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Hunter New England South Coast Riverina Western North Coast Sydney			
Asset Advisory Heritage Project + Program Management Assurance Procurement Engineering Planning Sustainability			
Developments Buildings Water Infrastructure Roads + Bridges Coastal Waste Emergency Management Surveying			



Declaration

This Review of Environmental Factors has been prepared by Public Works Advisory, Department of Regional NSW on behalf of Upper Hunter Shire Council. The report presents the assessment of potential impacts that may result from the Scone CBD Revitalisation works including upgrade of the Kelly Street roadway, stormwater drainage, footpaths and associated landscaping.

Upper Hunter Shire Council is a Public Authority and is a determining authority as defined in the *Environmental Planning & Assessment Act 1979* (EP&A Act). The Proposal satisfies the definition of an activity under the Act, and as such Upper Hunter Shire Council must assess and consider the environmental impacts of the Proposal before determining whether to proceed.

This REF has been prepared in accordance with Sections 5.5 and 5.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and Clause 228 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Reg).

On the basis of the information presented in this REF it is concluded that:

- (1) The proposed activity is not likely to have a significant impact on the environment. An Environmental Impact Statement is not required.
- (2) The proposed activity is not likely to significantly affect threatened species, populations, ecological communities, or critical habitat. A Species Impact Statement (SIS) is not required
- (3) The proposed Activity is not likely to affect any Commonwealth land, is not being carried out on Commonwealth land, or significantly affect any matters of national environmental significance.

The REF has assessed the likely impacts based on the preliminary design information and is considered adequate for the proposed activity, assuming that the detailed designs do not result in additional impacts that have not been assessed. Accordingly, the proposed activity is recommended to proceed subject to implementation of measures to avoid, minimise or manage environmental impacts in this REF.

This REF provides a true and fair assessment of the proposed activity in relation to its likely effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposed activity.



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Date	25.02.2022



Verification and Determination

Verifier

I have examined this REF and the Declaration by the author Kristen Parmeter and accept the report on behalf of Upper Hunter Shire Council.

Name	Grahame Wilson
Designation	Manager Strategic Projects
Organisation	Upper Avinter Shire ¢øuncil
Signature	

Upper Hunter Shire Council – Determination

I determine that the activity is approved and may proceed.

Name	Karen Davies	
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Organisation Upper Hunter Shire Council		
Signature		



Executive Summary

Upper Hunter Shire Council (UHSC) and Transport for New South Wales (TfNSW) are proposing reconstruction and upgrade works to Kelly Street in Scone, from the intersection of Kingdon Street to the intersection with Susan Street (approximately 700 m). Kelly Street is the main Central Business District (CBD) of Scone. The road is in the process of, potentially, being reclassified from a State road to a local road due to the completion of New England Highway Scone bypass and therefore transferred from the care and control of TfNSW to UHSC and the roadway design has been undertaken in partnership with TfNSW. The existing roadway comprises a two-lane dual carriageway, with a varying width between 5.5 m and 6 m, and a paved pedestrian footpath on both sides of the road between the road reserve and building frontages. UHSC has received grant contributions from the NSW Government to fund the Proposal.

Scope of Works

The project would consist of the following key activities:

- Road realignment (vertical and horizontal) and change of roadway from four traffic lanes to two traffic lanes;
- Construction of new road pavement; including sealing; and line marking and road signage;
- Construction of new (replacement) roadway medians with landscaping, irrigation and pedestrian refuges/crossings;
- Repositioning and marking of car parking spaces along the length of the road to be upgraded;
- Stormwater management works within the road reserve and adjacent footpaths (including construction of new drains, pipeline and road kerbs and gutters);
- Construction of replacement footpath pavements (including footpath widening and vertical realignment (raising) at some locations); and
- Construction of new pedestrian facilities (including footpaths, street lighting, kerb adjustments and ramps, pedestrian fences, refuges, holding rails, and bollards), street furniture and footpath landscaping.
- In addition, new water supply infrastructure comprising replacement water mains would be constructed within the pedestrian footpath area along both sides of Kelly Street (between Kingdon Street and Shaw Street) to manage fire-fighting and response capability in the Scone CBD area.

It is noted that the works would be carried out as staged packages of works.

Planning Framework

The Proposal is permissible without consent pursuant to clause 94(1) of *State Environmental Planning Policy (Infrastructure) 2007* (SEPP Infrastructure). Clause 94(1) allows development for the purpose of a road or road infrastructure facilities (including alterations or additions to an existing road) to be carried out by or on behalf of a public authority without consent on any land.

The proposed water mains installation within the footpath area along Kelly Street is permissible with consent under clause 125(1), which allows development for the purpose of water reticulation systems may be carried out by or on behalf of a public authority without consent on any land.



This Review of Environmental Factors (REF) has been prepared in accordance with Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to fully assess the potential environmental impacts associated with the proposal in accordance with sections 5.5 and 5.7 of the EP&A Act and clause 228 of the *Environmental Planning and Assessment Regulation 2000*. UHSC would be the proponent and determining authority for the works.

Approvals

Concurrence from TfNSW under Section 138 of the *Roads Act* 1993 may be required to undertake the proposed upgrade of Kelly Street.

Summary of Potential Environmental Impacts

A number of temporary construction related impacts have been identified due to the Proposal. This includes impacts to land use and visual amenity, increased traffic, elevated noise and waste generation/ management. Given the implementation of appropriate mitigation measures, the Proposal is not expected to result in a significant impact to the community.

Multiple heritage items located adjacent to the Kelly Street road alignment are not anticipated to be impacted by the Proposal based on the outcomes of a Statement of Heritage Impact Assessment. However, it is recommended that UHSC undertake dilapidation assessments of these buildings prior to the commencement of works and on the completion of construction works.

Conclusion and Recommendations

The REF has assessed the likely impacts based on the preliminary design information and is considered adequate for the proposed activity, assuming that the detailed designs do not result in additional impacts that have not been assessed. Accordingly, the proposed activity is recommended to proceed subject to implementation of measures to avoid, minimise or manage environmental impacts in this REF.

On the basis of the information presented in this REF it is concluded that by adopting the safeguards identified in this assessment, it is unlikely that there would be significant adverse environmental impacts associated with the Proposal. Therefore, an Environmental Impact Statement would not be required.



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Abbreviations

AHIMS	Aboriginal Heritage Information Management System	
AHIP	Aboriginal Heritage Impact Permit	
BC Act	Biodiversity Conservation Act 2016	
CEMP	Construction Environmental Management Plan	
DPIE	NSW Department of Planning, Industry and Environment	
EES	Environment, Energy and Science	
EP&A Act	Environmental Planning and Assessment Act 1979	
EP&A Regulation	Environmental Planning and Assessment Regulation 2000	
EPA	Environment Protection Authority	
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999	
LEP	Local Environmental Plan	
LGA	Local Government Area	
NPW Act	National Parks and Wildlife Act 1974	
OEH	Office of Environment and Heritage	
POEO Act	Protection of The Environment Operations Act 1997	
REF	Review of Environmental Factors	
SEPP	State Environmental Planning Policy	
SWMP	Soil and Water Management Plan	
TfNSW	Transport for New South Wales	
TMP	Traffic Management Plan	
UHSC	Upper Hunter Shire Council	
WM Act	Water Management Act 2000	
WMP	Waste Management Plan	



1. Introduction

This section provides details on the background of the Proposal, its objectives and location.

1.1 Background and Purpose of the Proposal

Upper Hunter Shire Council (UHSC) is proposing reconstruction and upgrade works to Kelly Street and the adjacent pedestrian footpath area, from the intersection with Kingdon Street through to the intersection with Susan Street (approximately 700 m) (hereafter referred to as the Proposal).

Kelly Street is a key roadway which forms the main shopping and business precinct, or Central Business District (CBD), for the Scone township. Kelly Street is currently classified as a State road under the care and control of Transport for NSW (TfNSW). Due to the recent completion of the New England Highway bypass of Scone, Kelly Street may be reclassified as a local road under the control of UHSC. As part of the road reclassification and transfer, TfNSW have been working with UHSC to redesign the Kelly Street road reserve for local CBD use; suitable for reduced vehicle speeds and increased pedestrian use. To encourage increased local use of the Scone CBD, UHSC have engaged a landscaping consultancy (Mara Consulting) to redesign and revitalise the Kelly Street footpath area and create a fit for purpose place to facilitate and support increased local business, pedestrian and leisure activity utilisation.

The aim of Proposal is to apply the government grant to upgrade Kelly Street and the adjacent pedestrian footpath area, to encourage local resident utilisation of the main street and revitalise the CBD area. The works are expected to involve road realignment which would reduce Kelly Street from four trafficable lanes to two lanes with adjacent angled (45°) and parallel car parking (comprising both standard and accessible spaces), new road pavement, bitumen sealing, new kerbs and gutters, landscaped median strip and footpath widening, repaving, new street furniture, lighting and footpath landscaping works. In addition, a new pedestrianised plaza and park space would be created on the eastern side of St Aubins Street and replacement and upgrade of stormwater drainage would be carried out within some sections of the road reserve to reduce localised flooding in Kelly Street.

In addition to the roadworks, replacement potable water mains with a larger capacity would be installed along both sides of Kelly Street along the same alignment as existing potable water mains, to improve fire-fighting and response capability in the Scone CBD area. The water main works would be carried out as part of the footpath upgrade works to minimise ground disturbance in the pedestrianised area of the road reserve.

1.2 Location and Setting

The approximately 700 m long Scone CBD revitalisation of the Kelly Street road and footpath area of the road reserve stretches from the intersection of Kelly Street and Kingdon Street (southern extent) to the intersection of Kelly Street with Susan Street and Shaw Street (northern extent).

Maps and aerial views of the Proposal area are provided in Figure 1-2 to Figure 1-3.



1.3 Land Ownership

The Proposal would predominantly be located within the existing Kelly Street road reserve, which is a classified road under the control of TfNSW, pending reclassification as a local road and transfer to UHSC care and control.

Where works are proposed to be outside the existing Kelly Street road reserve, land to be affected comprises UHSC managed public land or road reserve, and Coles.



Scone CBD Revitalisation

Review of Environmental Factors

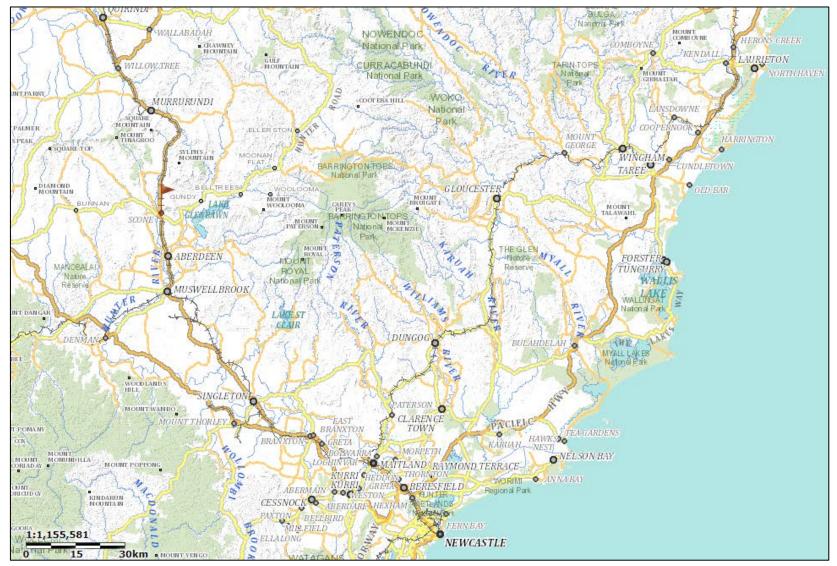


Figure 1-1 Location Map of Scone

Source: SIX Maps, December 2021

Hunter New England | South Coast | Riverina Western | North Coast | Sydney



Scone CBD Revitalisation

Review of Environmental Factors

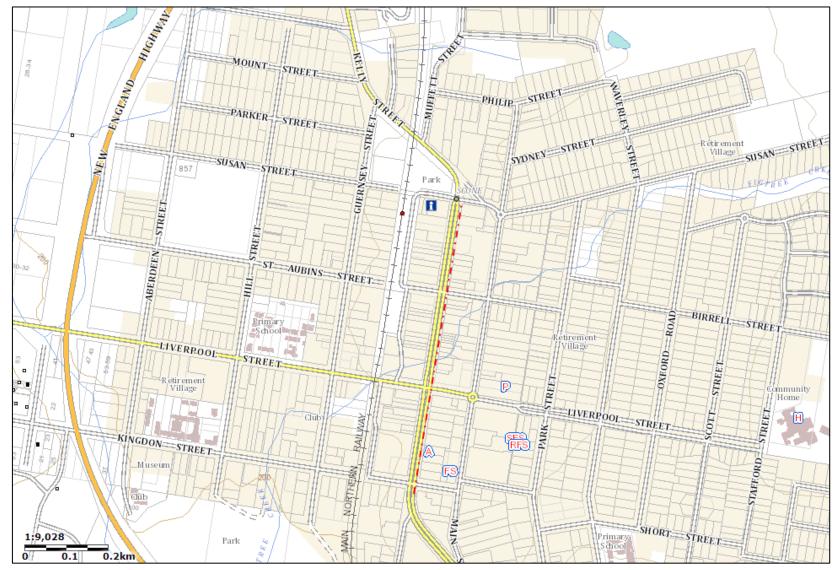


Figure 1-2: Proposed Scone CBD Revitalisation works Location Map Source: SIX Maps, December 2021

Hunter New England | South Coast | Riverina Western | North Coast | Sydney



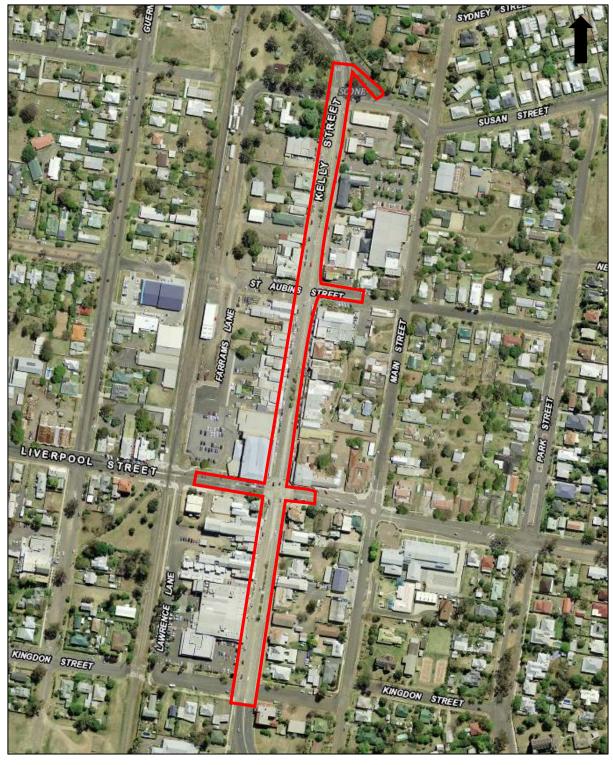


Figure 1-3 Aerial Map of the Scone CBD Revitalisation works area

Source: SIX Maps, December 2021



2. Statutory Considerations

This section provides information on the Environmental Planning Instruments which are relevant to the Proposal.

2.1 Environmental Planning Instruments

2.1.1 Upper Hunter Local Environmental Plan 2013

Zoning

The Proposal is located within the Upper Hunter Local Government Area (LGA). The applicable local environmental planning instruments for the Proposal is the *Upper Hunter Local Environmental Plan* (LEP) 2013.

The Proposal works are located within land zoned B2 Local Centre and R1 General Residential under the Upper Hunter LEP 2013 (see Figure 2-1). Development for the purpose of roads and water supply works are permitted with development consent in the land zones under the Upper Hunter LEP 2013.

However, the relevant environmental planning instrument for the Proposal is *State Environmental Planning Policy (Infrastructure) 2007* (SEPP (Infrastructure) 2007), which allows the development to be undertaken without consent (see Section 2.1.2). Clause 5.12 (1) of the Upper Hunter LEP 2013 states that the LEP *does not restrict or prohibit, or enable the restriction or prohibition of, the carrying out of any development, by or on behalf of a public authority, that is permitted to be carried out with or without development consent, or that is exempt development, under State Environmental Planning Policy (Infrastructure) 2007.* Therefore, the development controls contained within the LEP would not be applicable to the Proposal.

Hunter New England | South Coast | Riverina Western | North Coast | Sydney

Asset Advisory | Heritage | Project + Program Management | Assurance | Procurement | Engineering | Planning | Sustainability Developments | Buildings | Water Infrastructure | Roads + Bridges | Coastal | Waste | Emergency Management | Surveying

5

RT ST SCONE E STREET NE COURT HOUSE SCONE POLICE STATION B2 SP1 Proposed cal F ad & Carpaning Zone SCONE RSL CLUB UPPER NTER SHIRE INCIL SCONE 132 ΗÚ PARK B4 STREE SAINT ANDREWS TEN NI TING CHURCH COUR KINGDON STREET MAIN 100 moulo ۶

Figure 2-1: LEP Land Zoning Map Extract - Scone CBD revitalisation works area is identified in purple

Source: NSW Planning Portal Spatial Viewer, accessed December 2021

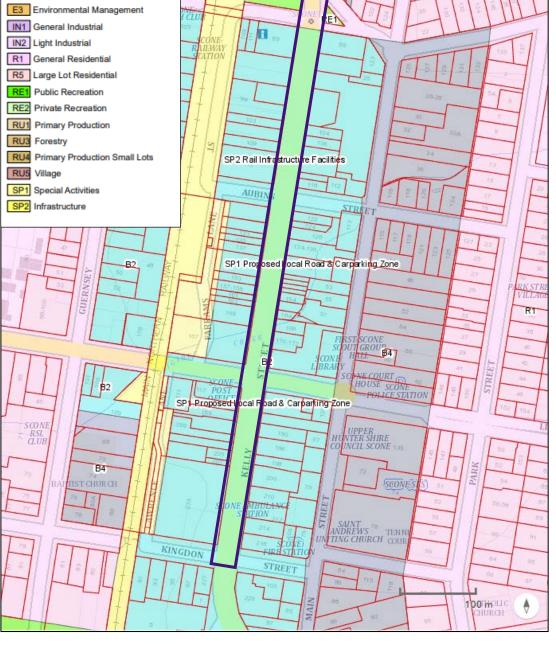
B2 Local Centre B4 Mixed Use

E1 National Parks and Nature Reserves

Zone

Review of Environmental Factors

Scone CBD Revitalisation



В4

RE1







Heritage

There are twenty local heritage items listed under the Upper Hunter LEP 2013 located in proximity to the Proposal works along Kelly Street and the works would be located within the Central Scone Conservation area. A Statement of Heritage Impacts (SOHI) assessment has been prepared for the Proposal. Potential impacts from the Proposal on locally listed heritage items are discussed in detail in Section 4.5

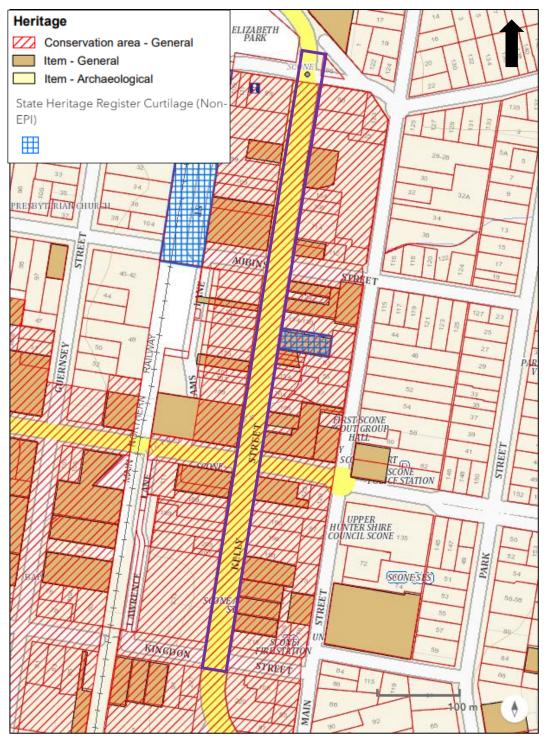


Figure 2-2: Upper Hunter LEP 2013 Heritage Map Extract - Scone CBD revitalisation works area is identified in purple Source: NSW Planning Portal Spatial Viewer, accessed December 2021

Hunter New England | South Coast | Riverina Western | North Coast | Sydney



2.1.2 State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (SEPP (Infrastructure) 2007) aims to assist in the effective delivery of public infrastructure by improving certainty and regulatory efficiency. It provides clear definition of the environmental assessment and approval process for public infrastructure and services facilities.

Clause 94(1) of SEPP (Infrastructure) 2007 states that development for the purpose of a road or road infrastructure facilities (including alterations or additions to an existing road and environmental management works, in or adjacent to a road corridor) may be carried out by or on behalf of a public authority without consent on any land. Accordingly, the Proposal is permitted without development consent under SEPP (Infrastructure) 2007. Therefore, the Proposal is being assessed under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). It is noted that the proposed medians, landscaping, paving, kerbs and gutters, pedestrian facilities, street furniture, line marking, and signage may be permitted as exempt development (if undertaken by a public authority) under clause 97(1)(c) of SEPP (Infrastructure) 2007. However, the Proposal has been assessed in its entirety within this REF.

Furthermore, Clause 125(1) of SEPP (Infrastructure) 2007 permits development for the purpose of water reticulation systems to be carried out by or on behalf of a public authority without consent on any land. Clause 124 defines water reticulation systems as a building or place used for the transport of water, including pipes, tunnels, canals, bores, pumping stations, related electricity infrastructure, dosing facilities and also includes water supply reservoirs. As such, the proposed water mains works to improve fire-fighting and response capability are also permitted without development consent under SEPP (Infrastructure) 2007.

Accordingly, the SEPP removes the need for development consent for the proposed road works and water mains and the works would be assessed under Part 5 of the EP&A Act. Therefore, the Proposal can be undertaken without development consent.

2.1.3 State Environmental Planning Policy (Koala Habitat Protection) 2021

The State Environmental Planning Policy – Koala Habitat Protection 2021 (Koala Habitat Protection SEPP) aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline. Schedule 1 of the Koala Habitat Protection SEPP 2021 identifies UHSC as an LGA to which this planning instrument applies. It is noted that the SEPP does not apply to proposals assessed under Part 5 of the EP&A Act. No Koala feed tree species or Koala habitat would be impacted by the Proposal as the works would take place within an urbanised area.

2.2 Legislation

2.2.1 Environmental Planning and Assessment Act 1979 (NSW)

The relevant environmental planning instrument for the works is SEPP (Infrastructure) 2007 (refer to 2.1.2), which removes the requirement to obtain development consent. Therefore, the Proposal has been assessed under Part 5 of the EP&A Act. Upper Hunter Shire Council is the determining authority for the development.



This REF has been prepared in accordance with Section 5.5 of the Act, which requires that the proponent take into account to the fullest extent possible all matters affecting or likely to affect the environment due to the proposed activity. Consideration of the factors listed under Clause 228 of *the Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) has been used to assist in assessing the significance of the impact of the Proposal and is provided in Appendix A.

Ecologically Sustainable Development

The encouragement of ecologically sustainable development (ESD) is one of the Objects of the EP&A Act. The principles of ESD are:

The reasons justifying the carrying out of the development or activity in the manner proposed, having regard to biophysical, economic and social considerations, including the following principles of ecologically sustainable development:

(a) the precautionary principle, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
- (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) improved valuation, pricing and incentive mechanisms, namely, that environmental factors should be included in the valuation of assets and services, such as:
 - (1) polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
 - (2) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
 - (3) environmental goals, having been established, should be pursued in the most costeffective way, by establishing incentive structures, including market mechanisms that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

The works are considered to be consistent with these principles. Environmental safeguards have been proposed during construction works to prevent long term and irreversible environmental degradation in accordance with the precautionary principle and intergenerational integrity. The Proposal would not have a significant impact on biological diversity and ecological integrity at the Proposal site and surrounding area.



2.2.2 Roads Act 1993 (NSW)

Under Section 138 of the *Roads Act 1993* a person must not "erect a structure or carry out a work in, on or over a public road," other than with the consent of the appropriate roads authority. UHSC is the roads authority for surrounding local roads including Kingdon Street, Liverpool Street, St Aubin Street, Susan Street, Main Street and Shaw Street where works may take place. Schedule 2 Section 5(1) of the Act does not require a public authority to obtain a roads authority's consent to exercise the public authority's functions in, on or over an unclassified road other than a Crown road. Council is the roads authority for the local roadways to be impacted by the proposed water main replacement works, and by undertaking these works would be exercising their function as the local water authority

The majority of the Proposal works would be undertaken within the Kelly Street road reserve which is a currently a classified road pending possible reclassification as a local (unclassified) road. Accordingly, concurrence is required from TfNSW as the appropriate roads authority, to undertake works within a classified road unless the road has been transferred to UHSC prior to the works commencing.

2.2.3 National Parks and Wildlife Act 1974 (NSW)

The National Parks and Wildlife Act 1974 (NPW Act) provides for the statutory protection of Aboriginal cultural heritage places, objects and features. One of the objects of the NPW Act is the conservation of places, objects and features of significance to Aboriginal people (Section 2A). The NPW Act provides for the management of both Aboriginal Objects and Aboriginal Places and is administrated by Heritage NSW within the Department of Premier and Cabinet.

Aboriginal Objects and Aboriginal Places are protected under Part 6 of the NPW Act and there are legislative penalties if a person harms or desecrates an Aboriginal Place or Object (s. 86). Harm to an Aboriginal Place or Object includes any act or omission that destroys, defaces or damages the object or place, or, in relation to an Aboriginal object, moves the object from the land on which it had been situated. However, harm to an Aboriginal Object that is 'trivial or negligible' does not constitute an offence. Also, it is a defence against prosecution for unintentionally harming Aboriginal Objects if due diligence had been exercised to determine that no Aboriginal object would be harmed, or the harm or desecration was authorised by an Aboriginal heritage impact permit (AHIP). The *National Parks and Wildlife Regulation 2009* made under the NPW Act advocates a Due Diligence process to determining likely impacts on Aboriginal objects.

A search of the Aboriginal Heritage Information Management Systems (AHIMS) database did not identify any previously recorded Aboriginal sites or places in or near the Proposal site. The *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH, 2010)* has been considered in assessing the likelihood of encountering items of Aboriginal cultural heritage during the construction works.

