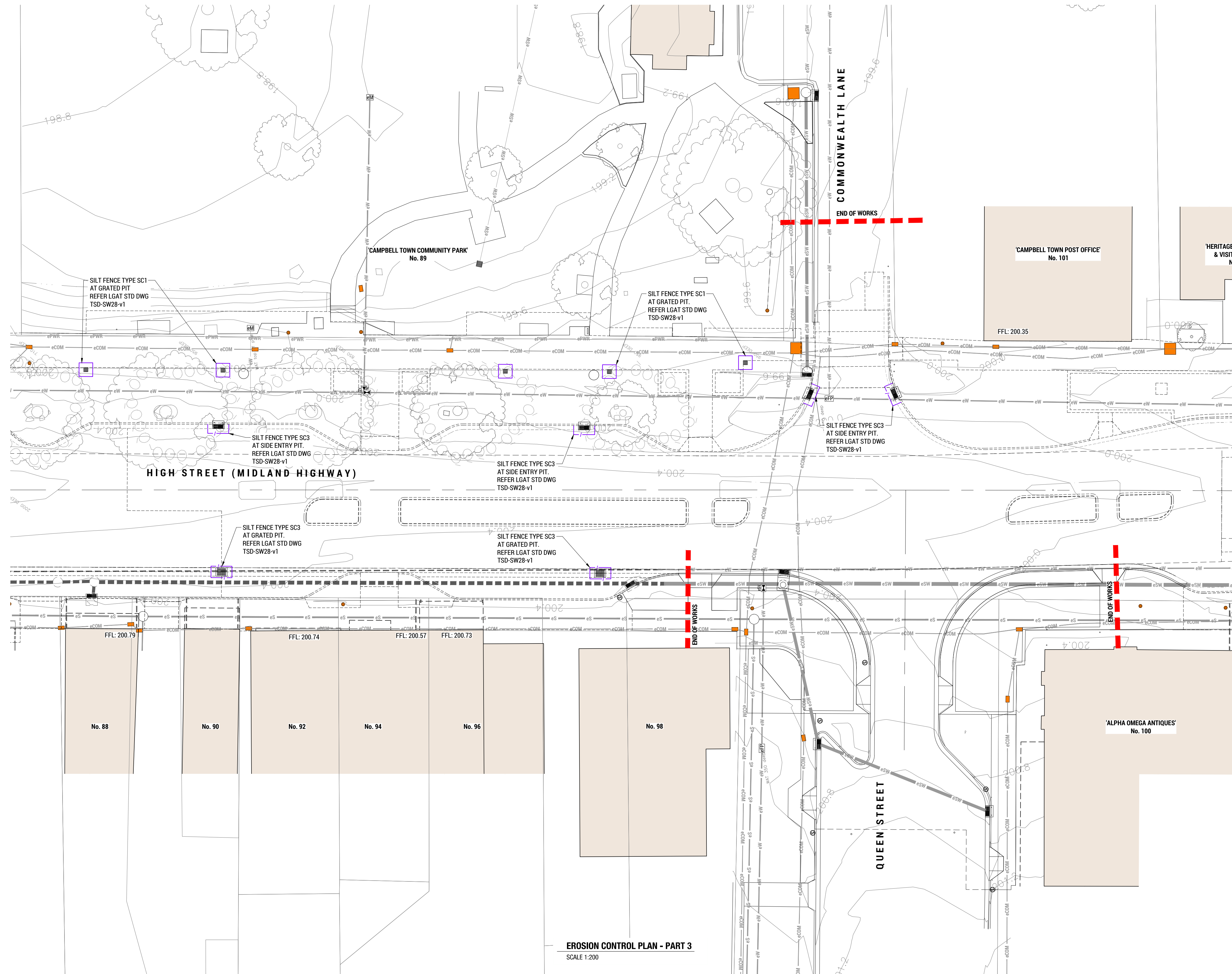
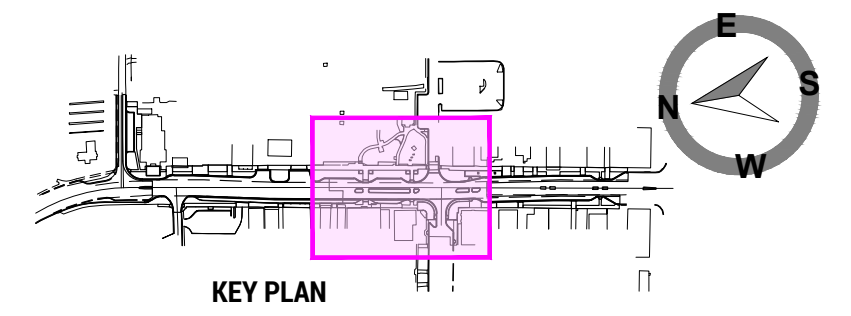


- EROSION AND SEDIMENT CONTROL NOTES**
1. ALL RUNOFF AND SEDIMENT CONTROL STRUCTURES TO BE INSPECTED EACH WORKING DAY MAINTAINED IN A FUNCTIONING CONDITION
 2. ALL VEGETATION OUTSIDE OF THE BUILDING ENVELOPE TO BE RETAINED
 3. REFER 'SOIL AND WATER' NOTES IN CIVIL NOTES FOR ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES
 4. EROSION AND SEDIMENT CONTROL MEASURES TO BE PLACED IN ACCORDANCE WITH NRM GUIDELINES & DETAILS SUPPLIED IN THESE DRAWINGS.

- LEGEND**
- EROSION CONTROL BARRIER
 - EXISTING STORM WATER MAIN
 - EXISTING SEWER MAIN
 - EXISTING WATER MAIN
 - EXISTING SERVICE LINE - TO BE DEMOLISHED

EROSION CONTROL PLAN - PART 2
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p>	<p>DESIGN BY: RJ</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: EROSION CONTROL PLAN - PART 2</p>
	<p>REV: DESCRIPTION:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p>	<p>DESIGN CHK: JS</p>			
			<p>ACRED. No: CC58481</p>	<p>DRAFT CHK: JS</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>PROJECT No: 17.340 DWG No: C302 REV: 0</p>

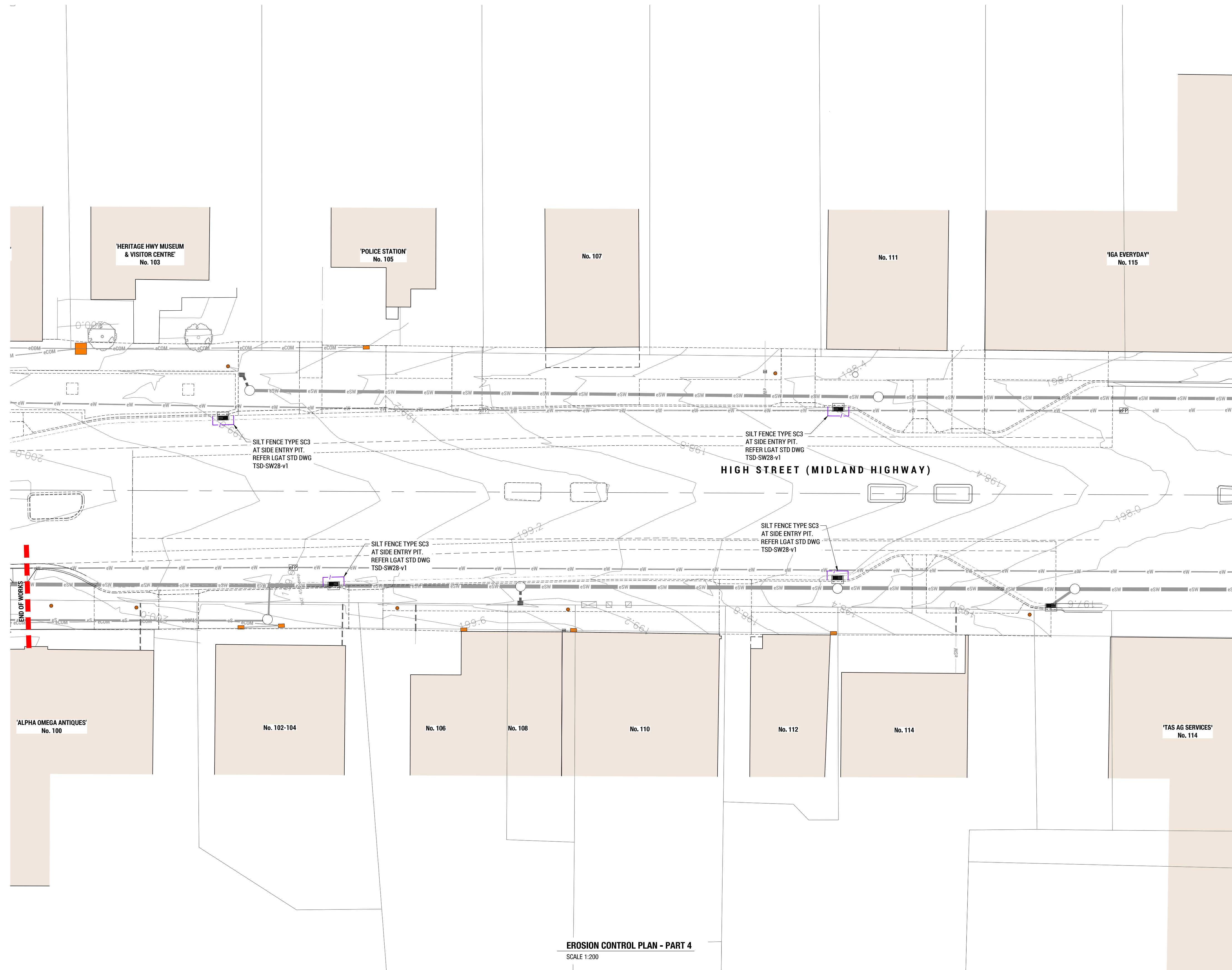
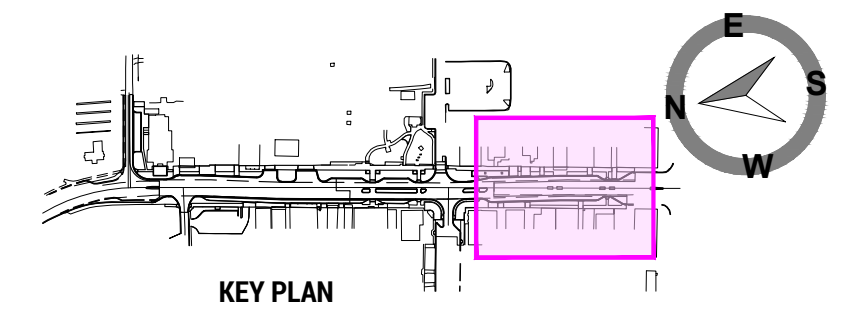


- EROSION AND SEDIMENT CONTROL NOTES**
1. ALL RUNOFF AND SEDIMENT CONTROL STRUCTURES TO BE INSPECTED EACH WORKING DAY MAINTAINED IN A FUNCTIONING CONDITION
 2. ALL VEGETATION OUTSIDE OF THE BUILDING ENVELOPE TO BE RETAINED
 3. REFER 'SOIL AND WATER' NOTES IN CIVIL NOTES FOR ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES
 4. EROSION AND SEDIMENT CONTROL MEASURES TO BE PLACED IN ACCORDANCE WITH NRM GUIDELINES & DETAILS SUPPLIED IN THESE DRAWINGS.

- LEGEND**
- - - - - EROSION CONTROL BARRIER
 - - - - - EXISTING STORM WATER MAIN
 - - - - - EXISTING SEWER MAIN
 - - - - - EXISTING WATER MAIN
 - - - - - EXISTING SERVICE LINE - TO BE DEMOLISHED

EROSION CONTROL PLAN - PART 3
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: EROSION CONTROL PLAN - PART 3</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C303 REV: 0</p>
	<p>REV: DESCRIPTION:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>				

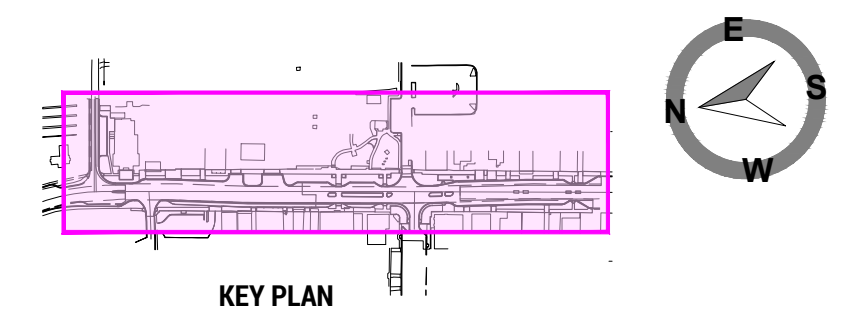


- EROSION AND SEDIMENT CONTROL NOTES**
1. ALL RUNOFF AND SEDIMENT CONTROL STRUCTURES TO BE INSPECTED EACH WORKING DAY MAINTAINED IN A FUNCTIONING CONDITION
 2. ALL VEGETATION OUTSIDE OF THE BUILDING ENVELOPE TO BE RETAINED
 3. REFER 'SOIL AND WATER' NOTES IN CIVIL NOTES FOR ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES
 4. EROSION AND SEDIMENT CONTROL MEASURES TO BE PLACED IN ACCORDANCE WITH NRM GUIDELINES & DETAILS SUPPLIED IN THESE DRAWINGS.

- LEGEND**
- EROSION CONTROL BARRIER
 - EXISTING STORM WATER MAIN
 - EXISTING SEWER MAIN
 - EXISTING WATER MAIN
 - EXISTING SERVICE LINE - TO BE DEMOLISHED

EROSION CONTROL PLAN - PART 4
SCALE 1:200

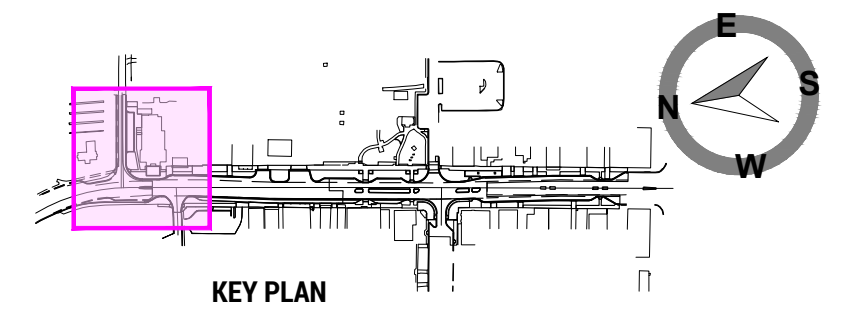
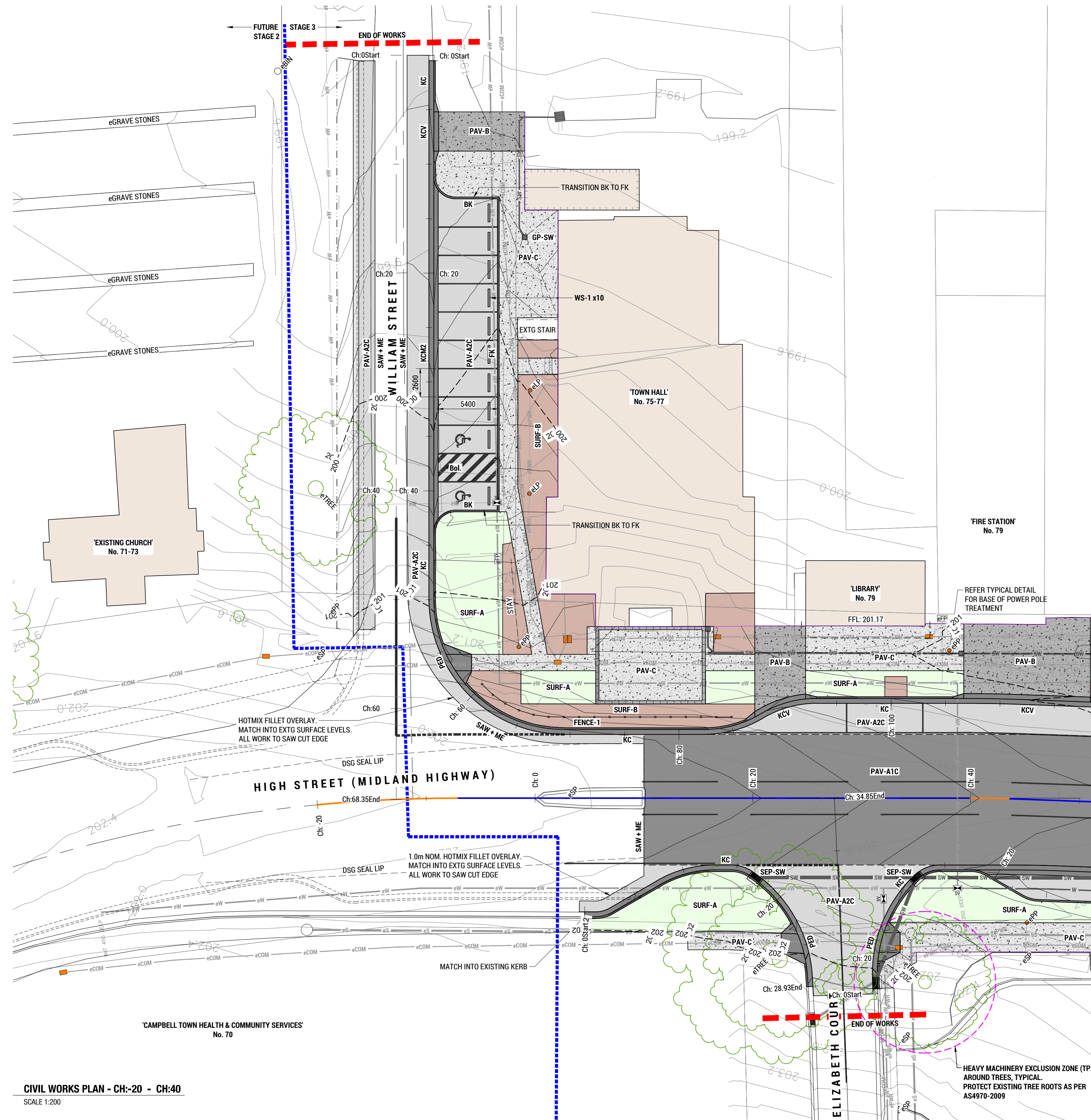
<p>NORTHERN MIDLANDS COUNCIL</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>		<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>TITLE: EROSION CONTROL PLAN - PART 4</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C304 REV: 0</p>
	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>			<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>



CIVIL WORKS PLAN - OVERALL
SCALE 1:500

LEGEND	
	HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE REFER DETAILS
	HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE REFER DETAILS
	HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
	HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
	CONCRETE - TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
	CONCRETE - HEAVY VEHICLE TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
	CONCRETE - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
	PAVER BANDING / TRIM (300 WIDE) - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
	GRASSED / TURFED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL LANDSCAPED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>APPROVED: R. JESSON</p>	<p>ACRED. No: CC58481</p>	<p>DESIGN BY: RJ</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL WORKS PLAN - OVERALL</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DRAWN BY: PVD</p>	<p>DRAFT CHK: JS</p>			<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>

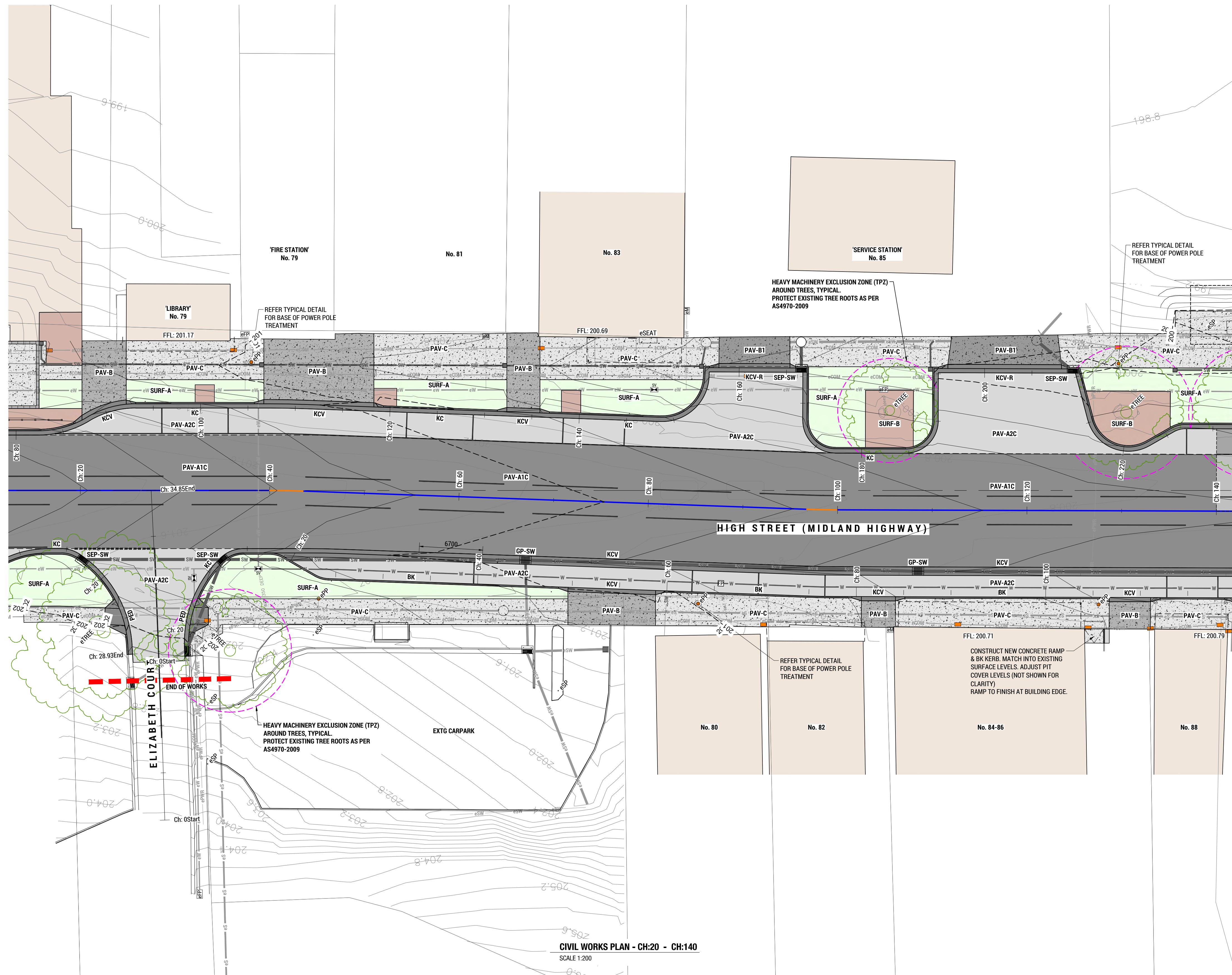
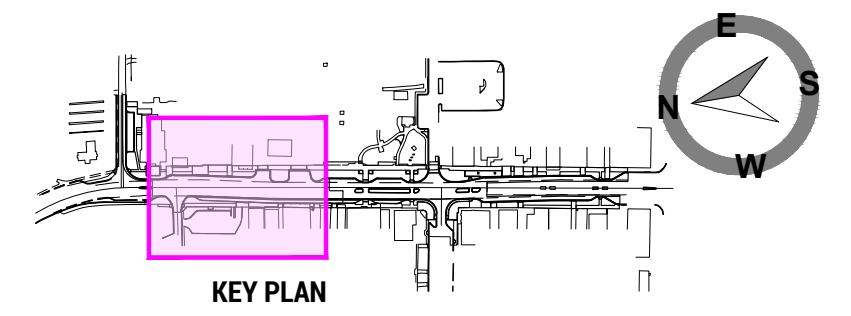


LEGEND

PAV-A1C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A1R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A2C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-A2R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-B	CONCRETE - TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-B1	CONCRETE - HEAVY VEHICLE TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-C	CONCRETE - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-A	PAVER BANDING / TRIM (300 WIDE) - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-B	GRASSED / TURFED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL LANDSCAPED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL
BK	BARRIER KERB
KC	KERB & CHANNEL
KCV	KERB & CHANNEL - VEHICLE CROSSING
KCV-R	KERB & CHANNEL REINFORCED - HEAVY VEHICLE CROSSING
KCM2	KERB & CHANNEL MOUNTABLE - VEHICLE CROSSING (MODIFIED)
FK	FLUSH KERB
M3	MOUNTABLE KERB (DSG SPEC)
PED	PEDESTRIAN RAMP - TYPE A
BoI	BOLLARD - REFER DETAIL
MH	MANHOLE
SEP	SIDE ENTRY PIT
GP	GRATED PIT
ME	MATCH EXISTING
SAW	SAW CUT
SP	SIGN POST
FENCE-1	FENCE / BARRIER - REFER LANDSCAPE ARCH.
WS-1	WHEEL STOP

CIVIL WORKS PLAN - CH-20 - CH-40
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p> <p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL WORKS PLAN CH-20 - CH-40</p>
							<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C401 REV: 0</p>

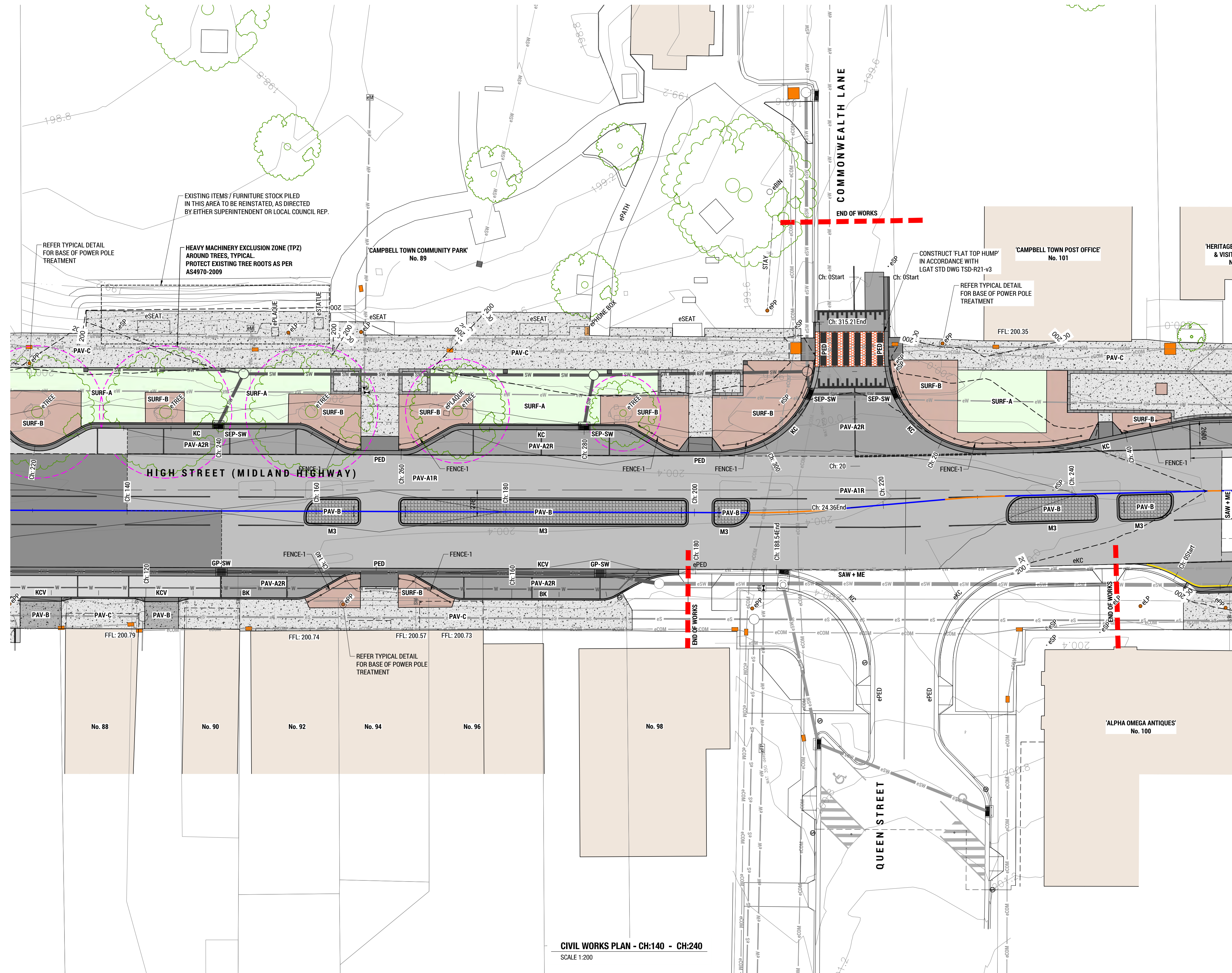
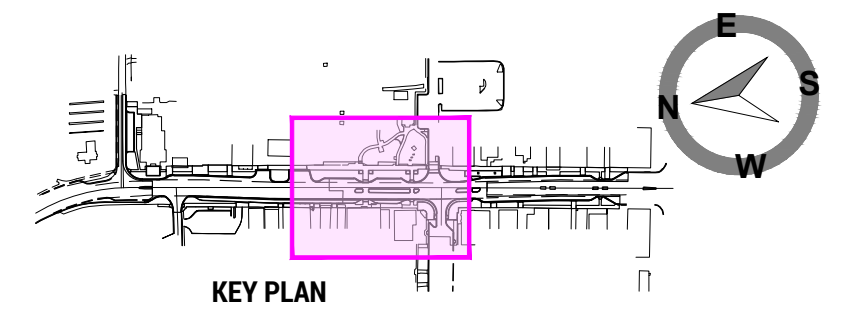