The Proposal site is within 200 m of waters, which is identified in the Code of Practice as a landscape feature that indicate the likely existence of Aboriginal objects. However, it is considered that the risk of disturbing any previously unidentified Aboriginal items are low. This is due to the extremely disturbed and altered nature of the site, having previously been cleared and formed into a concrete stormwater channel. Therefore, it is considered that further archaeological investigations and/or an Aboriginal Heritage Impact Permit are not



required and that the works can proceed with caution and in accordance with the mitigation measures in this REF (see 4.5).

2.2.4 Heritage Act 1977 (NSW)

The *Heritage Act* 1977 protects and aims to conserve the environmental heritage of New South Wales. Environmental heritage is broadly defined under Section 4 of the *Heritage Act* 1977 as consisting of "those places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance" (Heritage Branch, DoP 2009:4). Aboriginal places or objects that are recognised as having high cultural value (potentially of local and State significance) can be listed on the State Heritage Register and protected under the provisions of the *Heritage Act* 1977.

The Scone Civic Theatre, which is located at 144 Kelly Street, is listed on the State Heritage Register (Listing Number: 01660) under the *Heritage Act* 1977 (refer to Section 4.5). A Statement of Heritage Impact (SOHI) prepared for the proposed works, concluded that the Proposal would have no adverse impact on the cultural significance of the Scone Civic Theatre.

2.2.5 Biodiversity Conservation Act 2016 (NSW)

The Biodiversity Conservation Act 2016 (BC Act) protects species of threatened flora and fauna, endangered populations and endangered ecological communities and their habitats in NSW. It also lists Key Threatening Processes that adversely affect threatened species, populations or ecological communities or that may cause species, populations or ecological communities that are not threatened to become threatened. The impacts of any works that may affect 'threatened species', as listed in the BC Act, must be properly assessed. Impacts can include the destruction of threatened species habitat or potential habitat and threatened ecological communities.

The Proposal would be constructed within a previously disturbed road reserve and require the removal of previously planted vegetation only. Therefore, it is considered that the Proposal would not have a significant impact on any threatened flora and fauna species, populations or communities, or their habitats as listed under the BC Act (see Section 4.4).

2.2.6 Water Management Act 2000 (NSW)

The objects of the *Water Management Act 2000* (WM Act) are to provide for the sustainable and integrated management of the water sources, floodplains and dependent ecosystems of the state for the benefit of both present and future generations.

The Proposal includes the construction of replacement potable water mains with a larger capacity in the Scone CBD.

Section 91(B) of the WM Act requires a water supply works approval to be obtained for a number of works, including:

(c) a work (such as a water pipe or irrigation channel) that is constructed or used for the purpose of conveying water to the point at which it is to be used

Clause 37(1)(b) of the *Water Management (General) Regulation 2018* however, provides that a water supply works approval is not required for the construction of a water pipe for use solely for conveying water from one place to another.



The Proposal would not take water beyond Council's existing entitlement. Any water taken above this entitlement would require Council's water access licence to be modified (section 89).

2.2.7 Local Government Act 1993 (NSW)

The *Local Government Act 1993* principally deals with the legal and governance framework of local councils and county councils in New South Wales. Section 60 of this Act states that a Council must not, except in accordance with the approval of the Minister for Water, Property and Housing, construct or extend water treatment works. As the proposed water supply works for Scone do not require construction or extension of water treatment works, approval is not required under the *Local Government Act* 1993.

2.2.8 Pipelines Act 1967 (NSW)

The Pipelines Act 1967 aims to:

- implement a timely and efficient approvals system to facilitate the construction of cross-country transmission pipelines in New South Wales;
- ensure the effect of a pipeline project commenced under the Act on the environment, landowners and native titleholders is properly considered and managed;
- ensure pipeline licensees protect the environment, pipeline employees and the public from dangers arising from both pipeline construction and the transmission of potentially hazardous substances.

Under the *Pipelines Act 1967*, any person who wishes to construct and operate a pipeline for the purposes of any substance, can do so under an authorisation or licence.

However, Section 5 of the *Pipelines Act* 1967 has a number of exemptions to a licence under that Act, including a pipeline constructed by a public authority, or a pipeline for the purpose of water supply. Therefore, this Act does not apply to the Proposal.

2.2.9 Protection of the Environment Operations Act 1997 (NSW)

The NSW Environment Protection Authority (EPA) is responsible for the administration of the *Protection of the Environment Operations Act 1997* (POEO Act). The POEO Act regulates air, noise, land and water pollution. Activities listed under Schedule 1 of the POEO Act are scheduled activities which require an environmental protection licence (EPL). The proposed activity is not a scheduled activity under Schedule 1 and as such would not require an EPL.

Section 120 of the POEO Act makes it an offence to pollute waters. It is considered that the Proposal can be carried out without causing water pollution, with the implementation of appropriate mitigation measures during the works. Therefore, it is considered unlikely that a licence would be required under Section 120 of the POEO Act for the pollution of waters.

Other relevant provisions of the POEO Act that the Proposal would need to comply with include:

• Section 115 – It is an offence to dispose of waste in a manner that harms or is likely to harm the environment.



 Section 116 – It is an offence to cause any substance to leak, spill or otherwise escape (whether or not from a container) in a manner that harms or is likely to harm the environment.

The Proposal would be undertaken in a manner consistent with the requirements of the POEO Act.

2.2.10 Protection of the Environment Operations (Waste) Regulation 2014 (NSW)

The *Protection of the Environment Operations (Waste) Regulation* 2014 sets out the provisions with regards to non-licensed waste activities and non-licensed waste transporting, in relation to the way in which waste must be stored, transported, and the reporting and record-keeping requirements.

The disposal of waste, including spoil, would be required to comply with the *Protection of the Environment Operations (Waste) Regulation 2014.*

2.2.11 Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides for Commonwealth involvement in development assessment and approval in circumstances where there exist 'matters of national environmental significance'. The Matters of National Environmental Significance that are protected under this Act include:

- World heritage properties
- National heritage places
- Wetlands of international importance
- Nationally threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- The Great Barrier Reef Marine Park
- Nuclear actions (including uranium mining)
- A water resource, in relation to coal seam gas development and large coal mining development
- The environment, where actions proposed are on, or will affect Commonwealth land and the environment
- The environment, where Commonwealth agencies are proposing to take an action.

No matters of national environmental significance or other protected matters as listed under the EPBC Act would be significantly impacted by the Proposal, as the works would be located within a previously disturbed area (see Section 4.4). Therefore, the Proposal would not require referral to the Commonwealth under the EPBC Act.



2.3 Relevant Policies, Standards and Guidelines

The following policies, guidelines and standards may be relevant to the Proposal:

- Interim Construction Noise Guidelines (DECC, 2009);
- *Managing Urban Stormwater: Soils and Construction Volume 1*, 4th Edition (Landcom, 2004);
- Managing Urban Stormwater: Soils and Construction Volume 2D Main Road Construction; Waste Classification Guidelines (EPA, 2014)
- Waste Classification Guidelines (EPA, 2014); and
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW, 2010).

2.4 Summary of Approvals

The approvals required to undertake the Proposal are listed in Table 2-1.

Table 2-1: Approval Requirements

Approval Authority/Entity	Approval/ Licence/ Permit	Reference
Upper Hunter Shire Council	Determination of the activity	Part 5 of the EP&A Act
TfNSW	Concurrence/consent to undertake works within a Classified Road	Section 138 of the Roads Act

2.5 Agency and Community Consultation

2.5.1 Statutory Consultation

Part 2, Division 1 of the SEPP (Infrastructure) specifies consultation requirements for development permitted without consent under the SEPP, including consultation with Council and other public authorities. Clause 17 (c) states that consultation with Council under clause 13-15A does not apply to development that is being carried out by or on behalf of Council.

Consultation with other public authorities is also required for 'specified development' under Clauses 15AA and 16. The Proposal is not specified development for the purposes of these clauses. Therefore, statutory consultation under SEPP (Infrastructure) is not required.

2.5.2 Community Consultation

UHSC has undertaken community consultation with the affected community regarding the Scone CBD Revitalisation Proposal.





3. **Proposal Description**

This section describes the works that would be undertaken as part of the Proposal and the construction activities, including construction equipment, duration and program.

3.1 Need for the Proposal

Kelly Street in Scone, NSW is a key roadway which forms the main shopping and business CBD, for the township. Kelly Street is currently classified as a State road under the care and control of TfNSW.

Due to the recent completion of the New England Highway bypass of Scone, Kelly Street will be reclassified as a local road under the control of UHSC. As part of the road reclassification and transfer, TfNSW have been working with UHSC to redesign the Kelly Street road reserve for local CBD use; which would be suitable for reduced vehicle speeds and increased pedestrian use. UHSC have engaged a landscaping consultancy to redesign and revitalise the Kelly Street pedestrianised footpath area, to create a fit for purpose place and to facilitate and support increased local business, pedestrian and leisure activity utilisation.

The aim of Proposal is to apply State government grant funding to upgrade Kelly Street and the adjacent pedestrian footpath area, to encourage local resident utilisation of the main street and revitalise the CBD area.

3.2 Existing Infrastructure

The 700 m CBD section of Kelly Street where the Proposal works would be undertaken stretches from the intersection of the Kingdon Street at the south extent, to the intersection with Susan Street and also Shaw Street at the northern extent of the proposed works area.

The Kelly Street road reserve comprises a concrete dual carriageway road with four trafficable lanes (two in each direction), including a central raised and landscaped median, formed kerbs and gutters and stormwater drainage. Parallel car parking spaces are present along Kelly Street adjacent to the roadway, with paved pedestrian footpaths fronting on to commercial and retail premises, which are located immediately adjacent to the road reserve. A set of traffic lights is located at the intersection of Kelly and Liverpool Streets and pedestrian refuges are located within the median at several locations along Kelly Street.

Photographic views of the existing condition of Kelly Street are provided in Figure 3-2 to Figure 3-5 below.





Figure 3-1 View of the intersection of Kelly and Kingdon Streets, looking north west Source: PWA, 2020



Figure 3-2: View of the intersection of Kelly and Liverpool Streets, looking north west Source: PWA, 2020





Figure 3-3 View of the intersection of Kelly and St Aubins Streets, looking north west Source: PWA, 2020



Figure 3-4 View of the eastern side St Aubins Street looking east, where St Aubins Park is proposed.

Source: PWA, 2020





Figure 3-5 View towards the intersection of Kelly and Susan Streets, looking north west

Source: PWA, 2020



3.3 **Proposal Description**

As part of the Scone CBD Revitalisation works, it is proposed to reconstruct and upgrade the Kelly Street road reserve including the adjacent pedestrian footpath area, extending from the intersection with Kingdon Street in the south, through to the intersection with Susan Street in the northern end of Kelly Street (approximately 700 m in length). The works would involve road realignment which would reduce Kelly Street from four traffic lanes to two traffic lanes with adjacent angled (45°) and parallel car parking spaces. Road upgrade works would include new road pavement, bitumen sealing, kerbs and gutters, a landscaped median strip. Works to the pedestrianised area of the road reserve would include footpath widening (and raising in some sections), repaving, new street furniture, lighting and footpath landscaping works. In addition, replacement and upgrade of stormwater drainage infrastructure (pipes and drains) within some sections of the road reserve is required to reduce localised flooding along Kelly Street.

The replacement of existing potable water mains with larger capacity pipelines would be undertaken along both sides of Kelly Street, along the same alignment as existing potable water mains, to improve fire-fighting and response capability in the Scone CBD area. The water main works would be carried out as part of the footpath upgrade works.

The general scope of works includes:

- Minor road realignment (vertical and horizontal) including reduction of the Kelly Street roadway from four to two traffic lanes;
- Construction of new road pavement; including sealing; and line marking and road signage;
- Construction of new (replacement) roadway medians with landscaping, irrigation and pedestrian refuges/crossings;
- Repositioning and marking of car parking spaces along the length of the road to be upgraded;
- Stormwater management works within the road reserve and adjacent footpaths (including construction of new drains, pipeline and road kerbs and gutters);
- Construction of replacement footpath pavements (including footpath widening and vertical realignment (raising) at some locations); and
- Construction of new pedestrian facilities (including footpaths, street lighting, kerb adjustments and ramps, pedestrian fences, refuges, holding rails, and bollards), street furniture and footpath landscaping.
- In addition, new water supply infrastructure comprising new (replacement) water mains would be constructed within the pedestrian footpath area along both sides of Kelly Street (between Kingdon Street and Shaw Street) to manage fire-fighting and response capability in the Scone CBD area.

The following description of the works is based on available information available as well as similar road reconstruction projects. Accordingly, certain design and construction methodology information is not available during preparation of this REF. A Project Plan and



Construction Environmental Management Plan (CEMP) would be prepared by the construction contractor for each works component based on the detailed designs.

It is noted that the design process has considered and attempted to minimised impacts on biodiversity, archaeology and heritage where possible.

3.3.1 Early Works

Initial (site preparation) works would consist of the protection of existing trees which do not require removal and surrounding structures/ buildings; installation of temporary fencing along Kelly Street where works are occurring; preparation of an Erosion and Soil Control Plan (ESCP); onsite temporary stormwater runoff detention infrastructure within the road reserve and establishment of site compounds and stockpile facilities within two UHSC controlled sites at Muffett Street (located 500 m north of Kelly Street) and a carpark at the rear of the Campbell's Corner building, which would be accessed via Liverpool Street. In addition, temporary contractor administration facilities may be established within the Campbells Corner building or untenanted retail premises along Kelly Street. This would be followed by identification and survey of existing services and utilities within the works areas. Waste concrete and spoil resulting from the construction works would be taken directly to Aberdeen Waste Management Facility

3.3.2 Road and Stormwater Construction

The design of the Kelly Street roadway reconstruction would be undertaken in accordance with *Austroads - Guide to Road Design 2022.*

The proposed roadway reconstruction works would include the realignment of the roadway from four to two lanes with a raised central median; raising of the road and kerb levels where required to manage localised flooding; replacement of road subsurface and pavement layers and compaction; construction of formed concrete kerbs and gutters, including pedestrian ramps at pedestrian crossings, bus bays and driveways where required. New line markings, street signage and road safety signage would be installed in each section of the roadworks as they are completed. The installation of connections to services such as electricity, telecommunications and irrigation would also be carried out as part of the works.

The new roadway would comprise a 3 m wide single lane, with a central reinforced concrete median strip (varying between 3 m to 1.5 m wide) and either angled (45 °) or parallel car parking adjacent to the kerb, including the below structural layers:

- 65 mm thick topping (bitumen and asphalt) pavement layer.
- Approx. 200mm (approx.) thick Concrete Base.
- 100 mm to150 mm thick Mass Concrete Sub-Base.

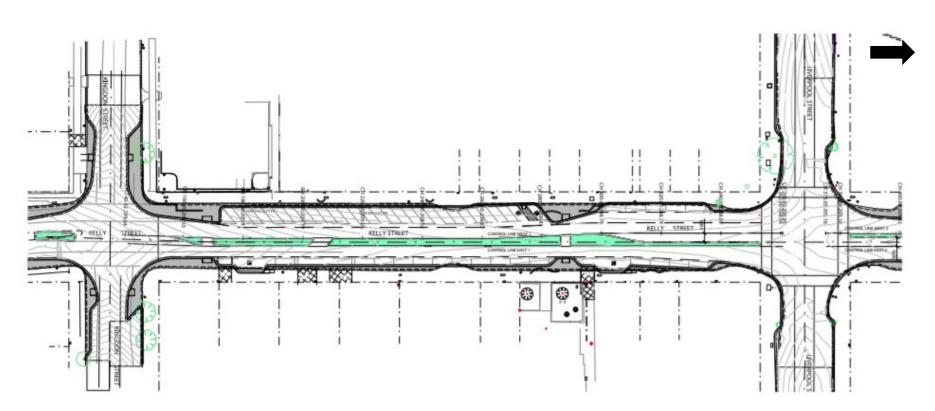
New stormwater management infrastructure would be constructed including new and upgraded (larger capacity) concrete stormwater pipework (225 mm, 375 mm, 450 mm, 750 mm and 1200 mm diameter pipes, as required) and new kerb and median stormwater inlet drainage pits with grates (either 900 x 900mm, 1200 x 1200mm or 2000 x 2000mm) at various locations along Kelly Street and extending into adjacent Streets including Kingdon and Liverpool Streets and new downpipes from buildings to kerbs.

Layout plans of the proposed roadworks along Kelly Street are provided in Figure 3-6 to Figure 3-8. The complete set of civil works designs is provided in Appendix B.



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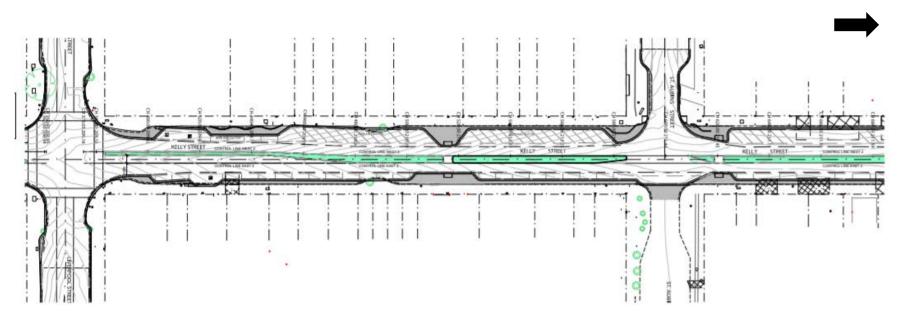




Scone CBD Revitalisation



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Source: RHM Consulting Engineers, 2021



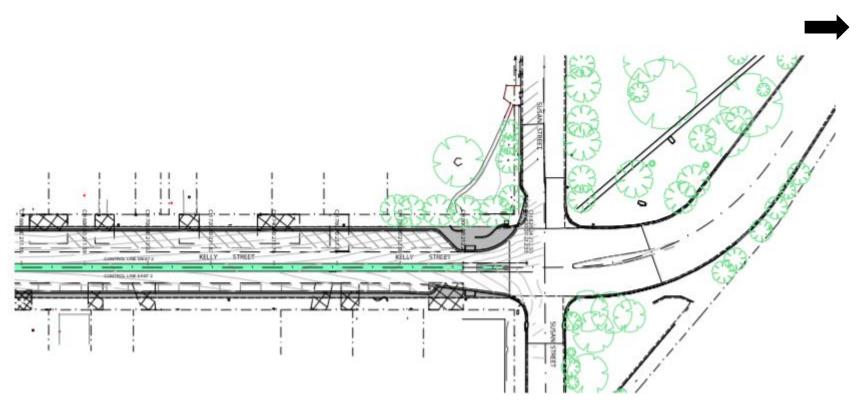


Figure 3-8 Proposed Kelly Street road realignment, median and car parking layout between St Aubins Street and Susan Street. Source: RHM Consulting Engineers, 2021



3.3.3 Pedestrian Footpath Realignment and Landscaping Construction

The landscaping works, to be undertaken in the pedestrianised footpath zone of the Kelly Street road reserve, would including widening and repaving of pedestrian footpaths along the length of Kelly Street between Kingdon and Susan Streets, to facilitate increased utilisation of the footpath space as a recreational and dining space for the community. The works would also include raising of the footpath surface level in some areas to manage localised flooding and a new inlaid "Horse Walk of Fame' along the footpath.

In addition, the eastern side of St Aubins Street would be closed to vehicular traffic and become a pedestrianised zone including a paved central plaza, with surrounding grassed park space, footpath, seating, sandstone blocks and plantings along the perimeter (to be known as St Aubins Park).

In general, the landscaping works along Kelly Street would comprise:

- Footpath realignment (horizontal and vertical) and repaving comprising honed integral colour concrete with concrete paver banding (Canvas and Golden Gunmetal colour scheme), formed kerbs and gutters and pedestrian ramps at crossings.
- Inlaid "Horse Walk of Fame' plaques within the footpath
- Planting areas on street corners and sections of the footpath adjacent to the kerb.
- Tree and shrub plantings with guards along the pavement adjacent to kerb.
- Formed central median with tree and shrub planter boxes (Concrete Grey colour) including irrigation system, pedestrian crossings and fencing at intervals along the median.
- New paved plaza, lawn, shaded (trellis structure) footpath and perimeter plantings in St Aubins Park.
- New pedestrian street lighting (lamp posts) at intervals along the footpath adjacent to kerb, along the central median and within St Aubins Park.
- Street furniture including bench seats, concrete seat walls, bin enclosures, bike parking, bubblers, pedestrian fencing and tactile strips.

A general cross section of the proposed footpath and landscaping along Kelly Street and St Aubins Park layout is provided in Figure 3-9. A copy of the landscape designs prepared by Mara Consulting is provided in Appendix B.



Scone CBD Revitalisation

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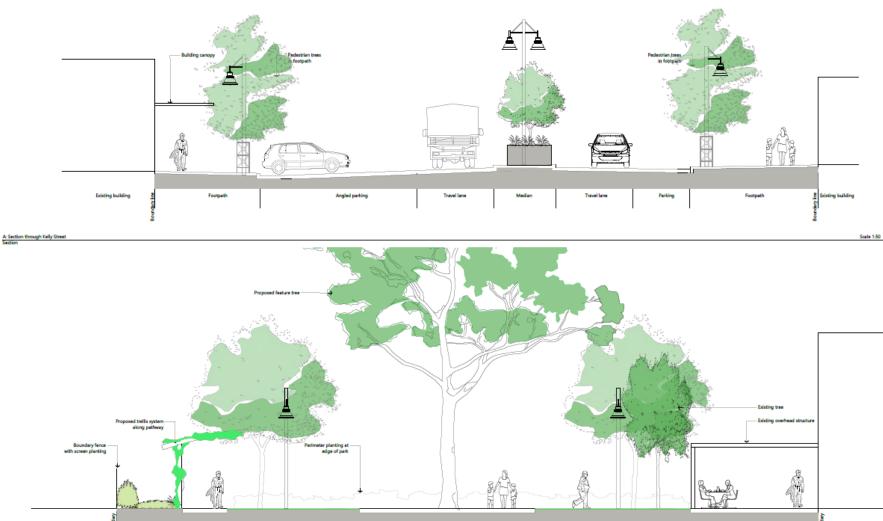


Figure 3-9 General cross section of the proposed Kelly Street footpath and roadway layout (upper cross section) and the new St Aubins Park design (lower cross section).

Central paved plaza area with lawn beyond

Source: Mara Consulting, 2022

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Footpath

Lawn are

Perimeter planting

Paved outdoor dining area (existing)



3.3.4 Water Main Works

The water main works would comprise the installation of six (6) new sections of water main along both sides Kelly Street within the pedestrian footpath/ road reserve, and a small section within Shaw Street to replace existing water mains. The works would be carried out in sections on one side of the street at a time to maintain fire services capability to the area. Temporary restoration of roadway, kerb and gutter or footpath would be undertaken prior to opening the areas to the public.

Water main works would include the below activities:

- Installation of temporary water mains along the rear of properties fronting onto Kelly Street.
- Excavation and removal of existing water mains from the water main trenches.
- Installation of six sections of new 150mm PVC-M water mains, including hydrants (24 new or replacement hydrants at 60 m spacing), valves, tees, bends and gibaults. Total water main length would be 1370 m.
- Construction of a new section of DN150 PVC-M water main from the corner of Kelly Street and Susan Street along the road reserve then crossing Susan Street and reconnect to existing main on the northern side of Shaw Street (new water main crossing Susan Street and Shaw Street would comprise a DICL pipe class PN35).
- Decommission of existing DN100 Water main on the eastern side of Kelly Street from Susan to Shaw Streets.
- Installation of new tapping bands and main taps, water meters (63) and connection to existing customer water service pipework.
- Installation of a fire services connection at the Civic Theatre.
- Installation of six connections and backflow devices, 20 mm to service the street irrigation system, nominally one per section of main.
- Installation of access pits for all domestic and commercial supplies at the valves and water meters in the footway.
- Installation of shroud pipes and cover plates for all hydrants and valves.
- Conduct pressure testing and flushing of water mains and commission new water mains.
- Removal of temporary water mains along the back of properties fronting onto Kelly Street.

The alignment of the new water mains is provided in Appendix B.

3.4 Construction Considerations

3.4.1 Construction Methodology

The proposed construction methodology would be dependent on a number of factors including the contractor's method, equipment and program. A construction methodology has been predicted based on past experience with construction of similar road reconstruction projects.



The roadway and pedestrian footpath widening works would be constructed and completed in sections progressing along Kelly Street.

The construction sequence for each (roadway or footpath) section would generally be as follows:

- Prepare preliminary documents including Project Plan, Traffic Management Plan, Construction Environmental Management Plan and sub-plans and Safety Management plan;
- Provide all necessary provisions for site signage, safe access, security, safe storage of hazardous materials, amenities, etc. to meet SafeWork NSW and WHS requirements and current Australian Standards;
- Develop and implement project induction for all personnel;
- Establish site preliminaries such as temporary protection fencing, entry/exit points, toilet facilities, site compounds, storage and set down areas;
- Implement appropriate temporary drainage, site run-off and other construction environmental control measures at each of the construction sites (sections) that are necessary for construction works;

Roadworks

- Establish traffic management controls and traffic control devices;
- Identification and installation of protective measures to surrounding trees, structures and areas, as required;
- Removal of planted trees, as required;
- o The establishment of the earthworks for road pavement removal;
- Construction of road pavement (this would include demolition of existing road pavement) and replacement within the sealed section of the road, including:
 - Installation of stormwater infrastructure, including pipes, pavement drainage and stormwater devices and other services such as electrical supply and telecommunications connections, as required;
 - Compaction by rollers and vibrating compactors
 - Paving new surface using paver and vibratory roller;
 - Construction of new road medians including irrigation system and landscaping, concrete barriers and pedestrian refuges;
- Carry out other associated works (i.e. lighting, new line marking (road and car parking), road signage structures, delimitation and guard rail installation (if required));
- Decommission site compounds and restore and stabilise disturbed areas, including removal of temporary infrastructure (e.g. fencing and barriers), all waste materials and equipment;
- Removal of roadway traffic and erosion and sediment controls and stabilisation of disturbed areas; and



- **Review of Environmental Factors**
- Opening of roadway to road traffic.

Pedestrian footpath and water main works

- Identification and installation of protective measures to surrounding trees, prominent structures (e.g. streetscape landmarks) and buildings, installation of temporary building access, as required;
- o Installation of temporary water mains;
- Removal of planted landscaping, street furniture, fencing, pedestrian facilities, as required;
- The establishment of the earthworks for footpath removal;
- Trench excavation for removal existing water mains and construction of replacement water mains (trenches to be backfilled and stabilised on completion of water main installation);
- Widening, raising and construction of pedestrian footpath and paving (this would include demolition of existing pavement/paving) and replacement within the extended pedestrian footpath area;
- Installation of stormwater infrastructure, footpath drainage, new building access and stormwater devices, electrical supply and telecommunications connections (as required), kerbs and gutters as required;
- Installation of new planted landscaping, street furniture (including street lighting), fencing, pedestrian facilities, as required;
- Decommission site compounds and restore and stabilise disturbed areas, including removal of temporary infrastructure (e.g. fencing and temporary water main), all waste materials and equipment;
- Removal of pedestrian traffic and erosion and sediment controls and stabilisation of disturbed areas; and
- Opening of pedestrian footpath to foot traffic.

3.4.2 Construction Works Staging

Traffic Management including partial road closures and traffic diversions would be required during the construction works. The Proposal roadway upgrade and subsequent adjacent pedestrian footpath upgrade works would be staged and carried out sequentially in Sections, progressing in a northerly direction along Kelly Street.

The works would be divided into three sections along Kelly Street and undertaken in seven Stages. Construction works in each section would commence with construction contractors overseen by TfNSW undertaking the roadway upgrade works, followed by construction contractors overseen by UHSC undertaking the pedestrian footpath and water main upgrade works on each side of the road (western side followed by eastern side). Once the roadway upgrade construction works are completed in one section, roadway upgrade works would then progress to the next Section, while the pedestrian footpath and water main works are being completed in the previous Section.

The three sections (identified as Blocks where streets intersect with Kelly Street) would comprise:



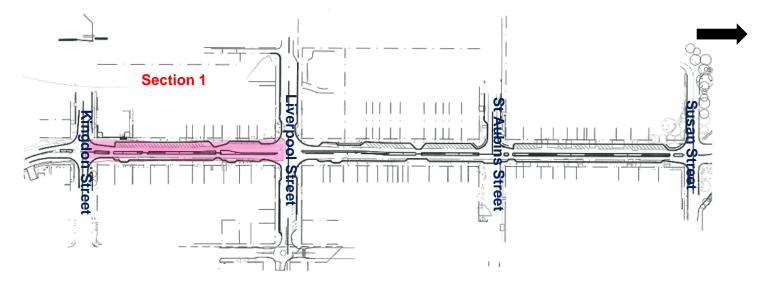
- Section 1 Kingdon Street to Liverpool Street
- Section 2 Liverpool Street to St Aubins Street
- Section 3 St Aubins Street to Susan Street

The three construction works Sections and associated roadways and the pedestrian footpath and water main works Stages are shown below in Figure 3-10.

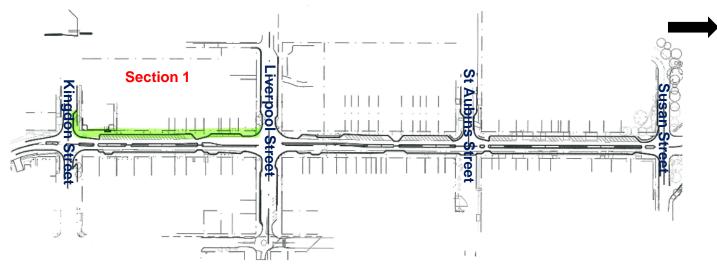
The number of construction workers that would typically be required per day during each of the construction stages would vary subject to the works being undertaken.



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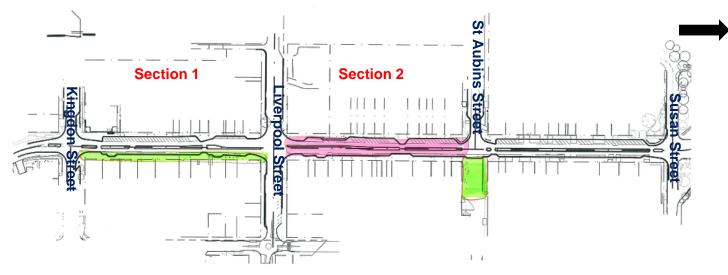
Stage 1 – TfNSW roadway works on Kelly Street (pink).



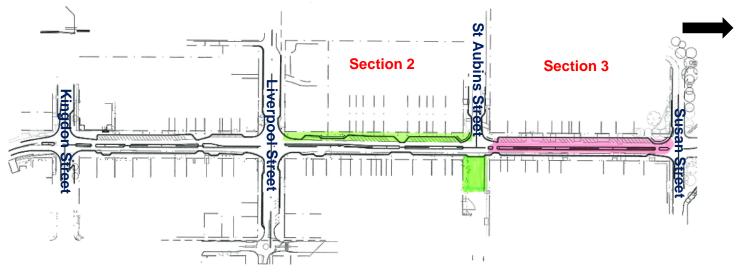




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Stage 3 – TfNSW roadway works along Kelly Street (pink) USC footpath/water main works (green).



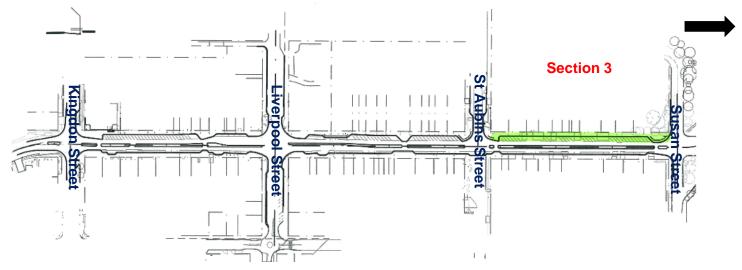
Stage 4 – TfNSW roadway works along Kelly Street (pink) USC footpath/water main works (green).



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Stage 5 – UHSC footpath/water main works (green).



Stage 6 – UHSC footpath/water main works (green).



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Stage 7 – UHSC footpath/water main works (green).

Figure 3-10 Identification of the three Sections and seven Stages of the Proposal construction works along Kelly Street. Source: UHSC, 2021

Hunter New England | South Coast | Riverina Western | North Coast | Sydney Asset Advisory | Heritage | Project + Program Management | Assurance | Procurement | Engineering | Planning | Sustainability Developments | Buildings | Water Infrastructure | Roads + Bridges | Coastal | Waste | Emergency Management | Surveying



3.4.3 Timeframe and Working Hours

The construction works are anticipated to commence in June 2022, with completion expected in July/August 2023. Construction works would be continuous over this period, although works would move along Kelly Street as each separable section is constructed.

The Interim Construction Noise Guidelines (DECC 2009) outlines recommended standard construction working hours, being:

- Monday to Friday 7 am to 6 pm.
- Saturdays 8 am to 1 pm.
- No work on Sundays or public holidays.

The construction works would generally comply with these recommended hours. However, where traffic and pedestrian impacts may occur, some works may be required outside of standard construction hours to minimise the disruption to traffic, the community and businesses along Kelly Street during peak traffic and trading hours. TfNSW roadworks would take place overnight during off peak traffic flow hours from 5.30 pm to 6 am. All construction works undertaken outside of standard construction works hours would require prior notification to Council, the EPA and all surrounding sensitive receivers.

It is proposed to halt construction works for the Proposal for the duration of the Scone Horse Festival (scheduled in May 2023), in order to avoid restricting traffic flow during this peak traffic period.

3.4.4 Construction Equipment and Compounds

The excavations required to undertake the Proposal works would be wholly within the road or footpath pavement and the previously disturbed sub surface and soil mantle, and should be readily achievable using conventional earth moving equipment such as excavators.

Construction works are likely to require the following equipment:

Roadworks

- Excavator or similar earthmoving equipment (e.g. small dozers and hydraulic excavators (5 tonne).
- Backhoe/ bobcat
- Small trucks carrying construction materials, and large trucks to transport excavated material from the site.
- Concrete truck with mixer.
- Passenger vehicles/ light vehicles to transport construction workers
- Watercart.
- Concrete saw.
- Bitumen sprayer truck.
- Wacker plate compactor.



- Road vibratory roller (2 tonne)(or preferentially a static (oscillating) roller if a suitable compaction level can be achieved)
- Smooth drum.

Pedestrian footpath and water mains works

General

- Small trucks carrying construction materials, and large trucks to transport excavated material from the site.
- Passenger vehicles to transport construction workers.
- Electric and manual hand tools.

Footpath area

- Excavators (3.5 tonne to 1.7 tonne) including bucket, auger, hammer for small concrete elements and trenching.
- Compaction rammer diesel compactor for trenches.
- Compaction plate compactor (up to 300 kg).
- Hand held jack hammer.

Parking bays/kerbs area

- Excavator (8 to 12 tonne) spur, bucket (for kerb/ drainage pits removal, hammer for pits.
- Concrete saw (500 kg, diesel).

Site Compounds

The construction contractors would establish site compound areas to accommodate construction operational facilities, equipment and construction material stockpiles during the works. Two temporary compounds and material storage sites have been identified which are located within UHSC land. One of the site compounds is located at Muffett Street across the road from an industrial precinct and adjacent to a railway line (located approximately 500 m north of Kelly Street within Lot 37 DP 249450, accessed directly off Muffett Street) and the second site compound is accessed off Liverpool Street (western side of Kelly Street), located within a section of the car park behind the Campbells Corner building adjacent to a railway line. The location of the two compound sites is shown in Figure 3-12.No lease arrangement would be required for the compounds, as the sites are located within Council-controlled land.

Both compounds would be fenced off to prevent unauthorised access with appropriate construction fencing and management of construction vehicle movements to and from the compounds to works sites would be included in the construction works plan and CEMP to be prepared for each stage of the works.

The two site compounds would accommodate the following facilities:

• Vehicle parking;



- **Review of Environmental Factors**
- Equipment/ Plant parking and storage;
- Site office;
- Amenities;
- Stockpiles and laydown areas; and
- Fuel storage.

TfNSW are currently in the process of identify options for an additional stockpile and laydown site to be utilised by TfNSW in addition to the Muffett Street site. A tentative additional stockpile site has been identified, which is located approximately 4 km south of the Scone CBD adjacent to the New England Highway within the road reserve (controlled by TfNSW). The location of the stockpile site is shown below in Figure 3-11. If this location is utilised, construction vehicles would access the Proposal works areas via the New England Highway and the southern end of Kelly Street.



Figure 3-11 Tentative Location of additional TfNSW stockpile site located approximately 4 km south of the Scone CBD.

Source: Google Maps, 2022



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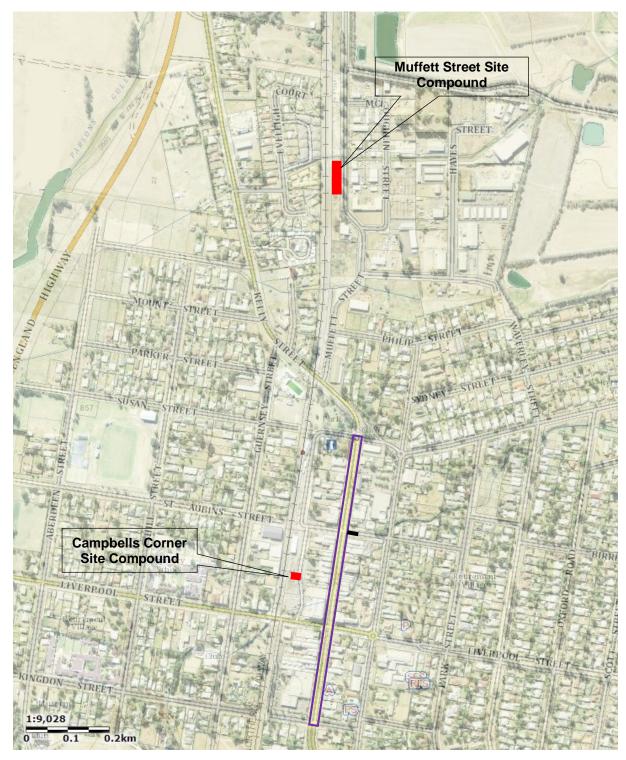


Figure 3-12 Proposed location of the Muffett Street and Campbells Corner site compounds (shown in red). The Proposal works area along Kelly street is shown in purple.

Source: SIX Maps, 2022



3.4.5 Construction Environmental Management Plan

Construction of the Proposal would be undertaken in accordance with a Construction Environmental Management Plan (CEMP) that would be prepared by the construction contractor/s and approved by UHSC and TfNSW prior to commencement. The CEMP would incorporate all mitigation measures identified in this REF, including sub-plans such as Traffic Management Plan and Erosion and Sediment Control Plan, as well as any conditions of approval and any other licence/approval conditions. The CEMP would also incorporate an emergency response plan in case of a pollution incident, a complaints handling procedure and a 24 hour telephone contact number. The complete list of the mitigation measures recommended in this REF is provided in Section 5.



4. Environmental Assessment

This section identifies and characterises the likely potential impacts associated with the construction and operational phases of the Proposal.

4.1 Assessment Methodology

The key objectives of this assessment are to:

- Identify those facets of the environment likely to be affected by the Proposal during construction and operation;
- Identify the sensitivity of the site;
- Identify and characterise the associated impacts; and
- Identify and evaluate feasible mitigation measures for the identified impacts.

Environmental issues of potential relevance to the Proposal include:

- Land use;
- Water, geology and soils;
- Biodiversity;
- Heritage (Aboriginal and historic);
- Noise and vibration;
- Air quality;
- Traffic and access;
- Waste management;
- Visual amenity; and
- Utilities and infrastructure;

4.2 Land Use

The Proposal site comprises the road reserve of Kelly Street in Scone. Kelly Street is currently a classified road under the control of TfNSW. However, due to the completion of the New England Highway Bypass of Scone, the road reserve is pending reclassification as a local road and transfer of control to UHSC.

The land surrounding either side of Kelly Street generally comprises an urbanised area of the Scone CBD. A range of commercial business premises, an entertainment venue (Scone Civic Theatre) and public services properties (e.g. Ambulance Station, Post Office, Banks) are located along both sides of Kelly Street.

The Proposal site is highly disturbed and modified and cleared of vegetation due to previous commercial roadway and services infrastructure development. Scattered trees and plantings are present along the footpath and median.

4.2.1 Impact Assessment

The Kelly Street upgrade works to be undertaken as part of for the Scone CBD revitalisation would be undertaken within existing road reserve areas (within previously cleared and



disturbed areas) under the control of either TfNSW or UHSC. As the Proposal works are being carried as a joint project between TfNSW and UHSC within public land, other than concurrence from TfNSW for UHSC works within a classified road, no other approvals would be required for the Proposal. The two proposed construction works site compounds located at Muffett Street and the Campbells Corner building car park located off Liverpool Street are also would also be situated within land under the control of UHSC, accordingly no temporary leasing arrangement would be required for use of the sites and the potential TfNSW stockpile site would be located within a classified road reserve under the control of TfNSW. Therefore, no significant land use/ownership conflicts are anticipated as a result of the Proposal.

There would be some inconvenience to the local community and businesses located along Kelly Street during the construction period, as the works would be undertaken in the roadway and pedestrian footpath areas immediately adjacent to the premises fronting Kelly Street. Short to moderate term noise, dust, access and traffic impacts are anticipated and are discussed further in Sections 4.6, 4.7 and 4.8 below. Works within Kelly Street road reserve area and nearby high public use areas would need to be managed in consultation with the community and the proprietors of the businesses, in order to limit impact on their operational activities. The construction works sites would be fenced appropriately during works to ensure public safety.

All construction activities would be carried out with due diligence, duty of care and best management practices. This would be documented in the project specific CEMP. Due to the temporary nature of the works in each section of Kelly Street, these impacts are not anticipated to be significant, assuming the implementation of the management measures listed below.

Post-construction, a positive impact is anticipated to the Scone community and local business along Kelly Street due to a revitalised, fit for purpose CBD area in Scone with improved amenity.

4.2.2 Mitigation Measures

- Obtain all necessary concurrence from TfNSW for UHSC works proposed in classified TfNSW road reserve area (as necessary).
- Where works may impact on surrounding residents, schools, community centres and businesses, they would be consulted with regards to the construction works, predicted program and any access requirements.
- Temporary fencing would be installed where necessary to exclude the general public from the work sites. Any temporary fencing no longer required would be removed at the completion of the construction works.
- Best management construction safeguards and management measures are to be documented in a project specific CEMP.
- No materials are permitted to be dumped or stored on surrounding local roads or waterways, or on private land, unless under prior assessment and expressed consent of the relevant landowner.



- The construction contractor should provide a 24-hour telephone number so that any issues relating to the construction of the new infrastructure can be clarified and complaints dealt with by those able to respond. This should be included in all written correspondence and on signage at the work site/s and construction compounds.
- Restoration of the areas disturbed during construction would be undertaken so that these areas are returned to their pre-construction (or improved) condition.

4.3 Geology, Soils and Water

Geology and Soils

The Proposal site is situated on generally flat terrain which grades slightly in a westerly direction, with an elevation of approximately 200 m. The site is level, comprising a developed and concreted road reserve including formed gutters with a surrounding pedestrian footpath and scattered planted trees.

The Singleton 1:250,000 Geological Map (Map Sheet SI/56-01, First Edition, 1969) indicates the southern section of the Proposal site is located within the Permian Maitland Group comprising undifferentiated sandstone, siltstone and conglomerate and the northern section from St Aubins Street is located within Permian Newcastle Coal Measures comprising conglomerate, sandstone, tuff, shale and coal seams.

Soil Landscapes of Central and Eastern NSW mapping indicates that the Proposal site is located within the Hunter Soil Landscape (SI5601hu). The general Description of this Soil Landscape" from the eSpade Spatial Viewer (DPIE, 2020) describes the Hunter Soil Landscape as follows:

This soil landscape covers the floodplains of the Hunter River and its tributaries. The main soils are all formed in alluvium. They include Brown Clays and Black Earths (Ug5.34, Ug5.17) on prior stream channels and on tributary flats, with Chernozems (Uf5.1) on prior stream channels adjacent to Dartbrook and Brays Hill soil landscapes and in many of the valleys such as Martindale and Widden. Alluvial Soils (loams – Um5 and sands – Um5.52, Um6.1, Uc) occur on levees and flats adjacent to the present river channel. Red Podzolic Soils and Lateritic Podzolic Soils (Dr2.11, Db2.41) are located on old terraces, with Non-calcic Brown Soils (Db1.13) and Yellow Solodic Soils in some drainage lines.

The soil profile at the Proposal site has been disturbed due to a range of previous excavation including existing road construction, building construction works and installation of subsurface services. As a result, the soils present at the Proposal site are anticipated contain disturbed natural or imported fill material.

Acid Sulfate Soils

Based on Sharing and Enabling Environmental Data in NSW (SEED) Acid Sulfate Soils (ASS) mapping (accessed December 2021), the Kelly Street road reserve lies within an area mapped as being of "No Known Occurrence" of ASS sediments and ASS are not known or expected to occur in this environment.

Surface Water and Flooding

The nearest watercourse is Figtree Creek which crosses under Kelly Street near St Aubins Street and under Liverpool Street on the western side of Kelly Street. At this location, Figtree Creek comprises an open concrete stormwater channel. Stormwater drainage infrastructure





along Kelly Street connects to this open stormwater drainage channel. At present, during high volume rainfall events, the existing stormwater drainage infrastructure for Kelly Street has insufficient capacity to manage stormwater flows which results in localised flooding, particularly in the area of the intersection of Kelly and Liverpool Streets.

Groundwater

The Proposal site is situated on generally level ground and not located in close proximity to a permanent, natural waterway. Groundwater is not anticipated to be close to the ground surface and therefore would not be encountered during the construction works. As such it is considered that significant dewatering during excavation works would not be required. It is however noted that fluctuations in groundwater levels may occur as a result of seasonal variations, temperature, rainfall, tidal influences, and other similar factors.

4.3.1 Impact Assessment

The construction of the Proposal would result in ground disturbance due to the excavations required for the reconstruction of the road and footpath, and for excavation/ trenching works associated with the installation of new sub surface utilities, including the new water main, stormwater infrastructure, electricity telecommunications within the both the roadway and pedestrian footpath areas of Kelly Street and some sections of surround local road reserves (including Kingdon Street, Liverpool Street, St Aubins Street and Shaw Street).

Accordingly, there is a potential for erosion and movement of excavated materials off-site. Erosion and sediment controls would be required during construction works in the Proposal works area and site compounds, with these controls to be documented in the site-specific Erosion and Sediment Control Plan (ESCP) to be prepared as part of the CEMP. Road and pathway levels and trenches would be filled in using onsite excavated material or imported clean, select and compacted clayey sandstone or loose granular fill material, as appropriate. Stabilisation would be required following the works to prevent any adverse impacts, such as sedimentation of surrounding waterways and stormwater drainage, following completion of construction works. A number of mitigation measures to protect water quality have been listed in this REF, however further site- specific plans and construction details would be included in the CEMP for the works when further detail regarding the construction methodology is known.

Overall, it is assessed that the impacts on soil and water quality during construction works can be adequately managed through the proper implementation of mitigation measures and therefore the overall impact is assessed to be low.

The Proposal would provide longer term surface water quality improvements within the Proposal area by directing stormwater surface flows to improved stormwater drainage infrastructure with increased capacity to adequately manage localised surface flows and manage flooding along Kelly Street.

4.3.2 Mitigation Measures

• Appropriate stormwater management infrastructure shall be incorporated into the design of the Proposal to manage localised flooding in Kelly Street.

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- A detailed Erosion and Sediment Control Plan (ESCP) shall be prepared as part of the CEMP. The ESCP would describe the site specific measures to be implemented for all works areas, in accordance with the guidelines outlined in the 2004 Landcom publication *Managing Urban Stormwater: Soils and Construction*, 4th edition ("The Blue Book"). The ESCP would need to be site specific and would need to address the following issues to prevent erosion, sediment loss and water quality impacts:
 - Identification of site specific sediment and erosion control measures wherever erosion is likely to occur.
 - Identification of any environmentally sensitive areas on or near the construction site to ensure runoff is diverted away from sensitive areas.
 - Requirements for clearing of groundcover to be kept to a minimum.
 - Retention of all surface runoff on-site and where possible stormwater from off site would be diverted around the construction site.
 - Location of construction compounds (at least 50 m from any drainage lines).
 - Location and management of stockpiles, such as locating stockpiles away from any drainage lines near the works areas.
 - All erosion and sediment controls would be regularly inspected, especially when rain is expected and directly after any rain events.
- Maintain and inspect erosion and sedimentation control measures regularly and after rainfall events in accordance with the Blue Book.
- Erosion and sedimentation control devices should not be removed until the works sites and site compounds are levelled and stabilised and there is no potential for sediment to enter nearby waterways, and until all disturbed areas have stabilised.
- Stabilise disturbed areas during the construction works where necessary in line with the Blue Book.
- Take all care and due diligence to minimise or prevent pollutant material entering stormwater drain inlets or waterways.
- The contractor would develop a monitoring and flood response plan to detail procedures for monitoring rainfall and surface water flows and to identify subsequent response actions that would be taken to ensure the protection of personnel, equipment and water quality during the construction works.
- In the event of flooding, construction works in affected areas would cease and would not commence until floodwaters have receded. Weather forecasts would be checked regularly so that equipment and materials in flood areas can be secured prior to heavy rainfall events.
- Workers are to be made aware of the provisions of Section 120 of the POEO Act with regards to water pollution and the requirements of the ESCP.
- Notification to the EPA in accordance with Part 5.7 of the POEO Act is to be undertaken where a pollution incident occurs in the course of an activity such that material harm to the environment is caused or threatened.

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- All fuels and other hazardous liquids shall be stored at designated construction compounds within containers in a bunded enclosure with sufficient capacity to hold 120% of the stored liquids.
- All non-essential plant and vehicles (light vehicles, trucks, etc) must be refuelled offsite at a service station or depot.
- All chemicals used for construction shall be stored and used in accordance with the relevant Safety Data Sheets.
- A site-specific emergency spill plan will be developed and include spill management measures in accordance with the TfNSW Code of Practice for Water Management (RTA, 1999) and relevant EPA guidelines. The plan will address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including TfNSW, UHSC and EPA officers).
- An emergency spill kit shall be kept at the construction compound. The CEMP shall include a procedure for using the spill kit in the event of a spill and all construction personnel shall be informed of the procedure, their roles and responsibilities in that procedure and trained in the use of spill kids.
- All areas where ground disturbance has occurred would be stabilised and restored following completion of works to ensure there is no erosion hazard and restored to their pre-construction condition.
- Mitigation measures to manage groundwater (should it be encountered during construction) would be incorporated into the CEMP, including:
 - Dewatering techniques during excavation;
 - Measures to ensure groundwater quality is not impacted during construction;
 - Techniques to settle, treat or filter groundwater encountered during excavation works i.e. diverting groundwater through baffle tanks or filter membranes; and
 - Appropriate treatment and monitoring regimes in the event that groundwater flows come to the surface, including disposal of groundwater in such a way as to prevent adverse impacts (such as erosion and water pollution). Groundwater should not be discharged to a waterway during construction.
 - Seepage collected, water pumped from excavations, groundwater entering the works area would be pumped to temporary & permanent drainage works and directed to the relevant temporary sedimentation basin supporting each construction stage. All such collected construction site water would similarly be treated as onsite stormwater runoff.

4.4 Biodiversity

Vegetation within the Proposal site comprises scattered native and introduced species of planted, ornamental trees and shrubs and some areas of mown grass adjacent to the footpath. No remnant native vegetation occurs at the Proposal site. A large mature trees are present in the footpath area adjacent to the Post Office near Liverpool Street and large trees are also located adjacent to the footpath in the northern end of Kelly Street near Susan



Street. The two confirmed site compounds and tentative stockpile site are also disturbed sites cleared of vegetation. The Muffett Street compound site is cleared of vegetation and comprises several scattered trees along the roadway, sparse patches of grass cover and loose gravel, the Campbells Corner compound site comprises an asphalted car park area and the potential New England Highway stockpile site comprises a previously cleared roadside area with grass covers and bare ground.

The Proposal site is not considered to support high quality habitat resources for any threatened species as the SEED Upper Hunter State Vegetation Type Map layer lists the vegetation Plant Community Type within the Proposal site as non-native (accessed January 2022). A search of the Bionet Atlas of NSW Wildlife database indicates 9 threatened species protected under the *Biodiversity Conservation Act 2016* have previously been recorded within a 10 km x 10 km radius of the site, including 2 threatened flora populations, 4 threatened bird species and 3 mammal species. An EPBC Act Protected Matters Report with a 1 km buffer surrounding the Proposal site identified one wetland of international importance, 7 listed threatened ecological communities, 26 listed threatened species and 12 listed migratory species that may or are likely to occur, or have habitat, in the area. No threated flora or fauna species have been recorded within the Proposal works area. The database search results are provided in Appendix D.