LEGEND

PAV-A1C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A1R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A2C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-A2R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-B	CONCRETE - TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-B1	CONCRETE - HEAVY VEHICLE TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-C	CONCRETE - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-A	PAVER BANDING / TRIM (300 WIDE) - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-B	GRASSED / TURFED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL LANDSCAPED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL
BK	BARRIER KERB
KC	KERB & CHANNEL
KCV	KERB & CHANNEL - VEHICLE CROSSING
KCV-R	KERB & CHANNEL REINFORCED - HEAVY VEHICLE CROSSING
KCM2	KERB & CHANNEL MOUNTABLE - VEHICLE CROSSING (MODIFIED)
FK	FLUSH KERB
M3	MOUNTABLE KERB (DSG SPEC)
PED	PEDESTRIAN RAMP - TYPE A
Bol	BOLLARD - REFER DETAIL
MH	MANHOLE
SEP	SIDE ENTRY PIT
GP	GRATED PIT
ME	MATCH EXISTING
SAW	SAW CUT
SP	SIGN POST
FENCE-1	FENCE / BARRIER - REFER LANDSCAPE ARCH.
WS-1	WHEEL STOP

CIVIL WORKS PLAN - CH:20 - CH:140
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL WORKS PLAN CH:20 - CH:140</p>
								<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p>
						<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>		<p>PROJECT No: 17.340 DWG No: C402 REV: 0</p>	

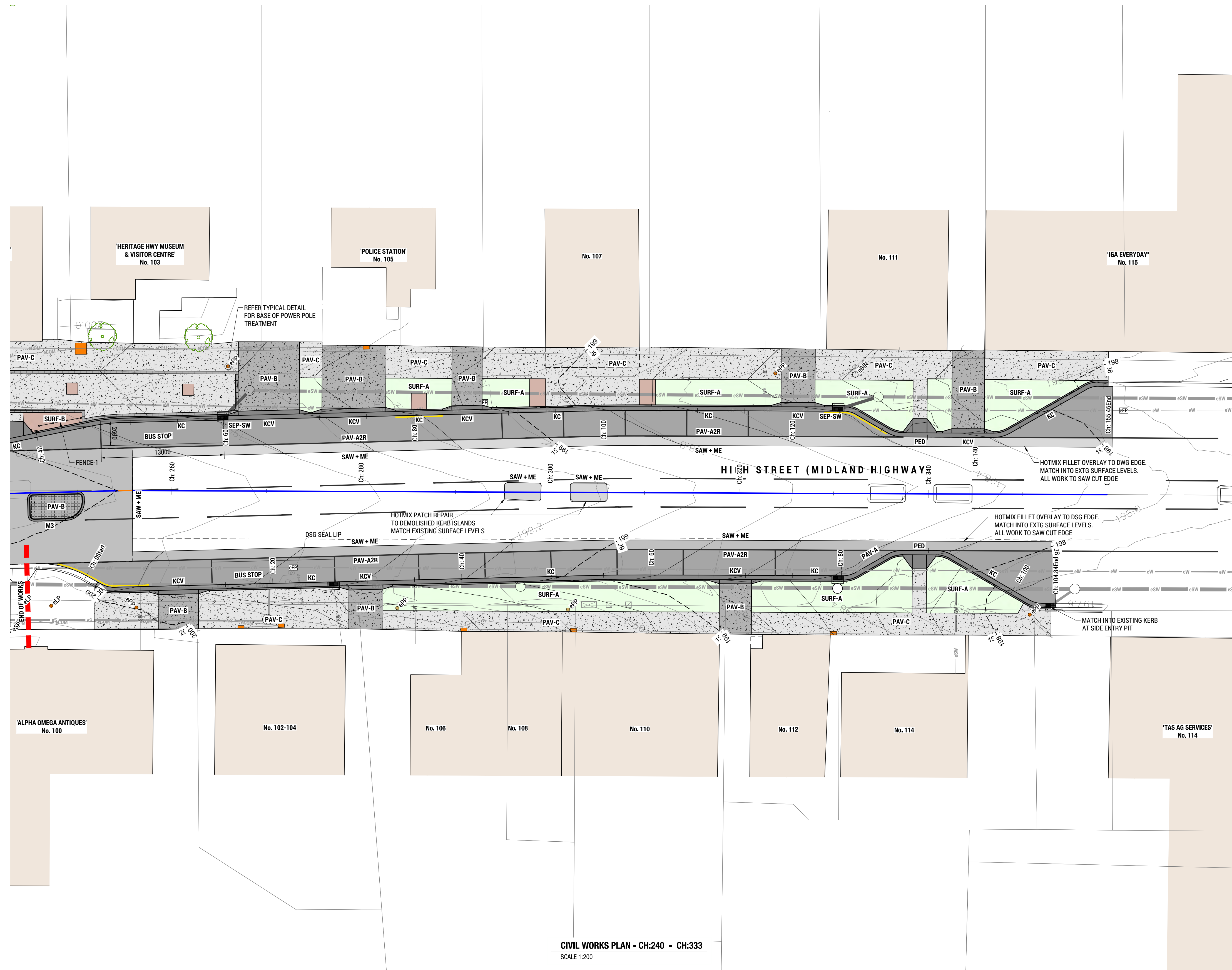
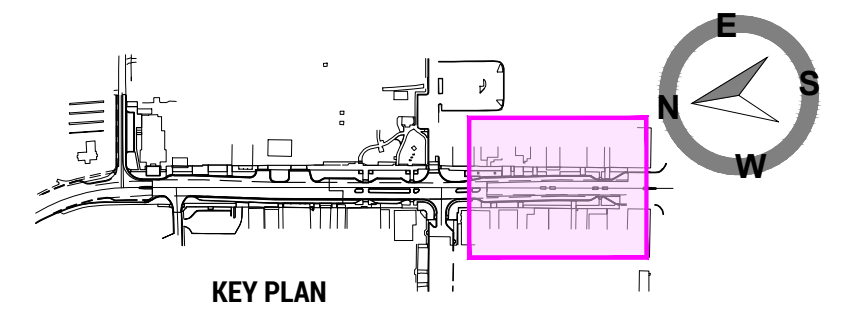


LEGEND

PAV-A1C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A1R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A2C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-A2R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-B	CONCRETE - TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-B1	CONCRETE - HEAVY VEHICLE TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-C	CONCRETE - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-A	PAVER BANDING / TRIM (300 WIDE) - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-B	GRASSED / TURFED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL LANDSCAPED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL
BK	BARRIER KERB
KC	KERB & CHANNEL
KCV	KERB & CHANNEL - VEHICLE CROSSING
KCV-R	KERB & CHANNEL REINFORCED - HEAVY VEHICLE CROSSING
KCM2	KERB & CHANNEL MOUNTABLE - VEHICLE CROSSING (MODIFIED)
FK	FLUSH KERB
M3	MOUNTABLE KERB (DSG SPEC)
PED	PEDESTRIAN RAMP - TYPE A
Bol	BOLLARD - REFER DETAIL
MH	MANHOLE
SEP	SIDE ENTRY PIT
GP	GRATED PIT
ME	MATCH EXISTING
SAW	SAW CUT
SP	SIGN POST
FENCE-1	FENCE / BARRIER - REFER LANDSCAPE ARCH.
WS-1	WHEEL STOP

CIVIL WORKS PLAN - CH:140 - CH:240
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK</p> <p>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL WORKS PLAN CH:140 - CH:240</p>
								<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C403 REV: 0</p>

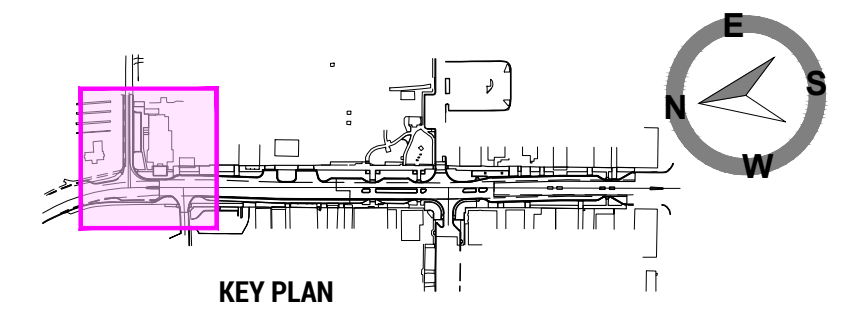


LEGEND

PAV-A1C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A1R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - DSG TRAFFICABLE REFER DETAILS
PAV-A2C	HOTMIX - FULL DEPTH - CLAY SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-A2R	HOTMIX - FULL DEPTH - ROCK SUBGRADE - LGAT TRAFFICABLE REFER DETAILS
PAV-B	CONCRETE - TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-B1	CONCRETE - HEAVY VEHICLE TRAFFICABLE REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
PAV-C	CONCRETE - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-A	PAVER BANDING / TRIM (300 WIDE) - PEDESTRIAN REFER DETAILS + LANDSCAPE ARCHITECT FOR DETAILS
SURF-B	GRASSED / TURFED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL LANDSCAPED AREA REFER LANDSCAPE ARCH. SPEC. 200mm MIN GOOD QUALITY SCREENED TOP SOIL
BK	BARRIER KERB
KC	KERB & CHANNEL
KCV	KERB & CHANNEL - VEHICLE CROSSING
KCV-R	KERB & CHANNEL REINFORCED - HEAVY VEHICLE CROSSING
KCM2	KERB & CHANNEL MOUNTABLE - VEHICLE CROSSING (MODIFIED)
FK	FLUSH KERB
M3	MOUNTABLE KERB (DSG SPEC)
PED	PEDESTRIAN RAMP - TYPE A
Bol	BOLLARD - REFER DETAIL
MH	MANHOLE
SEP	SIDE ENTRY PIT
GP	GRATED PIT
ME	MATCH EXISTING
SAW	SAW CUT
SP	SIGN POST
FENCE-1	FENCE / BARRIER - REFER LANDSCAPE ARCH.
WS-1	WHEEL STOP

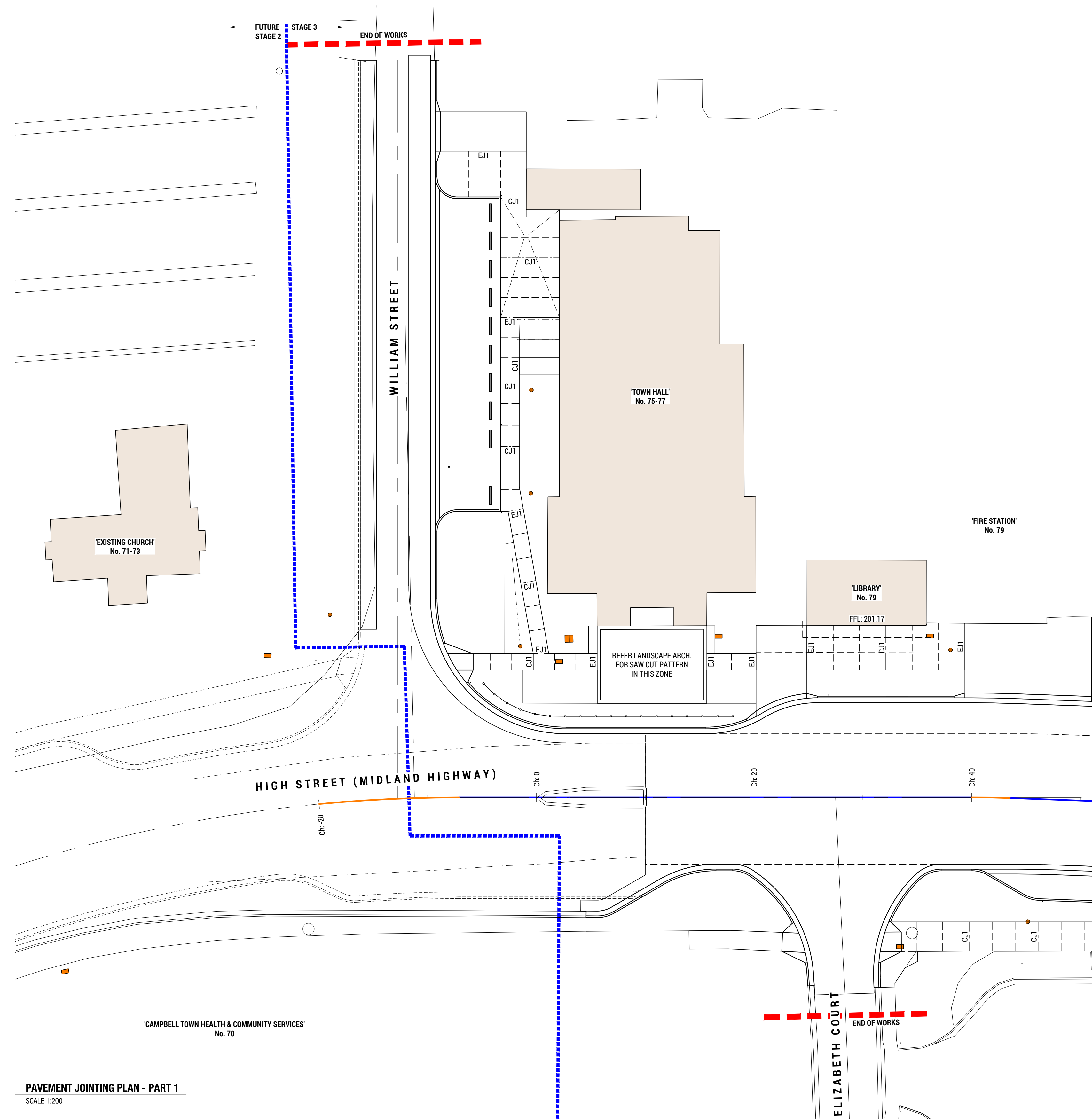
CIVIL WORKS PLAN - CH:240 - CH:333
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p>	<p>DESIGN BY: RJ</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL WORKS PLAN CH:240 - CH:333</p>
	<p>REVISIONS:</p>	<p>APPROVED: R. JESSON</p>	<p>DESIGN CHK: JS</p>	<p>DATE: 00-00-00</p>				
<p>APPROVED: R. JESSON</p>			<p>ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>			<p>PROJECT No: 17.340 DWG No: C404 REV: 0</p>



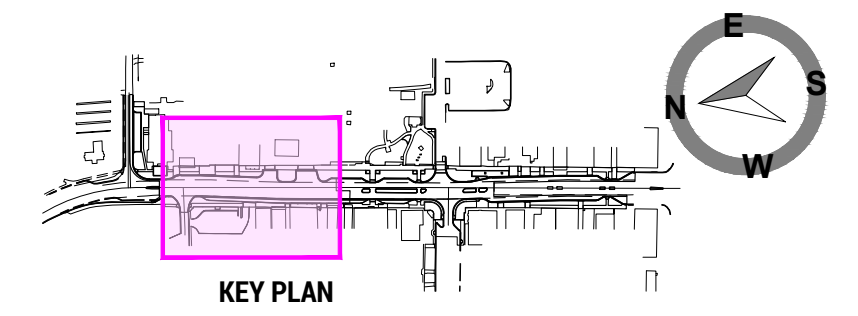
LEGEND

-----	EJ1 - EXPANSION JOINT - 18.0m MAX CRS
-----	CJ1 - CONTROL JOINT - 9.0m MAX CRS
-----	SCJ / WPJ - SAW CUT JOINT / WEAKENED PLANE JOINT



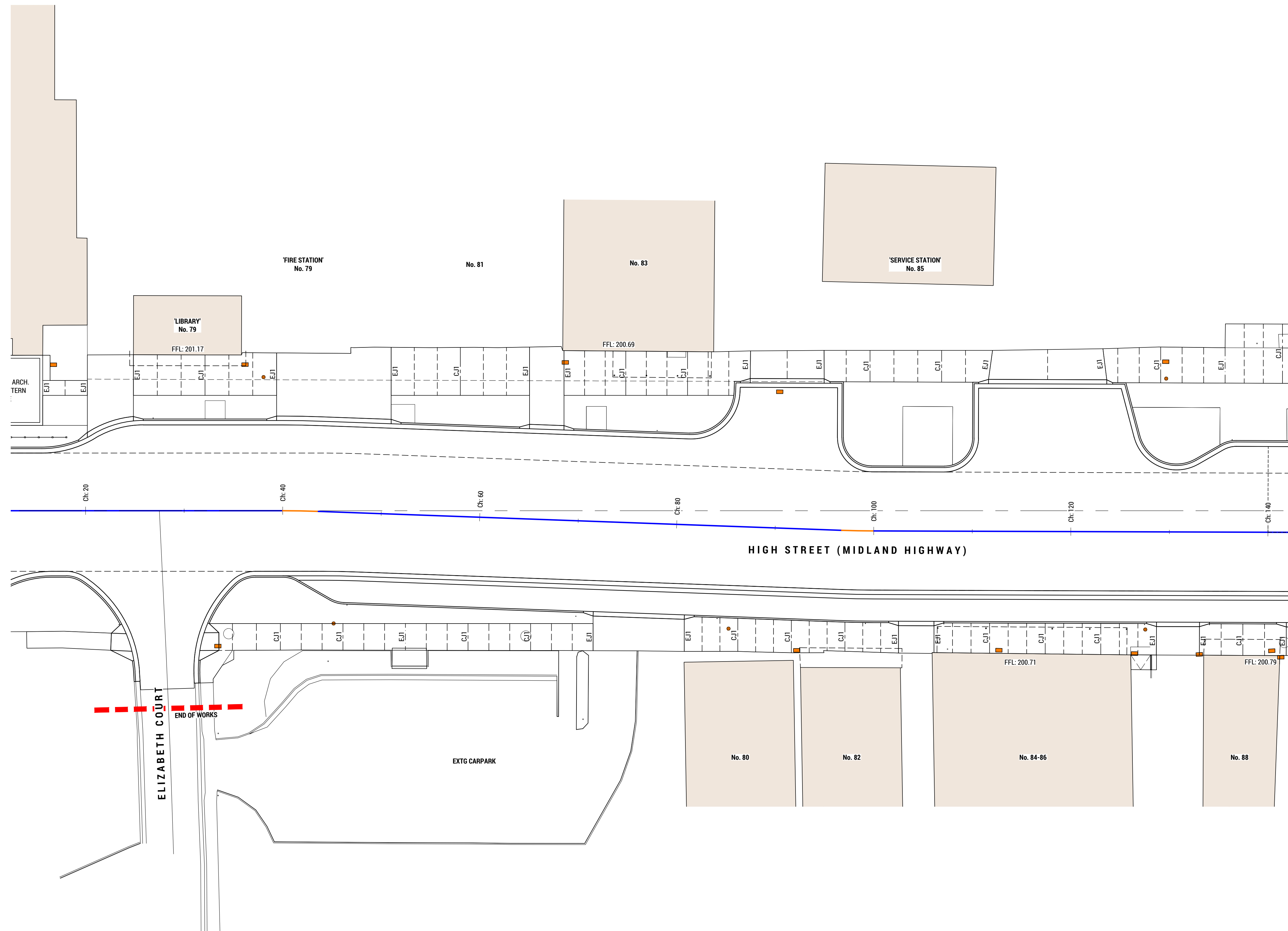
PAVEMENT JOINTING PLAN - PART 1
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: PAVEMENT JOINTING PLAN - PART 1</p>
	<p>REVISIONS:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>	<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>			<p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C411 REV: 0</p>	



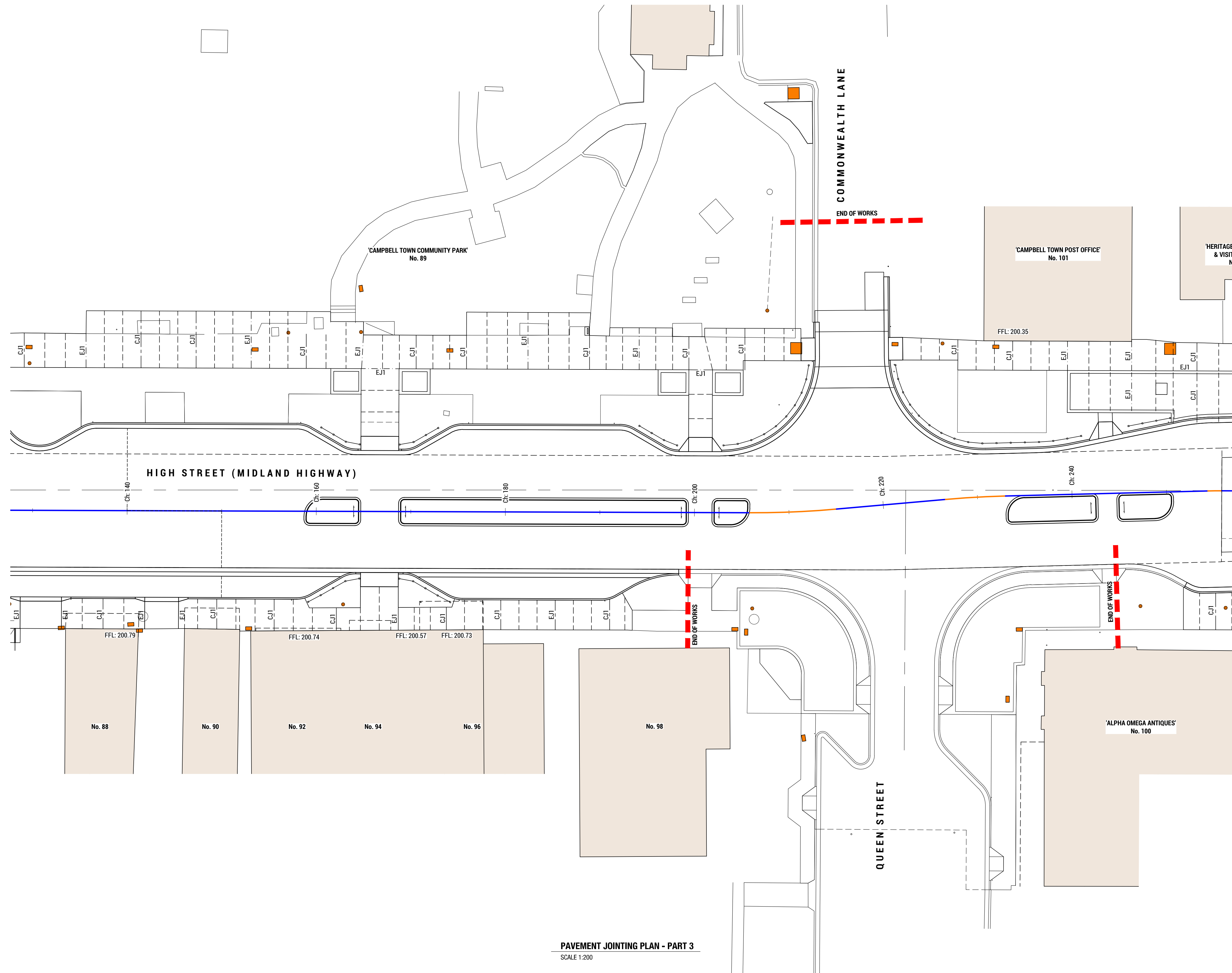
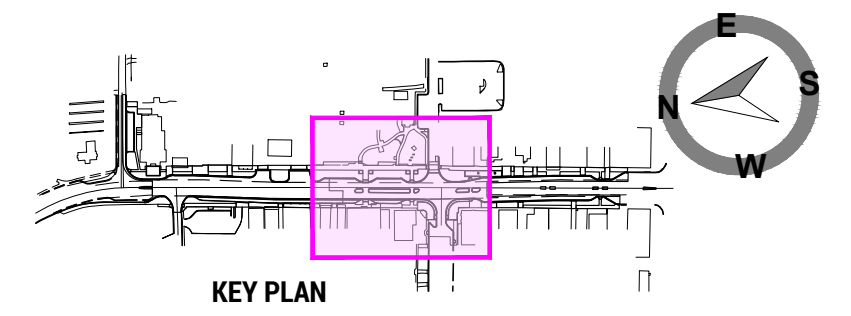
LEGEND

- EJT - EXPANSION JOINT - 18.0m MAX CRS
- CJT - CONTROL JOINT - 9.0m MAX CRS
- SCJ / WPJ - SAW CUT JOINT / WEAKENED PLANE JOINT



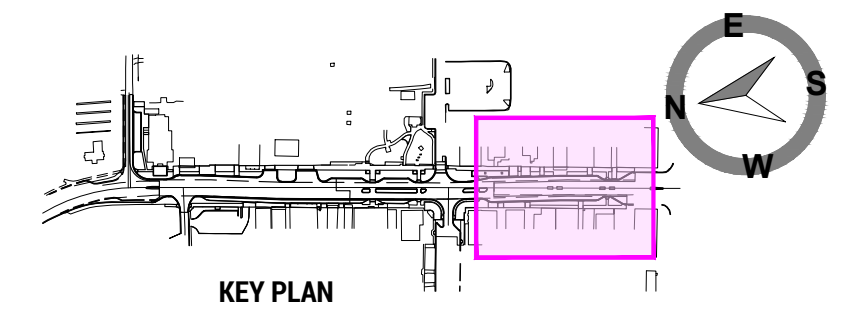
PAVEMENT JOINTING PLAN - PART 2
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: PAVEMENT JOINTING PLAN - PART 2</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>			<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>



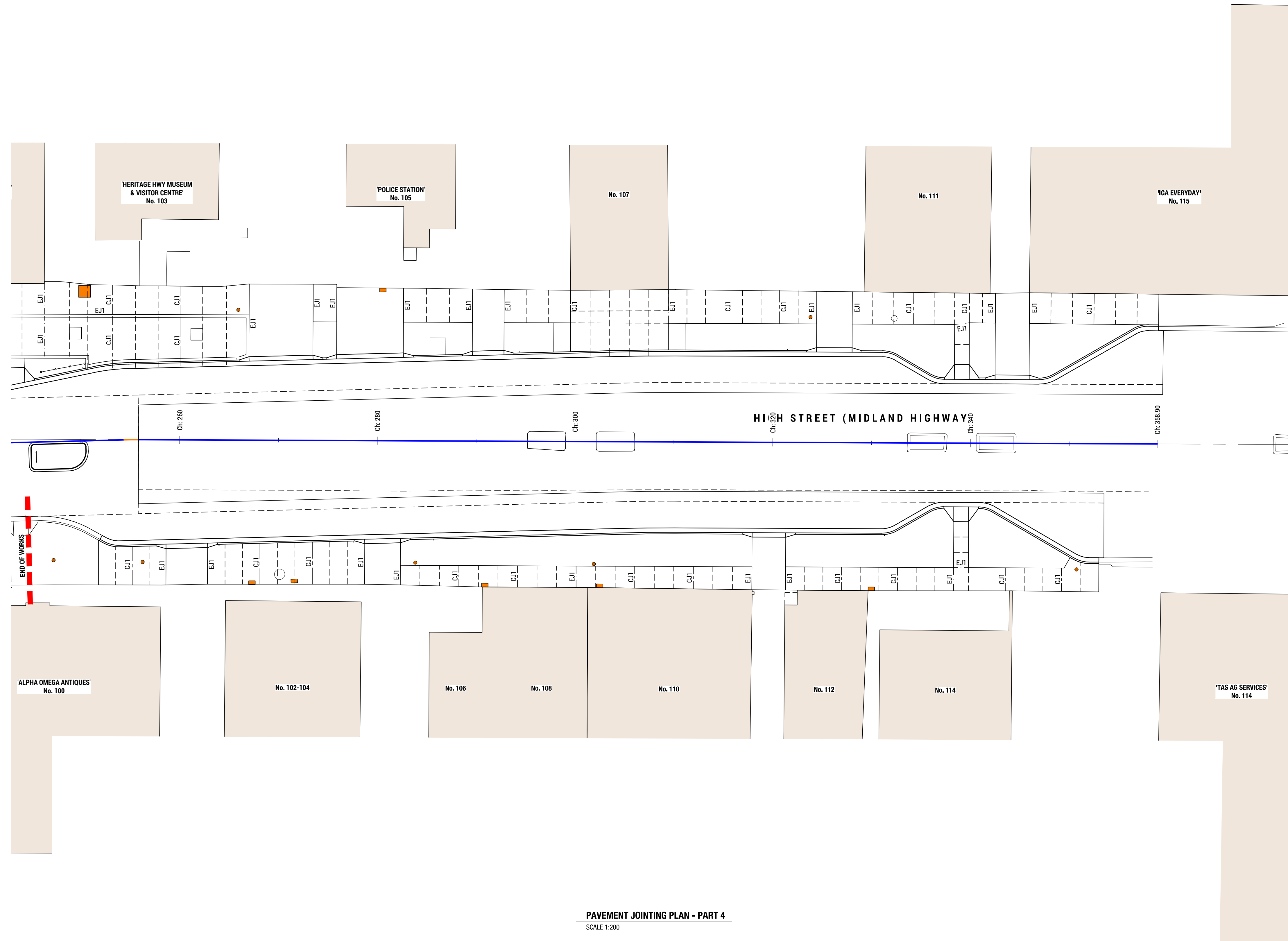
PAVEMENT JOINTING PLAN - PART 3
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p>	<p>DESIGN BY: BJL</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: PAVEMENT JOINTING PLAN - PART 3</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DESIGN CHK: JRJ</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JST</p>			
<p>APPROVED: R. JESSON ACRED. No: CC58481</p>			<p>DATE: 00-00-00</p>		<p>rarein.com.au P. 03 6388 9200</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>PROJECT No: 17.340 DWG No: C413 REV: 0</p>