4.4.1 Impact Assessment

Much of the environment impacted by the Proposal is highly altered, comprising of introduced tree and shrubs species. Overall, the proposed works would require vegetation removal comprising planted ornamental shrubs and trees in the median and footpath areas of Kelly Street. Some larger mature trees are present in the area which would be retained including one large tree adjacent to the Scone Post Office and three trees present on the southern side of the proposed St Aubins Park site. Several trees are also located at the Muffett Street site compound adjacent to the roadway. These trees would be retained and protected during the works.

Overall, the site to be affected by the Proposal works has very limited habitat potential due to its highly disturbed nature, and none of the threatened flora species or communities listed as occurring within a 10 km radius of the Proposal site are anticipated to be utilising the site for primary habitat. The Proposal site provides only limited fauna habitat mainly for invertebrates (i.e. insects, spiders, millipedes, snails, etc.) and the small lizards, birds and microbats typical of the surrounding area.

No areas of high biodiversity value habitat occur at the Proposal site. As such, The Proposal is not likely to significantly impact threatened species or ecological communities or their habitats, within the meaning of the *Biodiversity Conservation Act 2016* and therefore a Species Impact Statement is not required.

The Proposal is not likely to significantly impact threatened species, ecological communities or migratory species, within the meaning of the *Environment Protection and Biodiversity Conservation Act 1999*.

The operation of the Proposal is not expected to result in any impact to biodiversity values. During operation of the upgraded Kelly Street road and footpaths, the landscaped areas along Kelly Street would be maintained by UHSC staff and new landscaping tree and shrub



plantings in St Aubins Park and within the median and footpath areas would be regularly irrigated or watered.

4.4.2 Mitigation Measures

- Do not place vehicles, machinery or stockpiles beneath canopies of trees.
- Vegetation removal and trimming of trees branches and any tree removal should be limited to the minimum necessary to complete the works.
- Trees to be retained which are located in proximity to the works or at site compounds are to be protected for the duration of works in accordance with AS 4970-2009 *Protection of trees on development sites* (Australian Standards 2009).
- Post works, the Proposal site should be monitored for the spread of weeds and appropriate control measures implemented.

4.5 Heritage

Aboriginal Heritage

A desktop search was conducted on the following databases targeting the Proposal site to identify any potential previously recorded aboriginal heritage sites or objects within the area. The results of this search are summarised in Table 4-1 below and provided in Appendix D.

Name of Database Searched	Date of Search	Type of Search	Comment
Heritage NSW Aboriginal Heritage Information Management System (AHIMS);	01.02.22	Area search - Lat, Long From : -32.05, 150.86 - Lat, Long To : -32.05, 150.87	No registered AHIMS sites within the proposal study areas (or within 200 metres of the Proposal site).
National Native Title Claims /Determinations Search	01.02.22	NSW	One Native Title Claim (NC2011/006 Gomeroi People, registered 20 Jan 2012). No Determinations cover the Proposal site.
National Heritage Register	01.02.22	NSW	No Aboriginal places listed on either the National or Commonwealth heritage lists are located within or near the Proposal site
Local Environment Plan	01.02.22	Upper Hunter LEP 2013, Schedule 5.	No Aboriginal places noted occur within or near the Proposal works site.

Table 4-1 Aboriginal Heritage Desktop - Database Search Results

Historic Heritage

 Hunter New England | South Coast | Riverina Western | North Coast | Sydney

 Asset Advisory | Heritage | Project + Program Management | Assurance | Procurement | Engineering | Planning | Sustainability

 Developments | Buildings | Water Infrastructure | Roads + Bridges | Coastal | Waste | Emergency Management | Surveying



A specialist Statement of heritage Impact (SOHI) was undertaken for the Proposal by John Carr Heritage Design in January 2022. This section provides a summary of the assessment results, with the full report provided in Appendix C.

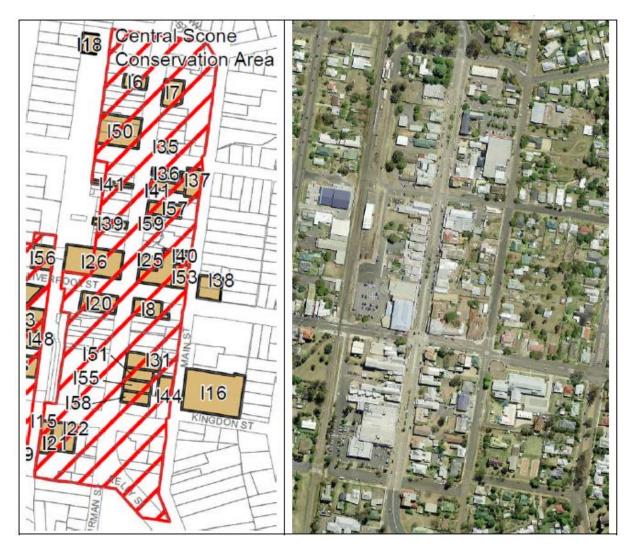
Kelly Street is sited within the Central Scone Heritage Conservation Area (HCA) which contains twenty items of local heritage significance listed under the Upper Hunter LEP 2013 and one item of State heritage significance (Scone Civic Theatre) listed under the *Heritage Act 1977*.

The Central Scone Heritage Conservation Area is significant as it contains a number of important buildings from different eras of the development of the town.

The significance of both listed heritage items and the various contributing buildings that are not individually listed but nonetheless are well known to the community as an overall group of buildings associated with the development of Scone in the nineteenth and twentieth centuries. Their design style and material selection and colours all play a role in contributing to the importance of Kelly Street to the Scone CBD. Figure 4-1 below shows an aerial view of the Proposal site and relationship to nearby heritage items.



Review of Environmental Factors



Item name
Shops
Belmore Hotel
Royal Hotel
2 Shops (adjacent to Mazda showroom)
Cafe (former Energy Australia building)
Shops
Willow Tree Hotel
Scone Civic Theatre
Campbell's Comer
Farams Store
Bank of New South Wales
Post office
National Australia Bank (former CBC Bank)
Asser House car park and outbuildings
Scone Advocate Building
Upper Hunter Ambulance Station
Former Library Building and WW1 Memorial
House

Address 95–97 Kelly Street

98 Kelly Street 109-119 Kelly Street 116 and 118 Kelly Street 122 Kelly Street 127-133 Kelly Street 140 Kelly Street 144 Kelly Street 177-181 Kelly Street 157 Kelly Street 170 Kelly Street 187 Kelly Street and 117 Liverpool Street 182 Liverpool Street and Kelly Street 202 Kelly Street 206 Kelly Street 210 Kelly Street 212 Kelly Street 95 Kingdon Street

Property description	Significance	Item no
Lot B, DP 158596	Local	16
Lot 100, DP 1008166	Local	17
Lots 1 and 2, DP 741827; Lot 32, DP 539874	Local	150
Lot 1, DP 998395; Lot 1, DP 708825	Local	135
Lot 1, DP 534209	Local	136
Lot 1, DP 718295; Lot 2, DP 222497	Local	I41
Lot 4, DP 1115231	Local	157
Lots 1-3, DP 214848	State	159
SP 32887; Lot 1, DP 161339	Local	126
Lot 1, DP 950304	Local	139
Lot A, DP 332685	Local	125
Lot 3, DP 700953; Lot 10, DP 703172	Local	120
Lot 30, DP 580699	Local	18
Lot 2, DP 151514	Local	I31
Lot 21, DP 788031	Local	151
Lot 1, DP 196911	Local	155
Lot 214, DP 1086129	Local	158
Lot 10, DP 834781	Local	122

Figure 4-1 The heritage map showing the Proposal site and HCA.

Source: John Carr Heritage Design, January 2022

Hunter New England | South Coast | Riverina Western | North Coast | Sydney Asset Advisory | Heritage | Project + Program Management | Assurance | Procurement | Engineering | Planning | Sustainability Developments | Buildings | Water Infrastructure | Roads + Bridges | Coastal | Waste | Emergency Management | Surveying



4.5.1 Impact Assessment

Aboriginal Heritage

The Proposal site has previously been subject to high levels of disturbance and modifications due to commercial business centre and infrastructure development, including the installation of the existing roadway and adjacent footpath. It is therefore unlikely that the proposed works would disturb any undisturbed Aboriginal objects or sites. The works would not take place on land identified as Crown land, with works being carried out on either roadway or adjacent predominantly paved pedestrian footpath areas.

Assessment of the Proposal site based on the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW, 2010) indicates that overall, it is considered reasonable to conclude that there are no known Aboriginal objects or a low probability of objects occurring in the area of the proposed activity, for the following reasons:

- No Aboriginal objects or places have been recorded in adjacent to or in close proximity any of the Proposal site, in accordance with a search of the AHIMS database (see Appendix D).
- The closest waterway is Figtree Creek, which crosses under Kelly Street. However, in the Proposal works area the creek line comprises a concrete stormwater drainage channel. Based on this information the waterway is assumed to be extremely disturbed in nature and therefore unlikely to support past Aboriginal occupation. Furthermore, the work site would be located within the road reserve roadway and footpath areas and no waterways would be disturbed during the construction works. No other landscape features likely to indicate presence of Aboriginal objects are present within the Proposal works area.
- The works site comprises sealed road and paved reserve areas and has been subject to previous disturbance for the construction of the existing roadways and surrounding residential and commercial development within the town. Therefore, the Proposal site is considered to be located on land that has been highly disturbed.

Therefore, it is considered that further archaeological investigations and/or an AHIP are not required and that the proposed development can proceed with caution. In the event that any Aboriginal heritage items are found during construction, work should cease and safeguards listed below in 4.5.2 would be applied.

No Aboriginal heritage impacts are anticipated during operation of the Proposal.

Historic Heritage

The Proposal construction works have the potential to indirectly impact adjacent heritage listed buildings located on Kelly Street through the use of construction equipment which causes vibration. Therefore, dilapidation reporting on the heritage listed buildings is recommended pre and post-construction works and vibration monitoring is recommended when construction works which cause high levels of vibration are undertaken adjacent to heritage buildings. Potential vibration impacts associated with the Proposal discussed further in Section 4.6 and associated vibration mitigation measures are provided in Section 4.6.2.



The below information is summary of the SOHI assessment results (John Carr Heritage Design, 2022), a copy of the report is provided in Appendix C.

The roadwork's upgrade to Kelly Street Scone concentrates substantially on changing the use of the street from a four-lane highway thoroughfare to a shopping centre, providing additional parking to shops by changing from parallel to angle parking.

The potential to impact on the heritage significance of the Central Scone Heritage Conservation Area and the nearby individually listed heritage items by the rearrangement of the Kelly Street layout is minimised by the majority of hard site works changes being at ground level.

The effect of the proposed landscaping, while changing the existing aesthetic of the street, would provide additional softening of the hard areas as can be seen by recent plantings over the last two decades. Scone has supported tree planting in and around Kelly Street since early development as shown by the historic photos of the town taken in the late nineteenth century.

The Scone Civic Theatre is State heritage listed building and has been for the majority of its existence on this site, free of landscaping. The large directional sign has been the main intrusive element on the building and its setting in a busy streetscape.

The original landscape designs included the planting of two large trees towards the outer edge of the building's awning which in time could potentially cause problems with leaf litter and screening of the facade of this important and iconic building in Scone. The redesign of the landscaping to the footpath area within the curtilage of the theatre building has resulted in a more acceptable solution. The plantings are now dominated by low bushes and when combined by a wider footpath to support a pedestrian crossing, the dominance of the Civic Theatre in Kelly Street remains intact.

The revitalisation of the Scone CBD would have minimal impact on the heritage significance of the individual listed items in Kelly Street as well as the Scone Central HCA for the following reasons:

- The works are confined to immediately above and below ground in the existing street;
- Underground services are all checked, upgraded or replaced for the future;
- The section of Kelly St. between Kingdon and Susan Streets is the subject site for these works;
- The narrowing of the road lanes from four to two improves the town's amenity;
- The widening of footpaths assists businesses without compromising the heritage significance of the buildings or the area;
- The design of the landscaping softens the street by provision of shading;
- The design of the landscaping enhances the heritage buildings in the street;
- The combination of landscaping at the road edge and median strip enhances the overall setting of the CBD in Scone in Kelly Street.

The township of Scone has supported tree planting on its footpaths, roadways, parks and gardens since it was first developed. While this is a major project for hard and soft



landscaping and engineering works, it is undoubtedly in the spirit of the past landscaping of Scone.

The SOHI examined the proposed works and recommended a change to the landscaping plan to replace the two proposed large trees in front of the former Scone Civic Theatre with small bushes. This was based on the building being State Heritage listed and the proposed trees having the potential to screen this building from views in either direction in Kelly Street, recognising that the building has never had trees in front of it since it was built.

All other works are considered to compliment the street, the HCA and the objective to provide a safe and attractive shopping area in Scone. Therefore, no significant heritage impacts are anticipated associated with the Proposal.

4.5.2 Mitigation Measures

Aboriginal Heritage

- As part of an induction, in the unlikely event that any unknown Aboriginal objects are uncovered during proposed works, all workers and sub-contractors should be aware of their responsibilities under the provisions of the NPW Act (including the penalties under the ancillary provisions) and *Heritage Act 1977*. In this event all works must cease, Unanticipated Finds Protocol should be followed and the area where Aboriginal objects are uncovered is protected until a qualified archaeologist and representatives of registered Aboriginal parties are contacted and can inspect and assess the area to determine its significance.
- Where the find(s) are determined to be Aboriginal Objects, any re-commencement of construction related ground surface disturbance may only resume in the area of the find(s) following compliance with any consequential legal requirements and gaining written approval from Heritage NSW.
- The Standard Management Procedure Unexpected Heritage Items (Roads and Maritime, 2015) will be followed in the event that an unknown or potential Aboriginal object/s, including skeletal remains, is found during construction. This applies where TfNSW does not have approval to disturb the object/s or where a specific safeguard for managing the disturbance (apart from the Procedure) is not in place. Work will only recommence once the requirements of that Procedure have been satisfied.

Historic Heritage

- As part of an induction, workers should be made aware of their responsibilities under the provisions of the *Heritage Act 1977* in the unlikely event that any historical relics or sites are identified. In this event all works must cease and the area be protected until a qualified archaeologist inspects the site and provides management advice in consultation with Heritage NSW.
- All land and ground disturbance activities must be confined to within the Proposal area assessed in this REF.
- Should it be identified during detailed design or construction works that the Proposal would impact on the existing heritage listed items adjacent to Kelly Street, additional heritage assessment would be required to be undertaken prior to the commencement of works to identify the any potential impact on the historic heritage significance of these items.



- **Review of Environmental Factors**
- Monitor the landscaping works over the next five or more years and prune any tree canopies that overhang all footpath awnings. As leaf litter build-up in awning gutters can result in rusted roof materials if not checked and cleaned on a bi-annual basis.

4.6 Noise and Vibration

The area immediately surrounding the Proposal site and site compounds comprises a rural township CBD containing commercial properties and associated road and services infrastructure. The Proposal site generally comprises a developed and concreted road reserve including formed gutters with surrounding car parking spaces, pedestrian footpaths and scattered planted trees and shrubs.

The nearest sensitive receivers are the multiple commercial business premises located immediately adjacent, which front onto Kelly Street. The closest commercial premises are located approximately 5 m to the east and west of the roadway. Sensitive non-residential noise receivers in the vicinity of the Proposal site are already subject to noise and vibration associated with the existing road traffic along the Kelly Street roadway. The closest residential sensitive receivers are located in adjacent streets to the east and west running parallel to Kelly Street (located on Guernsey Street and Main Street). The Campbells Corner site compound is surrounded by a railway line to the west and commercial premises, the Muffett Street site compound has a railway line immediately located to the west and industrial precinct to the east and the tentative New England Highway stockpile site is surrounded by agricultural land with a railway line to the west and a highway to the east. Residential properties in these areas are generally located 100 m or more from the Proposal site. Refer to Figure 4-2 to for the general location of commercial and resident sensitive receivers surrounding the Proposal site.

Noise monitoring was not undertaken as part of the REF, however background noise levels in the Proposal area is likely to be 50 dB(A) in the Proposal works area during daytime and 40 dB(A) during the at night (using Figure 2.2 of the *Noise Guide for Local Government* (EPA, 2013) and R3 Representative Noise Environment based on AS 1055.3-1997 as a guide), with the greatest source of noise being vehicle traffic.



Review of Environmental Factors



Figure 4-2 Indicative general location of surrounding sensitive noise receivers in commercial premises (blue areas) and residential properties (yellow areas) to the Proposal site (red).

Source: SIX Maps,2021

4.6.1 Impact Assessment

Construction management levels for construction noise are listed in *Interim Construction Noise Guidelines (DECC, 2009)* (ICNG). In accordance with this guideline, the external noise management level during daytime hours for the area is 60 dB(A) during daytime and 50 dB(A) at night (the background level plus 10 dB(A)). However, it is noted that the



premises surrounding the Proposal site generally comprise non-residential retail and office premises which would be subject a 'noise affected level' of 70 dB(A) using the TfNSW *Construction Noise and Vibration Guideline* (RMS, 2016).

The construction works are anticipated to start in June 2022. The works program is expected to extend over 14 - 15 months with completion expected by July 2023. Construction works would be continuous over this period (with the exception of the Scone Horse Festival in May), although works would move along the road alignment as each Section is constructed.

Noise impacts were estimated based on the ICNG and AS 2436-2010 Guide to Noise and Vibration on Construction, Demolition and Maintenance sites for the construction equipment likely to be used during construction (listed in Table 4-2 below). The sound pressure levels of this equipment and the likely sound pressure levels at 5 m, 10 m (commercial business premises) and 100 m (residential properties) from the works site source are also shown in Table 4-2. Based on the distance to the nearest non-residential sensitive receptors (within commercial business premises), it is anticipated that construction noise at the nearest sensitive receivers occupying commercial premises located 5 m to 10 m from the works (as discussed above) would exceed the recommended maximum daytime goal of 60 dB(A) and the highly affected noise level (75 dB(A)) above which there may be strong community reaction to noise. Noise levels for residential sensitive receivers occupying residential premises located 100 m or more from the works would exceed the recommended maximum daytime goal of 60 dB(A) but not the highly affected noise level (75 dB(A)) above which there may be strong community reaction to noise. Based on the estimated construction noise output levels (refer to Table 4-2) and short distance to non-residential sensitive receivers within commercial business premises on Kelly Street, respite periods and durations and specific notification (including individual briefings) to surrounding commercial premises would be recommended for the works. For surrounding sensitive residential receivers, general notification and respite periods and durations when using equipment with high noise emissions are recommended for the construction works. All construction works undertaken outside of standard construction works hours would require prior notification to Council and all surrounding sensitive receivers.

It is noted that these levels are considered to be a conservative estimate, as they are based on maximum noise levels assuming that all machinery/construction equipment would be used simultaneously. It is anticipated that this would occur intermittently, if at all during the construction of the Proposal, and furthermore the actual noise levels experienced would vary depending on the nature and location of the activities being undertaken.

Construction impacts would be temporary. However, it is noted that trucks accessing the Proposal area from outside of Scone and the site compounds and stockpile sites located 500 m to the north, west of Kelly Street off Liverpool Street and approximately 4 km south of the Scone CBD in the New England Highway would be a source of intermittent noise for the majority of the construction period.

The ICNG states that, where the predicted noise level is greater than the noise affected level, all feasible and reasonable work practices should be applied to meet the noise affected level. Furthermore, all potentially impacted adjacent properties should be informed of the Proposal, the expected noise levels and duration, as well as contact details.



Where the noise level is above the highly affected noise level, respite periods may be required by restricting the hours that the very noisy activities can occur, taking into account:

- Excavation or removal of any materials using machinery of any kind, including compressors, must be of a limited duration, with a respite break of 45 minutes between 12 pm and 1 pm.
- Times identified by the community when they are less sensitive to noise (such as before and after school for when located near schools, or mid-morning or mid-afternoon when located near residences); and
- If the community is prepared to accept a longer period of works in exchange for restrictions on construction times.

Control measures to minimise noise impacts would be implemented during the works as part of the contractor's CEMP, which would be required to be submitted to UHSC and TfNSW for approval prior to commencement of works (see Section 4.6.2).

Equipment	A-weighted sound power levels (mid-point dB)	Sound Pressure Level at 5m distance (dB(A))	Sound Pressure Level at 10 m distance (dB(A))	Sound Pressure Level at 100 m distance (dB(A))	
	Roadway works				
Backhoe /bobcat	111	89	83	61	
Excavator (5 tonne)	107	85	79	57	
Truck (>20 tonne) (Smooth drum truck, bitumen sprayer truck, road marking truck)	106	84	78	56	
Pavement laying machine	114	92	86	64	
Vibratory Roller (2 tonne)	109	87	81	58	
Compactor (wacker plate)	113	91	85	63	
Concrete saw	118	96	90	68	
Concrete agitator truck (pump)	109	87	81	58	

Table 4-2 Estimated Construction Noise Levels

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Equipment	A-weighted sound power levels (mid-point dB)	Sound Pressure Level at 5m distance (dB(A))	Sound Pressure Level at 10 m distance (dB(A))	Sound Pressure Level at 100 m distance (dB(A))
Light Vehicles	103	81	75	53
Hand tools (electric)	105	83	77	55
P	edestrian Footpath	Works (including	y water mains)	
Backhoe /bobcat	111	89	83	61
Excavator (3.5 tonne)	107	85	79	57
Truck (>20 tonne)	106	84	78	56
Concrete saw	118	96	90	68
Concrete agitator truck (pump)	109	87	81	58
Jack Hammer	113	91	85	63
Light Vehicles	103	81	75	53
Hand tools (electric)	105	83	77	55
Compactor (wacker plate)	113	91	85	63

Calculations Source: Construction Noise and Vibration Guidelines (RMS, 2016).

NB: Highest noise emitting equipment listed in bold.

Vibration

There is no Australian Standard that sets criteria for the assessment of building damage caused by vibration. *Assessing vibration: a technical guideline* (DEC, 2006) presents preferred and maximum vibration values for use in assessing human responses to vibration and provides recommendations for measurement and evaluation techniques. It is based on guidelines contained in *British Standard (BS)* 6472 – 1992, *Guide to Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*. Human comfort is normally assessed with reference to the above British Standard or *Australian Standard AS 2670.2 1990* however, the guideline recommends the use of the *German Standard DIN 4150-3: 1999 Structural Vibration – Part 3: Effects of vibration on structures* for guidance on assessing the risk of vibration damage to structures. These are described in Table 4-3 below.

The TfNSW Construction Noise and Vibration Guideline (RMS, 2016) provides a suggested minimum distance to buildings to prevent cosmetic damage for vibration intensive equipment based on British Standard (BS) 7385 Part 2-1993 Evaluation and measurement



for vibration in buildings Part 2. Indicative minimum working distances from buildings for typical items of vibration intensive plant are listed in Table 4-4. It is noted that an additional buffer would be recommended for heritage buildings and vibration monitoring is recommended to confirm the site-specific minimum working distances.

Table 4-3: Summary of Relevant Vibration Criteria

Human comfort intermittent vibration limits (BS 6472-1992)				
Receiver Type	Time of Day	Preferred Value	Recommended Max	
Suburban	Day	0.2 m/s1.75	0.4 m/s1.75	
Guideline values for short-term vibration on structures (DIN 4150-3: 1999)				
Receiver Type	1 Hz to 10 Hz	10 Hz to 50 Hz	50 Hz to 100 Hz	
Receiver Type Buildings used for commercial purposes, industrial buildings, and buildings of similar design.	1 Hz to 10 Hz 20mm/s	10 Hz to 50 Hz 20 – 40 mm/s	50 Hz to 100 Hz 40 – 50 mm/s	

Table 4-4: Recommended minimum working distances for vibration intensive plant from building and sensitive receivers

Equipment	Description	Cosmetic Damage (BS 7385 <i>)</i>	
Vibratory Roller	< 50 kN (Typically 1-2 tonnes)	5 m	
Jackhammer	Hand held	1 m	
Asphalt Paver	Vogele Super 1800-3	1 m	
Backhoe	-	2 m	

The use of excavating and cutting equipment as part of the construction works has the potential to result in offsite vibration impacts due to the close proximity of the works to adjacent buildings on Kelly Street. Potential vibration generated to receivers for the works would be dependent on separation distances, the intervening ground condition and material, dominant frequencies of vibration and the receiver structure. Dominant vibration generating plant include:

• Vibratory rollers;



Review of Environmental Factors

- Pavement laying machines
- Excavator equipment;
- Jack hammers
- Concrete saws
- Compacters; and
- Truck movements.

There is the potential for the nearest affected non- residential sensitive receivers and adjacent buildings (particularly older structures) to be affected by these plant.

It is recommended that any required site-specific buffer distances for vibration significant plant items (e.g. vibratory rollers, compactors) be determined on site where works are within 10 - 15 m from a building or structure depending on the blow energy used as, unlike noise, vibration cannot be readily predicted. A static (oscillating) roller would be used during the road works instead of a vibratory roller to minimise potential vibration impacts if the required compaction level is achieavable. The use of a static roller would be assessed for feasibility onsite by the construction contractor.

For any buildings located in close proximity to any such works, building dilapidation survey and reporting is recommended pre and post-construction works, particularly for the heritage listed buildings located along Kelly Street (refer to 4.5 for their location). Accurate buffer distances should be determined on site by measuring vibration emission levels from each plant item prior to its operation, or alternative construction methods and equipment are to be used. In addition, vibration should be monitored (verified) and minimised during construction works adjacent to all listed heritage buildings, to avoid inadvertent indirect impacts to the heritage items.

Overall, given the proper implantation of mitigation measures provided in Section 4.6.2, the noise and vibration impacts associated with the Proposal is unlikely to be significant.

The works would result in the roadway alignment being moved further from the adjacent commercial premises as the pedestrian footpath would be widened and the roadway narrowed. Any potential decrease in road noise and vibration as a result of this realignment is not anticipated to be significant, given the relatively small separation distance between the roadway and the adjacent commercial premises, however it is anticipated to be positive overall.