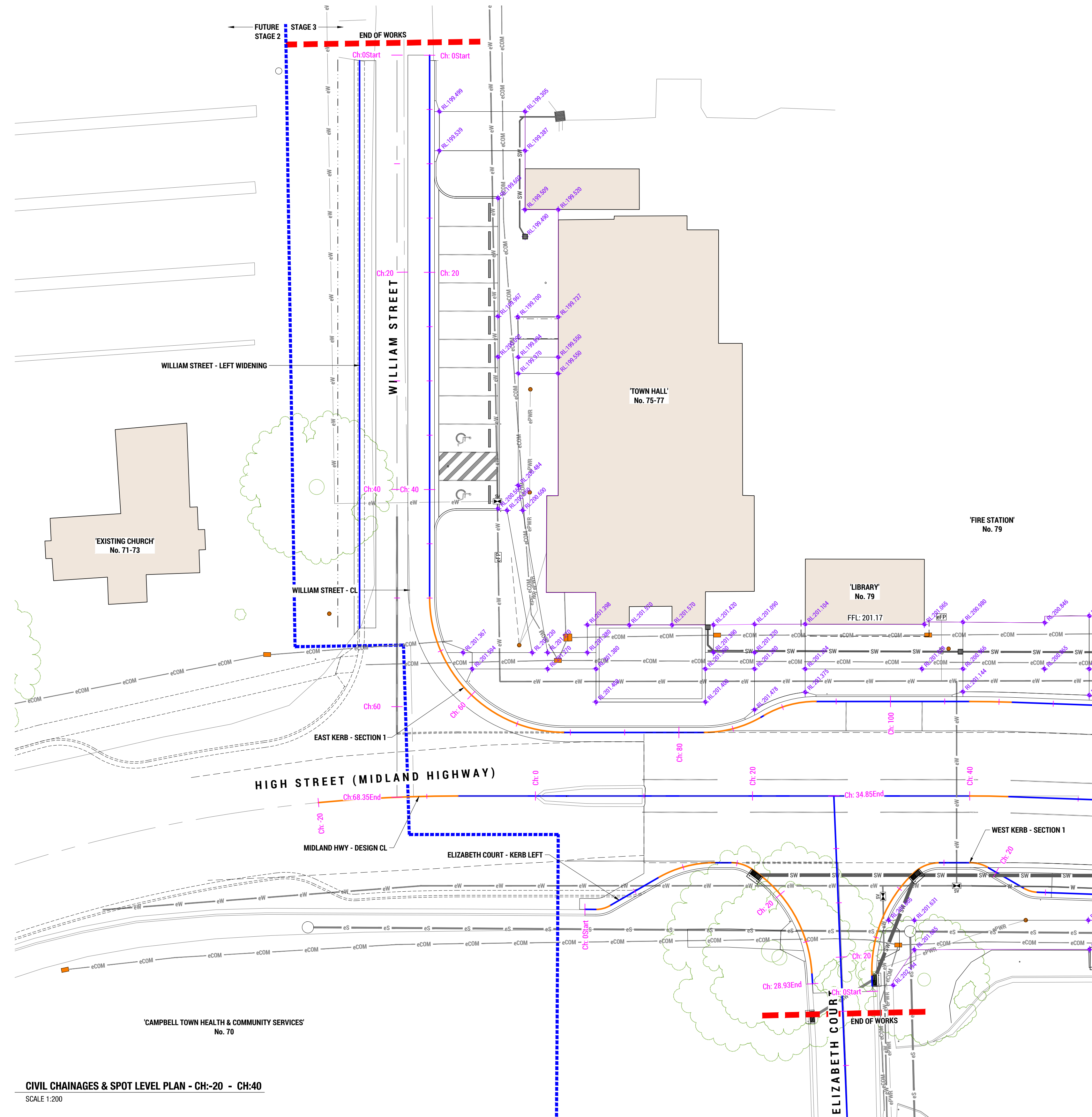
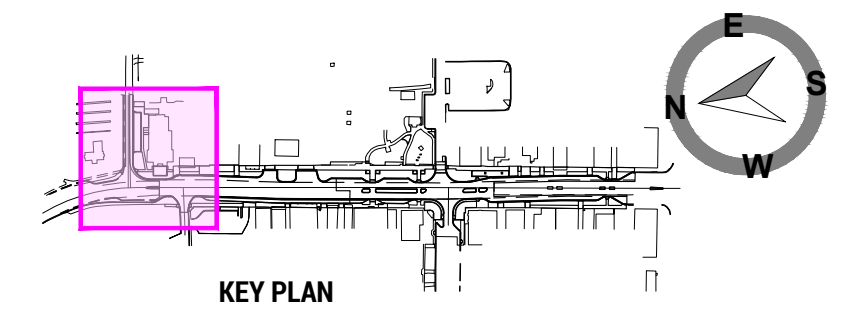


LEGEND

-----	EJ1 - EXPANSION JOINT - 18.0m MAX CRS
-----	CJ1 - CONTROL JOINT - 9.0m MAX CRS
-----	SCJ / WPJ - SAW CUT JOINT / WEAKENED PLANE JOINT

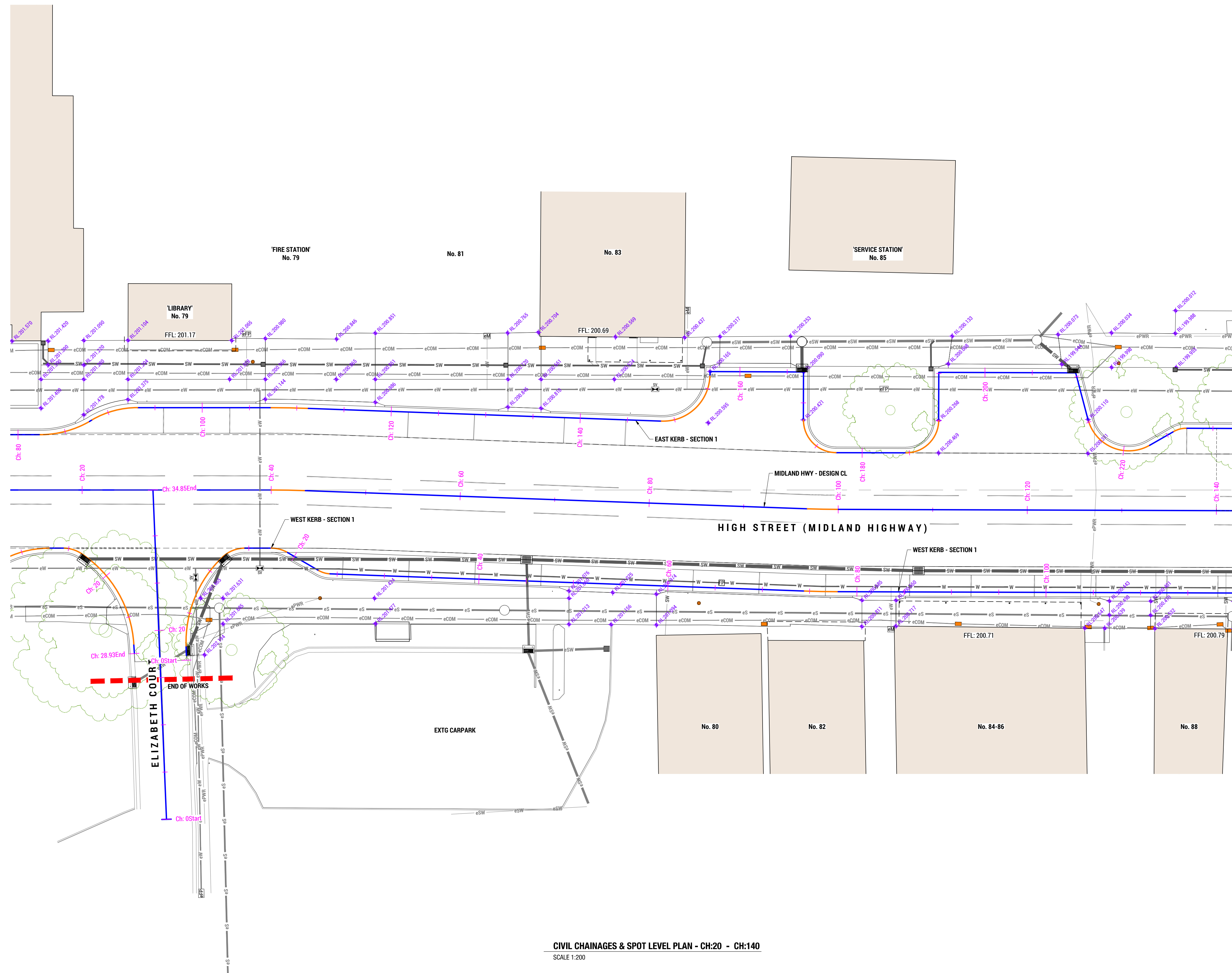
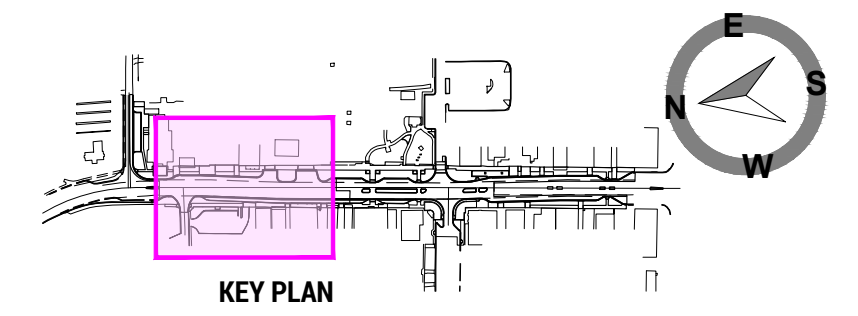


<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RAJL</p> <p>DESIGN CHK: JSJ</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JST</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: PAVEMENT JOINTING PLAN - PART 4</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C414 REV: 0</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DATE: 00-00-00</p>			






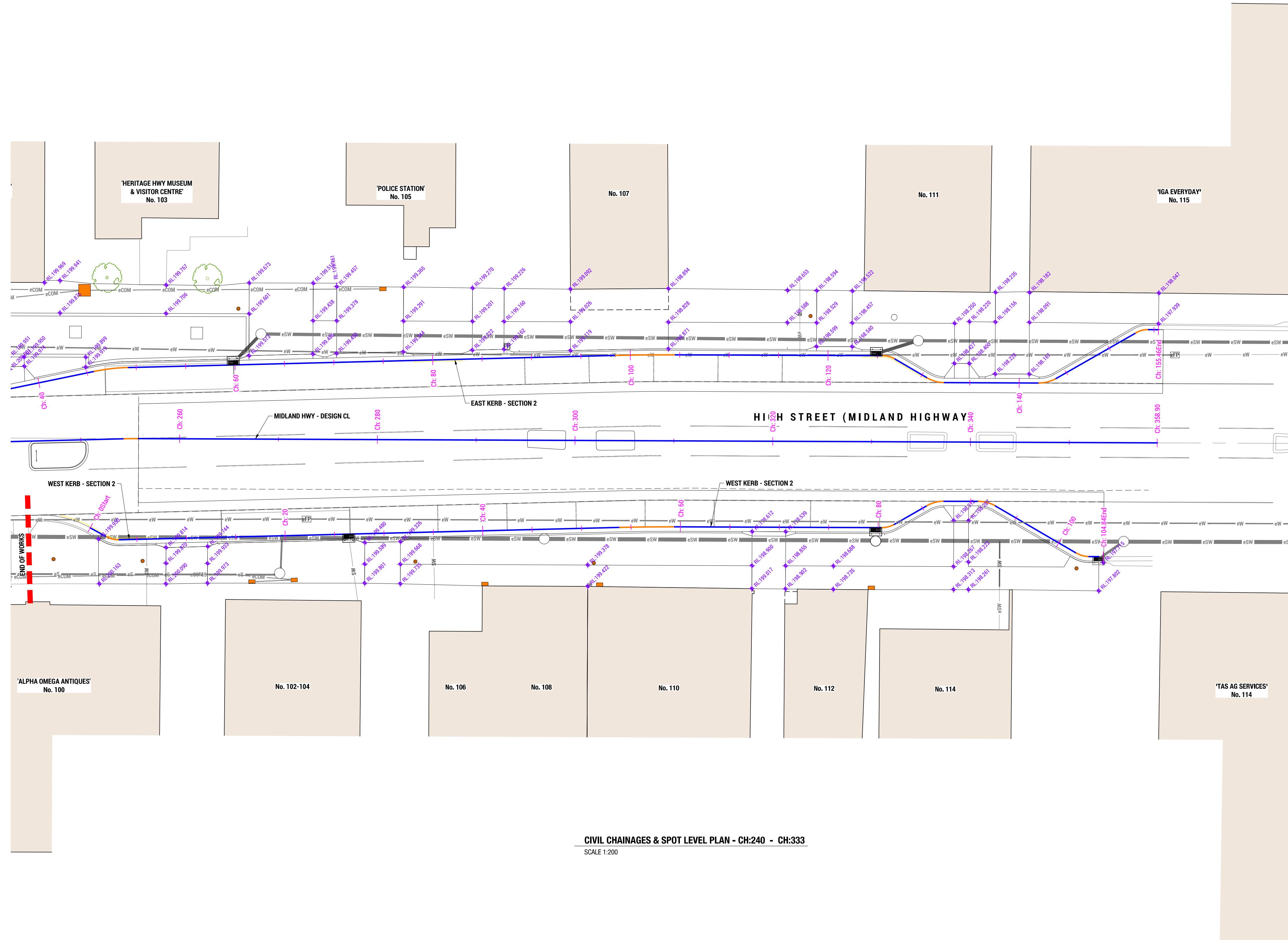
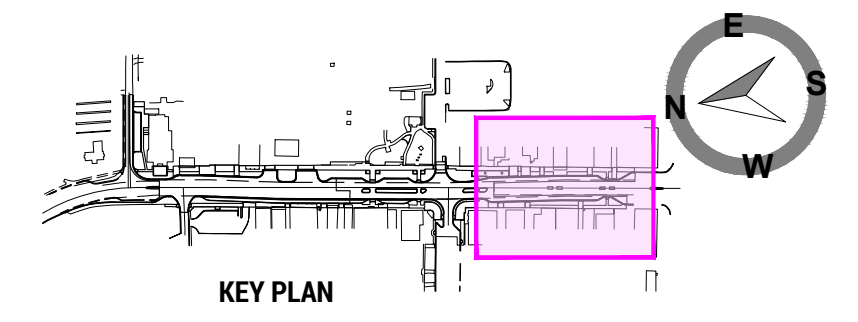
CIVIL CHAINAGES & SPOT LEVEL PLAN - CH-20 - CH:40
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK</p> <p>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL CHAINAGES & SPOT LEVEL PLAN CH-20 - CH:40</p>
	<p>REVISIONS:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>	<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>			<p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C421 REV: 0</p>	






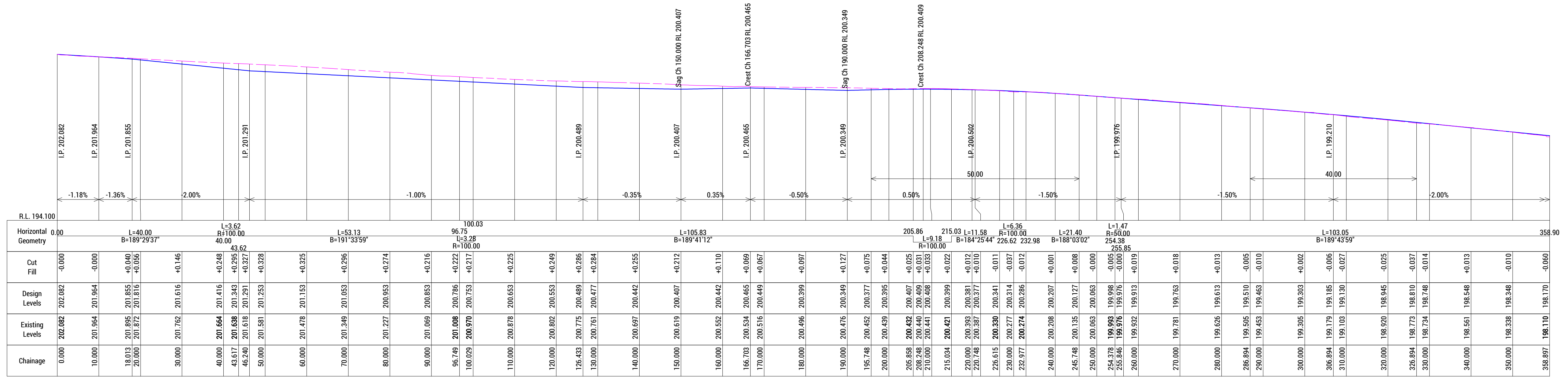
CIVIL CHAINAGES & SPOT LEVEL PLAN - CH:20 - CH:140
SCALE 1:200

 <p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ DESIGN CHK: JS</p>	 <p>LANGE design landscape architecture</p>	 <p>rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL CHAINAGES & SPOT LEVEL PLAN CH:20 - CH:140</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C422 REV: 0</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DRAWN BY: PVD DRAFT CHK: JS</p>			<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	

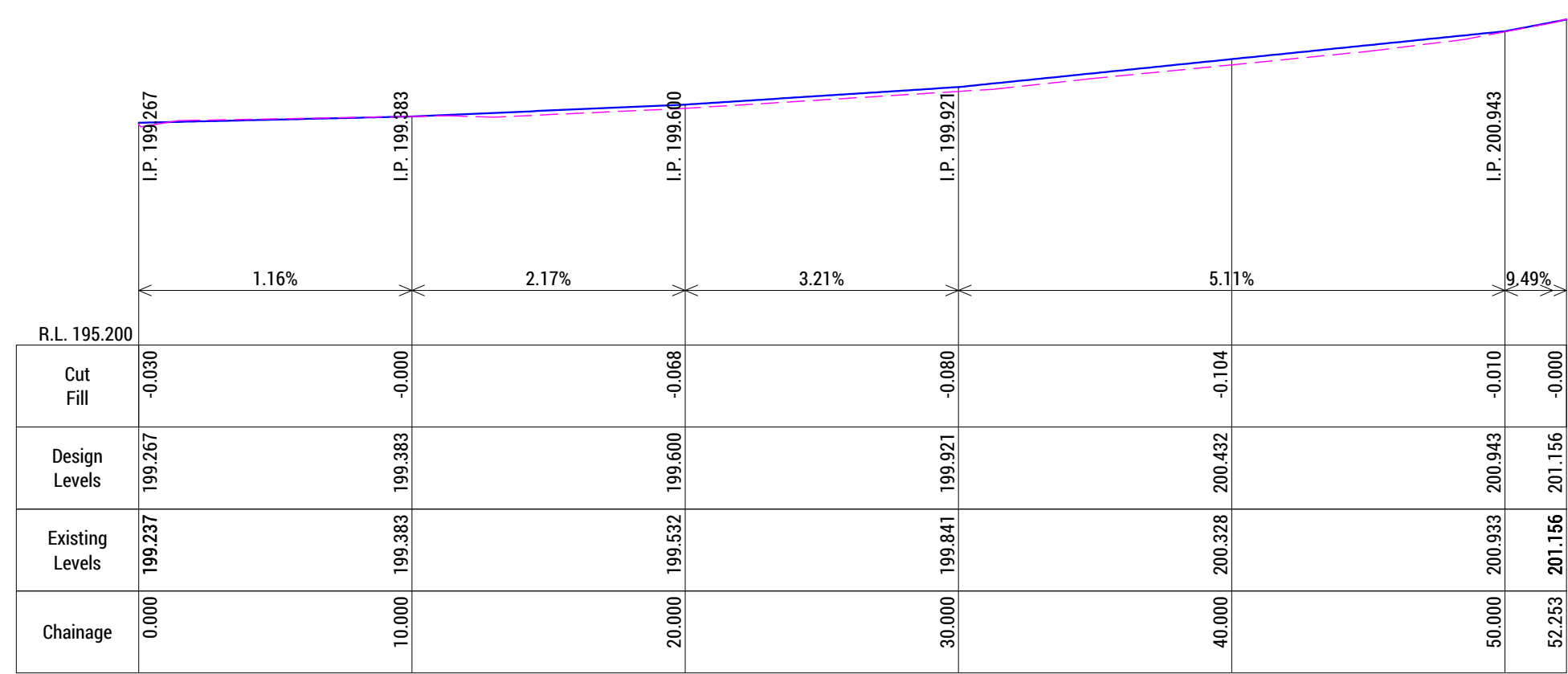


CIVIL CHAINAGES & SPOT LEVEL PLAN - CH:240 - CH:333
SCALE 1:200

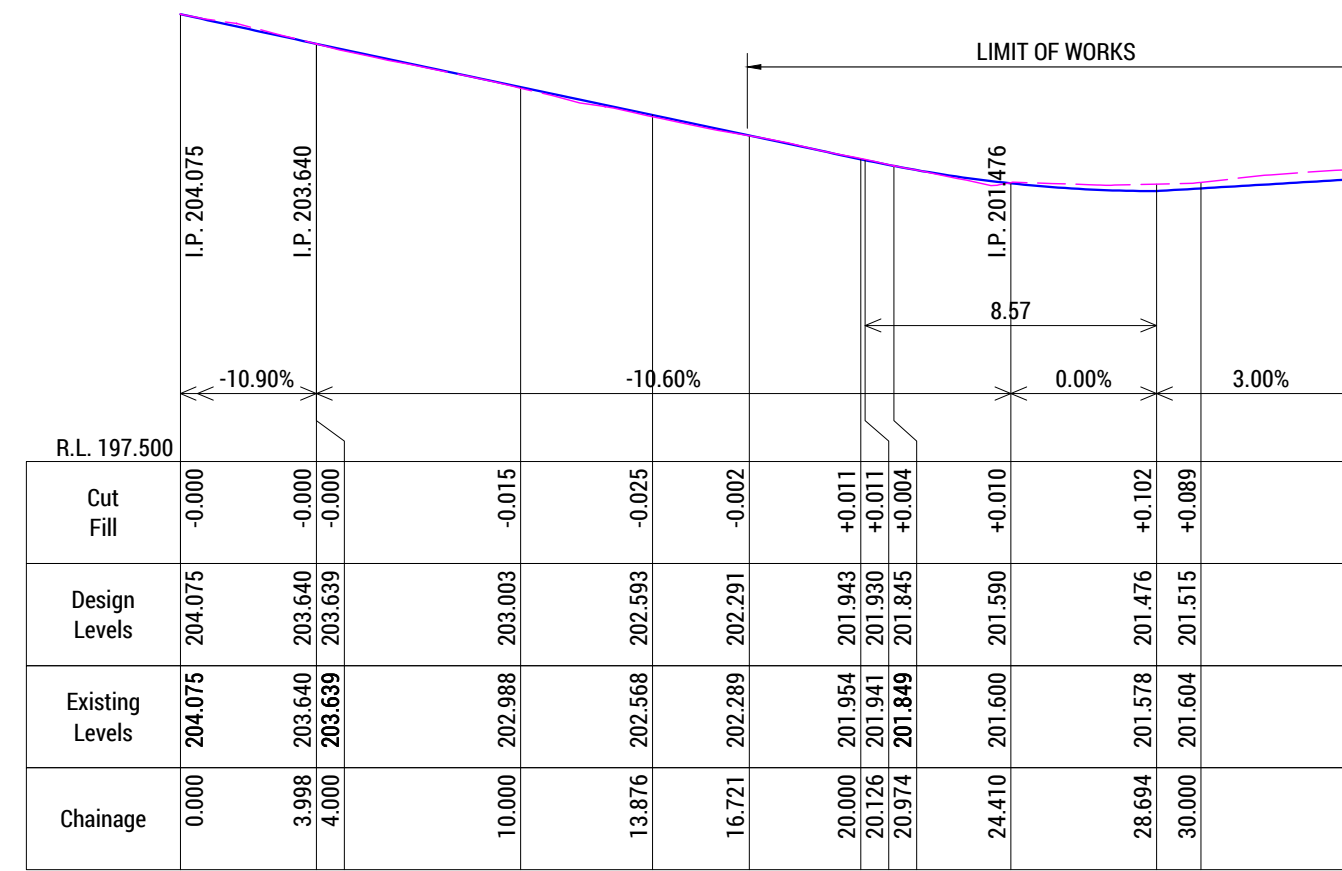
 <p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	 <p>LANGE design landscape architecture</p>	 <p>rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL CHAINAGES & SPOT PLAN CH:240 - CH:333</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C424 REV: 0</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRD. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>			<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	



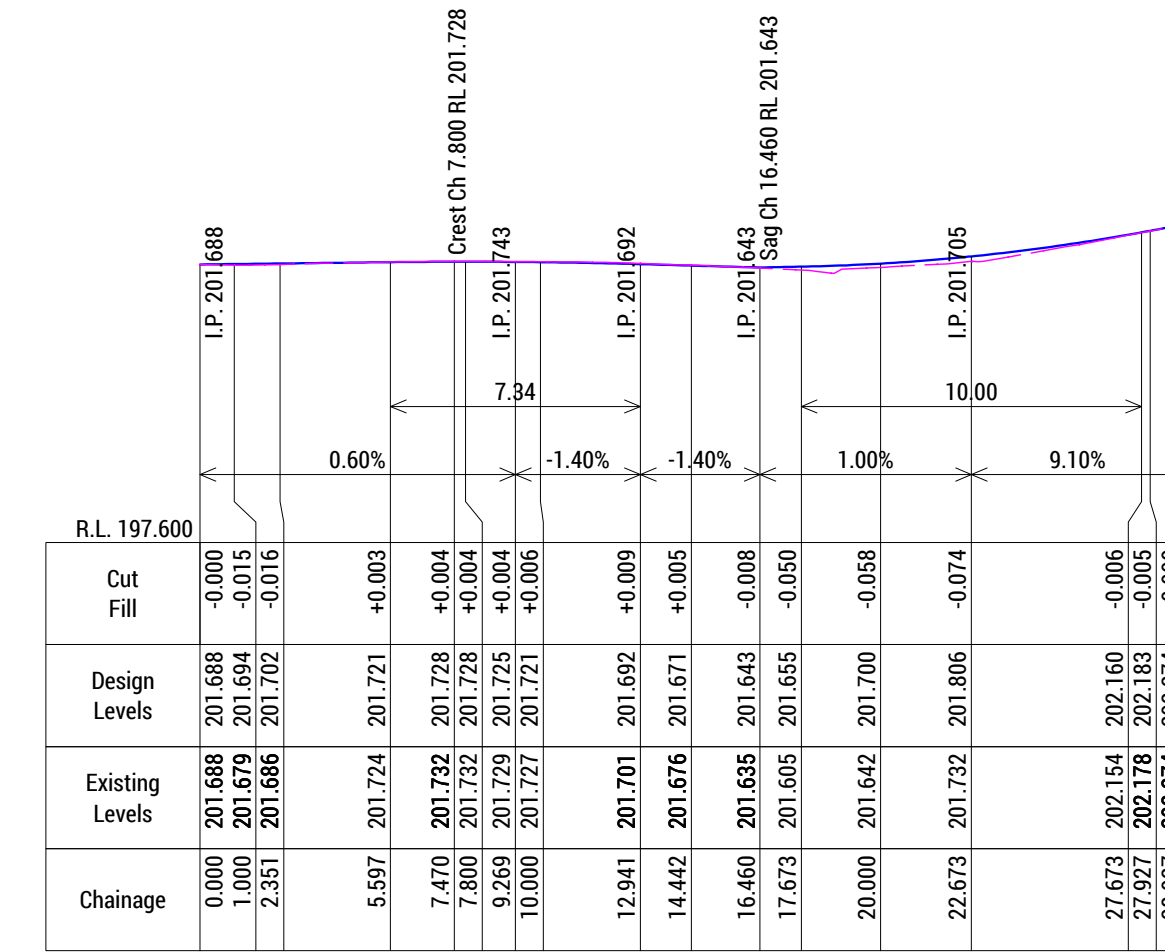
LONGITUDINAL SECTION
Scales: H 1:500 V 1:100
MIDLAND HWY DESIGN CL



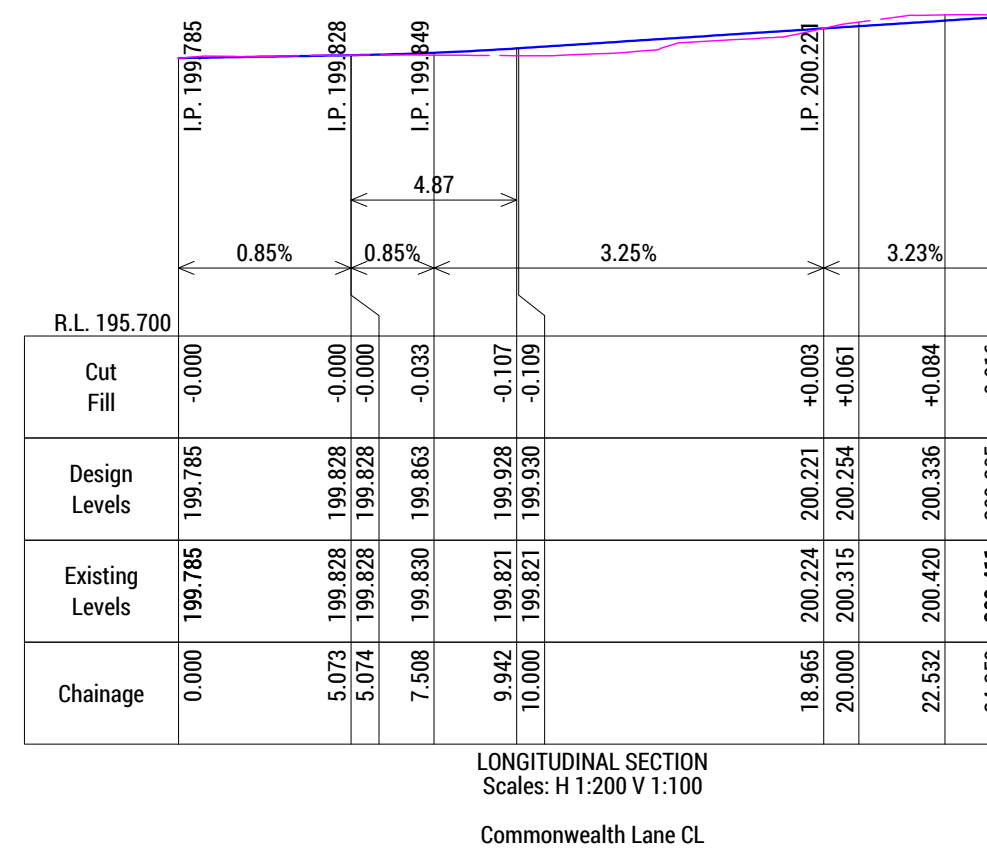
LONGITUDINAL SECTION
Scales: H 1:200 V 1:100
William St - Left Widening



LONGITUDINAL SECTION
Scales: H 1:200 V 1:100
Elizabeth Cr - CL



LONGITUDINAL SECTION
Scales: H 1:200 V 1:100
ELIZABETH Cr - KERB LEFT



LONGITUDINAL SECTION
Scales: H 1:200 V 1:100
Commonwealth Lane CL



0	APPROVAL / TENDER	PVD	00-00-00
REV:	DESCRIPTION:	BY:	DATE:

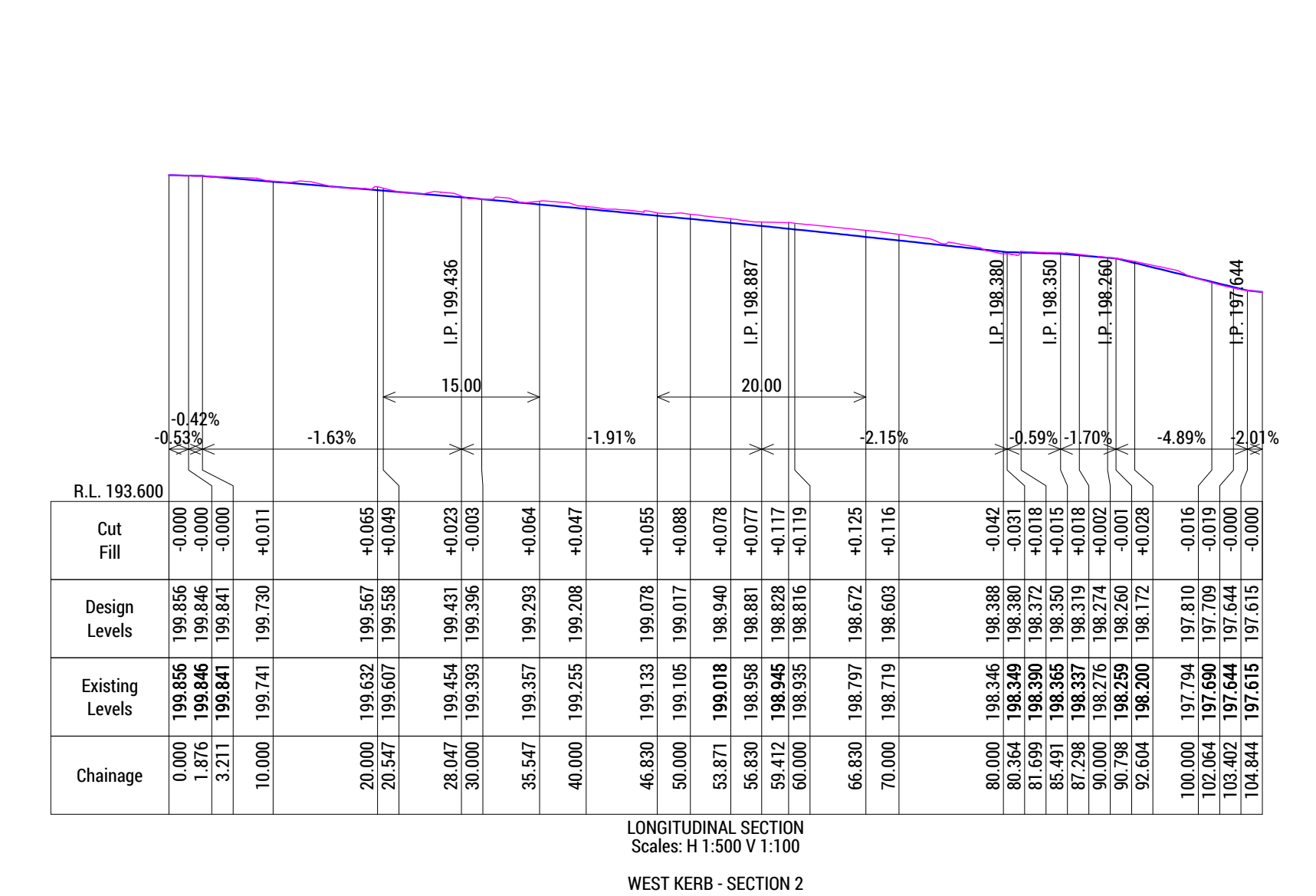
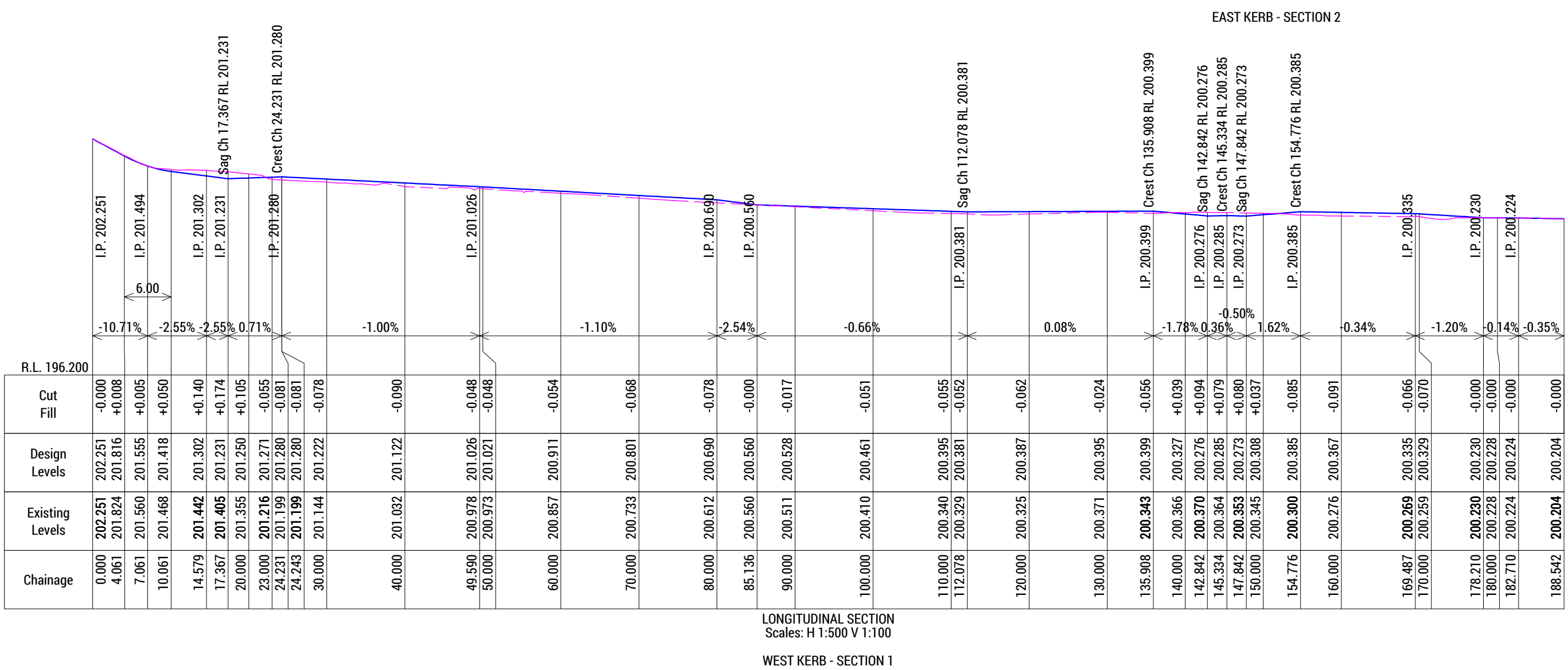
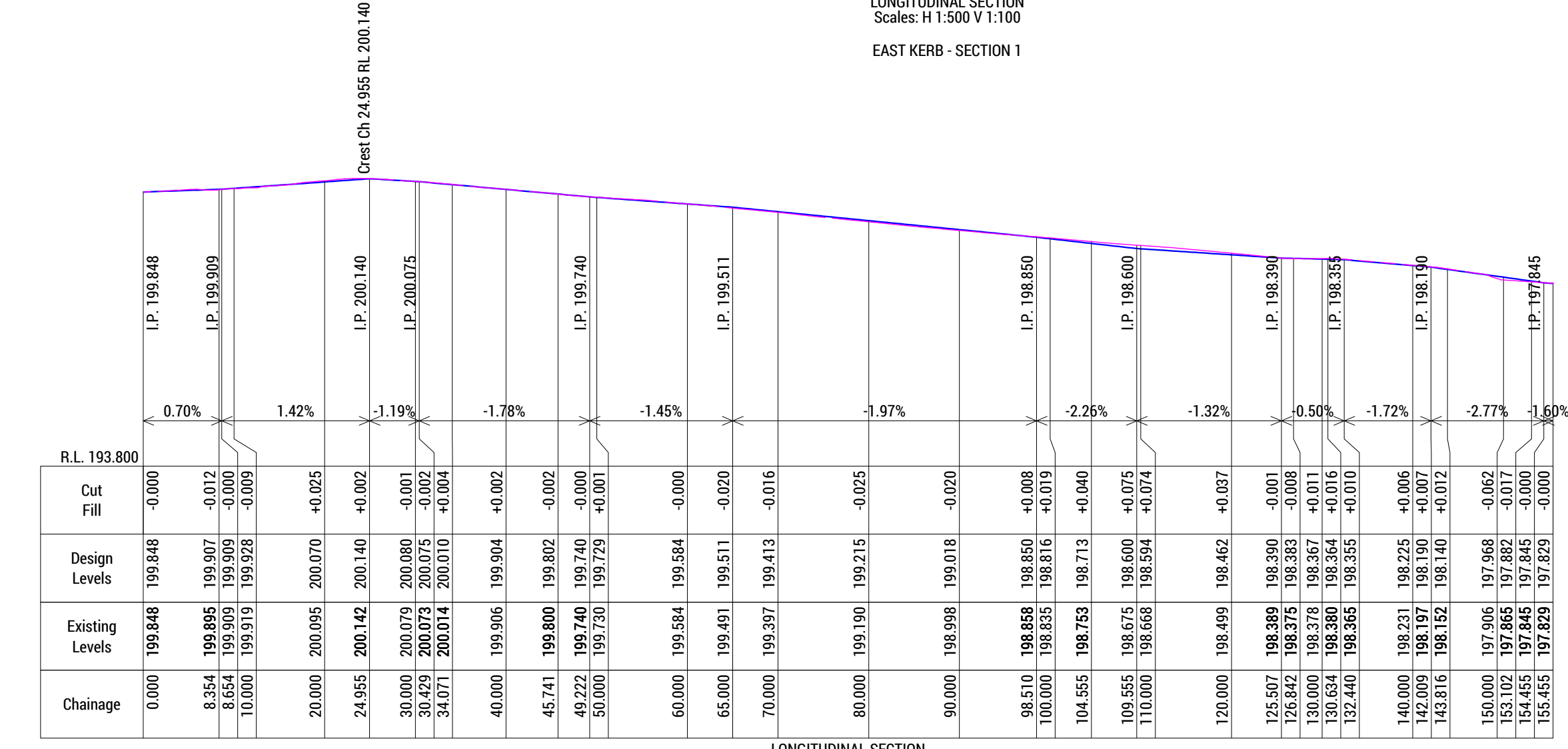
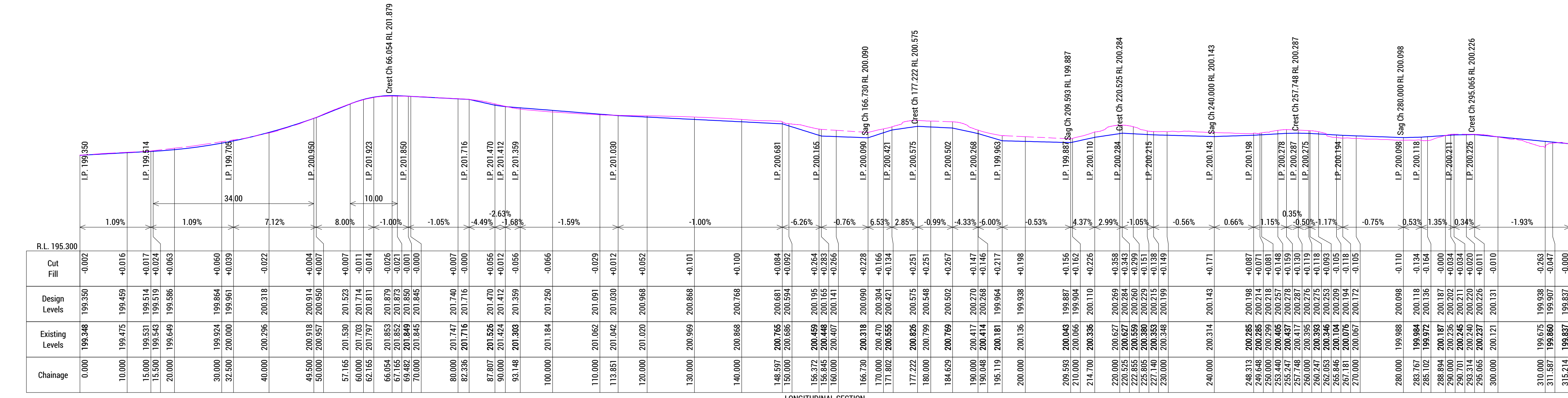
STATUS: PRELIMINARY/INFORMATION		DESIGN BY: RJ
DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257		DESIGN CHK: JS
APPROVED: R. JESSON	ACRED. No: CC58481	DRAWN BY: PVD
		DRAFT CHK: JS
		DATE: 00-00-00



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Launceston TAS 7250
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P. 03 6388 9200

CLIENT:	NORTHERN MIDLANDS COUNCIL
PROJECT:	URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS
ADDRESS:	MIDLANDS HIGHWAY CAMPBELL TOWN

TITLE:	CIVIL LONGITUDINAL SECTIONS - SHEET 1
SCALE:	AS NOTED
SHEET SIZE:	A1
DWG IN SET:	-
PROJECT No:	17.340
DWG No:	C431
REV:	0



<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK</p> <p>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>		<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: CIVIL LONGITUDINAL SECTIONS - SHEET 2</p> <p>SCALE: AS NOTED SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C432 REV: 0</p>
			<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>	<p>DATE: 00-00-00</p>		

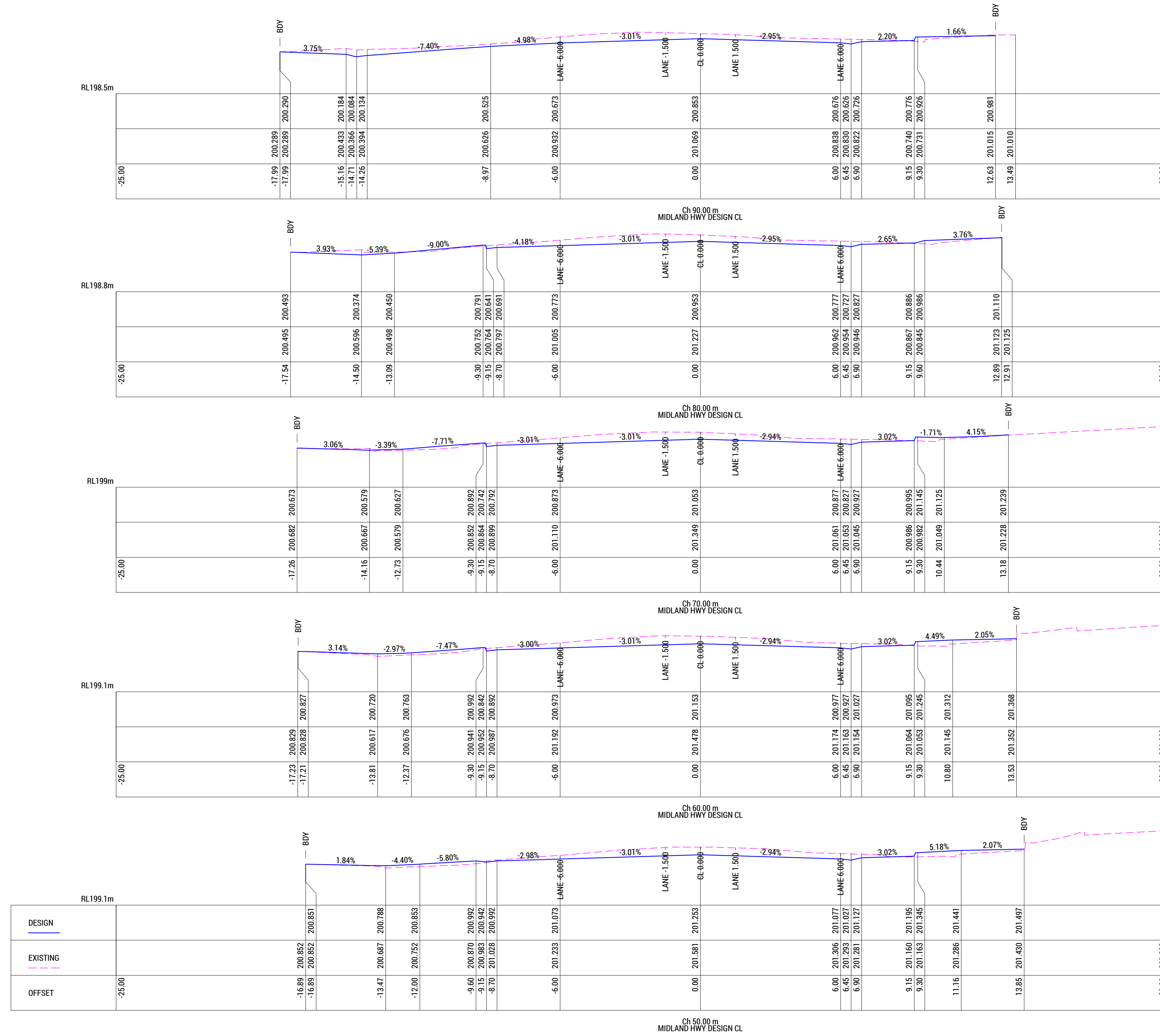
LANGE design





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Launceston TAS 7250

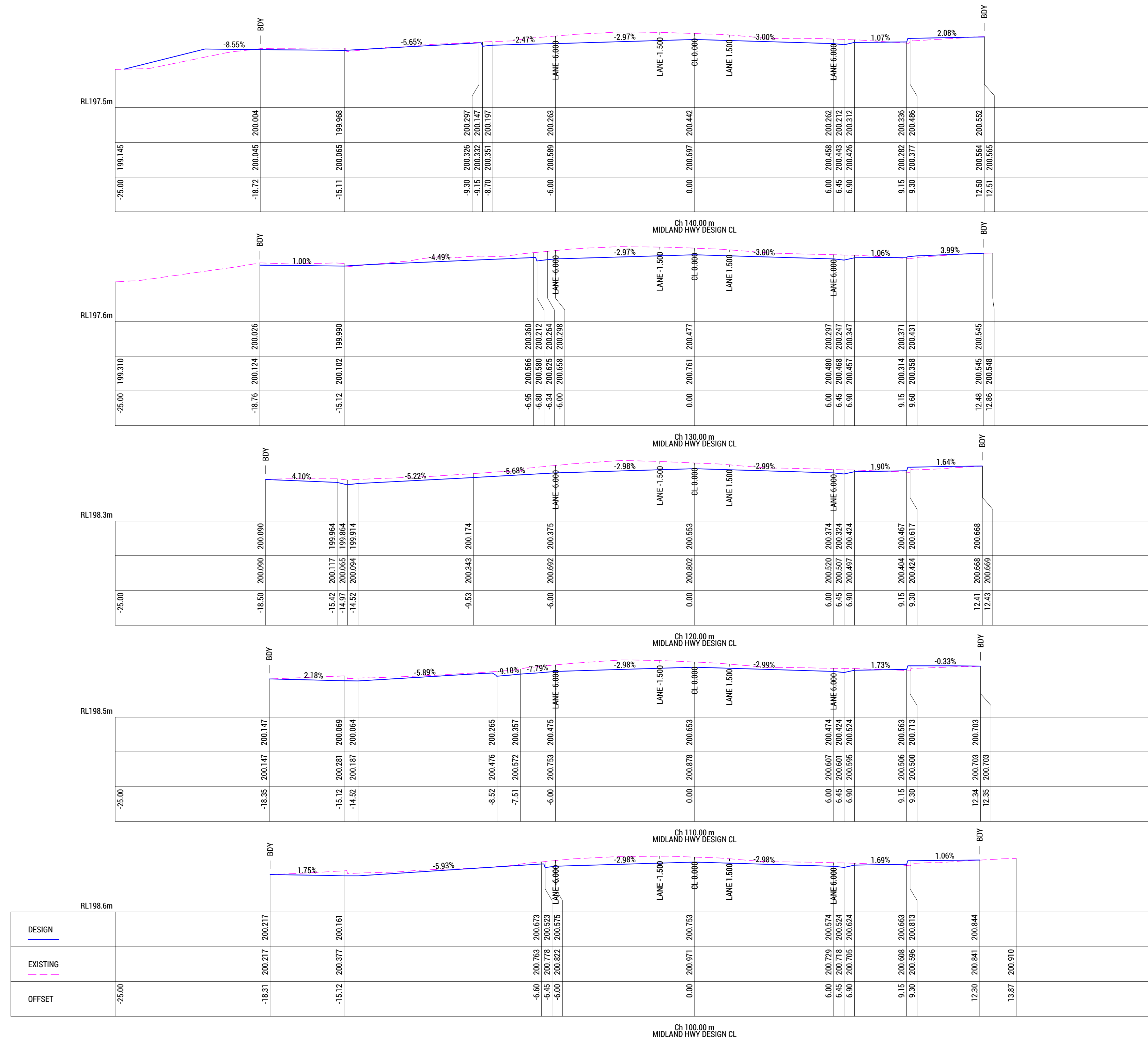
rare.

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P. 03 6388 9200

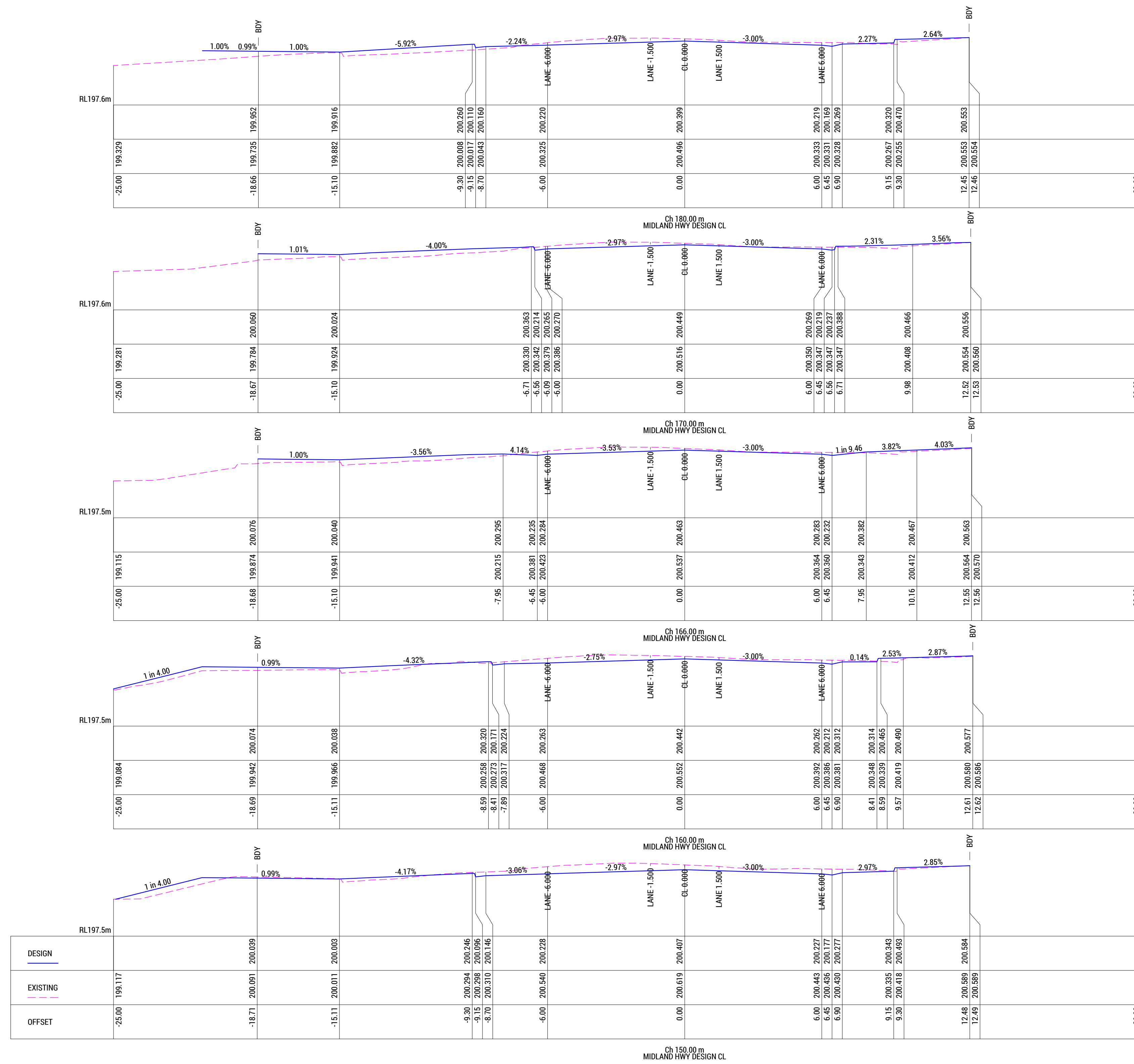


 <p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	 <p>LANGE design landscape architecture</p>	 <p>rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	 <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL CROSS SECTIONS MIDLAND HIGHWAY - SHEET 2</p>
	<p>REV: DESCRIPTION:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DRAFT BY: PVD</p> <p>DRAFT CHK: JS</p>				<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>