4.6.2 Mitigation Measures

- All potentially affected sensitive receivers (e.g. occupiers of adjacent commercial and business premises) should be specifically notified (including individual briefings where required) of the nature of the works, the expected noise and vibration levels and duration, as well as contact details for the construction contractor. General notification is recommended for surrounding residential sensitive receivers in streets adjacent to Kelly Street.
- A Noise and Vibration Management Plan (NVMP) will be prepared and implemented by the contractor as part of the CEMP, to be reviewed by UHSC and TfNSW prior to

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commencement of works. The NVMP will include site-specific measures to minimise noise impacts to sensitive receivers and would be prepared to include considerations of Tables 4 - 10 in *Interim Construction Noise Guideline* (DECC, 2009) and identify:

- all potential significant noise and vibration generating activities associated with the activity
- feasible and reasonable mitigation measures to be implemented
- a monitoring (verification) program to assess performance against relevant noise and vibration criteria
- arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures
- contingency measures to be implemented in the event of non-compliance with noise and vibration criteria.
- Works would be undertaken during normal work hours i.e. 7am to 6pm Monday to Friday; 8 am to 1 pm Saturdays; and no work would be undertaken on Sundays, Public Holidays or outside these work hours without notification to affected community, Council and the EPA. Notification would provide the following details:
 - The locations and types of surrounding receivers likely to be affected;
 - The nature of the Proposal;
 - The noise characteristics of any powered equipment likely to be used;
 - Measures to be taken to reduce noise emissions; and
 - Any other information EPA may request.
- The contractor shall undertake building dilapidation survey and reporting on the buildings located adjacent to the works pre and post-construction, and vibration monitoring and verification should be carried out during construction works for all of the identified heritage buildings located on Kelly Street and any other buildings which are potentially susceptible to indirect impacts from the proposed works. If damage or risk to a building is identified, vibratory activities should cease and alternative work methods should be implemented so that vibration impacts are reduced to acceptable levels.
- Vibration measurements and verification during construction should be undertaken in accordance with the procedures documented in Assessing Vibration a technical guideline (DEC, 2006) and BS7385 Part 2-1993 Evaluation and measurement for vibration in buildings.
- The use of a static (oscillating) roller instead of a vibratory roller should be considered during roadworks if feasible, to minimise potential vibration impacts to surrounding buildings.
- Reasonable and practical control measures to minimise noise and vibration impacts on adjoining land would be implemented during construction as part of the contractor's CEMP, which would require review by UHSC and TfNSW prior to commencement of works. The CEMP would address site specific issues, including limited work hours and noise and vibration reduction practices if considered appropriate, taking into consideration EPA's *Interim Construction Noise Guideline* (in particular Tables 4–10)



and Assessing Vibration: A Technical Guideline (in particular mitigation measures in Section 3). If necessary, mitigation measures to minimise noise and vibration impacts may include:

- Optimum siting of work areas, vehicle and plant parking areas, materials stockpiles and equipment storage areas in locations where potential acoustic and vibration impacts would be minimised;
- Regular maintenance of all plant and machinery used for the project;
- Identify locations where construction noise and vibration are most intrusive and develop strategies to reduce impacts for these areas.
- Any noise or vibration complaint received would be investigated as soon as practicable. Any practicable and feasible measures to minimise noise and / or vibration would be identified. The complainant would be advised of the outcome.
- A management procedure should be implemented to deal with noise and vibration complaints. Each complaint should be investigated and if considered appropriate, amelioration measures should be put in place to mitigate future occurrences. This may include modification of construction methods such as using smaller equipment, establishment of safe buffer zones, and if necessary, time restrictions for the most excessive noise and vibration activities. Time restrictions are to be negotiated with affected receivers.
- Consideration is to be given to respite periods by restricting the hours and duration that the very noisy activities can occur, taking into account:
 - Excavation or removal of any materials using machinery of any kind, including compressors, must be of a limited duration, with a respite break of 45 minutes between 12pm and 1pm. Construction activities with impulsive or tonal noise emissions should be limited to 8am to 5pm Monday to Friday; 9am to 1pm Saturdays; and no work would be undertaken on Sundays, Public Holidays.
 - Times identified by the community when they are less sensitive to noise (such as before and after school for when located near schools, or mid-morning or midafternoon when located near residences); and
 - If the community is prepared to accept a longer period of works in exchange for restrictions on construction times.
- All construction machinery is to be turned off when not in use.
- Use quieter and less noise emitting construction methods where feasible and reasonable.
- Non-tonal reversing beepers (or an equivalent mechanism) should be fitted and used on all construction vehicles and mobile plant regularly used on site for periods of over two months where practicable.
- All plant and equipment to be appropriately maintained to ensure optimum running conditions, with periodic monitoring.



 Simultaneous operation of noisy plant within discernible range of a sensitive receiver is to be limited/ avoided where possible.

4.7 Air Quality

Air quality is expected to be good in the area, with the main influence on air quality in the area being vehicle emissions associated with moderate to high traffic volumes along Kelly Street and surrounding local roads in Scone. A search of the National Pollution Inventory (NPI) indicates that there is one point source (Scone Depot) of air pollution in the vicinity of the Proposal site. In addition, during high wind events, dust can be a source of air particulates.

The main factors influencing local air quality are:

- Movement of vehicles and trucks on sealed and unsealed roads;
- Trains laden with coal;
- Trucks transporting livestock;
- Light industrial, Equine, Meat Processing and Agricultural activities; and
- Wind-borne dust during dry periods, particularly from bare ground and surrounding agricultural properties.

4.7.1 Impact Assessment

The main impact to air quality during construction would arise from the generation of airborne localised dust associated with earthworks, and from construction vehicles driving to and from the Proposal site. This is not expected to cause notable adverse environmental impacts unless the weather is particularly windy, in which case dust suppression methods would be applied.

Local air quality may also be affected by emissions from construction traffic. These emissions would, however, occur only intermittently, and are expected to be minor and temporary. It would be unlikely that they would contribute to a permanent detectable reduction in local air quality.

No significant greenhouse gas emissions are anticipated to be generated during the construction works. Vehicle movements would emit greenhouse gases, but their short-term duration is unlikely to have a significant impact on the local, regional or State level of greenhouse gas emissions.

Given the temporary nature of the proposed construction works, as well as the implementation of the recommended mitigation measures, potential air quality impacts would not be significant.

There would be no long term reductions in air quality associated with the operation of the Proposal.

4.7.2 Mitigation Measures

• Construction vehicles and equipment would be suitably serviced within the six-month period prior to commencement of construction activities and all necessary maintenance undertaken during the construction period to meet EPA air quality requirements.



- •
- All construction machinery is to be turned off when not in use to minimise emissions.
- All practicable and feasible measures would be taken to avoid raising excessive levels of dust.
- Appropriate measures to suppress dust would be implemented whenever dust is likely to be a problem.
- Any hazardous material would be handled as per relevant guidelines to avoid potential air pollution.
- Any stockpiled spoil is to be protected to minimise dust generation.
- Vehicles transporting spoil or building materials to/from the Proposal area are to be covered.
- The burning of waste materials is not permitted on construction sites.
- Reduce the number of traffic movements required during construction works where possible.

4.8 Traffic and Access

The Proposal site comprises the section of the Kelly Street road reserve between Kingdon Street at the southern end and Susan Street/ Shaw Street at the northern extent. The road reserve includes a dual carriageway (two traffic lanes in each direction) that, until recently, formed part of the New England Highway, with adjacent parallel car parking spaces and a paved pedestrian footpath. The roadway experiences moderate traffic volumes and has a speed limit of 50 km/h.

Buildings adjoining the roadway predominantly comprise a wide range of commercial businesses and public services facilities.

4.8.1 Impact Assessment

The Proposal construction works would occur over a total period of approximately 14 -15 months, and would result in an increase in traffic in the local area. The works would be staged as described in Section 3.4.2 and construction works would not take place in May 2022 for the duration of the Scone Horse Festival.

Heavy vehicle movements would be generated during construction works for the delivery collection of materials and equipment and for waste disposal. The heavy vehicle demand would fluctuate throughout the duration of the works, with the main daily vehicle generating activities being construction equipment deliveries and construction personnel arrival and departure from the works site.

Construction vehicles would access the works site via the northern or southern end of Kelly Street and approach specific works areas via cross streets and adjacent streets running parallel to Kelly Street and from the construction works site compounds located on Muffett Street 500 m to the north of the Proposal site the Campbells Corner car park area compound site accessed via Liverpool Street and the New England Highway and the southern end of Kelly Street. It is noted vehicles accessing from the western side of Kelly Street would need to cross a railway line, therefore approach from the eastern side is recommended. Indicative



average numbers during construction would be in the order of 6-10 employees (based on the construction of a similar size). It is estimated that in general, the construction of the Proposal would involve an average of 4 - 6 truck movements per day plus additional traffic associated with construction employee passenger vehicles during the construction period. Construction worker car parking is anticipated to be located at the construction compounds and potentially the unconfirmed TfNSW stockpile site south of Scone to accommodate this demand.

It is not expected that peak truck/material deliveries would overlap with construction workers arrivals/departures, as the majority of the heavy vehicle and construction worker traffic generated by the Proposal would be expected to occur outside of the AM and PM peak hours. Construction workers would typically arrive at site before 7:00 am and depart at around 5:00 pm. The heavy vehicles would typically be generated during the interpeak period.

Considering land uses surrounding the Scone CBD are mostly agricultural land and residential properties and the New England Highway Bypass of Scone is now operational, the traffic generated by the existing land uses is far less than the existing road network functional capacity. Therefore, traffic volumes on the surrounding road network, particularly on Kelly Street, typically operate below their functional capacity and there would be spare capacity on the road network to cater for the construction vehicle estimates. Intersections would continue to perform similar to existing conditions with the addition of the Proposal related traffic during construction.

Considering the type of construction required to complete the roadway services installation earthworks, pavement works, vehicular access to Kelly St in the section where the works are occurring would be closed during earthworks and bituminous works. Access would be provided for local traffic throughout the construction of the works via temporary diversions (detours) on adjacent streets running parallel to Kelly Street, and occupiers of surrounding businesses and any affected residential dwellings would be notified about construction works near their property accesses where disruption would occur. The contractor should maintain pedestrian access to adjacent commercial premises during the footpath works. However, if disruption or limitation to access is anticipated, the occupiers of the commercial premises must be notified of the extent and duration of changes to pedestrian access.

The contractor would prepare a Traffic Management Plan (TMP) prior to construction works commencing including traffic controls such as temporary traffic lights, manual traffic control and temporary detours as well as safe pedestrian access paths and management of construction vehicle movements between the site compounds and stockpile sites and the contruction works sites. Traffic management during the Proposal would be prepared and carried out in accordance with the *TfNSW Traffic Control at Work Sites Manual* (Issued September 2020) and *Australian Standard 1742.3 – 2019: Manual of uniform traffic control devices Traffic control for works on roads.* The TMP would be approved by UHSC and TfNSW prior to the works commencing.

On the completion of works, the traffic speed limit in the CBD section of Kelly Street would be reduced to 40 km/h and car parking spaces would be available through the provision of



both angled and parallel parking spaces (including accessible parking spaces) along Kelly Street.

The set of traffic lights at the intersection Kelly and Liverpool Streets would remain postworks. The existing Traffic Control Signal (TCS) plan for the set of traffic lights has been subject to review, and a new TCS design with a new layout and set of personalities (phases) has been developed to suit the new road use and traffic lane layout. The layout design of the new Kelly Street roadway has also been subject to heavy vehicle turning path analysis for each intersection, to establish that adequate clearance has been provided for long vehicles (such as semi-trailers) entering and exiting Kelly Street. As such, the Kelly Street upgrade works would not negatively impact traffic flows at the traffic lights and heavy vehicle use of Kelly Street.

Post construction, a positive impact is anticipated, as lowering the road traffic speed limit to 40 km/h, reducing the road to a 3 m wide lane with adjacent parallel and angled parking with a wider pedestrian footpath area is expected to calm road traffic significantly, catering for increased local usage of the area and due to improved vehicular and pedestrian access to the Scone CBD area.

4.8.2 Mitigation Measures

- Surrounding local businesses, bus operators and residents are to be notified of any impacts to access and traffic flows, including likely detours, prior to the commencement of the Proposal.
- The contractor would prepare a Traffic Management Plan (TMP) as part of the CEMP, to be reviewed by UHSC and TfNSW prior to commencement of works. The TMP would include measures to minimise traffic impacts and ensure public safety, and would be prepared in accordance with:
 - Transport for NSW's *Traffic Control at Work Sites Manual*, Issued September 2020, and
 - Australian Standard 1742.3 2019 Manual of uniform traffic control devices Traffic control for works on roads.

The TMP would include:

- confirmation of haulage and site access routes
- site specific traffic control measures (including signage and active control by automated or manual traffic controllers) to manage and regulate traffic movement for each stage of work.
- measures to maintain pedestrian and cyclist access.
- requirements and methods to consult and inform the local community of impacts on the local road network.
- a response plan for any construction traffic incident.
- consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic.



- **Review of Environmental Factors**
- monitoring, review and amendment mechanisms.
- Pedestrian and vehicular access to adjacent premises is to be maintained during the construction stages. If access is disrupted or limited, the occupier of the premises is to be notified in advance, including the extent and duration of changes to access.
- The length of the work zone would be designed to maintain the traffic flow (based on the AS1742.3).
- Protection of workers and road users are to be provided as part of the TMP e.g. advance warning of roadwork, speed changes, safety barriers with adequate offsets and deflection allowance.
- Entry and exit to the compound/stockpile locations would be delineated with proper signage and advance warning signs.
- Temporary speed restrictions and traffic detours are to be imposed when necessary.
- All construction traffic would comply with all applicable traffic laws and regulations including speed limits. All construction vehicles would comply with the speed limits set for the roads when accessing the works site.

4.9 Waste Management

4.9.1 Impact Assessment

The construction works would generate waste in the form of spoil, green waste (trees, shrubs, grass/ groundcover), packaging waste, waste created from the demolition of old road pavement comprising concrete, steel and miscellaneous workers wastes. It is anticipated that all steel waste would be recycled and concrete waste would be disposed of at the Aberdeen Waste Management Facility located at 45 Wells Gully Road, Aberdeen.

Excavated spoil material would be used to backfill the pipe trenches and therefore minimal excess spoil is predicted. Excess spoil and green waste would be disposed of offsite at Aberdeen Waste Management Facility. Packaging and general workers waste would be removed from the construction site and transferred to an appropriately licenced waste management facility for recycling and/or disposal, such as the Scone Waste Management Facility located at 129 Noblet Road, Scone. All construction waste materials would be disposed of directly offsite during business hours, as no construction waste would be stockpiled temporarily at either of the site compounds.

Appropriate covered waste containers would be made available on site for disposal of waste materials and general works wastes.

All waste would be recycled or reused where possible. Where this is not possible, waste would be taken off site for recycling or disposal in accordance with the POEO Act and the *Protection of the Environment Operations (Waste) Regulation 2014.*

To ensure that environmental harm does not occur as a result of uncontrolled or inappropriate collection, transport and disposal of wastes, the relevant provisions of the following Acts would be implemented:

- Waste Avoidance and Resource Recovery Act 2001;
- Protection of the Environment Operations Act 1997; and

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Protection of the Environment Operations (Waste) Regulation 2014.

The works at the construction site are not anticipated to produce contaminated waste or cause contamination of the sites or surrounding land, however any contaminated materials encountered during the works would be handled, stored and disposed of appropriately.

The waste management procedures and/or measures listed below would be implemented for the Proposal. It is assessed that construction waste can be adequately managed to avoid adverse environmental impacts, assuming implementation of the mitigation measures listed in Section 4.9.2.

No significant additional forms of waste are expected to be generated during the operation of the Proposal.

4.9.2 Mitigation Measures

- A Waste Management Plan (WMP) would be prepared as part of the CEMP by the construction contractor for the management of waste generated during construction works. The WMP must be prepared in accordance with the applicable waste management provisions of the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Regulation)* 2014. The WMP would follow the resource management hierarchy principles embodied in the *Waste Avoidance and Resource Recovery Act 2001* and the NSW *Government Resource Efficiency Policy 2019*. It would include, but not necessarily be limited to, the following:
 - Non-recyclable waste and containers would be regularly collected and disposed of at a licensed landfill or other disposal site in the area. Waste oil would be sent to approved recyclers.
 - The worksite would be left tidy and rubbish free each day prior to leaving site and at the completion of construction.
 - Transportation of waste must be done in a manner that avoids the waste spilling, leaking, or otherwise escaping from the vehicle or plant used to transport the waste. Waste would be transported to a place that can lawfully receive that waste.
- The Waste Management Plan would adopt the objectives of the *Waste Avoidance and Resource Recovery Act 2001*, namely, to encourage the most efficient use of resources, to reduce environmental harm, and to provide for the continual reduction in waste generation in line with the principles of environmentally sustainable development (ESD).
- The Waste Management Plan would also need to be consistent with the *Waste Classification Guidelines* (EPA, 2014 and 2016 addendum) in that all waste removed from the construction sites is to be classified and disposed of appropriately.
- Accurate written records are to be kept such as:
 - Who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste); and
 - Copies of waste dockets/receipts for the waste facility (date and time of delivery, name and address of the facility, it's ABN, contact person).
- Management and disposal of waste shall comply with relevant statutory requirements, standards, codes, and guidelines, including but not limited to:



- **Review of Environmental Factors**
- SafeWork NSW requirements;
- SafeWork NSW Codes of Practice;
- Work Health and Safety Act 2011 (NSW);
- Work Health and Safety Regulation 2017 (NSW);
- Environmentally Hazardous Chemicals Act 1985 (NSW); and
- Waste Avoidance and Resource Recovery Act 2001 (NSW).
- All waste would be recycled if practicable or alternatively taken to a licensed waste disposal facility in accordance with its waste classification.
- Excess spoil material should be considered for re-use to achieve a fill balance. Where possible spoil would be temporarily stored onsite or removed to an appropriate hardstand area.
- No development drainage, overflow or contaminated waste (contaminated runoff or septic) shall impact negatively on nearby waterways or drainage lines.
- Waste receptacles for recyclable and non-recyclable waste are to be provided at each construction site for workers waste.

No batched concrete mixing plants would be established in the works areas. Any required concrete would be mixed off-site and transported to the construction area.

- The EPA is to be notified immediately of any pollution incidents or harm to the environment (as defined under Part 5.7 of the POEO Act).
- Prepare and implement an Unexpected Finds Protocol for hazards and/or contamination during construction, which would include the following procedure:
 - In the event of an unexpected find, all work in the immediate vicinity would cease;
 - Temporary barricades would be erected to isolate the area from access to the public and works; and
 - In the event that potential asbestos containing material is encountered, a qualified occupational hygienist and/or asbestos consultant would be contacted.
- The CEMP would incorporate a pollution incident response management plan that defines appropriate procedures for notification of pollution incidents to the required authorities in accordance with s. 147 to 153 of the POEO Act and requires response actions to be implemented in order to address any risks such as incidents posed to the environment, property or surrounding communities.

4.10 Visual Amenity

The Proposal site location and setting is described in Section 1.2 of this REF. The main visual receptors of the Proposal would be users of Kelly Street, occupiers and visitors to local business premises fronting onto Kelly Street, visual receptors located in the area of the two site compounds and local residents in the general Scone area. The tentative TfNSW stockpile site is located adjacent to a highway with few surrounding visual receptors and is not anticipated to have a significant visual impacts due to its rural location.



4.10.1 Impact Assessment

There would be minor visual impacts during construction of the Proposal due to the presence of construction equipment and removal of existing vegetation and disturbance to the Kelly Street roadway and pedestrian footpaths areas and the temporary storage of construction plant and stockpiled materials within the site compounds at Muffett Street, the Campbells Corner car park and adjacent to the New England Highway south of Scone. However, this would generally only occur for relatively short periods at any one location/site as the works progress along Kelly Street. This impact is not anticipated to be significant due to the temporary nature of the construction works, and given the proper implementation of mitigation measure provided in Section 4.10.2.

The Proposal would result in long term changes to local amenity due to new narrowed roadway and wider pedestrian footpath layout, and new landscape features including additional plantings, street furniture, lighting, new pavements incorporating plagues, new signage and a new pedestrianised public plaza and park on St Aubins Street. The new street layout, street furniture and landscaping would revitalise the CBD area and increase use of the area by both locals and visitors to Scone, resulting in a positive impact to visual amenity in the Scone CBD area.

4.10.2 Mitigation Measures

- The clearing of vegetation would be kept to the minimum required to undertake the works.
- Construction compounds and areas for the parking of vehicles and storing of equipment would be located in cleared areas wherever possible.
- Revegetation/re-grassing of disturbed areas to be undertaken as soon as practicable.
- All waste to be removed from the works areas and the sites left in a clean and tidy condition throughout works and following completion of the works.
- Undertake general post-construction site restoration to reduce the visual impacts of the works.

4.11 Utilities and Infrastructure

Various existing utilities and services are located within and surrounding the Proposal works site including water, wastewater, stormwater, electricity and telecommunications (i.e. Telstra optic fibre cables).

4.11.1 Impact Assessment

Construction works would be staged, managed and completed in sections to avoid extensive disruption to the operation of businesses and community use of Kelly Street during the Proposal construction works.

Measures would be taken to ensure that construction activities do not impact on existing utilities and services located along Kelly Street. The location of existing above ground and subsurface utilities and services have been identified and considered in the design plans. However, the location of all services in the vicinity of the proposed works would be accurately identified prior to commencement of construction works and relocated where required, to ensure services remain available during the works.



No negative impacts are anticipated during operation of the Proposal. Improved stormwater management, water supply (providing improved fire-fighting capability in the area), irrigation and lighting infrastructure would be present along Kelly Street upon the completion of works.

4.11.2 Mitigation Measures

- Utilities and services which may be impacted by the Proposal would be accurately located following the detailed design and prior to commencement of works. This would include Dial Before you Dig searches and potholing activities.
- Utility and service providers would be consulted prior to the commencement of and during construction works in the event that impacts on any utilities and services by the Proposal are likely.
- If the scope or location of proposed utility relocation works falls outside of the assessed Proposal scope and footprint, further assessment will be undertaken.





5. Environmental Management

This section identifies environmental mitigation measures that would be implemented during the construction stage of the project upon determination.

5.1 Construction Environmental Management Plan

Preparation of a Construction Environmental Management Plan (CEMP) is mandatory for all projects undertaken by or on behalf of government agencies or where funding is being provided by the government.

A Construction Environmental Management Plan would be developed to ensure that appropriate environmental management practices are followed during a project's construction and/or operation. UHSC and TfNSW would review the CEMP for this Proposal, which should include the following elements, as described in the *Guideline for the Preparation of Environmental Management Plans* (DIPNR, 2004).

The CEMP should generally conform to the structure shown in Table 5-1.

Table 5-1: Construction Environmental Management Plan Structure

Background	Introduction Proposal Description CEMP Context CEMP Objectives Environmental Policy
Environmental Management	Environmental Management Structure and Responsibility Approval and Licensing Requirements Reporting Environmental Training Emergency Contacts and Response
Implementation	Risk Assessment Environmental Management Environmental Management Activities and Controls Environmental Management Plans and Maps Environmental Schedules
Monitor and Review	Environmental Monitoring Environmental Auditing Corrective Action CEMP Review

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The CEMP would include a risk assessment which ensures that the safeguards identified in this REF, as well as any others that are considered relevant, are effectively translated into actual construction techniques and environmental management activities, controls, and monitoring/verification to prevent or minimise environmental impacts. The CEMP should also identify the requirements for compliance with relevant legislation and any other regulatory requirements to ensure environmental safeguards described throughout this REF are implemented. The environmental management objectives and supporting actions presented in this section are intended to assist in this process.

The following details the environmental objectives during construction works and the proposed mitigation to be included in the CEMP. This list is not definitive, and additional measures detailed as part of the determination of the project and conditions of any other approvals must also be included. Operational safeguards are also included where applicable.

5.2 **Environmental Management Measures**

Implementation of the mitigation measures outlined below would be undertaken during a number of phases of the project. These phases comprise:

- Detailed design refinement of the design details.
- Pre-construction prior to the contractor arriving on site to carry out the works.
- Construction – during construction phase.
- . Operation - post construction.

5.2.1 Land Use

Objective

Minimise impacts to surrounding land users during construction

Actions

Action/Phase	Responsibility
Pre-construction	
Obtain all necessary concurrence from TfNSW for UHSC works proposed in classified TfNSW road reserve area (as necessary).	UHSC
Where works may impact on surrounding residents, schools, community centres and businesses, they would be consulted with regards to the construction works, predicted program and any access requirements.	UHSC
Construction	
Temporary fencing would be installed where necessary to exclude the general public from the work sites. Any temporary fencing no longer required would be removed at the completion of the construction works.	Contractor
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Action/Phase	Responsibility
Best management construction safeguards and management measures are to be documented in a project specific CEMP.	Contractor
No materials are permitted to be dumped or stored on surrounding local roads or waterways, or on private land, unless under prior assessment and expressed consent of the relevant landowner.	Contractor
The construction contractor should provide a 24-hour telephone number so that any issues relating to the construction of the new infrastructure can be clarified and complaints dealt with by those able to respond. This should be included in all written correspondence and on signage at the work site/s and construction compounds.	Contractor
Restoration of the areas disturbed during construction would be undertaken so that these areas are returned to their pre- construction (or improved) condition.	Contractor

5.2.2 Water and Soil

Objective

- To effectively manage sediment and erosion control during the construction stage of the project.
- Prevention / minimisation of impacts to waterways during the construction works.