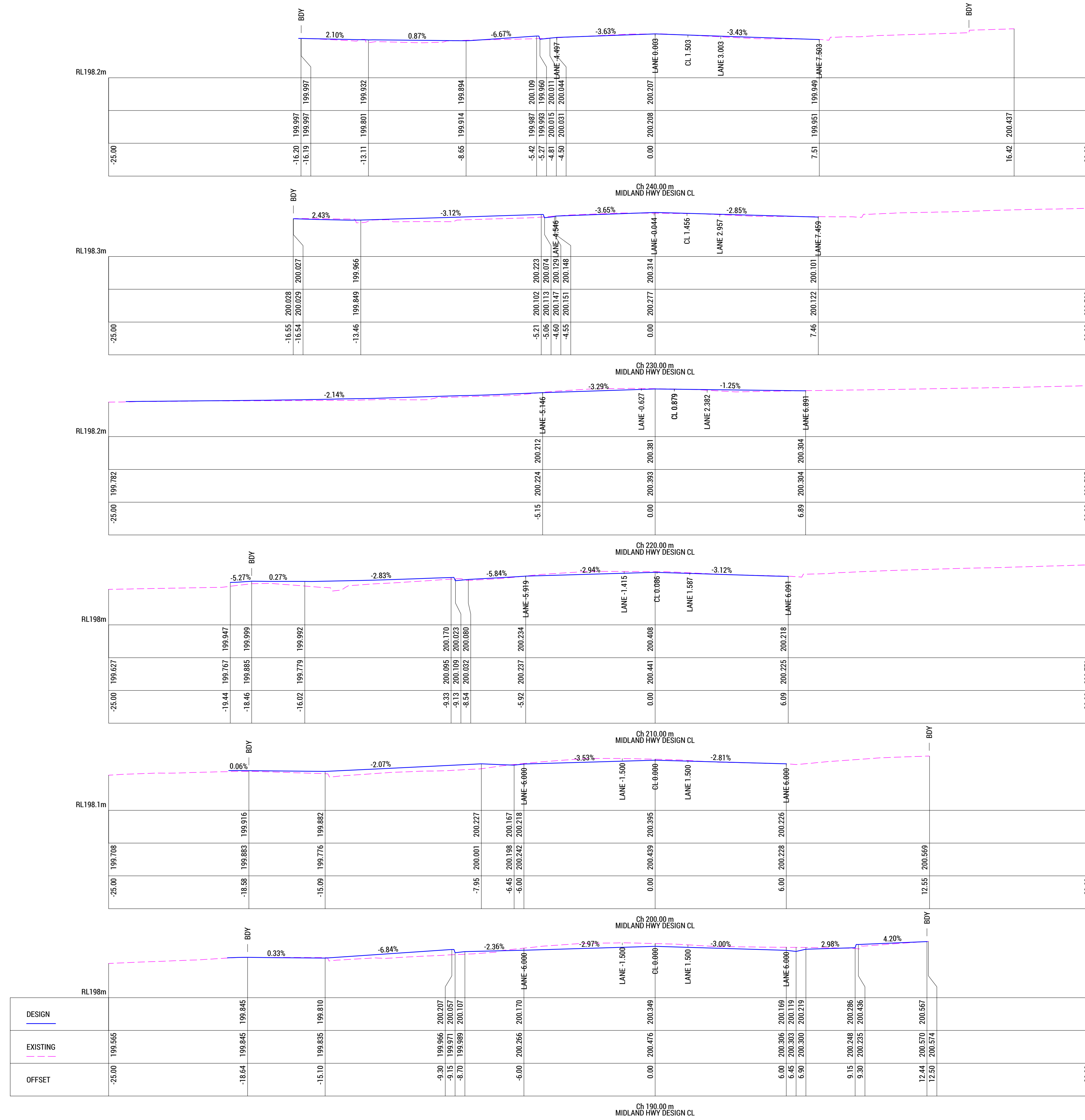


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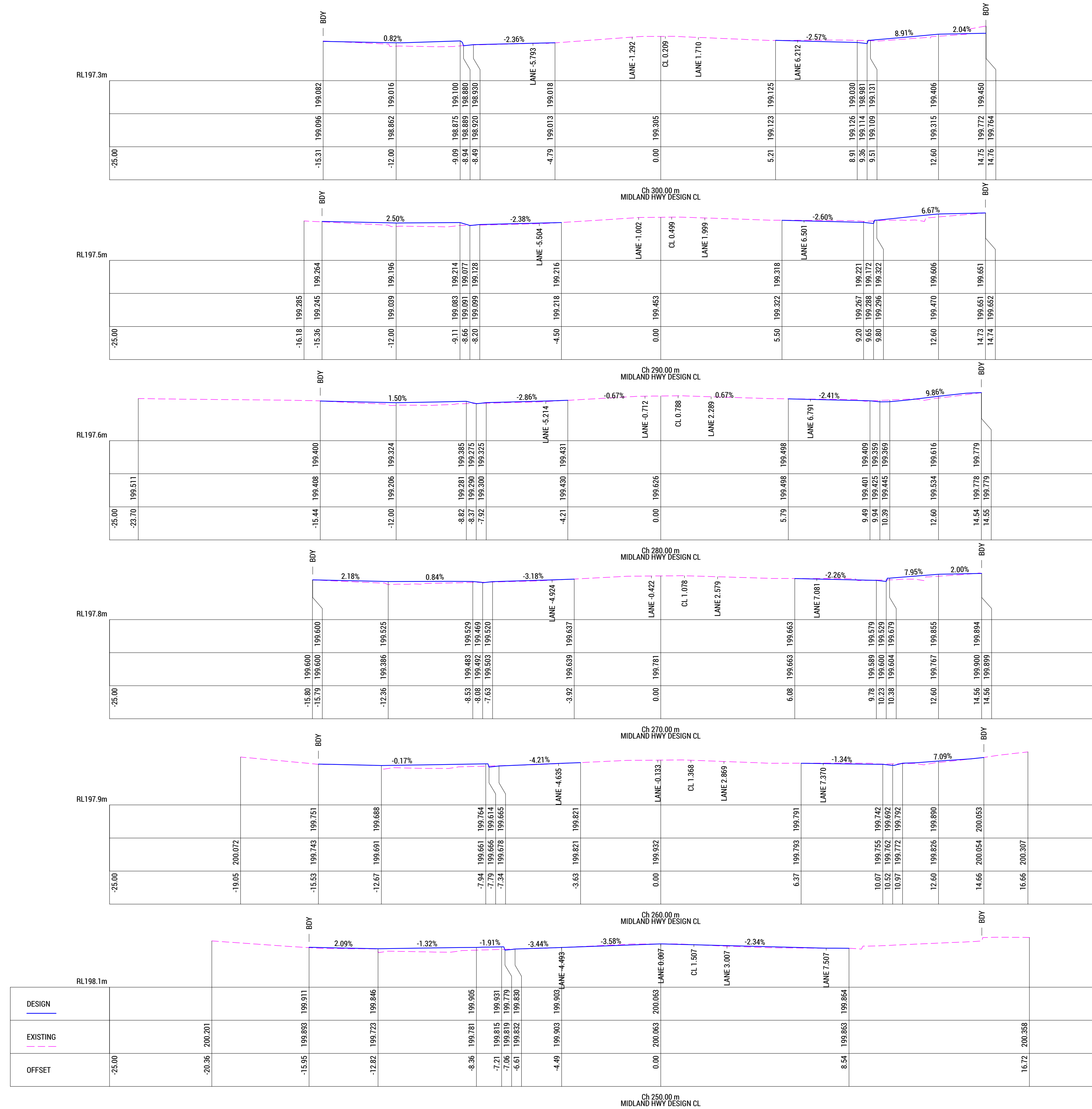
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REV:	DESCRIPTION:	BY:	DATE:											
<p>APPROVED: R. JESSON ACRED. No: CC58481</p>														



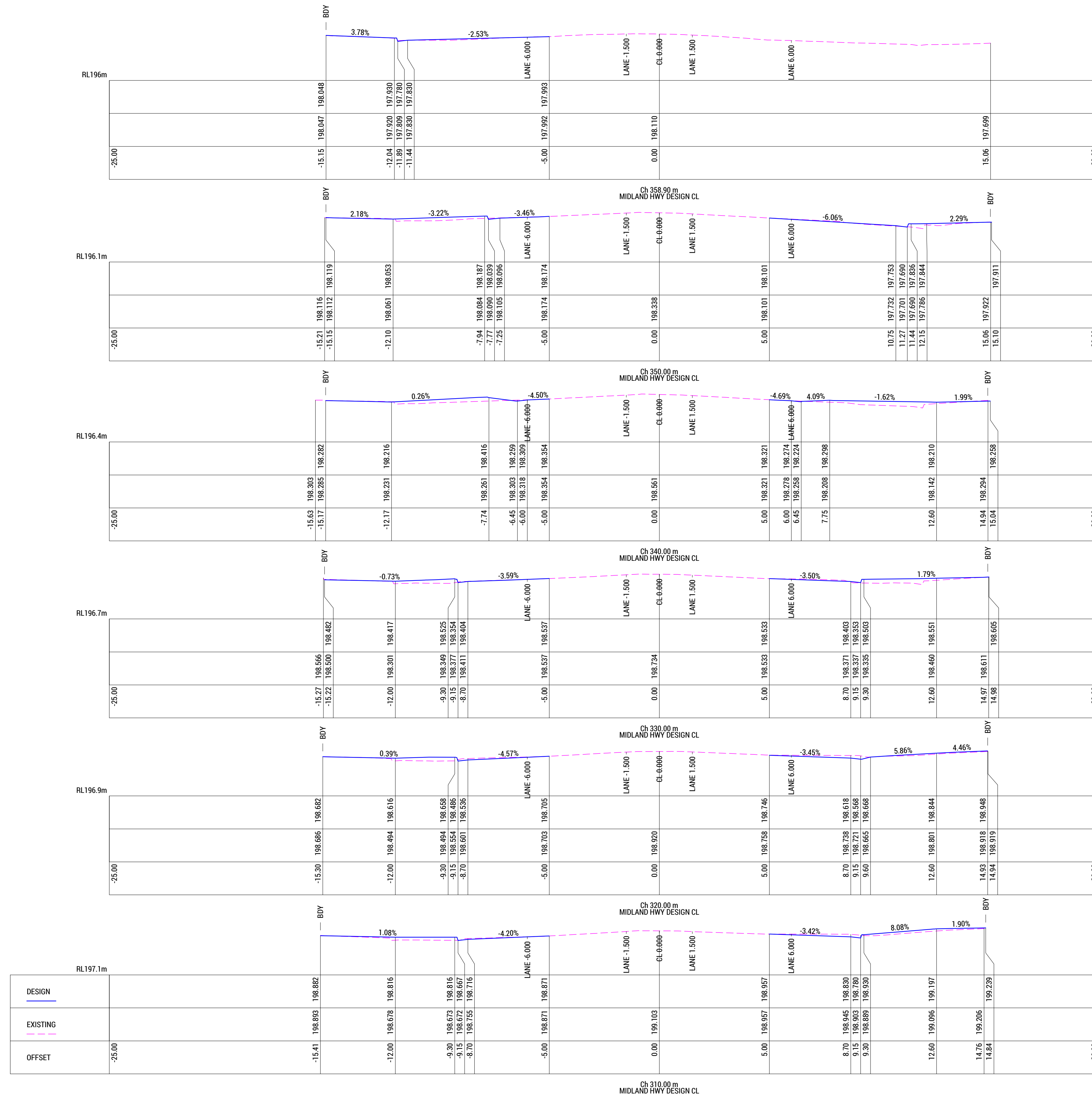
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<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS:</p> <p>PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK</p> <p>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: CIVIL CROSS SECTIONS MIDLAND HIGHWAY - SHEET 5</p> <p>SCALE: 1:100 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C445 REV: 0</p>
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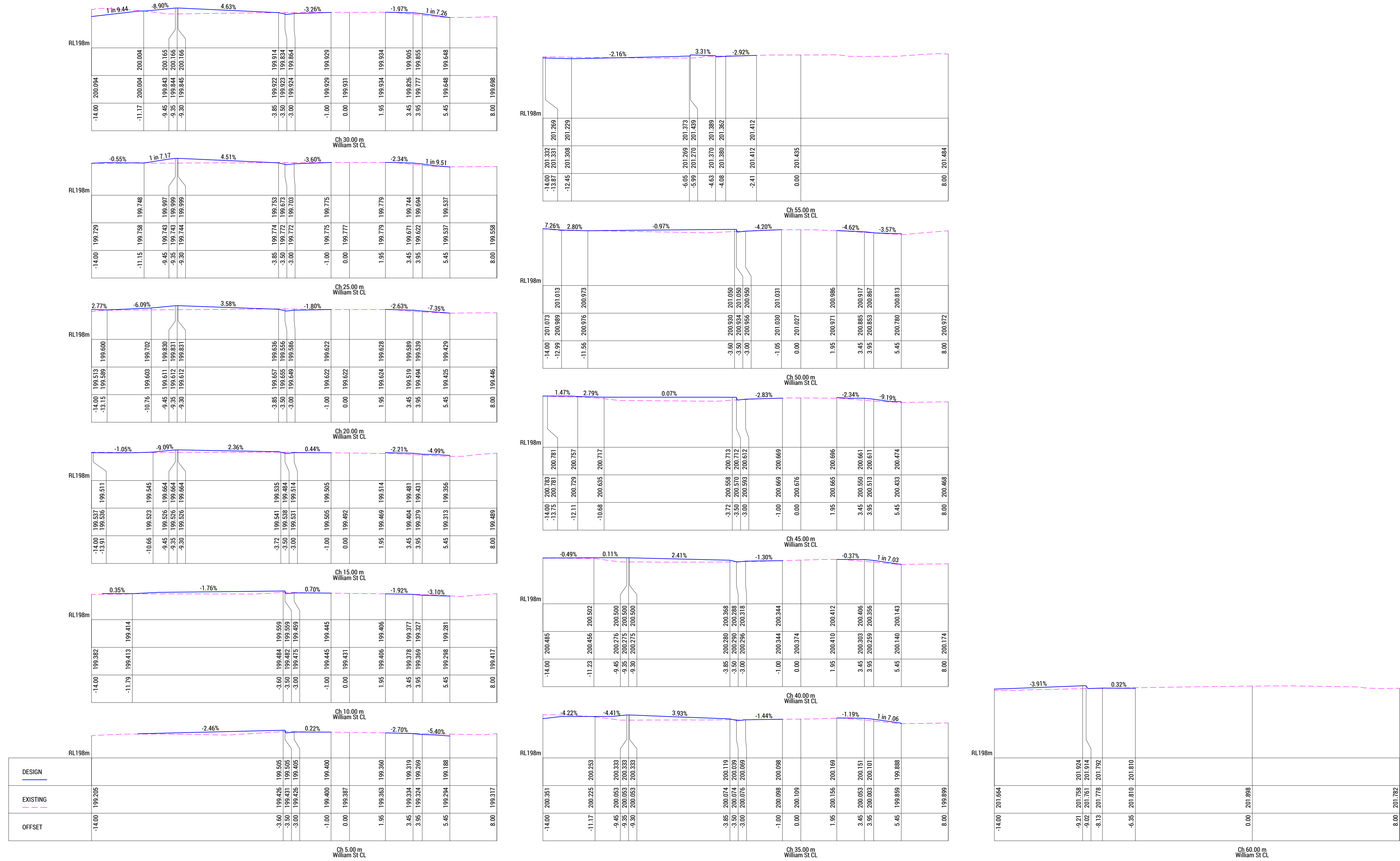


<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK</p> <p>THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rare.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: CIVIL CROSS SECTIONS MIDLAND HIGHWAY - SHEET 6</p>
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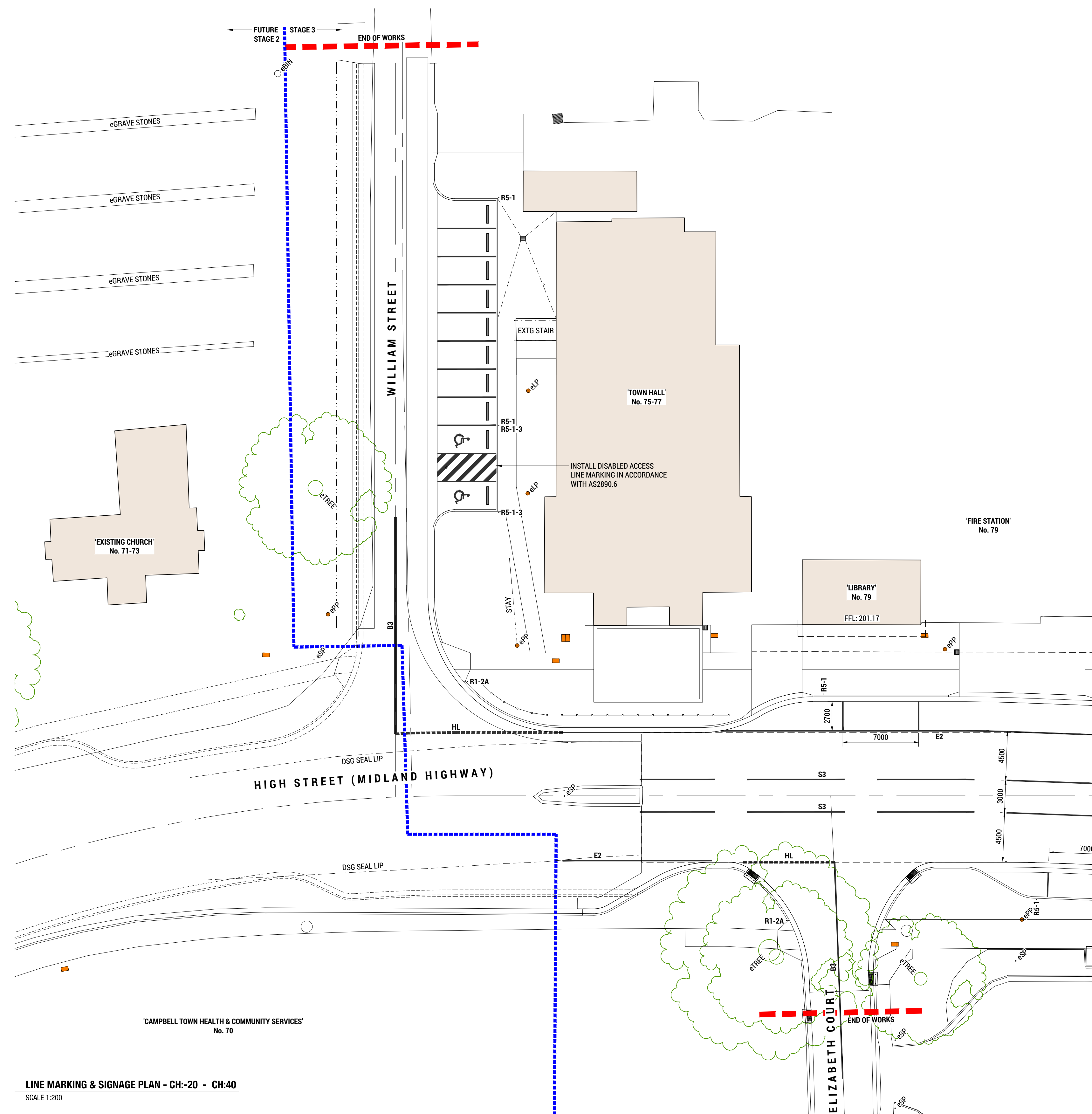
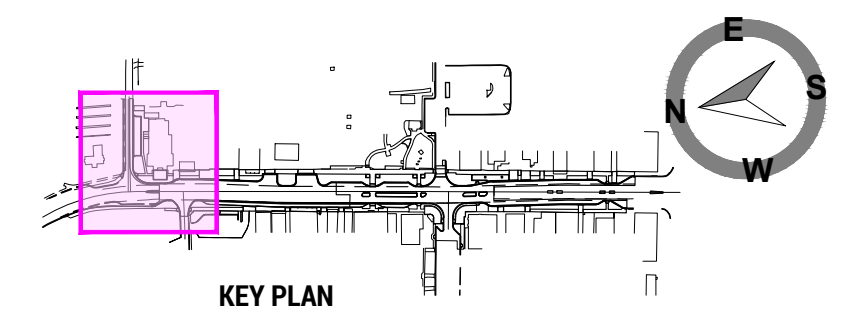


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<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: CIVIL CROSS SECTIONS MIDLAND HIGHWAY - SHEET 7</p> <p>SCALE: 1:100 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C447 REV: 0</p>
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<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>APPROVED: R. JESSON</p>	<p>ACRED. No: CC58481</p>	<p>DESIGN BY: RJ DESIGN CHK: JS DRAWN BY: PVD DRAFT CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rare.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: CIVIL CROSS SECTIONS WILLIAM STREET SCALE: 1:100 SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C451 REV: 0</p>

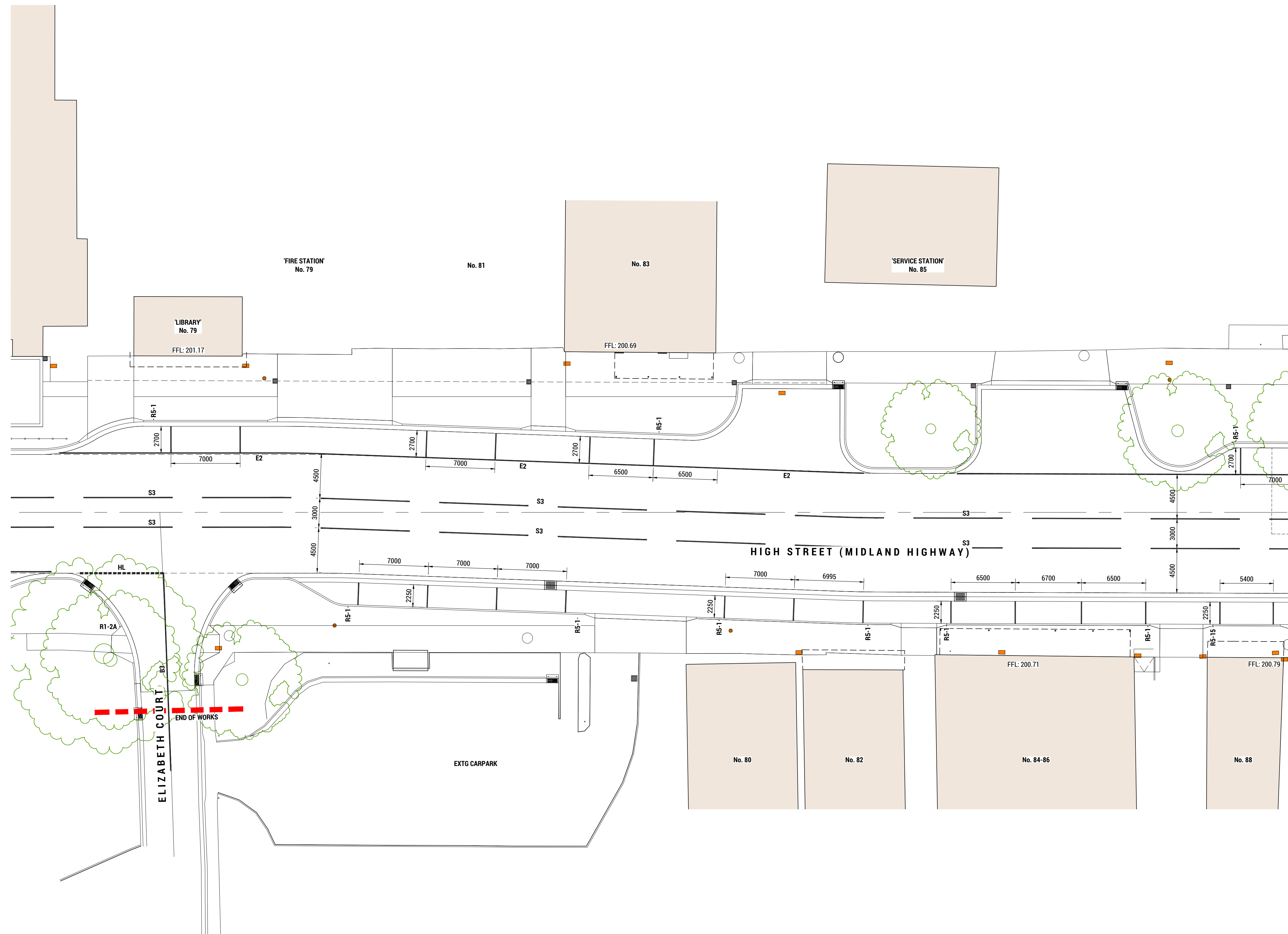
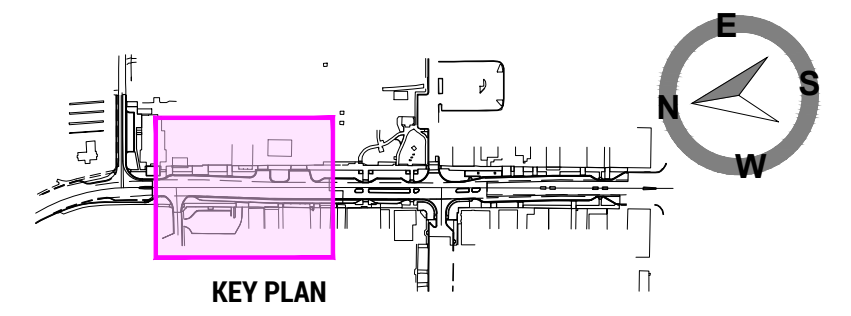


- SIGNAGE / LINEMARKING NOTES**
- SIGNAGE**
- CONTRACTOR TO INSTALL ALL SIGNAGE UNDER THE DIRECTION OF DEPARTMENT OF STATE GROWTH / SUPERINTENDENT UNLESS NOTED OTHERWISE.
- LINE MARKING**
- LINE MARKING DIMENSIONS ARE TO CENTRE OF THE LINE.
 - LINE MARKING TO BE THERMOPLASTIC AND INSTALLED BY DEPARTMENT OF STATE GROWTH APPROVED CONTRACTOR.
 - RE-USE EXISTING SIGNAGE WHERE APPROVED BY SUPERINTENDENT REPRESENTATIVE
 - SUPERINTENDENT REPRESENTATIVE TO APPROVE SIGNAGE TEXT

- LEGEND**
- RS-1-3(R) - DISABLED PARKING SIGN (RIGHT)
 - RS-1-3(L) - DISABLED PARKING SIGN (LEFT)
 - RS-1(R) - TIMED PARKING (RIGHT)
 - RS-1(L) - TIMED PARKING (LEFT)
 - BUS ZONE
 - NO STANDING SIGN (LEFT)
 - R1-2 - GIVE WAY
 - NO ENTRY
 - NO LEFT TURN
 - R3-1 - PEDESTRIAN CROSSING
 - D4-1-3 - HAZARD DIRECTIONAL SIGN

LINE MARKING & SIGNAGE PLAN - CH-20 - CH-40
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rare.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: LINE MARKING & SIGNAGE PLAN CH-20 - CH-40</p>
	<p>REV: DESCRIPTION:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>			<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>

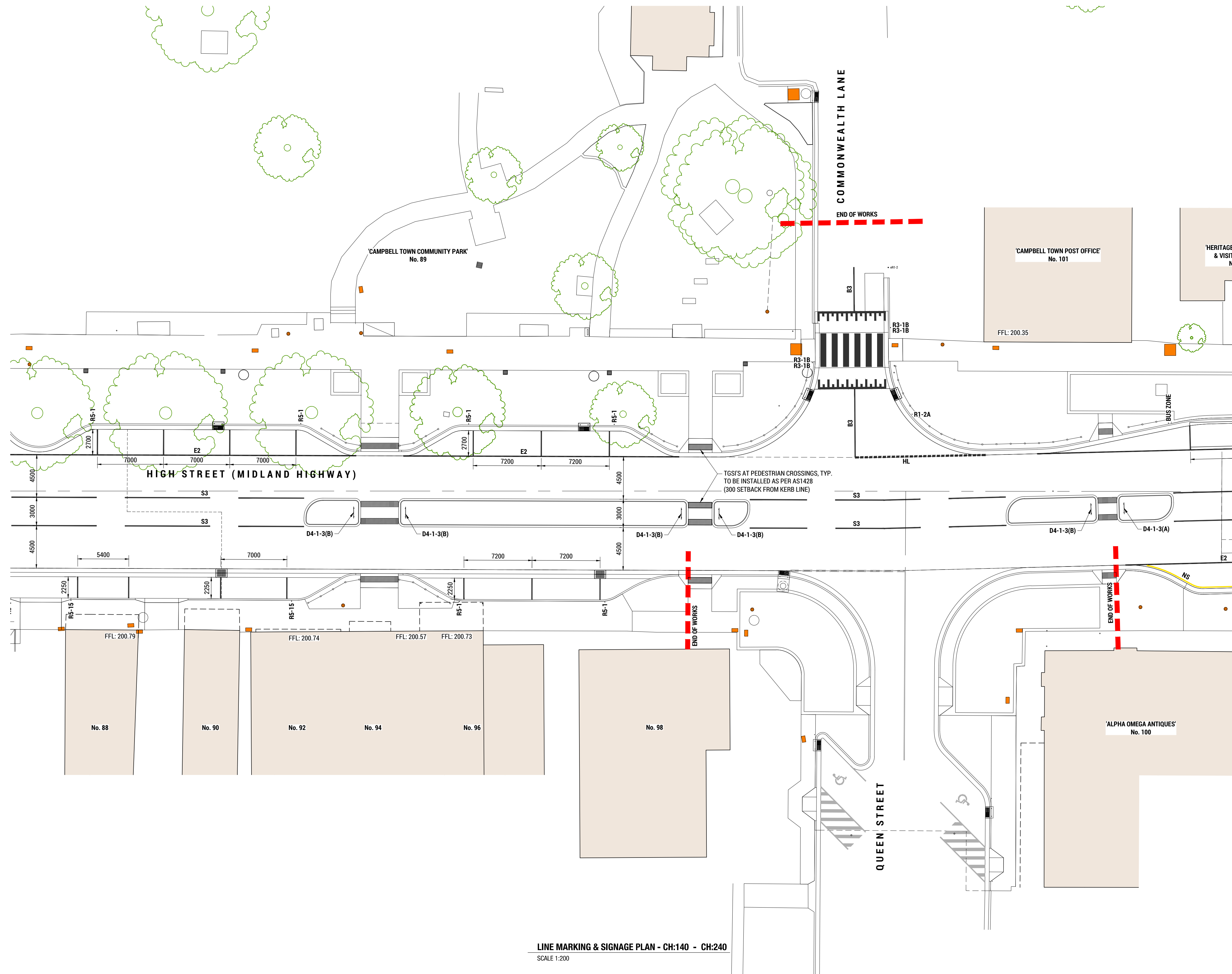
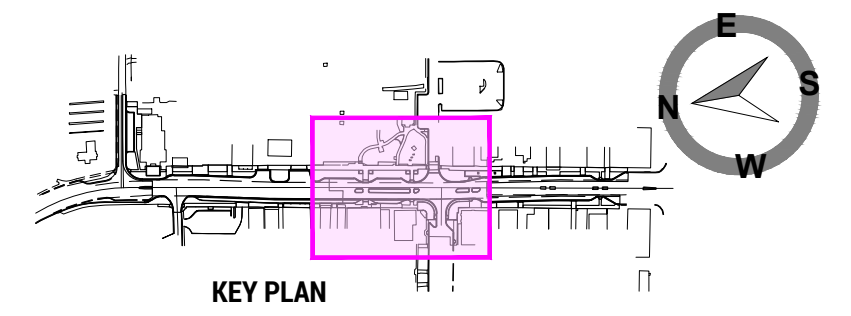


- SIGNAGE / LINEMARKING NOTES**
- SIGNAGE**
- CONTRACTOR TO INSTALL ALL SIGNAGE UNDER THE DIRECTION OF DEPARTMENT OF STATE GROWTH / SUPERINTENDENT UNLESS NOTED OTHERWISE.
- LINE MARKING**
- LINE MARKING DIMENSIONS ARE TO CENTRE OF THE LINE.
 - LINE MARKING TO BE THERMOPLASTIC AND INSTALLED BY DEPARTMENT OF STATE GROWTH APPROVED CONTRACTOR.
 - RE-USE EXISTING SIGNAGE WHERE APPROVED BY SUPERINTENDENT REPRESENTATIVE
 - SUPERINTENDENT REPRESENTATIVE TO APPROVE SIGNAGE TEXT

- LEGEND**
- RS-1-3(R) - DISABLED PARKING SIGN (RIGHT)
 - RS-1-3(L) - DISABLED PARKING SIGN (LEFT)
 - RS-1(R) - TIMED PARKING (RIGHT)
 - RS-1(L) - TIMED PARKING (LEFT)
 - BUS ZONE
 - NO STANDING SIGN (LEFT)
 - R1-2 - GIVE WAY
 - NO ENTRY
 - NO LEFT TURN
 - R3-1 - PEDESTRIAN CROSSING
 - D4-1-3 - HAZARD DIRECTIONAL SIGN

LINE MARKING & SIGNAGE PLAN - CH:20 - CH:140
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>LANGE design</p>	<p>rare.</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: LINE MARKING & SIGNAGE PLAN CH:20 - CH:140</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C462 REV: 0</p>
	<p>REV: DESCRIPTION:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>				

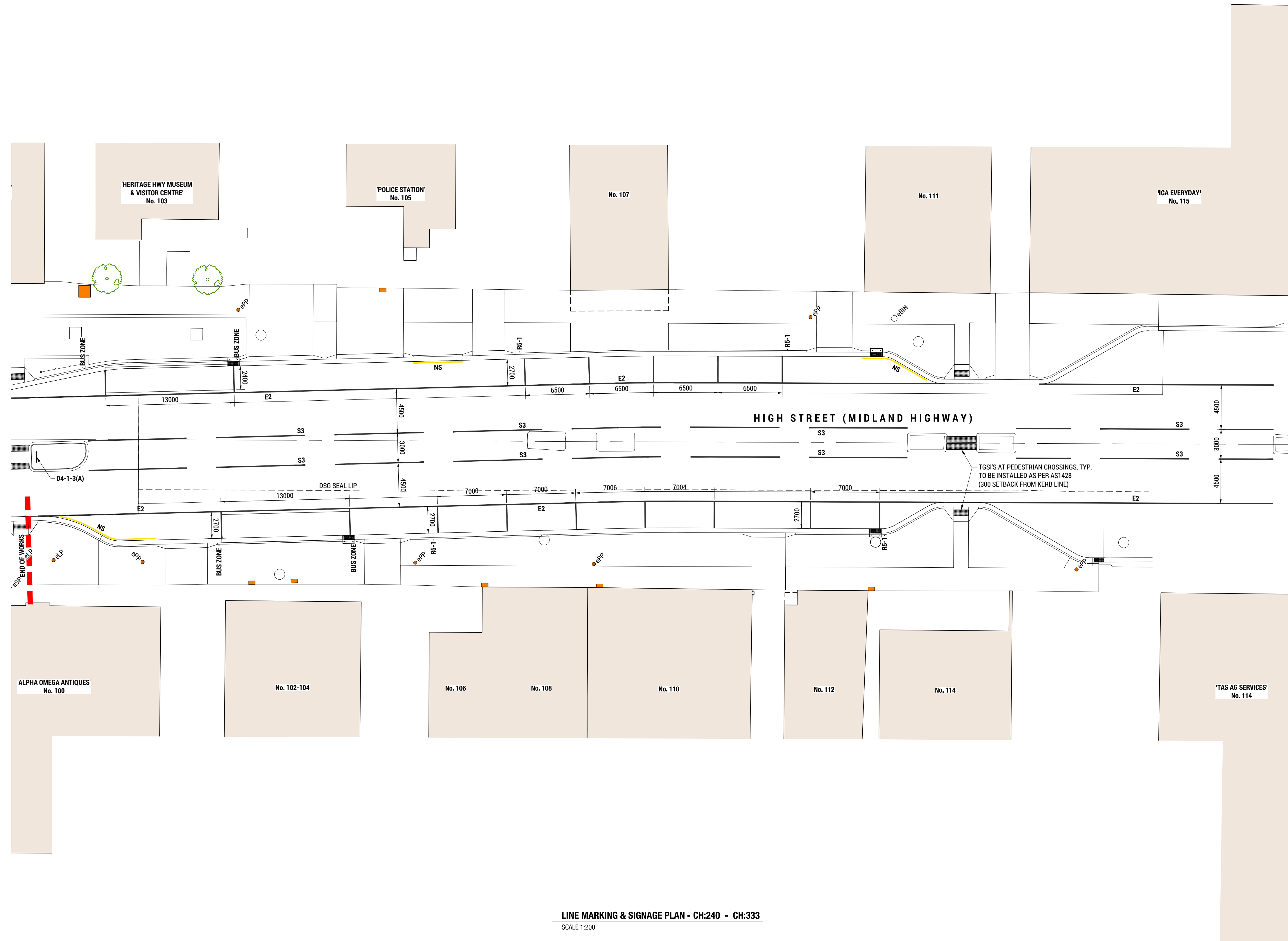
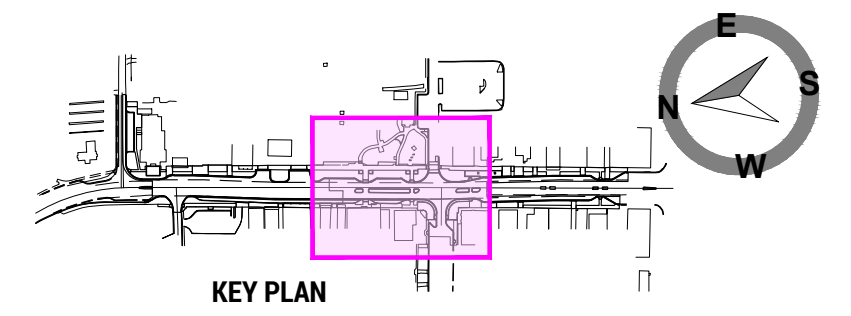


- SIGNAGE / LINEMARKING NOTES**
- SIGNAGE**
- CONTRACTOR TO INSTALL ALL SIGNAGE UNDER THE DIRECTION OF DEPARTMENT OF STATE GROWTH / SUPERINTENDENT UNLESS NOTED OTHERWISE.
- LINE MARKING**
- LINE MARKING DIMENSIONS ARE TO CENTRE OF THE LINE.
 - LINE MARKING TO BE THERMOPLASTIC AND INSTALLED BY DEPARTMENT OF STATE GROWTH APPROVED CONTRACTOR.
 - RE-USE EXISTING SIGNAGE WHERE APPROVED BY SUPERINTENDENT REPRESENTATIVE
 - SUPERINTENDENT REPRESENTATIVE TO APPROVE SIGNAGE TEXT

- LEGEND**
- RS-1-3(R) - DISABLED PARKING SIGN (RIGHT)
 - RS-1-3(L) - DISABLED PARKING SIGN (LEFT)
 - RS-1(R) - TIMED PARKING (RIGHT)
 - RS-1(L) - TIMED PARKING (LEFT)
 - BUS ZONE
 - NO STANDING SIGN (LEFT)
 - R1-2 - GIVE WAY
 - NO ENTRY
 - NO LEFT TURN
 - R3-1 - PEDESTRIAN CROSSING
 - D4-1-3 - HAZARD DIRECTIONAL SIGN

LINE MARKING & SIGNAGE PLAN - CH:140 - CH:240
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>0 APPROVAL / TENDER</p>	<p>PVD 00-00-00</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>LANGE design landscape architecture</p>	<p>rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p>	<p>TITLE: LINE MARKING & SIGNAGE PLAN CH:140 - CH:240</p>
	<p>REVISIONS:</p>	<p>BY: DATE:</p>	<p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>			<p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>

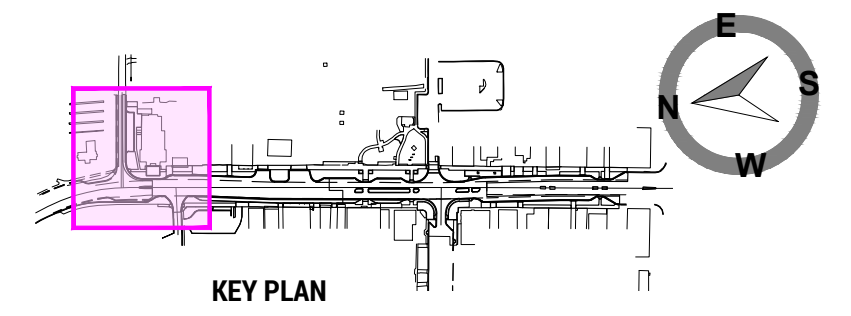
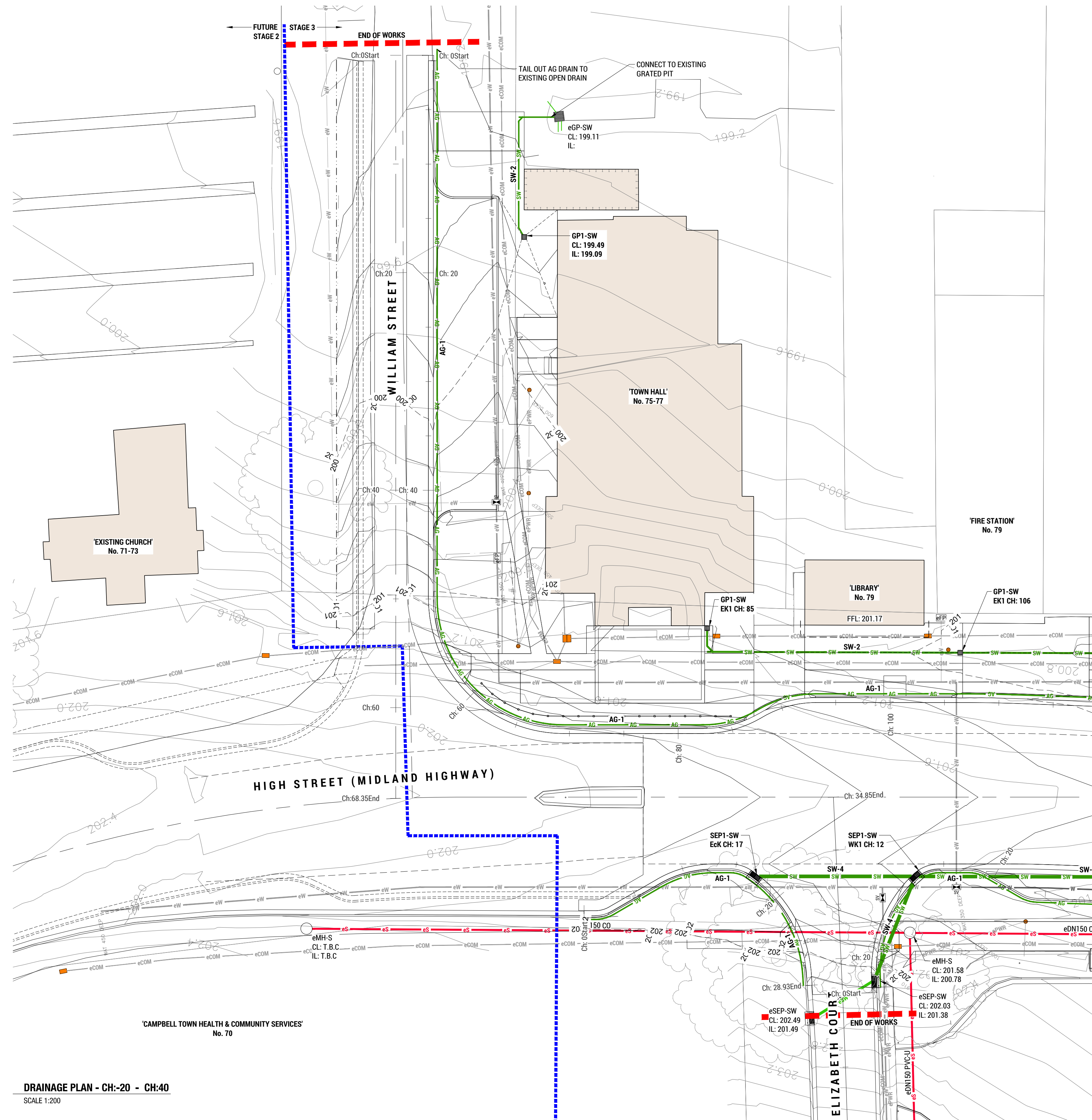


- SIGNAGE / LINEMARKING NOTES**
- SIGNAGE**
- CONTRACTOR TO INSTALL ALL SIGNAGE UNDER THE DIRECTION OF DEPARTMENT OF STATE GROWTH / SUPERINTENDENT UNLESS NOTED OTHERWISE.
- LINE MARKING**
- LINE MARKING DIMENSIONS ARE TO CENTRE OF THE LINE.
 - LINE MARKING TO BE THERMOPLASTIC AND INSTALLED BY DEPARTMENT OF STATE GROWTH APPROVED CONTRACTOR.
 - RE-USE EXISTING SIGNAGE WHERE APPROVED BY SUPERINTENDENT REPRESENTATIVE SUPERINTENDENT REPRESENTATIVE TO APPROVE SIGNAGE TEXT

- LEGEND**
- RS-1-3(R) - DISABLED PARKING SIGN (RIGHT)
 - RS-1-3(L) - DISABLED PARKING SIGN (LEFT)
 - RS-1(R) - TIMED PARKING (RIGHT)
 - RS-1(L) - TIMED PARKING (LEFT)
 - BUS ZONE
 - NO STANDING SIGN (LEFT)
 - R1-2 - GIVE WAY
 - NO ENTRY
 - NO LEFT TURN
 - R3-1 - PEDESTRIAN CROSSING
 - D4-1-3 - HAZARD DIRECTIONAL SIGN

LINE MARKING & SIGNAGE PLAN - CH:240 - CH:333
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>		<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p>	<p>TITLE: LINE MARKING & SIGNAGE PLAN CH:240 - CH:333</p>
	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>			<p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>





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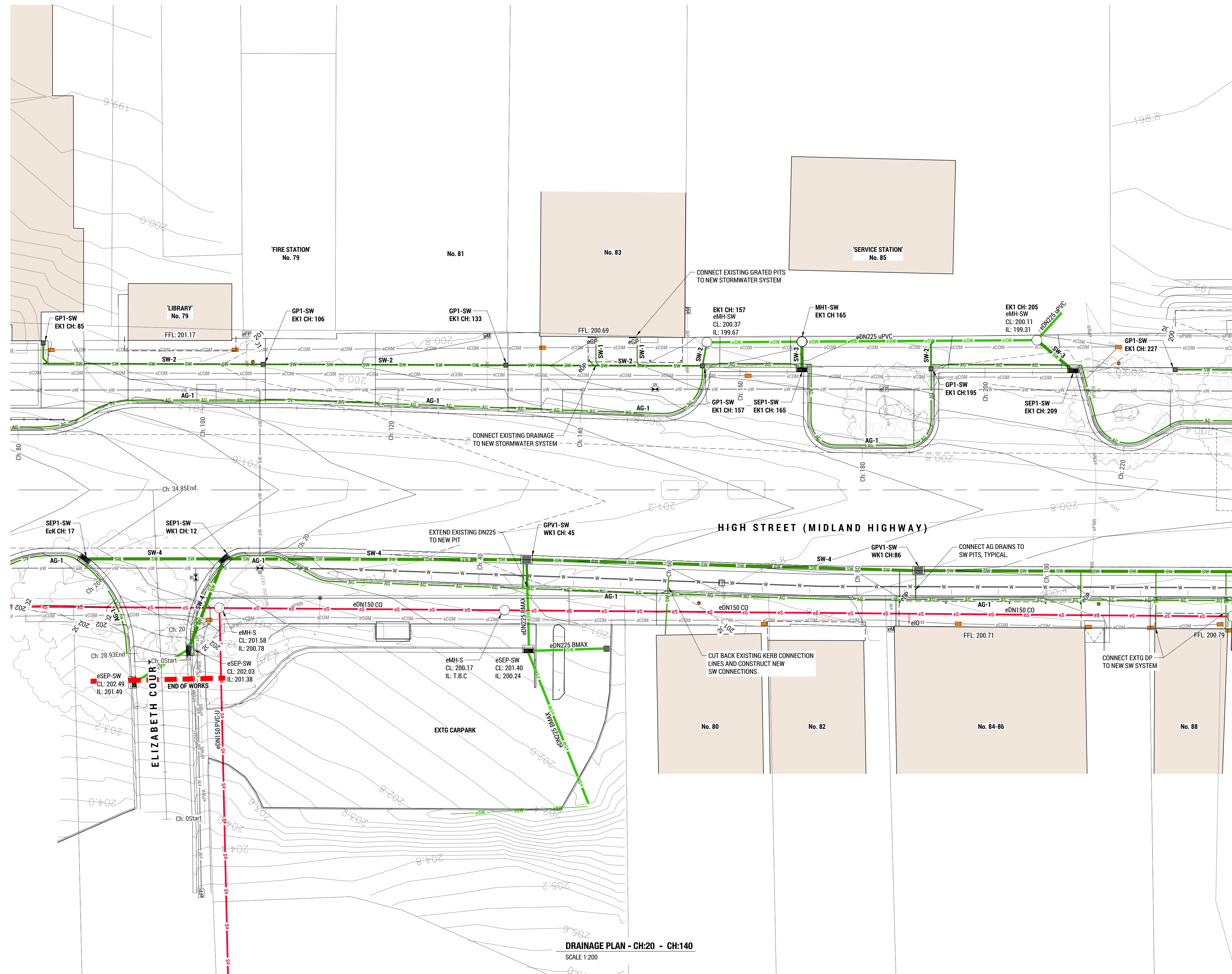
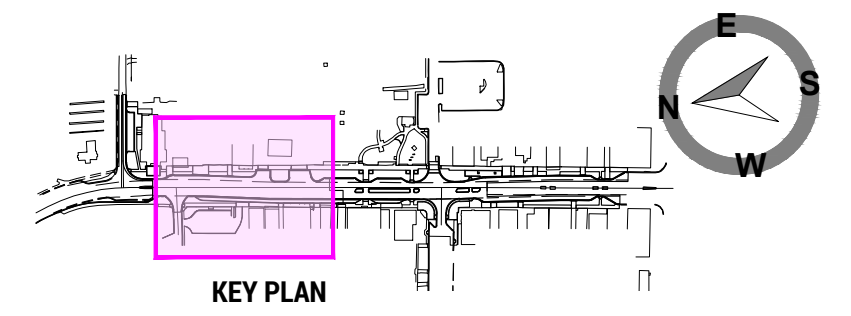
- eSW — eSW EXISTING STORM WATER MAIN
- SW — SW PROPOSED STORMWATER MAIN
- eS — eS EXISTING SEWER MAIN
- S — S PROPOSED SEWER MAIN
- AG — AG PROPOSED AG DRAIN
- - - - - - PROPOSED OPEN / SWALE / VEE DRAIN
- MH-S SEWER MANHOLE
- MH-SW STORMWATER MANHOLE
- SEP-SW SIDE ENTRY PIT
- GPx-SW GRATED PIT
- GDx-SW GRATED DRAIN
- SW-KC STORMWATER KERB CONNECTION REFER LGAT STD DWG TSD-R15-v1 FOR DETAILS
- EK1 CH: EAST KERB - SECTION 1 CHAINAGE
- EK2 CH: EAST KERB - SECTION 2 CHAINAGE
- WK1 CH: WEST KERB - SECTION 1 CHAINAGE
- WK2 CH: WEST KERB - SECTION 2 CHAINAGE
- Eck CH: ELIZABETH COURT KERB CHAINAGE

STORMWATER PIPE SCHEDULE				
MARK	PIPE SIZE	TYPE	CLASS	GRADE
AG-1	100	AG	-	1%
SW-1	100	uPVC	SN8	-
SW-2	150	uPVC	SN8	-
SW-3	300	BLACKMAX	SN8	-
SW-4	300	RCP	CLASS 4	-
SW-5	375	RCP	CLASS 4	-

STORMWATER PIT / MANHOLE SCHEDULE			
MARK	SIZE	TYPE	ACCESSORIES
MH1-SW	Ø1050	PRECAST CONC. MANHOLE	CLASS 'D' GATIC LID
SEP1-SW	1220	TYPE 1	REFER LGAT STD DWG TSD-SW07-v1
GPV1-SW	900 x 600	PRECAST CONC. VEE PIT	CLASS 'D' GALV. GRATE
GP1-SW	450 SQ.	BLACK PVC GRATED PIT	GALV. HEELGUARD GRATED LID

DRAINAGE PLAN - CH-20 - CH:40
SCALE 1:200

 NORTHERN MIDLANDS COUNCIL			STATUS: PRELIMINARY/INFORMATION	DESIGN BY: RJ DESIGN CHK: JS	 LANGE design rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200	CLIENT: NORTHERN MIDLANDS COUNCIL	TITLE: DRAINAGE PLAN - CH-20 - CH:40
	DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257	PVD 00-00-00 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481	DRAWN BY: PVD DRAFT CHK: JS DATE: 00-00-00		PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN	SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C501 REV: 0



LEGEND

- eSW — eSW EXISTING STORM WATER MAIN
- SW — SW PROPOSED STORMWATER MAIN
- eS — eS EXISTING SEWER MAIN
- S — S PROPOSED SEWER MAIN
- AG — AG PROPOSED AG DRAIN
- PROPOSED OPEN / SWALE / VEE DRAIN
- MH-S SEWER MANHOLE
- MH-SW STORMWATER MANHOLE
- SEP-SW SIDE ENTRY PIT
- GPx-SW GRATED PIT
- GDx-SW GRATED DRAIN
- SW-KC STORMWATER KERB CONNECTION REFER LGAT STD DWG TSD-R15-v1 FOR DETAILS
- EK1 CH: EAST KERB - SECTION 1 CHAINAGE
- EK2 CH: EAST KERB - SECTION 2 CHAINAGE
- WK1 CH: WEST KERB - SECTION 1 CHAINAGE
- WK2 CH: WEST KERB - SECTION 2 CHAINAGE
- Eck CH: ELIZABETH COURT KERB CHAINAGE

STORMWATER PIPE SCHEDULE

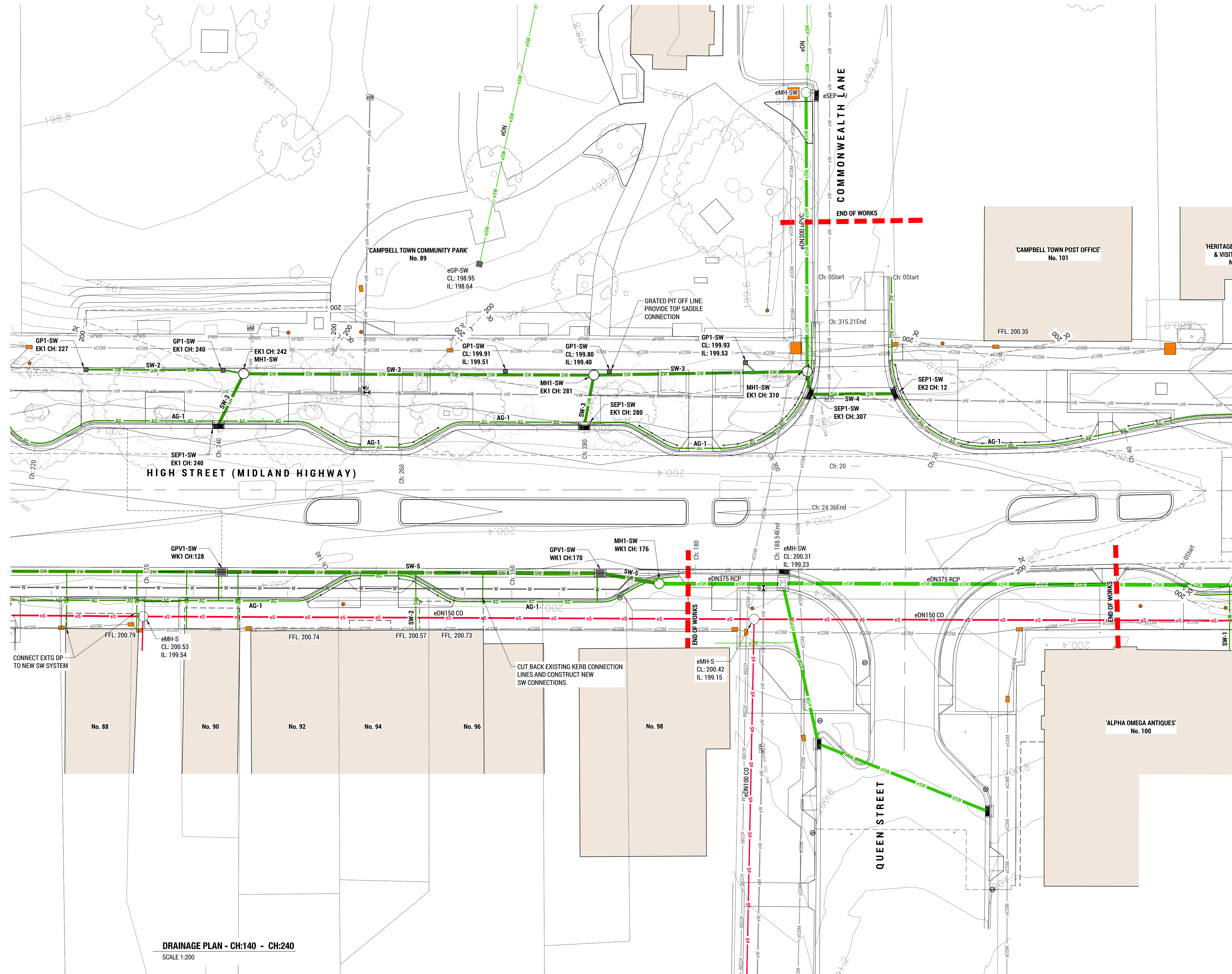
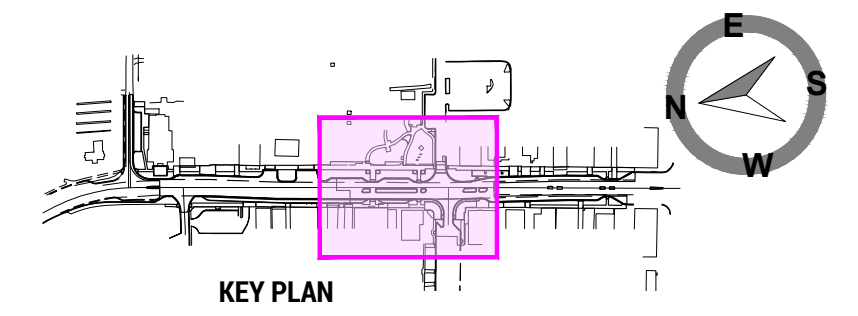
MARK	PIPE SIZE	TYPE	CLASS	GRADE
AG-1	100	AG	-	1%
SW-1	100	uPVC	SN8	-
SW-2	150	uPVC	SN8	-
SW-3	300	BLACKMAX	SN8	-
SW-4	300	RCP	CLASS 4	-
SW-5	375	RCP	CLASS 4	-

STORMWATER PIT / MANHOLE SCHEDULE

MARK	SIZE	TYPE	ACCESSORIES
MH1-SW	Ø1050	PRECAST CONC. MANHOLE	CLASS 'D' GATIC LID
SEP1-SW	1220	TYPE 1	REFER LGAT STD DWG TSD-SW07-v1
GPV1-SW	900 x 600	PRECAST CONC. VEE PIT	CLASS 'D' GALV. GRATE
GP1-SW	450 SQ.	BLACK PVC GRATED PIT	GALV. HEELGUARD GRATED LID

DRAINAGE PLAN - CH:20 - CH:140
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>		<p>STATUS:</p> <p>PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p>	<p>DESIGN BY: RJ</p> <p>DESIGN CHK: JS</p> <p>DRAWN BY: PVD</p> <p>DRAFT CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p> <p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: DRAINAGE PLAN - CH:20 - CH:140</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C502 REV: 0</p>
	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DATE: 00-00-00</p>		