Actions

Action/Phase	Responsibility
Pre-construction	
Appropriate stormwater management infrastructure shall be incorporated into the design of the Proposal to manage localised flooding in Kelly Street.	UHSC
 A detailed Erosion and Sediment Control Plan (ESCP) shall be prepared as part of the CEMP. The ESCP would describe the site specific measures to be implemented for all works areas, in accordance with the guidelines outlined in the 2004 Landcom publication <i>Managing Urban Stormwater: Soils and Construction</i>, 4th edition ("The Blue Book"). The ESCP would need to be site specific and would need to address the following issues to prevent erosion, sediment loss and water quality impacts: Identification of site specific sediment and erosion control measures wherever erosion is likely to occur. 	Contractor

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Action/Phase	Responsibility
 Identification of any environmentally sensitive areas on or near the construction site to ensure runoff is diverted away from sensitive areas. 	
 Requirements for clearing of groundcover to be kept to a minimum. 	
 Retention of all surface runoff on-site and where possible stormwater from off site would be diverted around the construction site. 	
 Location of construction compounds (at least 50 m from any drainage lines). 	
 Location and management of stockpiles, such as locating stockpiles away from any drainage lines near the works areas. 	
 All erosion and sediment controls would be regularly inspected, especially when rain is expected and directly after any rain events. 	
A site-specific emergency spill plan will be developed and include spill management measures in accordance with the TfNSW <i>Code of</i> <i>Practice for Water Management</i> (RTA, 1999) and relevant EPA guidelines. The plan will address measures to be implemented in the event of a spill, including initial response and containment, notification of emergency services and relevant authorities (including TfNSW, UHSC and EPA officers).	Contractor
Construction	
Maintain and inspect erosion and sedimentation control measures regularly and after rainfall events in accordance with the Blue Book.	Contractor
Erosion and sedimentation control devices should not be removed until the works sites and site compounds are levelled and stabilised and there is no potential for sediment to enter nearby waterways, and until all disturbed areas have stabilised.	Contractor
Stabilise disturbed areas during the construction works where necessary in line with the Blue Book.	Contractor
Take all care and due diligence to minimise or prevent pollutant material entering stormwater drain inlets or waterways.	Contractor
The contractor would develop a monitoring and flood response plan to detail procedures for monitoring rainfall and surface water flows	Contractor

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Action/Phase	Responsibility
and to identify subsequent response actions that would be taken to ensure the protection of personnel, equipment and water quality during the construction works.	
In the event of flooding, construction works in affected areas would cease and would not commence until floodwaters have receded. Weather forecasts would be checked regularly so that equipment and materials in flood areas can be secured prior to heavy rainfall events.	Contractor
Workers are to be made aware of the provisions of Section 120 of the POEO Act with regards to water pollution and the requirements of the ESCP.	Contractor
Notification to the EPA in accordance with Part 5.7 of the POEO Act is to be undertaken where a pollution incident occurs in the course of an activity such that material harm to the environment is caused or threatened.	Contractor
All fuels and other hazardous liquids shall be stored at designated construction compounds within containers in a bunded enclosure with sufficient capacity to hold 120% of the stored liquids.	Contractor
All non-essential plant and vehicles (light vehicles, trucks, etc) must be refuelled offsite at a service station or depot.	Contractor
All chemicals used for construction shall be stored and used in accordance with the relevant Safety Data Sheets.	Contractor
An emergency spill kit shall be kept at the construction compounds. The CEMP shall include a procedure for using the spill kit in the event of a spill and all construction personnel shall be informed of the procedure, their roles and responsibilities in that procedure and trained in the use of spill kids.	Contractor
All areas where ground disturbance has occurred would be stabilised and restored following completion of works to ensure there is no erosion hazard and restored to their pre-construction condition.	Contractor
 Mitigation measures to manage groundwater (should it be encountered during construction) would be incorporated into the CEMP, including: Dewatering techniques during excavation; Measures to ensure groundwater quality is not impacted during construction; 	Contractor

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Action/Phase	Responsibility
 Techniques to settle, treat or filter groundwater encountered during excavation works i.e. diverting groundwater through baffle tanks or filter membranes; and Appropriate treatment and monitoring regimes in the event that groundwater flows come to the surface, including disposal of groundwater in such a way as to prevent adverse impacts (such as erosion and water pollution). Groundwater should not be discharged to a waterway during construction. Seepage collected, water pumped from excavations, groundwater entering the works area would be pumped to temporary & permanent drainage works and directed to the relevant temporary sedimentation basin supporting each construction stage. All such collected construction site water would similarly be treated as on- site stormwater runoff. 	

5.2.3 Biodiversity

Objective

- Avoidance / minimisation of impacts to flora and fauna
- Minimise clearing of vegetation
- Prevention / minimisation of impacts to waterways

Actions

Action/Phase	Responsibility
Construction	
Do not place vehicles, machinery or stockpiles beneath canopies of trees.	Contractor
Vegetation removal and trimming of trees branches and any tree removal should be limited to the minimum necessary to complete the works.	Contractor
Trees to be retained which are located in proximity to the works or at site compounds are to be protected for the duration of works in accordance with AS 4970-2009 <i>Protection of trees on development</i> <i>sites</i> (Australian Standards 2009).	Contractor
Post Construction	
Post works, the Proposal site should be monitored for the spread of weeds and appropriate control measures implemented.	UHSC

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5.2.4 Heritage

Objective

Minimise potential impacts to items and places of Aboriginal and historic cultural heritage.

Actions

Action/Phase	Responsibility	
Construction		
Aboriginal Heritage		
As part of an induction, in the unlikely event that any unknown Aboriginal objects are uncovered during proposed works, all workers and sub-contractors should be aware of their responsibilities under the provisions of the NPW Act (including the penalties under the ancillary provisions) and <i>Heritage Act 1977</i> . In this event all works must cease, Unanticipated Finds Protocol should be followed and the area where Aboriginal objects are uncovered is protected until a qualified archaeologist and representatives of registered Aboriginal parties are contacted and can inspect and assess the area to determine its significance.	Contractor	
Where the find(s) are determined to be Aboriginal Objects, any re- commencement of construction related ground surface disturbance may only resume in the area of the find(s) following compliance with any consequential legal requirements and gaining written approval from Heritage NSW.	Contractor	
The Standard Management Procedure - Unexpected Heritage Items (Roads and Maritime, 2015) will be followed in the event that an unknown or potential Aboriginal object/s, including skeletal remains, is found during construction. This applies where TfNSW does not have approval to disturb the object/s or where a specific safeguard for managing the disturbance (apart from the Procedure) is not in place. Work will only re-commence once the requirements of that Procedure have been satisfied.	Contractor	
Historic Heritage		
As part of an induction, workers should be made aware of their responsibilities under the provisions of the <i>Heritage Act 1977</i> in the unlikely event that any historical relics or sites are identified. In this event all works must cease and the area be protected until a qualified archaeologist inspects the site and provides management advice in consultation with Heritage NSW.	Contractor	



Action/Phase	Responsibility
All land and ground disturbance activities must be confined to within the Proposal area assessed in this REF.	Contractor
Should it be identified during detailed design or construction works that the Proposal would impact on the existing heritage listed items adjacent to Kelly Street, additional heritage assessment would be required to be undertaken prior to the commencement of works to identify the any potential impact on the historic heritage significance of these items.	Contractor
Monitor the landscaping works over the next five or more years and prune any tree canopies that overhang all footpath awnings. As leaf litter build-up in awning gutters can result in rusted roof materials if not checked and cleaned on a bi-annual basis.	UHSC

5.2.5 Noise and Vibration

Objective

- Compliance with relevant recommendations specified in the *Interim Construction Noise Guideline* (DECC, 2009).
- Avoidance / minimisation of noise and vibration impacts on nearby sensitive receivers.

Actions

Action/Phase	Responsibility
Pre- construction	
All potentially affected sensitive receivers (e.g. occupiers of adjacent commercial and business premises) should be specifically notified (including individual briefings where required) of the nature of the works, the expected noise and vibration levels and duration, as well as contact details for the construction contractor. General notification is recommended for surrounding residential sensitive receivers in streets adjacent to Kelly Street.	Contractor / UHSC
A Noise and Vibration Management Plan (NVMP) will be prepared and implemented by the contractor as part of the CEMP, to be reviewed by UHSC and TfNSW prior to commencement of works. The NVMP will include site-specific measures to minimise noise impacts to sensitive receivers and would be prepared to include considerations of Tables 4 - 10 in <i>Interim Construction Noise</i> <i>Guideline</i> (DECC, 2009) and identify:	Contractor

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Action/Phase	Responsibility
 all potential significant noise and vibration generating activities associated with the activity 	
 feasible and reasonable mitigation measures to be implemented 	
 a monitoring (verification) program to assess performance against relevant noise and vibration criteria 	
 arrangements for consultation with affected neighbours and sensitive receivers, including notification and complaint handling procedures 	
 contingency measures to be implemented in the event of non-compliance with noise and vibration criteria. 	
 Reasonable and practical control measures to minimise noise and vibration impacts on adjoining land would be implemented during construction as part of the contractor's CEMP, which would require review by UHSC and TfNSW prior to commencement of works. The CEMP would address site specific issues, including limited work hours and noise and vibration reduction practices if considered appropriate, taking into consideration EPA's <i>Interim Construction Noise Guideline</i> (in particular Tables 4–10) and <i>Assessing Vibration: A Technical Guideline</i> (in particular mitigation measures in Section 3). If necessary, mitigation measures to minimise noise and vibration impacts may include: Optimum siting of work areas, vehicle and plant parking areas, materials stockpiles and equipment storage areas in locations where potential acoustic and vibration impacts would be minimised; Regular maintenance of all plant and machinery used for the project; 	Contractor
 Identify locations where construction noise and vibration are most intrusive and develop strategies to reduce impacts for these areas. 	
Construction	·
Works would be undertaken during normal work hours i.e. 7am to 6pm Monday to Friday; 8 am to 1 pm Saturdays; and no work would be undertaken on Sundays, Public Holidays or outside these work hours without notification to affected community, Council and the EPA. Notification would provide the following details: – The locations and types of surrounding receivers likely to be	Contractor
affected;	

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Action/Phase	Responsibility
 The nature of the Proposal; 	
 The noise characteristics of any powered equipment likely to be used; 	
 Measures to be taken to reduce noise emissions; and 	
 Any other information EPA may request. 	
The contractor shall undertake building dilapidation survey and reporting on the buildings located adjacent to the works pre and post- construction, and vibration monitoring and verification should be carried out during construction works for all of the identified heritage buildings located on Kelly Street and any other buildings which are potentially susceptible to indirect impacts from the proposed works. If damage or risk to a building is identified, vibratory activities should cease and alternative work methods should be implemented so that vibration impacts are reduced to acceptable levels.	Contractor
Vibration measurements and verification during construction should be undertaken in accordance with the procedures documented in Assessing Vibration - a technical guideline (DEC, 2006) and BS7385 Part 2-1993 Evaluation and measurement for vibration in buildings.	Contractor
The use of a static (oscillating) roller instead of a vibratory roller should be considered during roadworks if feasible, to minimise potential vibration impacts to surrounding buildings.	Contractor
Any noise or vibration complaint received would be investigated as soon as practicable. Any practicable and feasible measures to minimise noise and / or vibration would be identified. The complainant would be advised of the outcome.	Contractor
A management procedure should be implemented to deal with noise and vibration complaints. Each complaint should be investigated and if considered appropriate, amelioration measures should be put in place to mitigate future occurrences. This may include modification of construction methods such as using smaller equipment, establishment of safe buffer zones, and if necessary, time restrictions for the most excessive noise and vibration activities. Time restrictions are to be negotiated with affected receivers.	Contractor
 Consideration is to be given to respite periods by restricting the hours and duration that the very noisy activities can occur, taking into account: Excavation or removal of any materials using machinery of any kind, including compressors, must be of a limited 	Contractor



Action/Phase	Responsibility
 duration, with a respite break of 45 minutes between 12pm and 1pm. Construction activities with impulsive or tonal noise emissions should be limited to 8am to 5pm Monday to Friday; 9am to 1pm Saturdays; and no work would be undertaken on Sundays, Public Holidays. Times identified by the community when they are less sensitive to noise (such as before and after school for when located near schools, or mid-morning or mid-afternoon when located near residences); and If the community is prepared to accept a longer period of works in exchange for restrictions on construction times. 	
All construction machinery is to be turned off when not in use.	Contractor
Use quieter and less noise emitting construction methods where feasible and reasonable.	Contractor
Non-tonal reversing beepers (or an equivalent mechanism) should be fitted and used on all construction vehicles and mobile plant regularly used on site for periods of over two months where practicable.	Contractor
All plant and equipment to be appropriately maintained to ensure optimum running conditions, with periodic monitoring.	Contractor
Simultaneous operation of noisy plant within discernible range of a sensitive receiver is to be limited/ avoided where possible.	Contractor

5.2.6 Air Quality

Objective

- Avoidance / minimisation of off-site dust nuisance to neighbouring residences and the community.
- Minimisation of air quality impacts resulting from machinery and vehicle emissions.

Actions

Action/Phase	Responsibility
Pre-construction	
Construction vehicles and equipment would be suitably serviced within the six-month period prior to commencement of construction activities and all necessary maintenance undertaken during the construction period to meet EPA air quality requirements.	Contractor



Action/Phase	Responsibility
Construction	
All construction machinery is to be turned off when not in use to minimise emissions.	Contractor
All practicable and feasible measures would be taken to avoid raising excessive levels of dust.	Contractor
Appropriate measures to suppress dust would be implemented whenever dust is likely to be a problem.	Contractor
Any hazardous material would be handled as per relevant guidelines to avoid potential air pollution.	Contractor
Any stockpiled spoil is to be protected to minimise dust generation.	Contractor
Vehicles transporting spoil or building materials to/from the Proposal area are to be covered.	Contractor
The burning of waste materials is not permitted on construction sites.	Contractor
Reduce the number of traffic movements required during construction works where possible.	Contractor

5.2.7 Traffic and Access

Objective

- Ensure that construction vehicles do not cause excessive inconvenience to road and pedestrian users.
- Ensure the safety of road users and construction personnel for the duration of the works.
- Minimise the pollution impacts resulting from the use of vehicles during construction works.

Actions

Action/Phase	Responsibility
Pre-Construction	
Surrounding local businesses, bus operators and residents are to be notified of any impacts to access and traffic flows, including likely detours, prior to the commencement of the Proposal.	UHSC
The contractor would prepare a Traffic Management Plan (TMP) as part of the CEMP, to be reviewed by UHSC and TfNSW prior to	Contractor

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Action/Phase	Responsibility
commencement of works. The TMP would include measures to minimise traffic impacts and ensure public safety, and would be prepared in accordance with:	
 Transport for NSW's <i>Traffic Control at Work Sites Manual</i>, Issued September 2020, and 	
 Australian Standard 1742.3 - 2019 Manual of uniform traffic control devices Traffic control for works on roads. The TMP would include: 	
 confirmation of haulage and site access routes 	
 site specific traffic control measures (including signage and active control by automated or manual traffic controllers) to manage and regulate traffic movement for each stage of work. 	
 measures to maintain pedestrian and cyclist access. 	
 requirements and methods to consult and inform the local community of impacts on the local road network. 	
 a response plan for any construction traffic incident. 	
 consideration of other developments that may be under construction to minimise traffic conflict and congestion that may occur due to the cumulative increase in construction vehicle traffic. 	
 monitoring, review and amendment mechanisms. 	
Construction	<u> </u>
Pedestrian and vehicular access to adjacent premises is to be maintained during the construction stages. If access is disrupted or imited, the occupier of the premises is to be notified in advance, including the extent and duration of changes to access.	Contractor
The length of the work zone would be designed to maintain the traffic flow (based on the AS1742.3).	Contractor
Protection of workers and road users are to be provided as part of the TMP e.g. advance warning of roadwork, speed changes, safety barriers with adequate offsets and deflection allowance.	Contractor
Entry and exit to the compound/stockpile locations would be delineated with proper signage and advance warning signs.	Contractor

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Action/Phase	Responsibility
Temporary speed restrictions and traffic detours are to be imposed when necessary.	Contractor
All construction traffic would comply with all applicable traffic laws and regulations including speed limits. All construction vehicles would comply with the speed limits set for the roads when accessing the works site.	Contractor

5.2.8 Waste Management

Objective

- Compliance the provisions of the Protection of the Environment Operations (Waste) • Regulation 2014.
- Maximize reuse/recycling of waste material and minimise waste disposed of to landfill.

Actions

Action/Phase	Responsibility
Pre-construction	
 A Waste Management Plan (WMP) would be prepared as part of the CEMP by the construction contractor for the management of waste generated during construction works. The WMP must be prepared in accordance with the applicable waste management provisions of the <i>Protection of the Environment Operations Act 1997</i> and the <i>Protection of the Environment Operations (Regulation)</i> 2014. The WMP would follow the resource management hierarchy principles embodied in the <i>Waste Avoidance and Resource Recovery Act 2001</i> and the NSW <i>Government Resource Efficiency Policy 2019</i>. It would include, but not necessarily be limited to, the following: Non-recyclable waste and containers would be regularly collected and disposed of at a licensed landfill or other disposal site in the area. Waste oil would be sent to approved recyclers. The worksite would be left tidy and rubbish free each day prior to leaving site and at the completion of construction. 	Contractor
 Transportation of waste must be done in a manner that avoids the waste spilling, leaking, or otherwise escaping from the vehicle or plant used to transport the waste. Waste would be transported to a place that can lawfully receive that waste. 	
The Waste Management Plan would adopt the objectives of the Waste Avoidance and Resource Recovery Act 2001, namely, to	Contractor

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Action/Phase	Responsibility
encourage the most efficient use of resources, to reduce environmental harm, and to provide for the continual reduction in waste generation in line with the principles of environmentally sustainable development (ESD).	
The Waste Management Plan would also need to be consistent with the <i>Waste Classification Guidelines</i> (EPA, 2014 and 2016 addendum) in that all waste removed from the construction sites is to be classified and disposed of appropriately.	Contractor
The CEMP would incorporate a pollution incident response management plan that defines appropriate procedures for notification of pollution incidents to the required authorities in accordance with s. 147 to 153 of the POEO Act and requires response actions to be implemented in order to address any risks such as incidents posed to the environment, property or surrounding communities.	Contractor
Construction	1
 Management and disposal of waste shall comply with relevant statutory requirements, standards, codes, and guidelines, including but not limited to: SafeWork NSW requirements; SafeWork NSW Codes of Practice; Work Health and Safety Act 2011 (NSW); Work Health and Safety Regulation 2017 (NSW); Environmentally Hazardous Chemicals Act 1985 (NSW); and Waste Avoidance and Resource Recovery Act 2001 (NSW). 	Contractor
 Accurate written records are to be kept such as: Who transported the waste (company name, ABN, vehicle registration and driver details, date and time of transport, description of waste); and Copies of waste dockets/receipts for the waste facility (date and time of delivery, name and address of the facility, it's ABN, contact person). 	Contractor
All waste would be recycled if practicable or alternatively taken to a licensed waste disposal facility in accordance with its waste classification.	Contractor



Action/Phase	Responsibility
Excess spoil material should be considered for re-use to achieve a fill balance. Where possible spoil would be temporarily stored onsite or removed to an appropriate hardstand area.	Contractor
No development drainage, overflow or contaminated waste (contaminated runoff or septic) shall impact negatively on nearby waterways or drainage lines.	Contractor
Waste receptacles for recyclable and non-recyclable waste are to be provided at each construction site for workers waste.	Contractor
No batched concrete mixing plants would be established in the works areas. Any required concrete would be mixed off-site and transported to the construction area.	Contractor
The EPA is to be notified immediately of any pollution incidents or harm to the environment (as defined under Part 5.7 of the POEO Act).	Contractor
Prepare and implement an Unexpected Finds Protocol for hazards and/or contamination during construction, which would include the following procedure:	
 In the event of an unexpected find, all work in the immediate vicinity would cease; Temporary barricades would be erected to isolate the area from access to the public and works; and In the event that potential asbestos containing material is encountered, a qualified occupational hygienist and/or asbestos consultant would be contacted. 	Contractor

5.2.9 Visual Amenity

Objective

 Protect the visual amenity of the locality for neighbouring land users and the local community.

Actions

Action/Phase	Responsibility
Construction	
The clearing of vegetation would be kept to the minimum required to undertake the works.	Contractor

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Action/Phase	Responsibility
Construction compounds and areas for the parking of vehicles and storing of equipment would be located in cleared areas wherever possible.	Contractor
Revegetation/re-grassing of disturbed areas to be undertaken as soon as practicable.	Contractor
All waste to be removed from the works areas and the sites left in a clean and tidy condition throughout works and following completion of the works.	Contractor
Undertake general post-construction site restoration to reduce the visual impacts of the works.	Contractor

5.2.10 Utilities and Infrastructure

Objective

 Prevention / minimisation of impacts to utilities and services infrastructure during the construction works.

Actions

Action/Phase	Responsibility
Pre-construction	
Utilities and services which may be impacted by the Proposal would be accurately located following the detailed design and prior to commencement of works. This would include Dial Before you Dig searches and potholing activities.	Contractor
Utility and service providers would be consulted prior to the commencement of and during construction works in the event that impacts on any utilities and services by the Proposal are likely.	Contractor
If the scope or location of proposed utility relocation works falls outside of the assessed Proposal scope and footprint, further assessment will be undertaken	Contractor



6. Conclusion and Recommendations

UHSC and TfNSW are proposing reconstruction and upgrade works to the Scone CBD area along Kelly Street and the adjacent pedestrian footpath area, from the intersection with Kingdon Street through to the intersection with Susan Street. The aim of the Proposal is to revitalise Kelly Street, and create a fit for purpose place, to facilitate and support increased local business, pedestrian and leisure activity utilisation in the Scone CBD.

Construction works have the potential to cause short term impacts such as increased traffic, noise and vibration (particularly to older, heritage-listed buildings on Kelly Street), dust and a reduction in amenity for users of the Scone CBD. However, these impacts are anticipated to be relatively minor and temporary.

A SOHI prepared for the Proposal has concluded that there would be no significant impact to the buildings located on Kelly Street of local and State heritage significance, or to the Central Scone Heritage Conservation Area associated with the Proposal.

This REF has been prepared in accordance with 5.5 and 5.7 of the *Environmental Planning and Assessment Act* 1979 and Clause 228 of *the Environmental Planning and Assessment Regulation* 2000.

On the basis of the information presented in this REF it is concluded that:

- The proposed activity is not likely to have a significant impact on the environment and therefore an Environmental Impact Statement is not required.
- The proposed activity is not likely to significantly affect threatened species, populations, ecological communities, or critical habitat. Therefore, a Species Impact Statement (SIS) is not required.
- The proposed activity is not likely to affect any Commonwealth land, is not being carried out on Commonwealth land, or significantly affect any Matters of National Environmental Significance.

The REF has assessed the likely impacts of the Proposal and is considered adequate for the proposed activity. Accordingly, the proposed activity is recommended to proceed subject to the implementation of measures to avoid, minimise or manage environmental impacts in this REF.

Accordingly, this REF is considered to provide a true and fair assessment of the proposed activity in relation to its likely effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposed activity.



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Appendix A Consideration of Clause 228

Clause 228 of the EP&A Regulation 2000 indicates, for purposes of Part 5 of the Act, the factors that must be taken into account when consideration is being given to the likely impact of an activity on the environment.

A determining authority is only required to consider the following matters where an EIS has been prepared for a Part 5 activity under the EP&A Act. However, the following information is provided to assist determining authorities in making determinations consistent with those made for an activity requiring preparation of an EIS.

The various factors and findings following environmental assessment are presented below.

(a) any environmental impact on a community,

There is the potential for some minor and short term, temporary noise, dust, waste management and traffic impacts during construction works. These impacts would be limited to the immediate vicinity of the works and are not expected to have a significant impact on the local community.

(b) any transformation of a locality,

The works would involve road and footpath upgrades within an existing road reserve area. Therefore, there would be a negligible impact on the locality overall. A minor transformation of existing developed area would result. However, this transformation is considered to have a positive impact on the locality.

(c) any environmental impact on the ecosystems of the locality,

Vegetation removal comprising planted shrubs and trees is required to facilitate the works. However, no significant impact to threatened species is anticipated. No adverse impact on the ecosystems in the locality is predicted.

(d) any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality,

Minor visual impacts are anticipated during the construction phase. Appropriate mitigation measures would be implemented to avoid a reduction in any environmental quality or value of the locality. A positive impact is anticipated post-works.

(e) any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations,

A specialist Statement of Heritage Impact assessment indicated that given the proper implementation of mitigation measures, the impact Historic Heritage is anticipated to be minor and no approvals are required prior to the commencement of works. No effects to Aboriginal Heritage have been identified associated with the Proposal.

(f) any impact on the habitat of protected animals (within the meaning of the *Biodiversity Conservation Act 2016*),

The works would be limited to an existing previously cleared area only with limited habitat potential. No significant impact to the habitat of protected species is anticipated.



(g) any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air,

No impact to threatened species is anticipated with the implementation of the recommended mitigation measures during construction works.

(h) any long-term effects on the environment,

No effects identified.

(i) any degradation of the quality of the environment,

There would be temporary and minor degradation of the quality of the environment during the works which would involve excavation works. The works would result in some short-term impacts including traffic, noise and dust during the construction period. Control measures to minimise these impacts would be implemented during construction as part of the contractor's Construction Environmental Management Plan (CEMP).

(j) any risk to the safety of the environment,

None identified.

(k) any reduction in the range of beneficial uses of the environment,

None identified.

(I) any pollution of the environment,

There is the potential for some minor and temporary noise and air pollution during the proposal works. With the implementation of appropriate mitigation measures during construction works there would be no long term or significant pollution of the environment.

(m) any environmental problems associated with the disposal of waste,

All construction waste would be taken off site for disposal at a licensed recycling facility or waste facility in line with EPA requirements. The Contractor would prepare a Waste Management Plan to ensure waste is managed appropriately during works, so as not to cause off-site impacts.

(n) any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply,

None identified.

(o) any cumulative environmental effect with other existing or likely future activities,

None identified.

(p) any impact on coastal processes and coastal hazards, including those under projected climate change conditions.

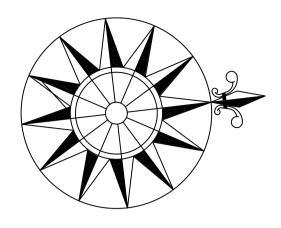
The Proposal site is not located in the Coastal Zone.