LEGEND

- eSW — eSW EXISTING STORM WATER MAIN
- SW — SW PROPOSED STORMWATER MAIN
- eS — eS EXISTING SEWER MAIN
- S — S PROPOSED SEWER MAIN
- AG — AG PROPOSED AG DRAIN
- - - PROPOSED OPEN / SWALE / VEE DRAIN
- MH-S SEWER MANHOLE
- MH-SW STORMWATER MANHOLE
- SEP-SW SIDE ENTRY PIT
- GPx-SW GRATED PIT
- GDx-SW GRATED DRAIN
- SW-KC STORMWATER KERB CONNECTION REFER LGAT STD DWG TSD-R15-v1 FOR DETAILS
- EK1 CH: EAST KERB - SECTION 1 CHAINAGE
- EK2 CH: EAST KERB - SECTION 2 CHAINAGE
- WK1 CH: WEST KERB - SECTION 1 CHAINAGE
- WK2 CH: WEST KERB - SECTION 2 CHAINAGE
- Eck CH: ELIZABETH COURT KERB CHAINAGE

STORMWATER PIPE SCHEDULE

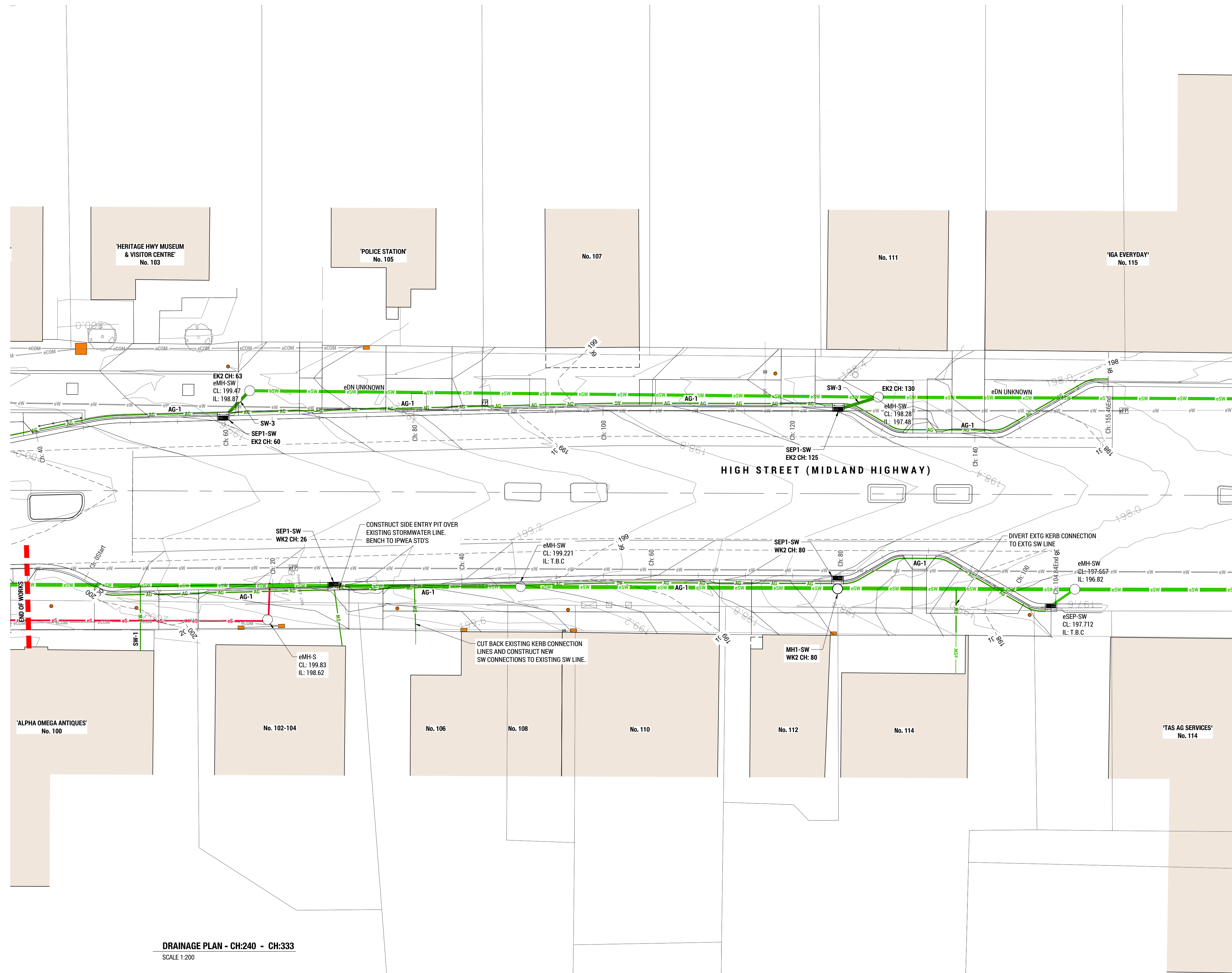
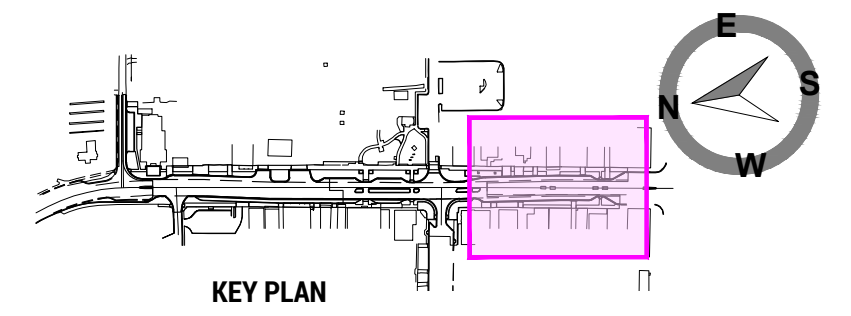
MARK	PIPE SIZE	TYPE	CLASS	GRADE
AG-1	100	AG	-	1%
SW-1	100	uPVC	SN8	-
SW-2	150	uPVC	SN8	-
SW-3	300	BLACKMAX	SN8	-
SW-4	300	RCP	CLASS 4	-
SW-5	375	RCP	CLASS 4	-

STORMWATER PIT / MANHOLE SCHEDULE

MARK	SIZE	TYPE	ACCESSORIES
MH1-SW	Ø1050	PRECAST CONC. MANHOLE	CLASS D' GATIC LID
SEP1-SW	1220	TYPE 1	REFER LGAT STD DWG TSD-SW07-v1
GPV1-SW	900 x 600	PRECAST CONC. VEE PIT	CLASS D GALV. GRATE
GP1-SW	450 SQ.	BLACK PVC GRATED PIT	GALV. HEELGUARD GRATED LID

DRAINAGE PLAN - CH:140 - CH:240
SCALE 1:200

 NORTHERN MIDLANDS COUNCIL	STATUS: PRELIMINARY/INFORMATION	DESIGN BY: RJ DESIGN CHK: JS	 LANGE design landscape architecture	 rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200	CLIENT: NORTHERN MIDLANDS COUNCIL	TITLE: DRAINAGE PLAN - CH:140 - CH:240
	DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257	DRAWN BY: PVD DRAFT CHK: JS			PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS	SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C503 REV: 0
0 APPROVAL / TENDER REV: DESCRIPTION:	PVD 00-00-00 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481	DATE: 00-00-00	CLIENT ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN		



LEGEND

- eSW — eSW EXISTING STORM WATER MAIN
- SW — SW PROPOSED STORMWATER MAIN
- eS — eS EXISTING SEWER MAIN
- S — S PROPOSED SEWER MAIN
- AG — AG PROPOSED AG DRAIN
- PROPOSED OPEN / SWALE / VEE DRAIN
- MH-S SEWER MANHOLE
- MH-SW STORMWATER MANHOLE
- SEP-SW SIDE ENTRY PIT
- GPV-SW GRATED PIT
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- SW-KC STORMWATER KERB CONNECTION REFER LGAT STD DWG TSD-R15-v1 FOR DETAILS
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- WK1 CH: WEST KERB - SECTION 1 CHAINAGE
- WK2 CH: WEST KERB - SECTION 2 CHAINAGE
- Eck CH: ELIZABETH COURT KERB CHAINAGE

STORMWATER PIPE SCHEDULE

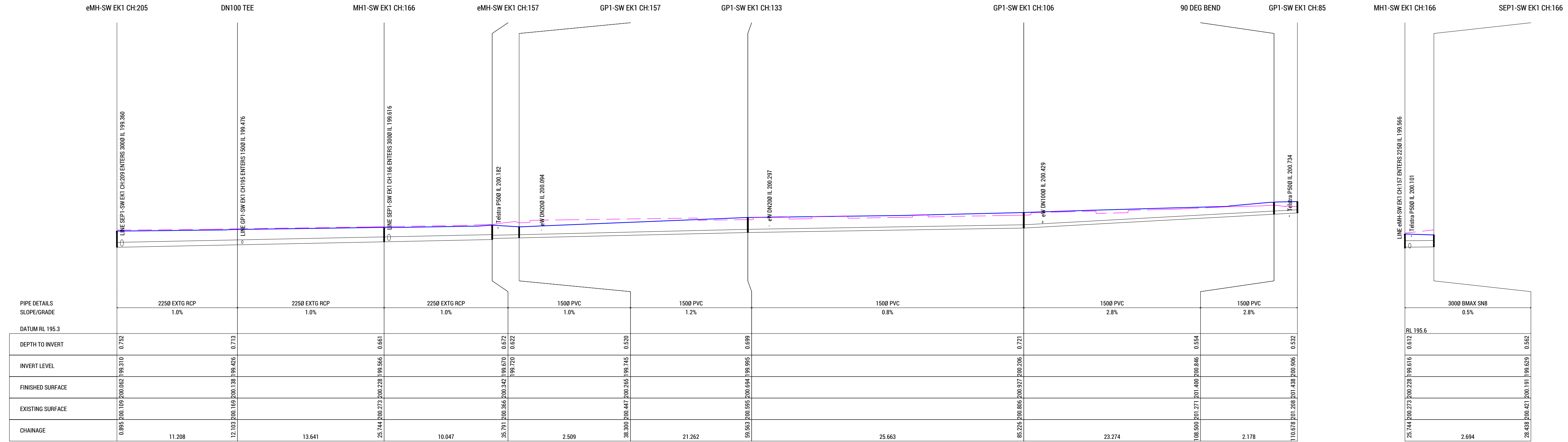
MARK	PIPE SIZE	TYPE	CLASS	GRADE
AG-1	100	AG	-	1%
SW-1	100	uPVC	SN8	-
SW-2	150	uPVC	SN8	-
SW-3	300	BLACKMAX	SN8	-
SW-4	300	RCP	CLASS 4	-
SW-5	375	RCP	CLASS 4	-

STORMWATER PIT / MANHOLE SCHEDULE

MARK	SIZE	TYPE	ACCESSORIES
MH1-SW	Ø1050	PRECAST CONC. MANHOLE	CLASS 'D' GATIC LID
SEP1-SW	1220	TYPE 1	REFER LGAT STD DWG TSD-SW07-v1
GPV1-SW	900 x 600	PRECAST CONC. VEE PIT	CLASS 'D' GALV. GRATE
GP1-SW	450 SQ.	BLACK PVC GRATED PIT	GALV. HEELGUARD GRATED LID

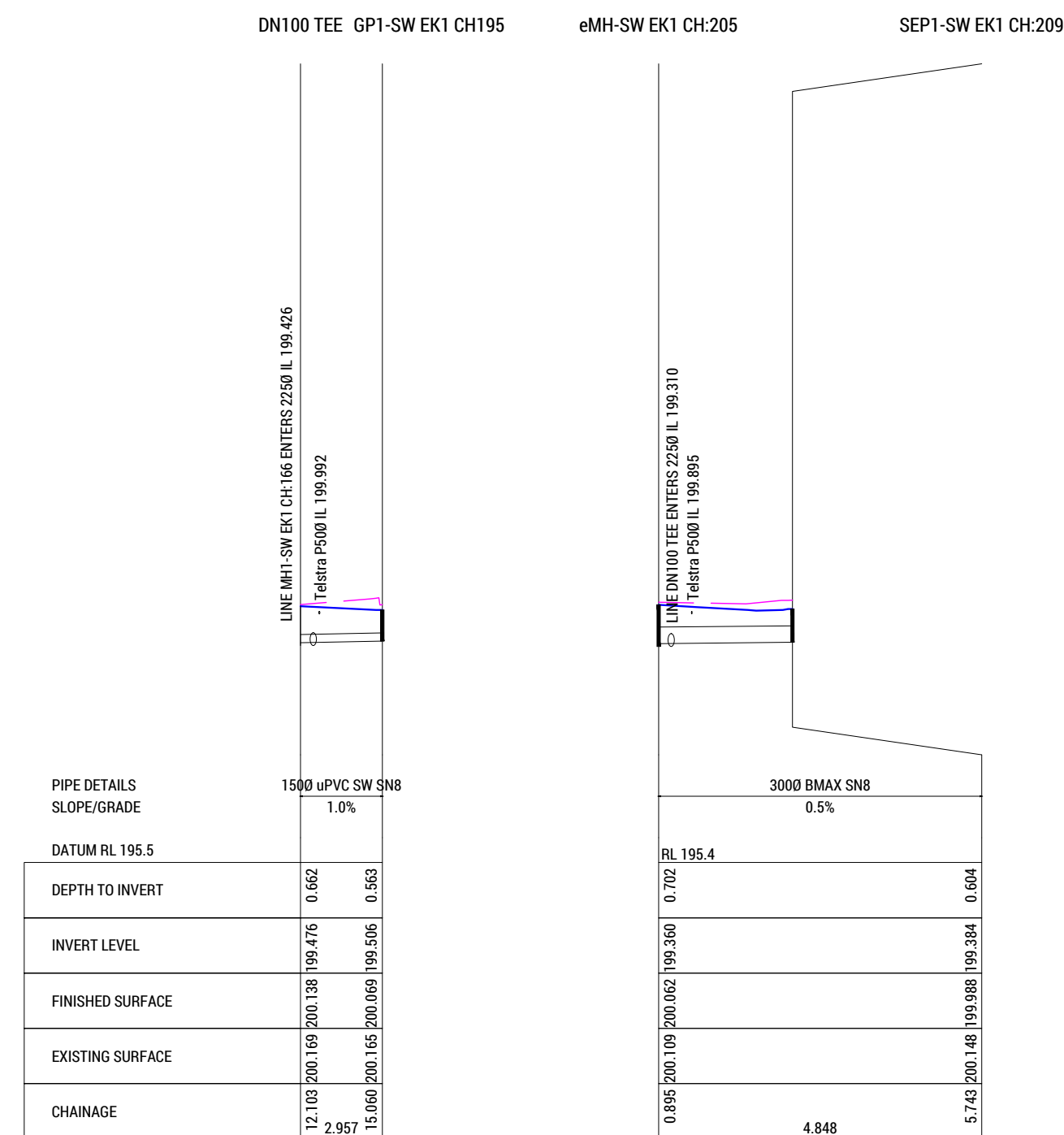
DRAINAGE PLAN - CH:240 - CH:333
SCALE 1:200

 NORTHERN MIDLANDS COUNCIL	STATUS: PRELIMINARY/INFORMATION	DESIGN BY: RJ DESIGN CHK: JS	 rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200	CLIENT: NORTHERN MIDLANDS COUNCIL	TITLE: DRAINAGE PLAN - CH:240 - CH:333
	DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257	DRAWN BY: PVD DRAFT CHK: JS		PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS	ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN
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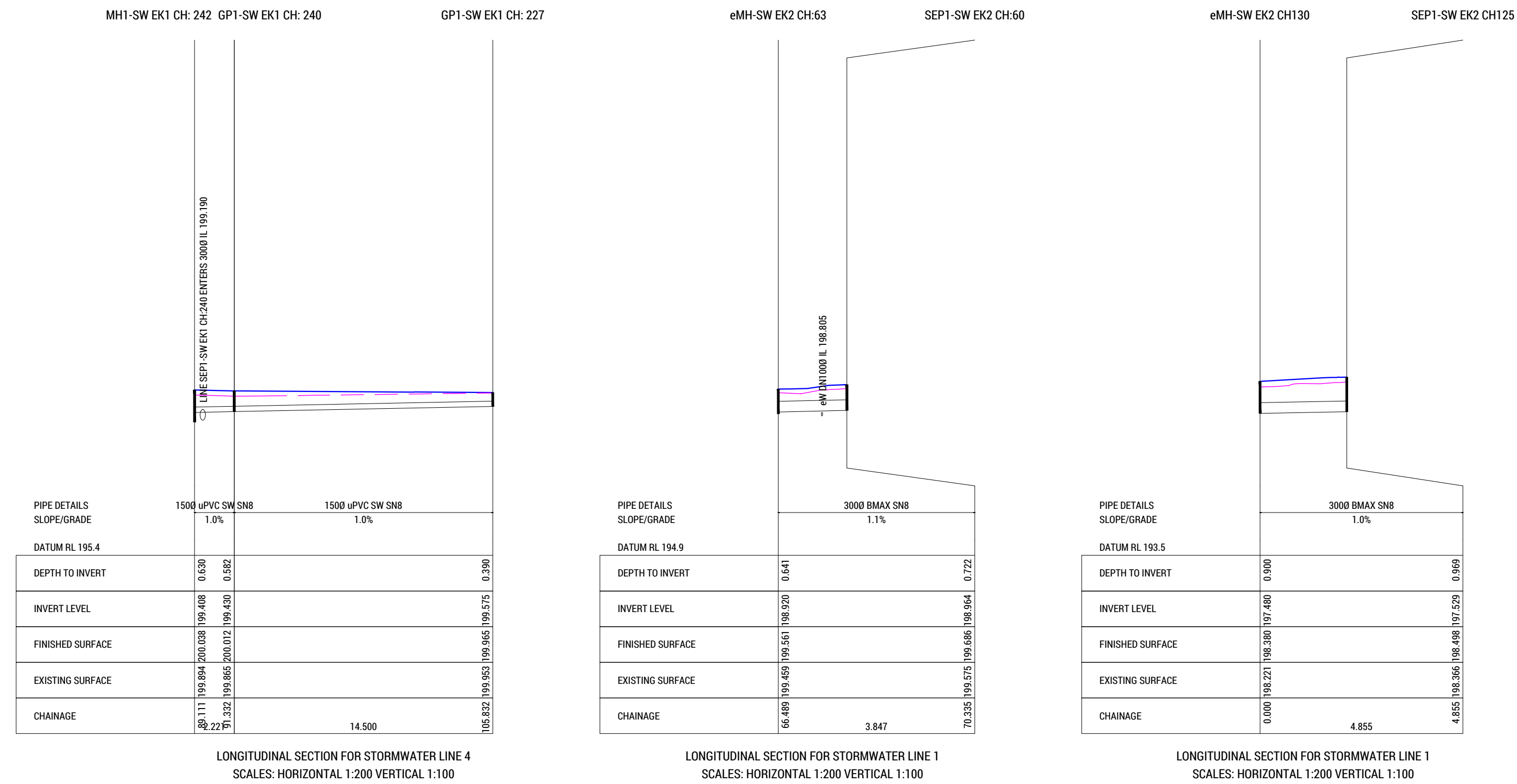
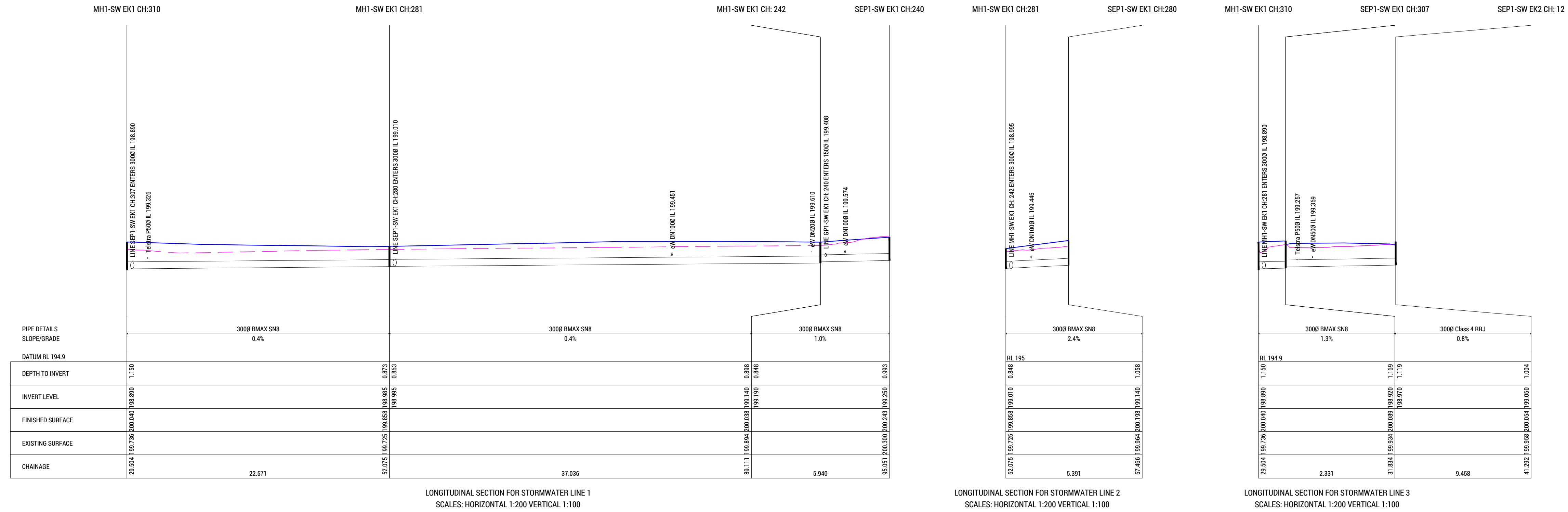
LONGITUDINAL SECTION FOR STORMWATER LINE 1
 SCALES: HORIZONTAL 1:200 VERTICAL 1:100

LONGITUDINAL SECTION FOR STORMWATER LINE 2
 SCALES: HORIZONTAL 1:200 VERTICAL 1:100

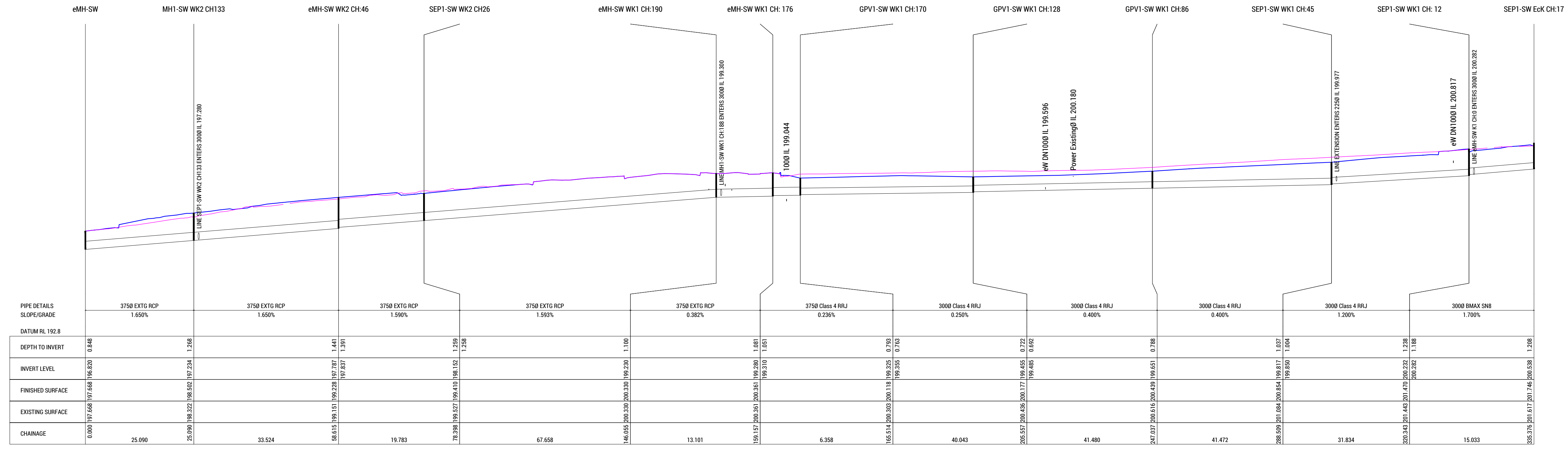


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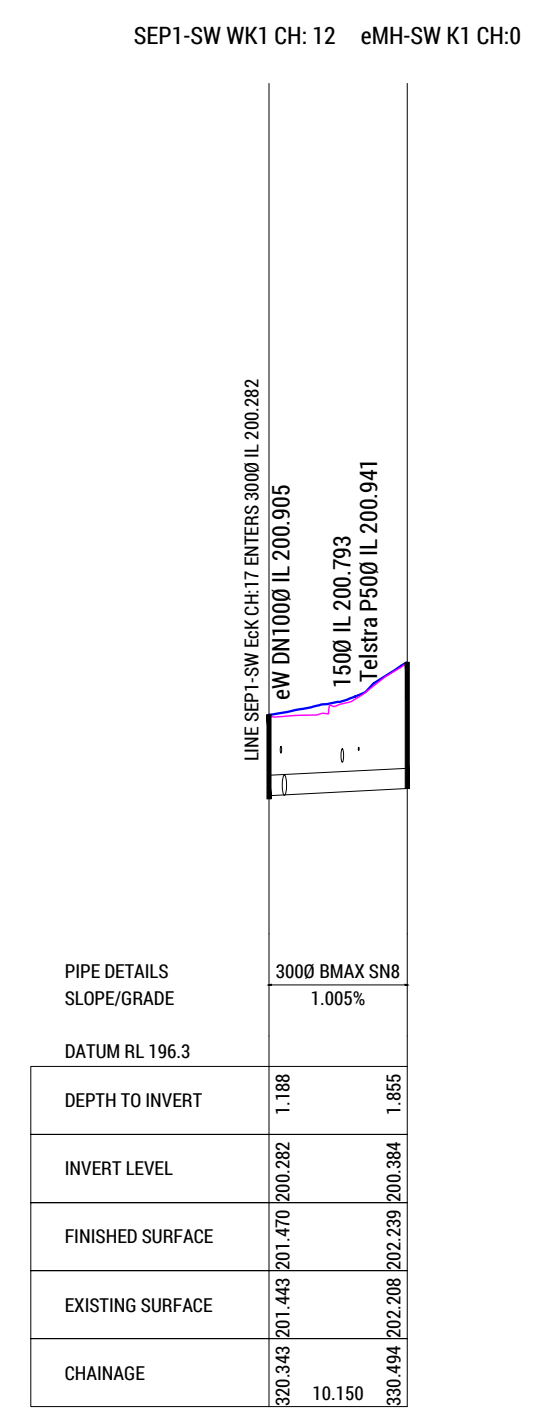
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			<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>						



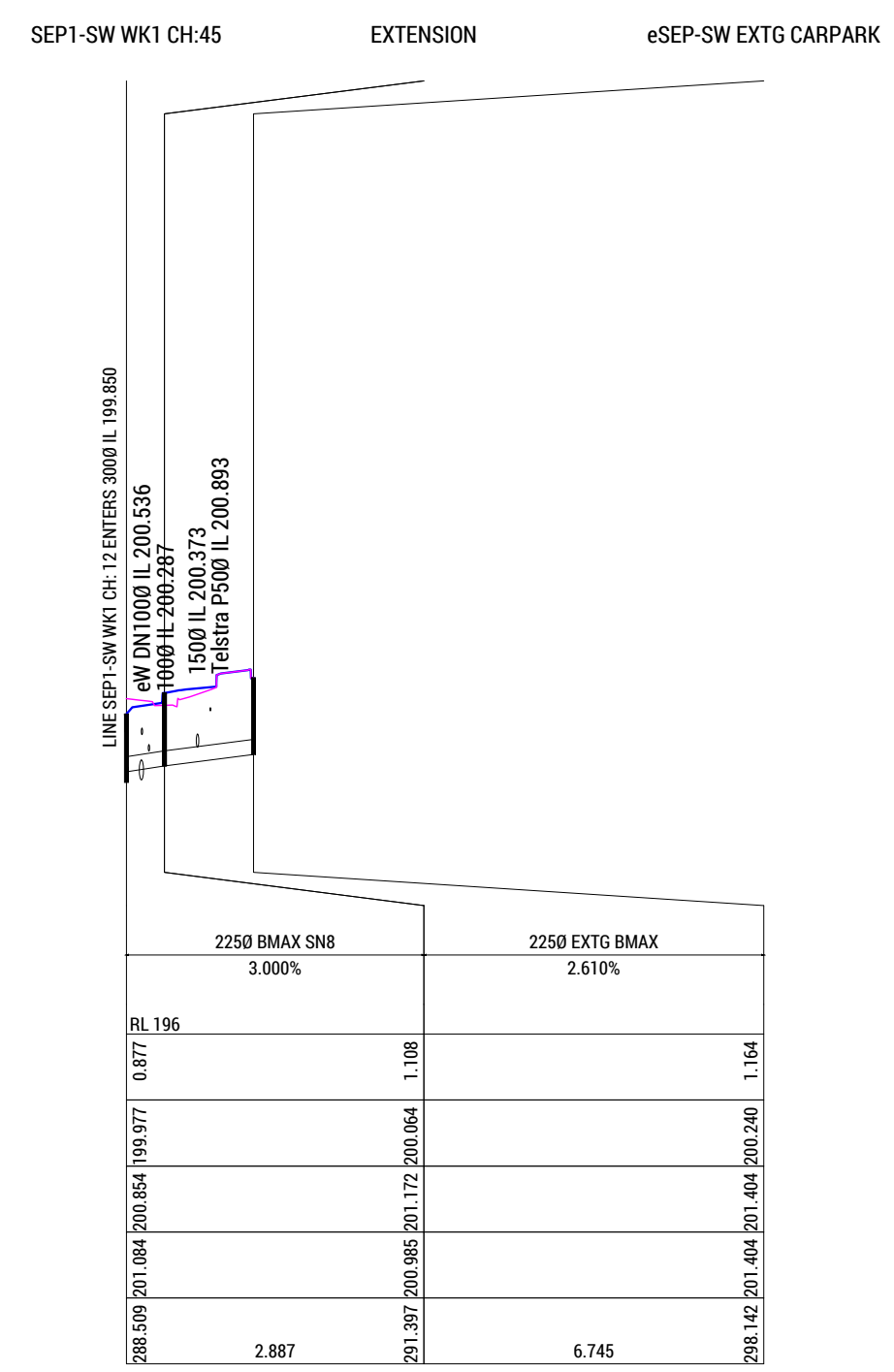
<p>NORTHERN MIDLANDS COUNCIL</p>	<table border="1"> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td>0</td> <td>APPROVAL / TENDER</td> <td></td> </tr> </table>	REV	DESCRIPTION	DATE	0	APPROVAL / TENDER		<table border="1"> <tr> <td>PVD</td> <td>00-00-00</td> </tr> <tr> <td>BY:</td> <td>DATE:</td> </tr> </table>	PVD	00-00-00	BY:	DATE:	STATUS: PRELIMINARY/INFORMATION DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257	DESIGN BY: RJ DESIGN CHK: JS DRAWN BY: PVD DRAFT CHK: JS	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	CLIENT: NORTHERN MIDLANDS COUNCIL PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN	TITLE: DRAINAGE LONGITUDINAL SECTIONS - EAST KERB - SHEET 2 SCALE: 1:200H 1:100V SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C522 REV: 0
		REV	DESCRIPTION	DATE													
0	APPROVAL / TENDER																
PVD	00-00-00																
BY:	DATE:																
APPROVED: R. JESSON ACRED. No: CC58481	DATE: 00-00-00	DATE: 00-00-00															



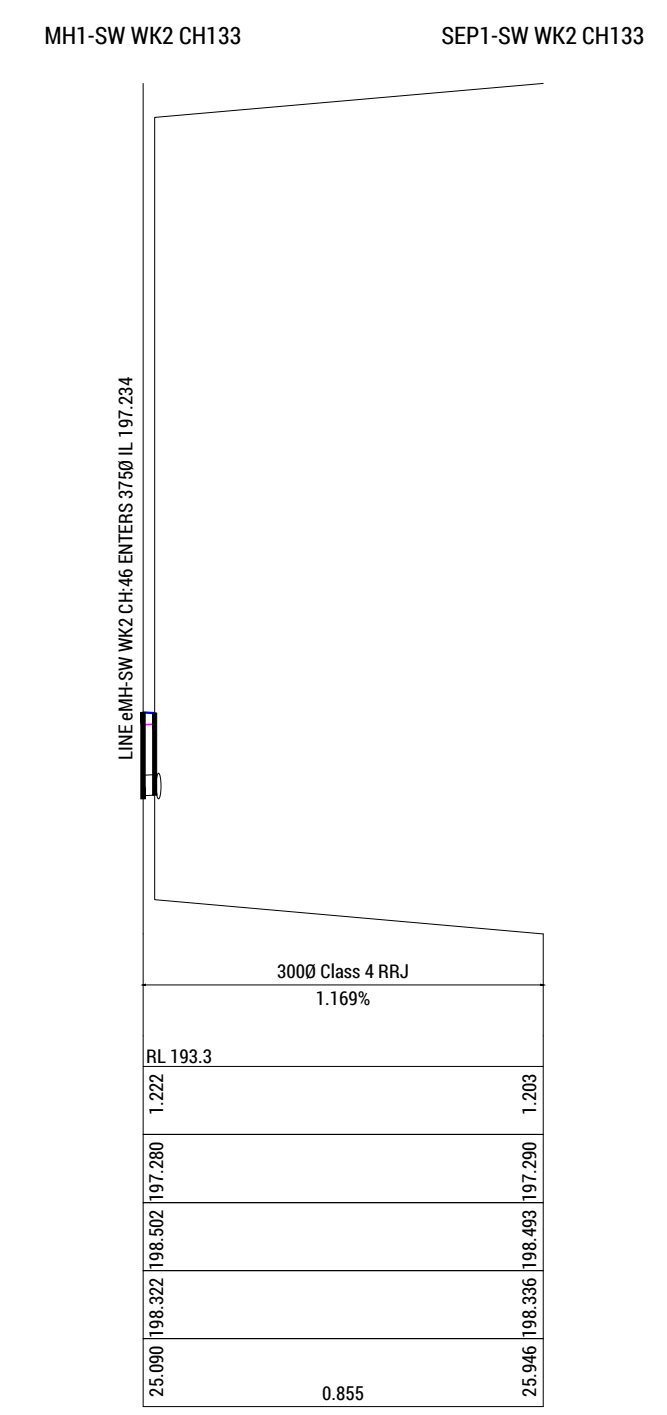
LONGITUDINAL SECTION FOR LINE 1
 SCALES: HORIZONTAL 1:500 VERTICAL 1:100



LONGITUDINAL SECTION FOR LINE 2
 SCALES: HORIZONTAL 1:500 VERTICAL 1:100

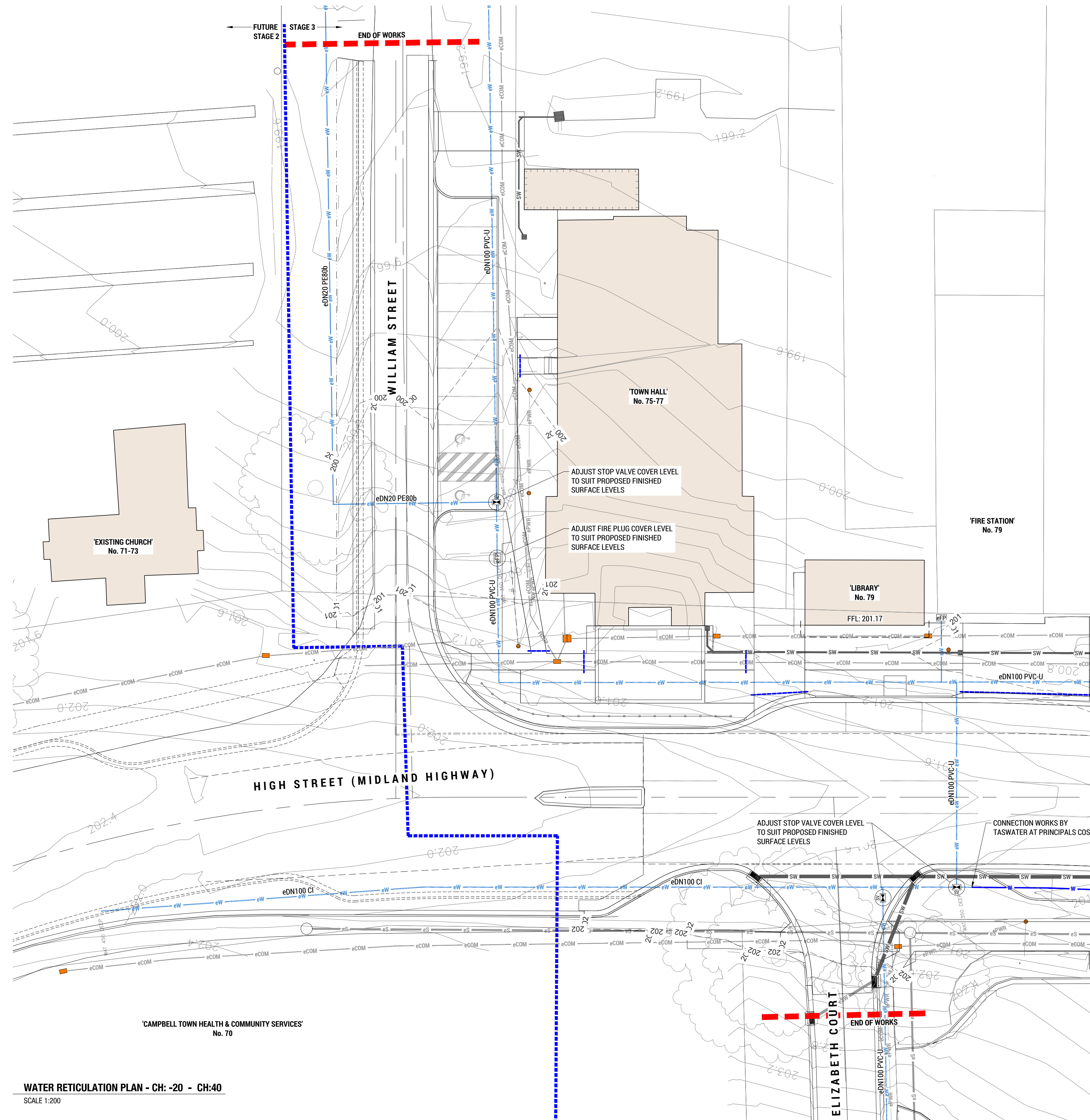


LONGITUDINAL SECTION FOR LINE 3
 SCALES: HORIZONTAL 1:500 VERTICAL 1:100



LONGITUDINAL SECTION FOR LINE 4
 SCALES: HORIZONTAL 1:500 VERTICAL 1:100

	0 APPROVAL / TENDER REV: DESCRIPTION:	PVD 00-00-00 BY: DATE:	STATUS: PRELIMINARY/INFORMATION DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257	DESIGN BY: RJ DESIGN CHK: JS DRAWN BY: PVD DRAFT CHK: JS	Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200	CLIENT: NORTHERN MIDLANDS COUNCIL PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN	TITLE: DRAINAGE LONGITUDINAL SECTIONS - WEST KERB SCALE: 1:200H 1:100H SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C523 REV: 0

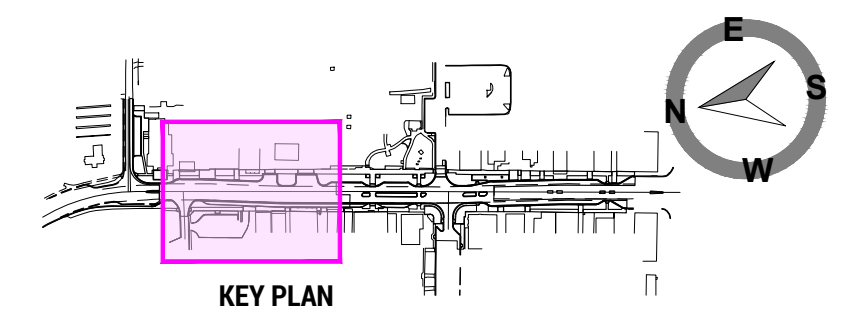
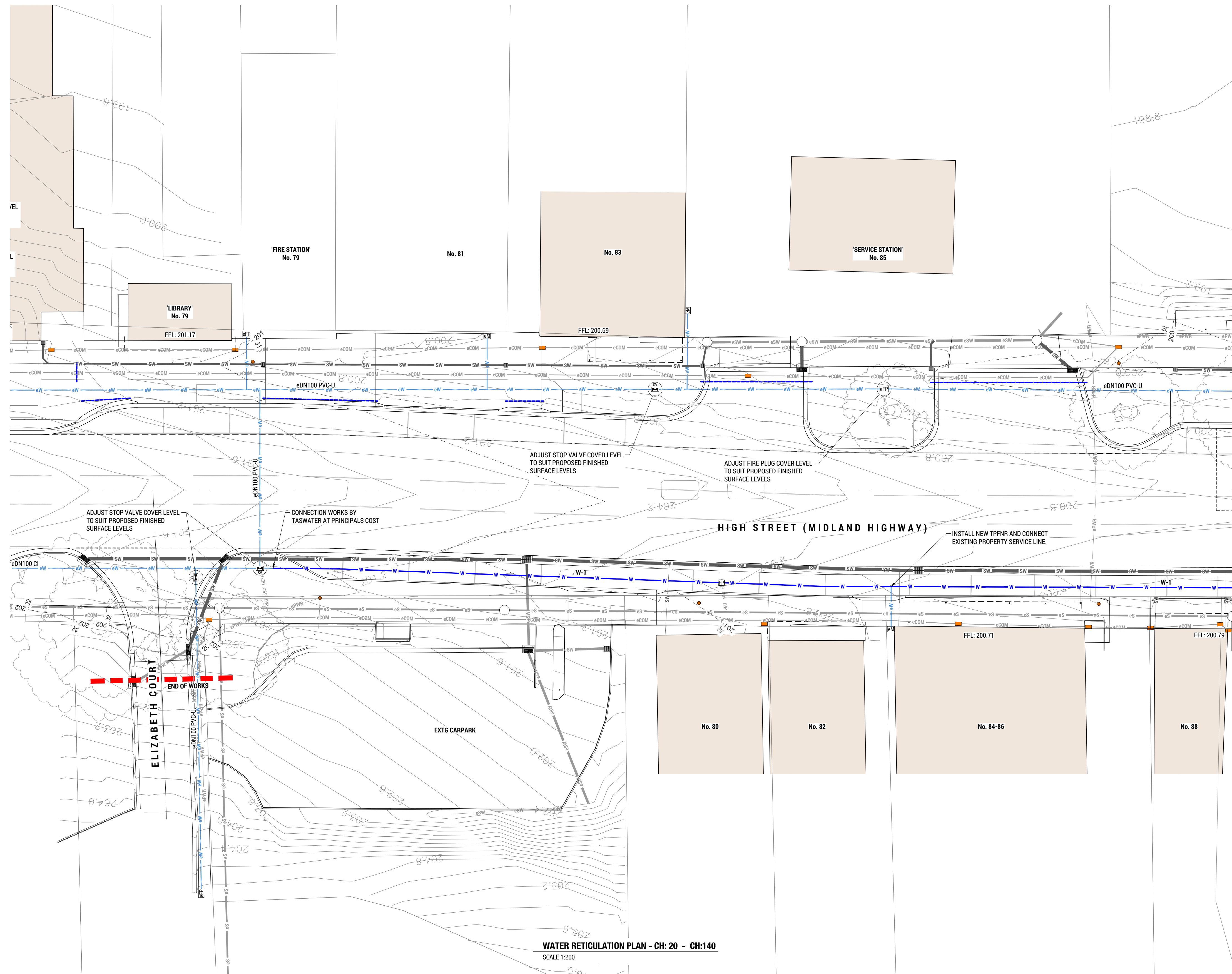


- LEGEND**
- EXISTING WATER MAIN
 - PROPOSED WATER MAIN
 - IRRIGATION SYSTEM CONDUIT - DN90 uPVC, 300 NOM. INVERT
 - EXISTING FIRE PLUG
 - EXISTING STOP VALVE
 - EXISTING WATER METER

WATER MAIN SCHEDULE		
MARK	PIPE SIZE	TYPE
W-1	100	PVC-O PN16

WATER RETICULATION PLAN - CH: -20 - CH:40
SCALE 1:200

 NORTHERN MIDLANDS COUNCIL		STATUS: PRELIMINARY/INFORMATION	DESIGN BY: RJ DESIGN CHK: JS DRAWN BY: PVD DRAFT CHK: JS	 LANGE design landscape architecture	 rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200	CLIENT: NORTHERN MIDLANDS COUNCIL PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN	TITLE: WATER RETICULATION PLAN - CH: -20 - CH:40 SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: - PROJECT No: 17.340 DWG No: C601 REV: 0
	0 APPROVAL / TENDER REV: DESCRIPTION:	PVD 00-00-00 BY: DATE:	APPROVED: R. JESSON ACRED. No: CC58481	DATE: 00-00-00			

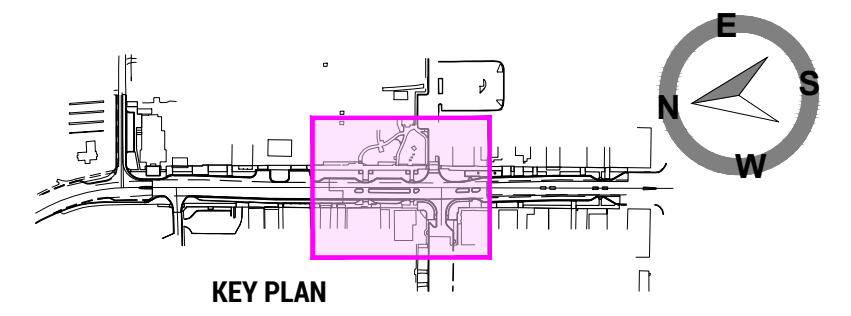
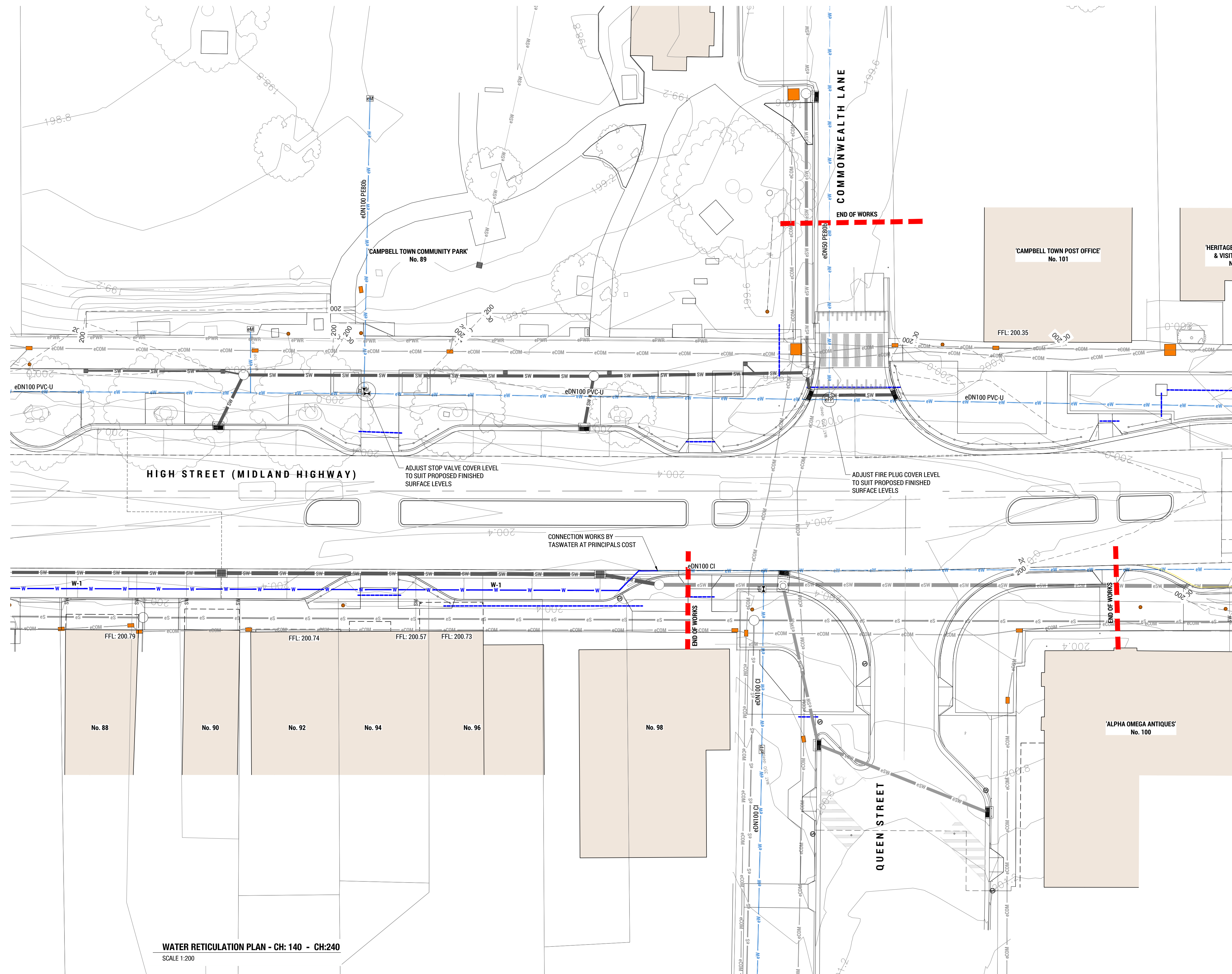


- LEGEND**
- EXISTING WATER MAIN
 - PROPOSED WATER MAIN
 - IRRIGATION SYSTEM CONDUIT - DN90 uPVC, 300 NOM. INVERT
 - EXISTING FIRE PLUG
 - EXISTING STOP VALVE
 - EXISTING WATER METER

WATER MAIN SCHEDULE		
MARK	PIPE SIZE	TYPE
W-1	100	PVC-O PN16

WATER RETICULATION PLAN - CH: 20 - CH:140
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>			<p>STATUS: PRELIMINARY/INFORMATION</p> <p><small>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</small></p>	<p>DESIGN BY: RJ DESIGN CHK: JS DRAWN BY: PVD DRAFT CHK: JS</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250</p>	<p>rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: WATER RETICULATION PLAN - CH:20 - CH:140</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C602 REV: 0</p>
	<p>0 APPROVAL / TENDER</p> <p>REV: DESCRIPTION:</p>	<p>PVD 00-00-00</p> <p>BY: DATE:</p>	<p>APPROVED: R. JESSON</p> <p>ACRED. No: CC58481</p>	<p>DATE: 00-00-00</p>				

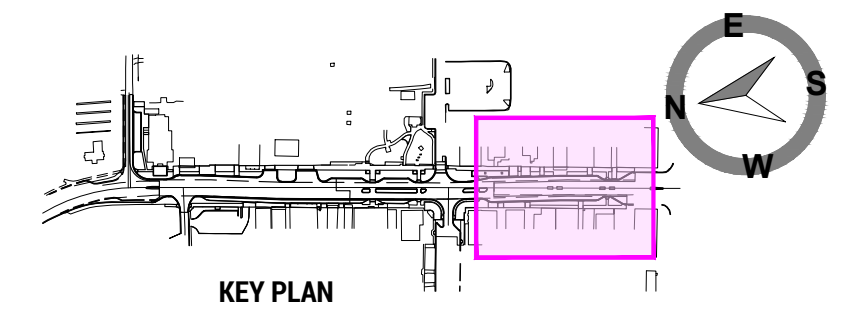


- LEGEND**
- EXISTING WATER MAIN
 - PROPOSED WATER MAIN
 - IRRIGATION SYSTEM CONDUIT - DN90 uPVC, 300 NOM. INVERT
 - EXISTING FIRE PLUG
 - EXISTING STOP VALVE
 - EXISTING WATER METER

WATER MAIN SCHEDULE		
MARK	PIPE SIZE	TYPE
W-1	100	PVC-O PN16

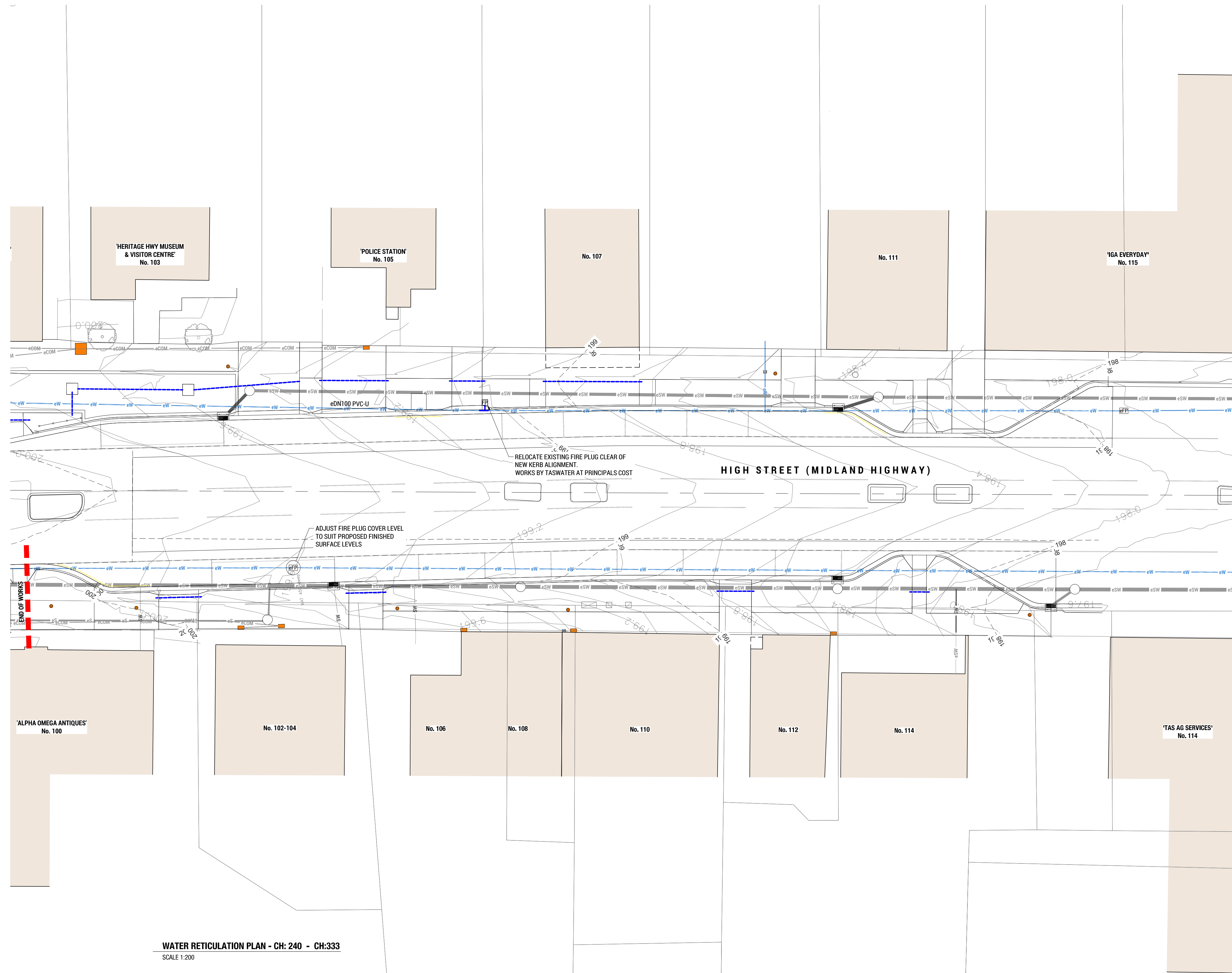
WATER RETICULATION PLAN - CH: 140 - CH:240
SCALE 1:200

 NORTHERN MIDLANDS COUNCIL			STATUS: PRELIMINARY/INFORMATION	DESIGN BY: RJ DESIGN CHK: JS	 rare. Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200	CLIENT: NORTHERN MIDLANDS COUNCIL	TITLE: WATER RETICULATION PLAN - CH:140 - CH:240
	DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 998 257	DRAFT BY: PVD DRAFT CHK: JS	APPROVED: R. JESSON ACRED. No: CC58481	DATE: 00-00-00		DATE: 00-00-00	PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS



- LEGEND**
- eW EXISTING WATER MAIN
 - W PROPOSED WATER MAIN
 - IRRIGATION SYSTEM CONDUIT - DN90 uPVC, 300 NOM. INVERT
 - EXISTING FIRE PLUG
 - EXISTING STOP VALVE
 - EXISTING WATER METER

WATER MAIN SCHEDULE		
MARK	PIPE SIZE	TYPE
W-1	100	PVC-O PN16



WATER RETICULATION PLAN - CH: 240 - CH:333
SCALE 1:200

<p>NORTHERN MIDLANDS COUNCIL</p>	<table border="1"> <tr> <th>0</th> <th>APPROVAL / TENDER</th> <th>PVD</th> <th>00-00-00</th> </tr> <tr> <td>REV:</td> <td>DESCRIPTION:</td> <td>BY:</td> <td>DATE:</td> </tr> </table>	0	APPROVAL / TENDER	PVD	00-00-00	REV:	DESCRIPTION:	BY:	DATE:	<p>STATUS: PRELIMINARY/INFORMATION</p> <p>DO NOT SCALE - IF IN DOUBT, ASK THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS PREPARED. © RARE INNOVATION PTY LTD. ABN 51 619 598 257</p> <p>APPROVED: R. JESSON ACRED. No: CC58481</p>	<p>DESIGN BY: RJ DESIGN CHK: JS DRAWN BY: PVD DRAFT CHK: JS</p> <p>DATE: 00-00-00</p>	<p>landscape architecture</p>	<p>Level 1a, 10-14 Paterson Street Launceston TAS 7250 rarein.com.au P. 03 6388 9200</p>	<p>CLIENT: NORTHERN MIDLANDS COUNCIL</p> <p>PROJECT: URBAN DESIGN & TRAFFIC MANAGEMENT STRATEGY - STAGE 3 WORKS</p> <p>ADDRESS: MIDLANDS HIGHWAY CAMPBELL TOWN</p>	<p>TITLE: WATER RETICULATION PLAN - CH:240 - CH:333</p> <p>SCALE: 1:200 SHEET SIZE: A1 DWGS IN SET: -</p> <p>PROJECT No: 17.340 DWG No: C604 REV: 0</p>
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REV:	DESCRIPTION:	BY:	DATE:												
<p>APPROVED: R. JESSON ACRED. No: CC58481</p>															