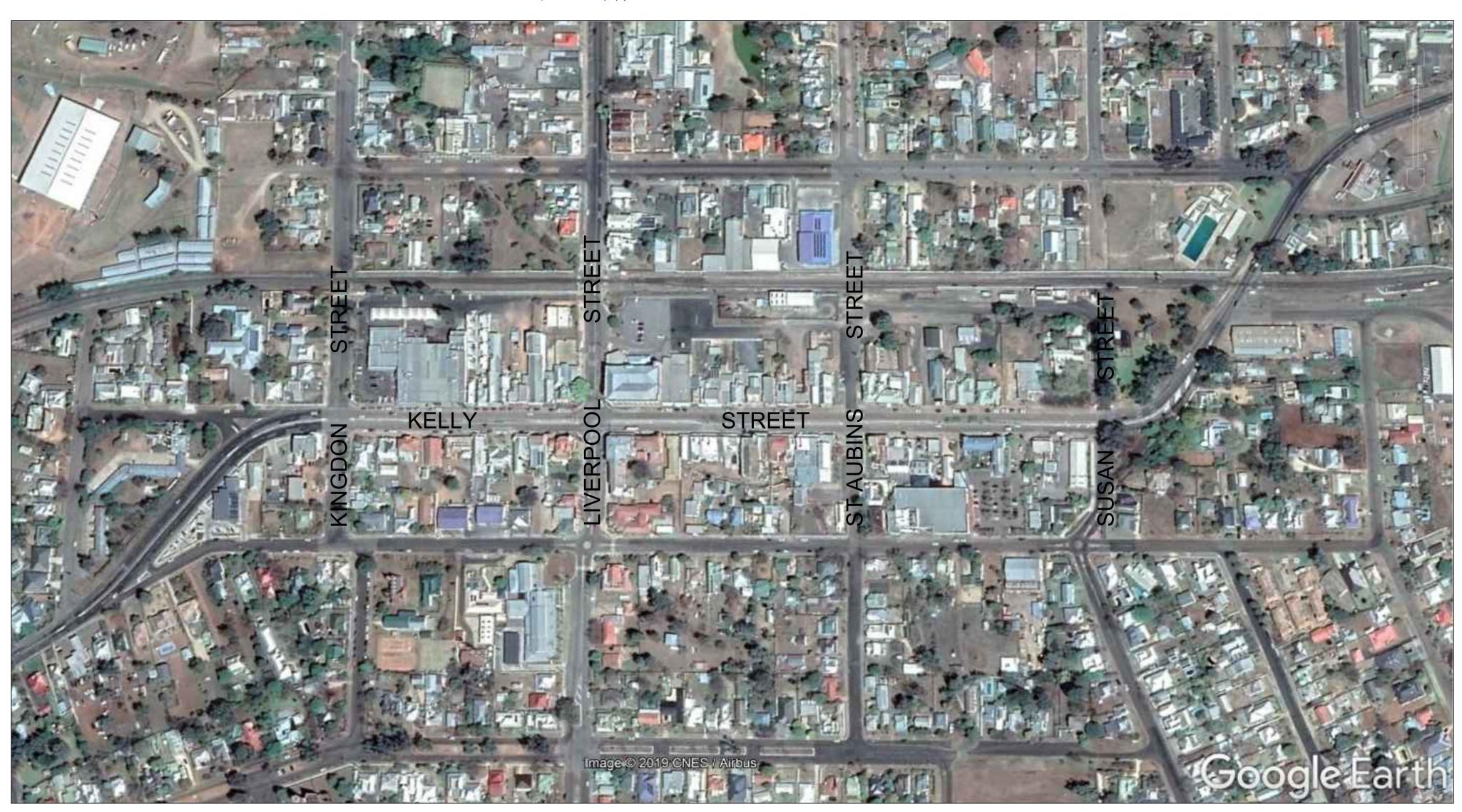


Scone CBD Revitalisation

Review of Environmental Factors

Appendix B Designs



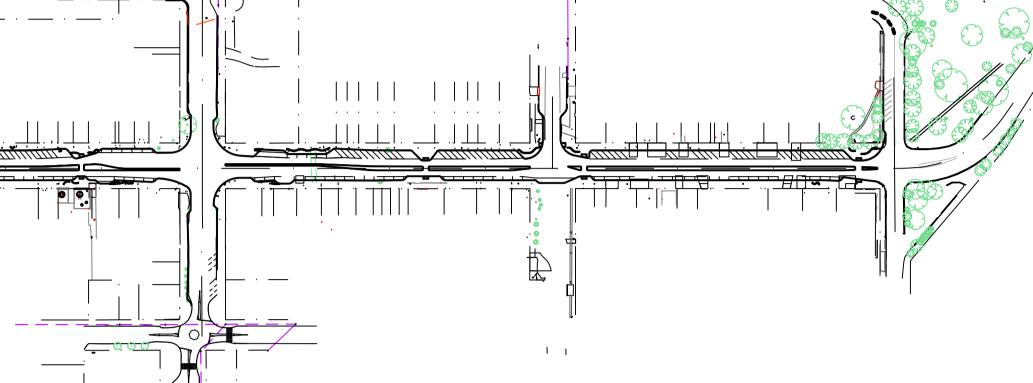


LOCALITY PLAN









DRAWING STATL	15
FOR CONCEPT	
FOR TENDER	
FOR INFORMATION	
FOR APPROVAL	
FOR CONSTRUCTION	

18-130 KELLY STREET REVITALISATION PROJECT

DRAWING SCHEDULE: KELLY STREET REDEVELOPMENT

DWG No	DRAWING TITLE	REV	DATE
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18-130-CD03.14	KELLY ST LONG SECTION - GUTTER LIP BLOCK 2 EAST SHEET 1 OF 2	CD3	24/12/2
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CD7	CONCEPT DESIGN	16/08/2021	CA							
CD6	CONCEPT DESIGN	09/08/2021	CA						UPPER HUNT	rer s
CD5	CONCEPT DESIGN	02/08/2021	CA						130 LIVERPOOL STREET	Telep
CD4	CONCEPT DESIGN	16/06/2021	CA					Upper Hunter	P.O. BOX 208	Facsi
CD3	CONCEPT DESIGN	11/06/2021	СН	CD10	CONCEPT DESIGN	24/12/2021	CA		SCONE NSW 2337	Emai
CD2	CONCEPT DESIGN	01/06/2021	СН	CD9	CONCEPT DESIGN	03/11/2021	CA			
CD1	CONCEPT DESIGN	14/05/2021	СН	CD8	CONCEPT DESIGN	17/08/2021	CA			
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

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18-130-CD05.77	STORMWATER EXISTING PIPE LONG SECTIONS SHEET 3	CD3	24/12/21
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18-130-CD05.91	PIT SCHEDULE SHEET 2	CD1	24/12/21
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18-130-CD06.16	FOOTPATH STORMWATER MANAGEMENT PLAN SHEET 6	CD1	24/12/21
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18-130-CD07.50	DEPTH RANGE PLAN SHEET 5	CD7	24/12/21
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18-130-CD07.70	DEPTH RANGE PLAN SHEET 7	CD1	24/12/21
18-130-CD08.10	EXISTING SLAB JOINT PLAN SHEET 1	CD3	24/12/21
18-130-CD08.20	EXISTING SLAB JOINT PLAN SHEET 2	CD3	24/12/21
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18-130-CD08.40	EXISTING SLAB JOINT PLAN SHEET 4	CD3	24/12/21
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18-130-CD09.30	TRAFFIC CONTROL ALTERNATIVE TYPE 1	CD1	05/08/21
18-130-CD09.31	TRAFFIC CONTROL ALTERNATIVE TYPE 2	CD1	05/08/21
18-130-CD09.32	TRAFFIC CONTROL ALTERNATIVE TYPE 3	CD1	05/08/21
18-130-CD09.33	TRAFFIC CONTROL ALTERNATIVE TYPE 4	CD1	17/08/2

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18-130-CD10.11	TURNING TEMPLATE - KELLY - KINGDON PATH B SHEET 2	CD2	24/12/2
18-130-CD10.12	TURNING TEMPLATE - KELLY - KINGDON PATH C SHEET 3	CD2	24/12/2
18-130-CD10.13	TURNING TEMPLATE - KELLY - KINGDON PATH D SHEET 4	CD2	24/12/2
18-130-CD10.20	TURNING TEMPLATE - KELLY - KINGDON PATH A SHEET 5	CD3	24/12/2
18-130-CD10.30	TURNING TEMPLATE - U-TURN ST AUBINS- KELLY SHEET 1	CD3	24/12/2
18-130-CD10.40	TURNING TEMPLATE - ST AUBINS - KELLY PATH A SHEET 1	CD3	24/12/2
18-130-CD10.41	TURNING TEMPLATE - ST AUBINS - KELLY PATH B SHEET 2	CD1	24/12/2
18-130-CD10.42	TURNING TEMPLATE - ST AUBINS - KELLY PATH C SHEET 3	CD1	24/12/2
18-130-CD10.43	TURNING TEMPLATE - ST AUBINS - KELLY PATH D SHEET 4	CD1	24/12/2
18-130-CD10.50	TURNING TEMPLATE - ST AUBINS - KELLY PATH E SHEET 5	CD3	24/12/2
18-130-CD10.60	TURNING TEMPLATE - SUSAN - KELLY PATH A SHEET 1	CD2	22/06/2
18-130-CD10.70	TURNING TEMPLATE - SUSAN - KELLY PATH B SHEET 2	CD3	24/12/2
18-130-CD10.80	TURNING TEMPLATE - NUTRIENT - PATH A SHEET 1	CD1	24/12/2
18-130-CD12.10	PROPOSED ROUNDABOUT KINGDON ST AND KELLY ST SHEET 1	CD2	24/12/2
18-130-CD12.20	PROPOSED ROUNDABOUT SUSAN ST AND KELLY ST SHEET 1	CD2	24/12/2

SHIRE COUNCIL Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 mail: council@upperhunter.nsw.gov.au

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



INDEX PLAN

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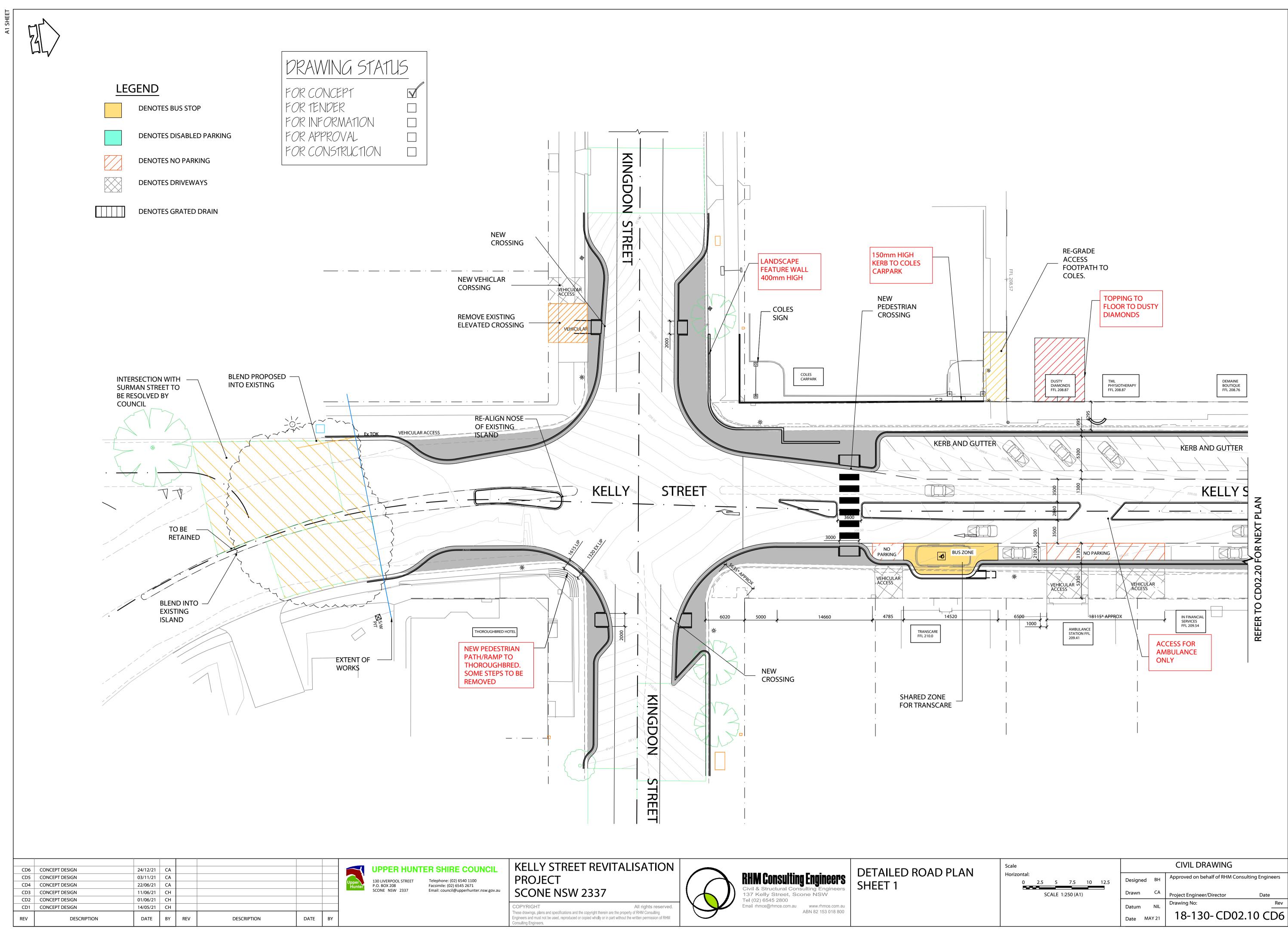
137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.au ABN 82 153 018 800

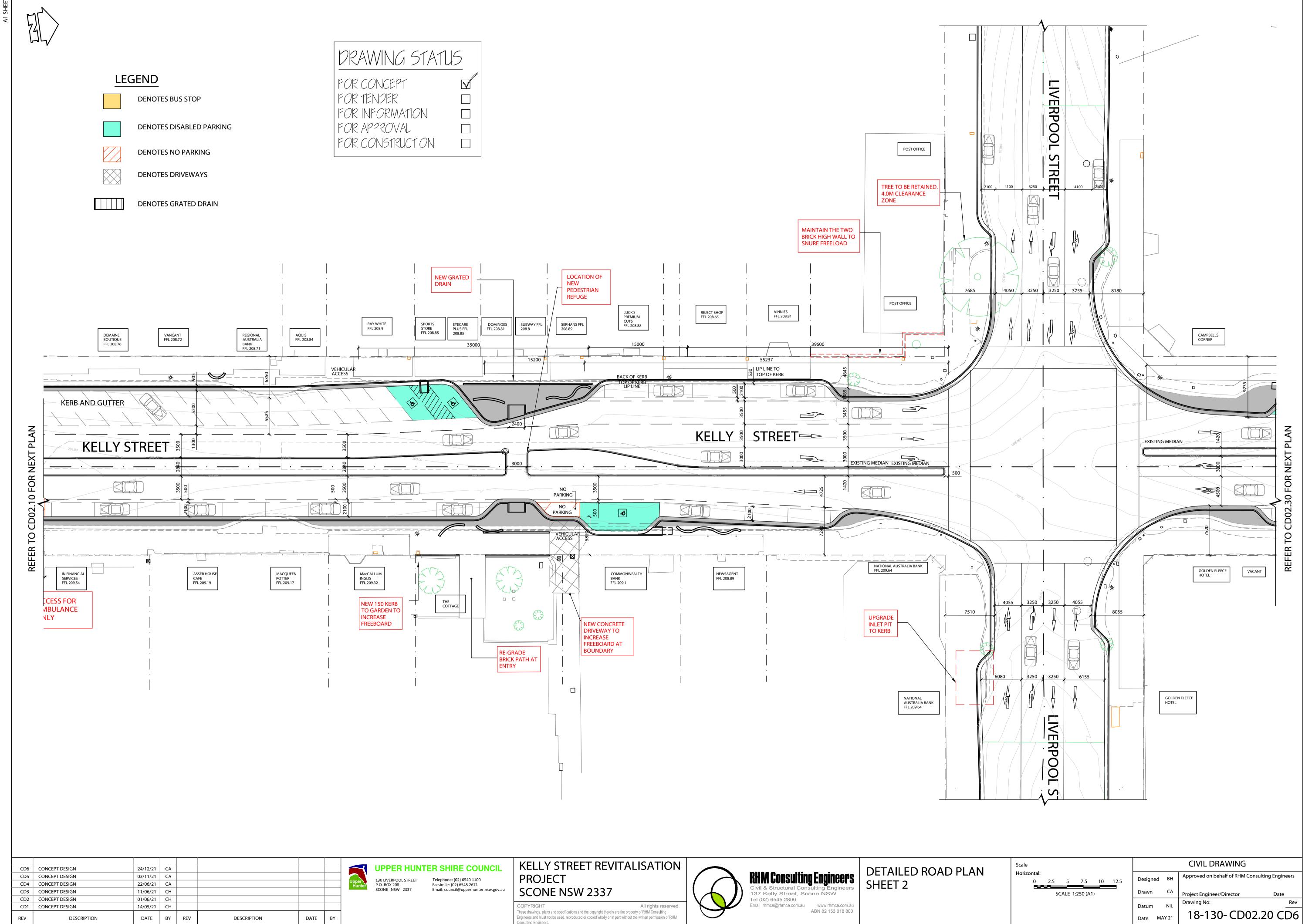
DRAWING SCHEDULE: KELLY STREET REDEVELOPMENT

DRAWING STATUS

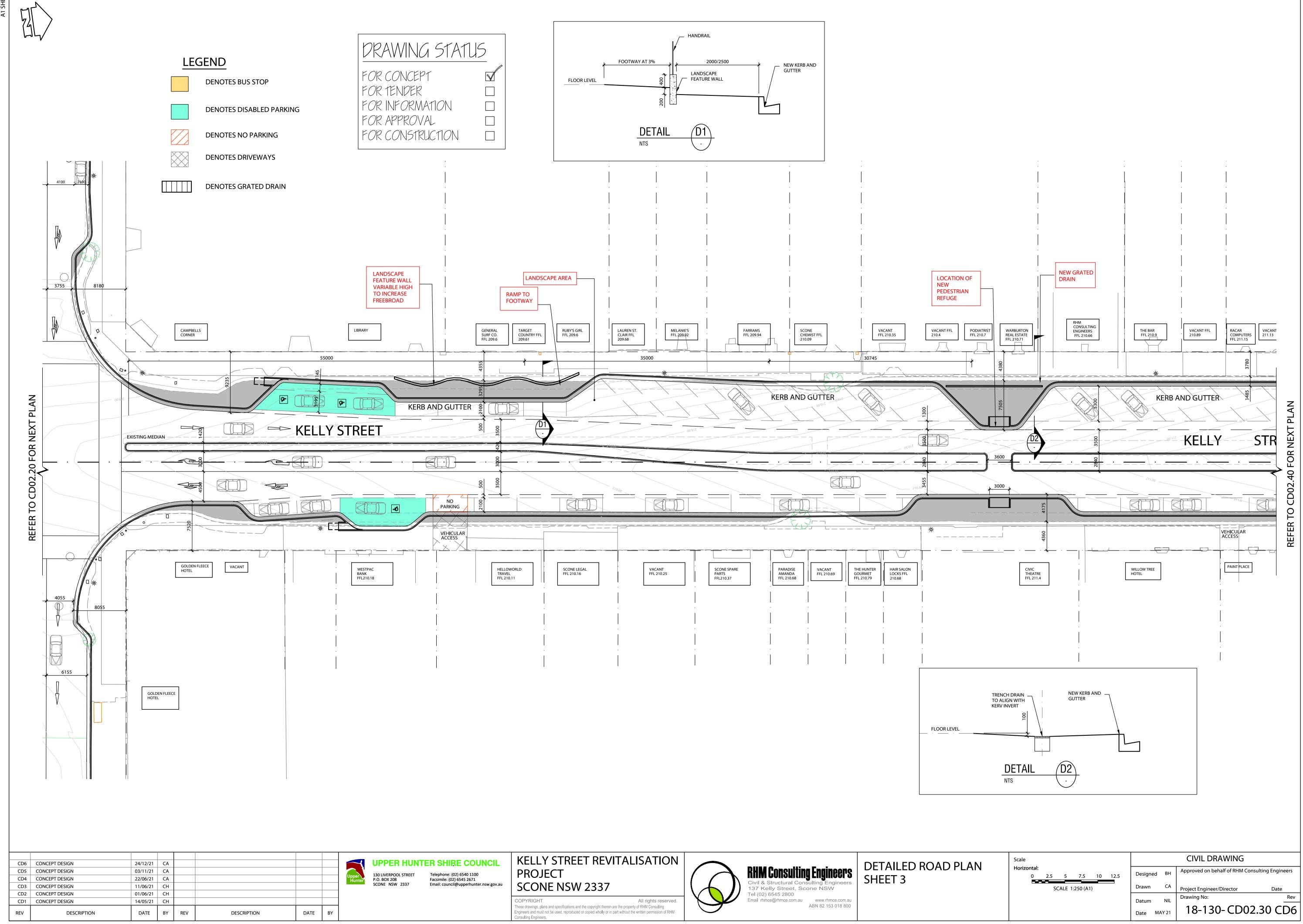
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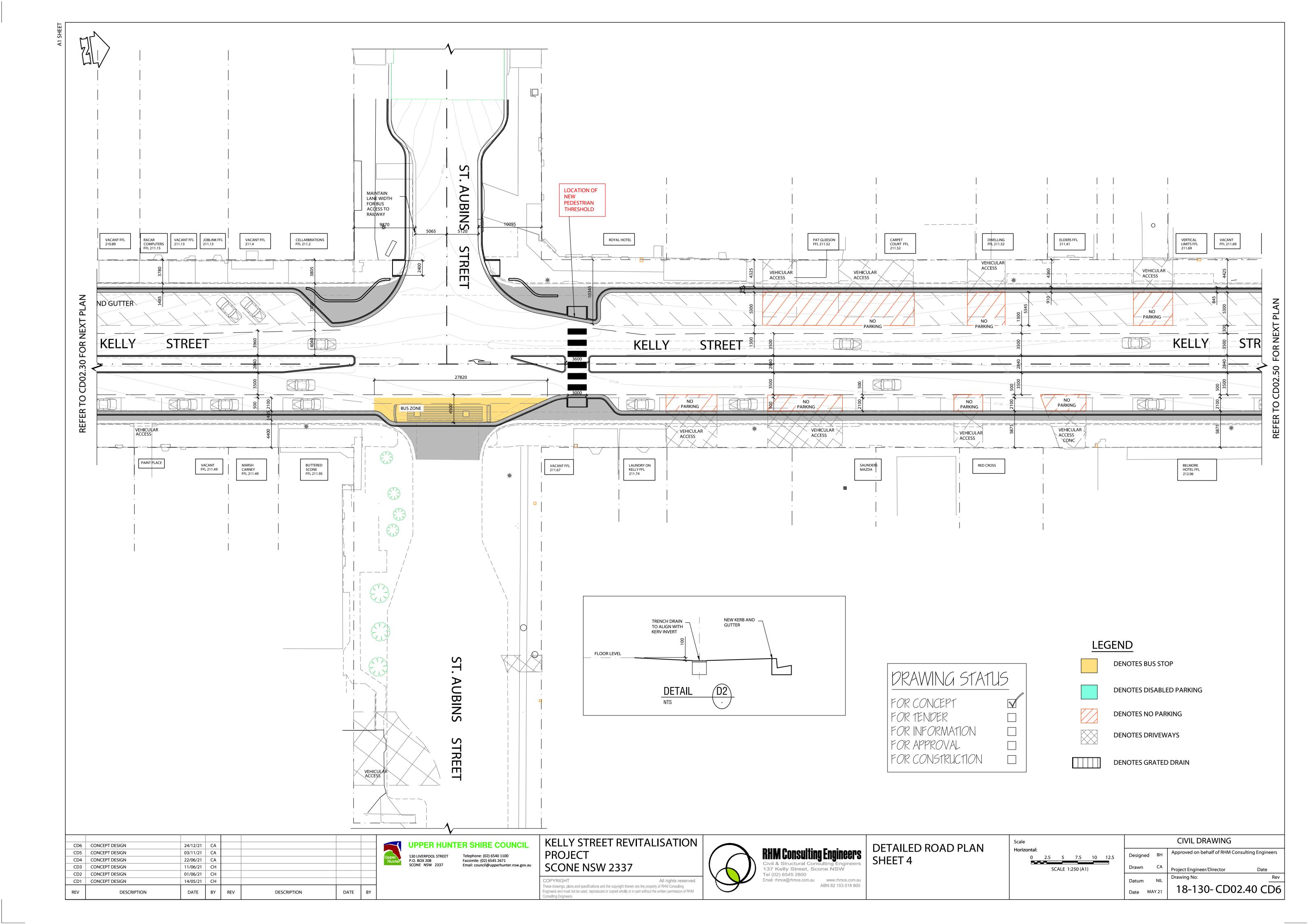


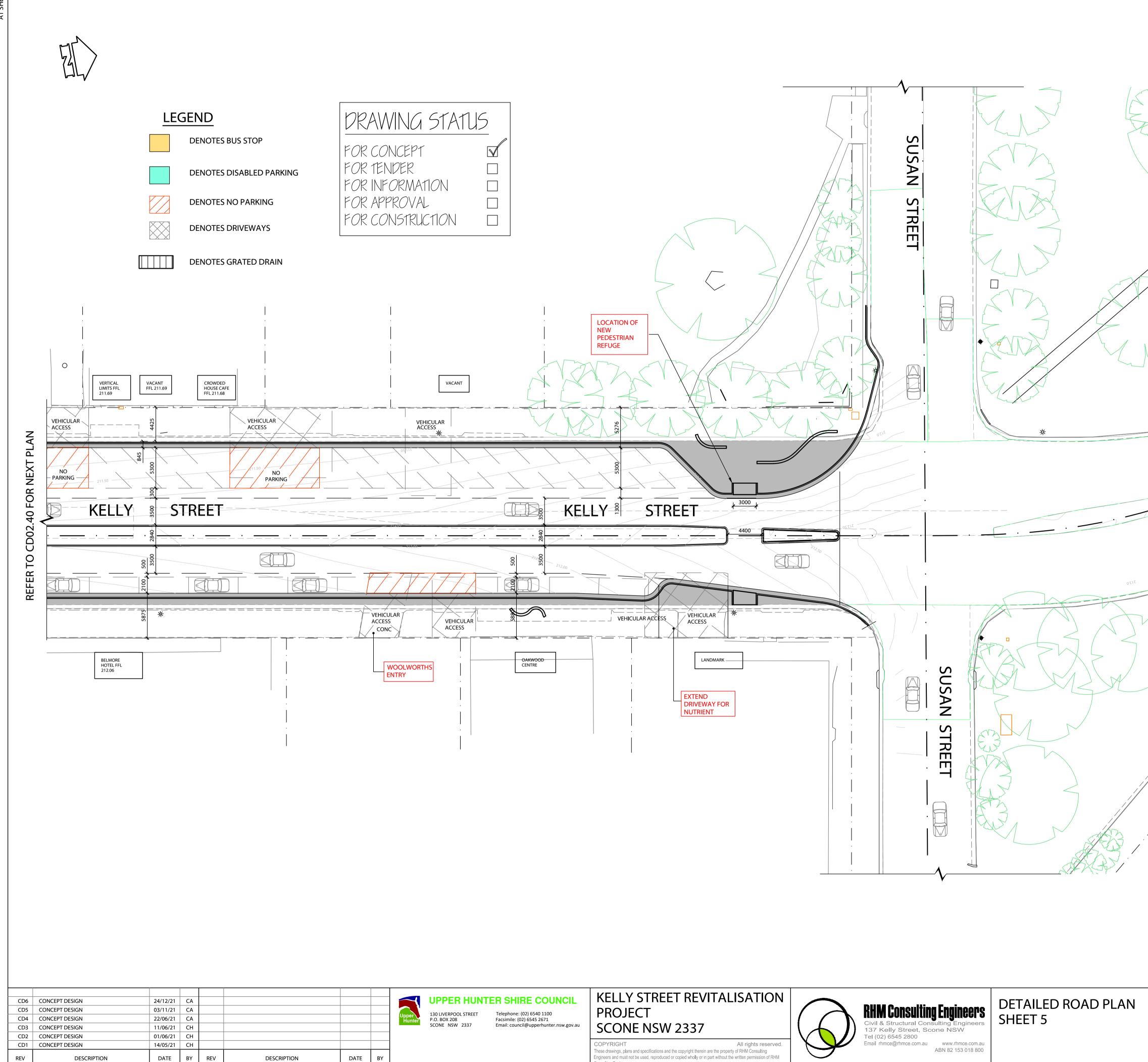


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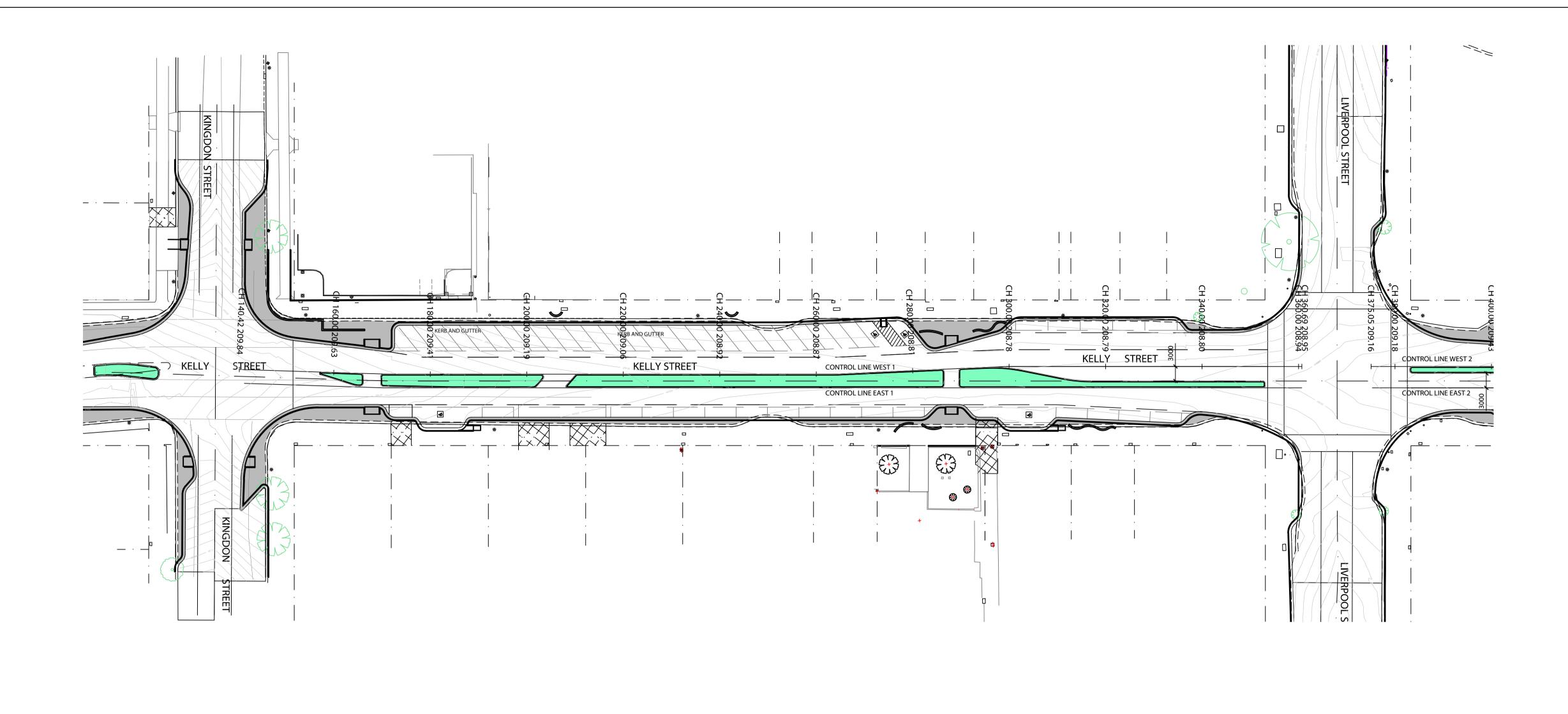


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REFER TO CD03.07 FOR LOCATION OF CONTROL LINE



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Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m)	- <u>2.2 %</u> 5m		. <u>1 %</u> 20m		-0.9 10n	%	-1.25 % 20m	><		-0.6 <mark>8 %</mark> 40m		<		-0.23 % 30m		><	 -0.38 % 20.98m 		<			0.18 % 49.02m		><	0.53 % 20.7m	
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CUT/FILL DEPTH	0.171 0.099	0.059		0.059	0.059	0.076	0.096	0.094	-0.02	-0.01	-0.015	-0.046	0.078	-0.05	-0.051	-0.041	-0.061	-0.092	-0.094	-0.05	0.137	0.158	0.151	0.141	0.143	0.137 0.136
DESIGN LEVELS ON BLOCK B1 CONTROL WEST	209.86 209.75	209.64	209.593	209.53	209.515	209.44	209.315	209.19	209.123	209.055	208.987	208.92	208.897	208.873	208.864	208.85	208.812 208.795	208.774	80	208.787	208.805	208.823	208.842	208.86	208.913	208.966 208.97 208.97
EXISTING SURFACE ON CENTRELINE	209.69 209.65	209.58	209.55	209.47	209.46	209.36	209.22	1.00.1	209.14	209.06	209	208.97	208.82	208.92	208.92	208.89	208.87 208.87	208.87	208.86	208.84	208.67	208.67	208.69	208.72	208.77	208.83 208.83
CHAINAGE BLOCK B1 CONTROL WEST	145 150	160	164.26	170	171.62	180	190	200	210	220	230	240	250	260	263.98	270	280 284.31	290	290.98	300	310	320	330	340	350	360 360.69 360.7

LONGSECTION CONTROL LINE 1 West Kerb HORIZONTAL SCALE 1:500 (A1)

VERTICAL SCALE 1:50 (A1)

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								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (i Facsimile: (02 Email: counci
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CD1	CONCEPT DESIGN	22/06/21	CA							
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IRE COUNCIL e: (02) 6540 1100 (02) 6545 2671 ıncil@upperhunter.nsw.gov.au KELLY STREET REVITALISATION PROJECT SCONE NSW 2337

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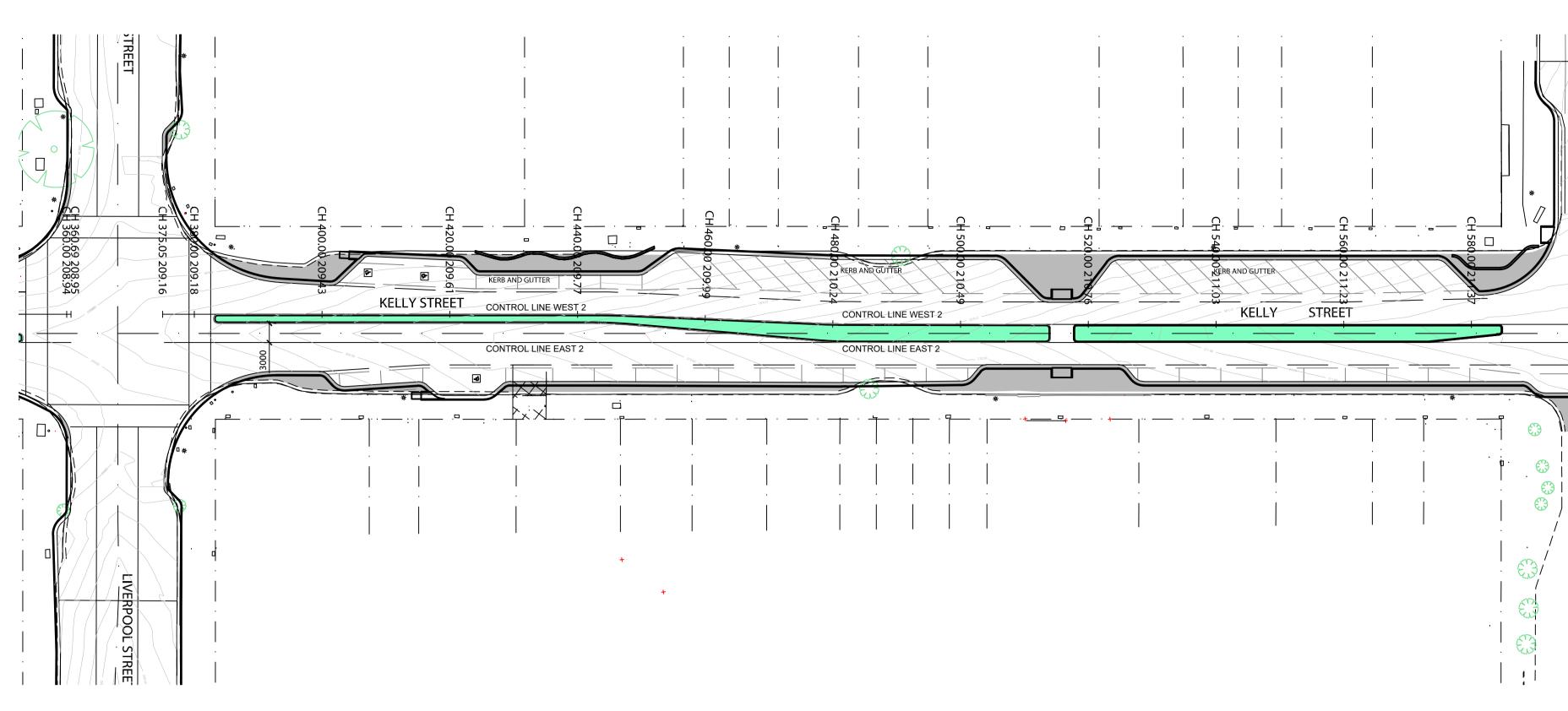


RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

LONG SECTIONS CONTROL LINE WEST 1 SHEET 1 OF 3

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REFER TO CD03.07 FOR LOCATION OF CONTROL LINE



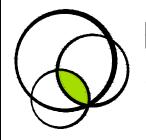
Vertical Geometry Grade (%)	0	,75%	IP CH. 383.06 RL.209.25	1,06 %	IP CH. 400 RL.209.43	6 %	IP CH. 412.5 RL.209.6	48 %	IP CH. 425 RL.209.66	0.73 %	IP CH. 440 RL.209.77	1.2 %	IP CH. 455 RL.209.95	1.47 %	IP CH. 470 RL.210.17		1 %		IP CH. 498 RL.210.49	.25 %	IP CH. 511.64 RL.210.66	55 %	IP CH. 520.04 KL.210.79	1.5 %		IP CH. 540 RL.211.09	1.1 %		IP CH. 560 RL.211.31	IP CH. 570 RL.211.34	% IP CH. 580 RL.211.42	0.34 %	///	0 IP CH. 594.5 RL.211.4
Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.207.00	×	.01m	1	6.94m	12.	5m		2.5 m		15m —		15m ->		15m ->		281	m	>	13	3.64m -	8.	4m		19.96m			20m	~~~	10m ⁻			[~] 14.5m	1	5.5
CUT/FILL DEPTH	0.202	0.168	-0.059		0/0.0-		-0.037	-0.059 -0.074	-0.077	-0 080	-0.00	-0.072	-0.032	ę	2	-0.026	-0.035	-0.036	-0.037	-0.044	-0.049	-0.049 -0.027	-0.023	0.111	0.134		0.149	0.165		0.112	0.133	0.122		
DESIGN LEVELS ON BLOCK B2 CONTROL WEST	209.19	209.227	209.324		209.43	209.566	6	209.636 209.66	209.697	77 BUC	17:602	209.89 209.95	210.023	210.17	71.017	210.284	210.399	210.49	210.515	210.64	210.66	210.66 210.789	210.79	210.94	211.09		211.2	211.31		211.34	211.42	211.454	211.47	
EXISTING SURFACE ON CENTRELINE	208.99	209.06	209.38		16.202	209.61	209.64	209.7 209.73	209.77	90 BU	08.202	209.96 209.96	210.05	210.17	210.17	210.31	210.43	210.53	210.55	210.68	210.71	210.71 210.82	210.81	210.83	210.96		211.05	211.15		211.23	211.29	211.33	211.34	
CHAINAGE BLOCK B2 CONTROL WEST	375.05	380	390		400	410	412.5	420 425	430	440	0	450 455	460	470) Ĵ	480	490	498	500	510	511.64	511.66 520	520.04	530	540		550	560		570	580	590	594.5	

LONGSECTION CONTROL LINE A1 West Kerb HORIZONTAL SCALE 1:500 (A1)

VERTICAL SCALE 1:50 (A1)

									UPPER HUNT	ER SHIRE COUNCIL
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au
CD2	CONCEPT DESIGN	24/12/21	CA							
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	ВҮ	REV	DESCRIPTION	DATE	ΒΥ			

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers

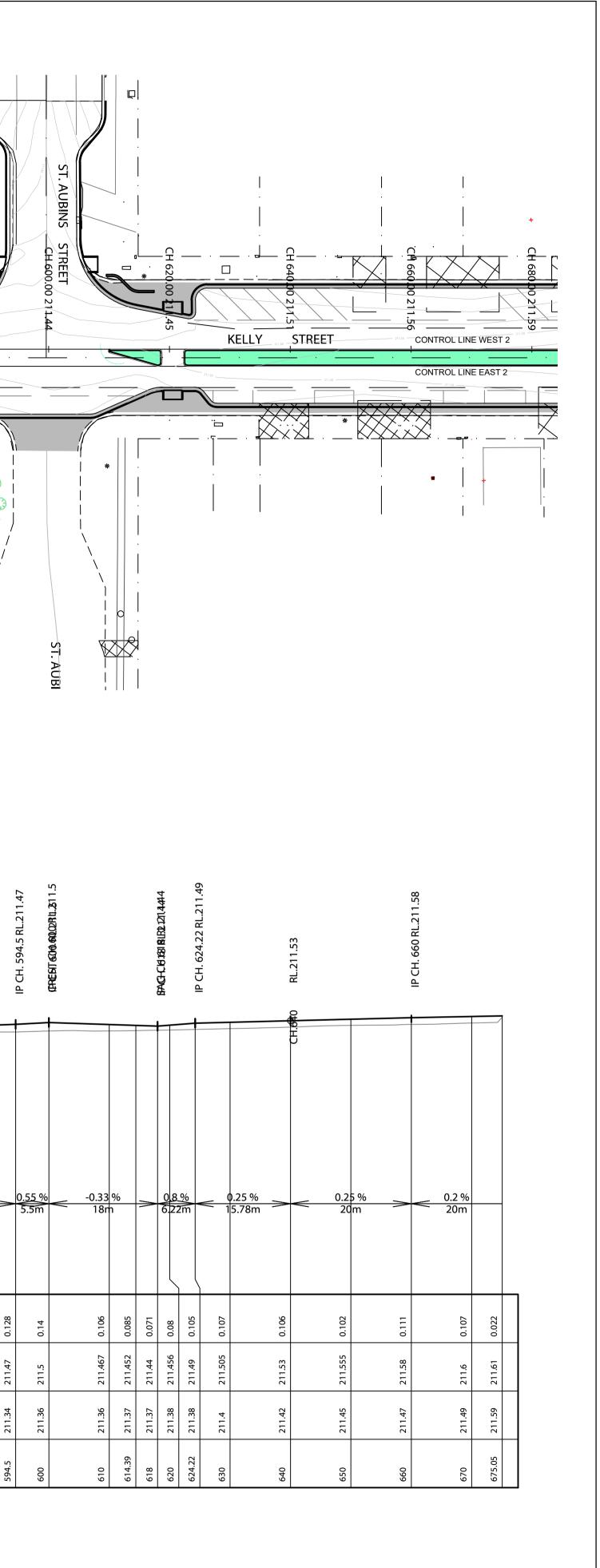
 137 Kelly Street, Scone NSW

 Tel (02) 6545 2800

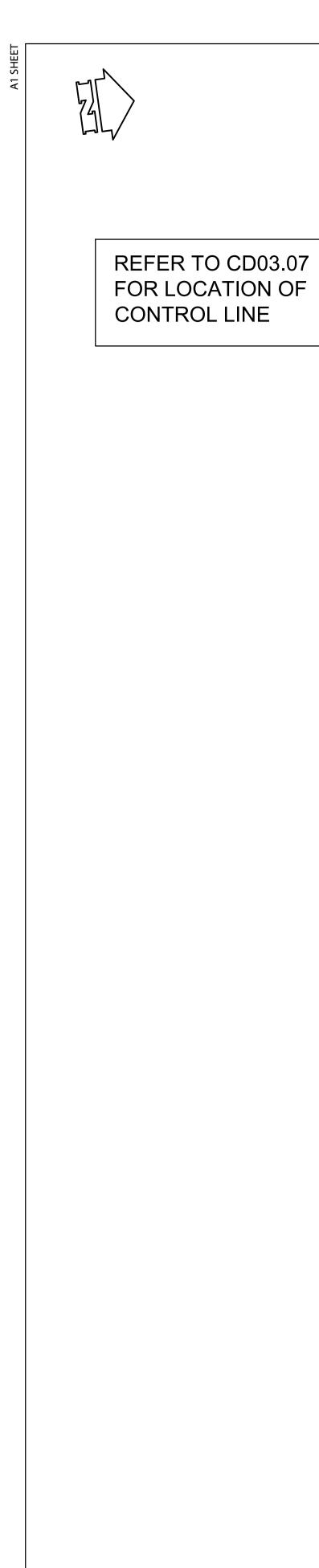
 Email rhmce@rhmce.com.au

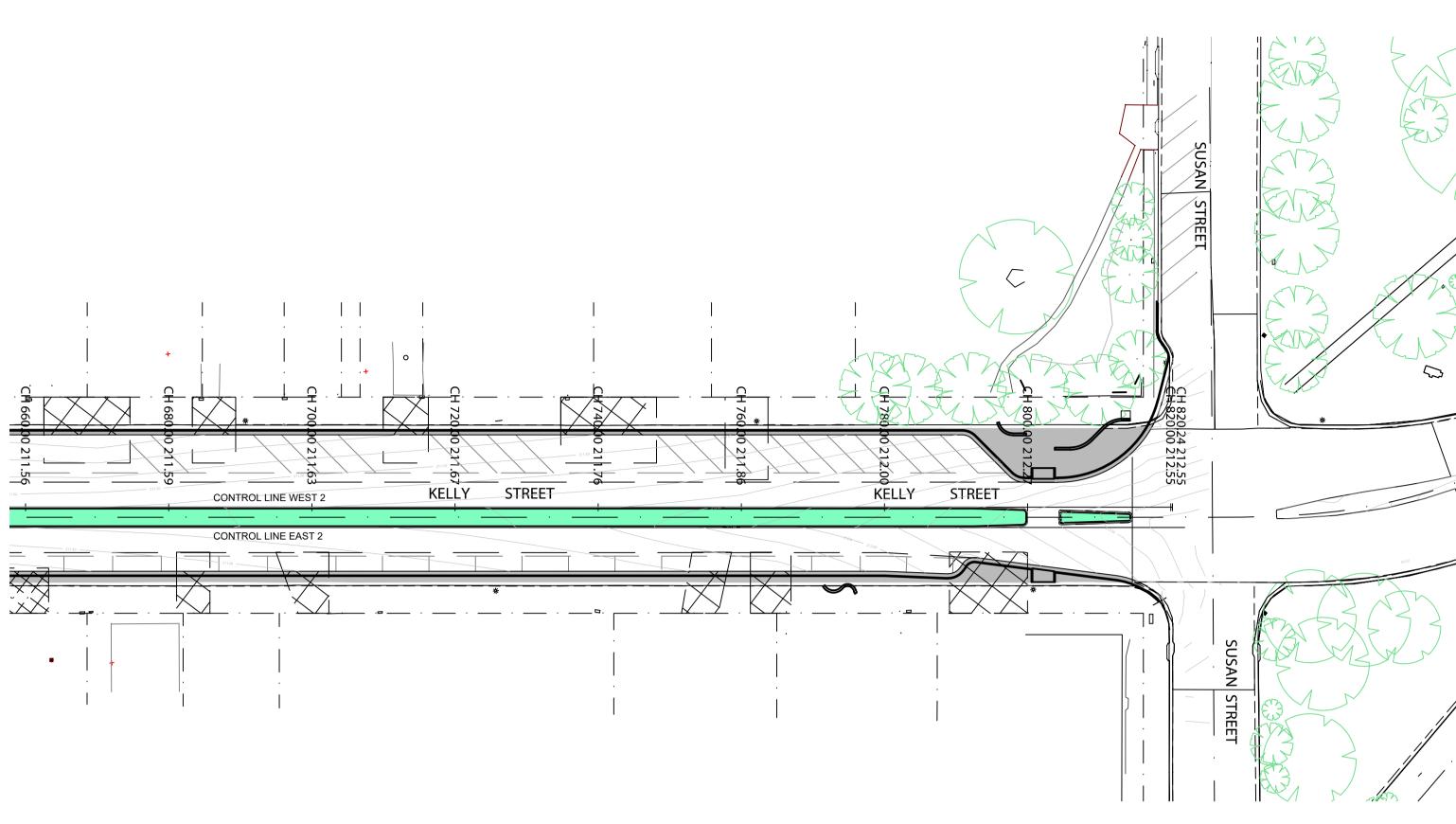
ABN 82 153 018 800

LONG SECTIONS CONTROL LINE WEST 2 SHEET 2 OF 3



Scale								CIVIL DRAWING	
Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consu	lting Engineers
	S	CALE 1	:500 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.5	1	1.5	2	2.5	Datum	NIL	Drawing No: 18-130- CD03.	
	5	SCALE 1	l:50 (A1))		Date JUN	NE 21		





				IP CH. 680 RL.211.62		IP CH. 700 RL.211.7		IP CH. 720 RL.211.74		IP CH. 740 RL.211.79				IP CH. 780 RL.212.04		IP CH. 800 RL.212.27	IP CH. 810 RL.212.4		
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.207.00			0.2 % 20m	< <u>0.</u> 20	4 % 0m →		.2 % 20m →	<u> </u>	25 % 0m →	< 0.35 % ≥ 20m		< 0.9 20	9% m →		15 % 0m →	1.3 % 10m	- <u>1</u> . T0	47 % 0.24m	
CUT/FILL DEPTH	0.113	0.107	-0.027	0.005	0.075		0.016	800.0	0.001	-0-08	0.137	0.143	0.11	0.113		0.092	0.092	0.09	60.0
DESIGN LEVELS ON BLOCK B2 CONTROL WEST	211.59 0	211.6 0	211.62	211.66		2112 2112 2112		211.765		10	211.86 0	211.95	212.04 0	<u>ې</u>		24	51	212.547 0	212.55 0
EXISTING SURFACE ON CENTRELINE	211.48	211.49	211.65	211.65	97 I C	00.112 7 11C	211.72	211.76	211.79	211.83	211.72	211.81	211.93	212.04	212.17	212.31	212.36	212.46	212.46
CHAINAGE BLOCK B2 CONTROL WEST	665.05	670	680	069	400	00	720	730	740	750	760	770	780	062	008	810	813.44	820	820.24

LONGSECTION CONTROL LINE A2 West Kerb HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:50 (A1)

									UPPER HUNT	FER SHIRE
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 65 Facsimile: (02) 654 Email: council@up
CD2	CONCEPT DESIGN	24/12/21	CA					-		
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	ΒΥ	REV	DESCRIPTION	DATE	BY			

E COUNCIL) 6540 1100 6545 2671 Qupperhunter.nsw.gov.au KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



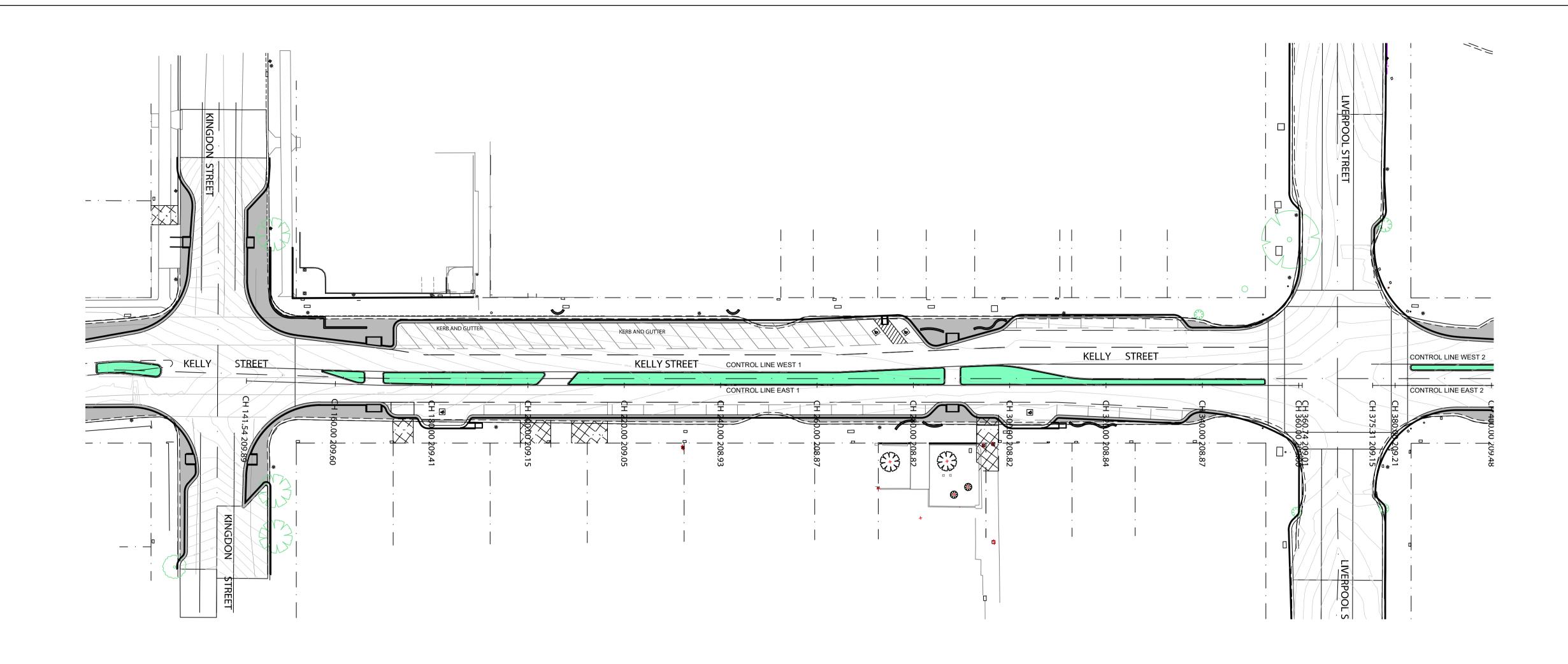
RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

LONG SECTIONS CONTROL LINE WEST 2 SHEET 3 OF 3

Scale		CIVIL DRAWING
Horizontal: 05_10_15_20_25	Designed BH	Approved on behalf of RHM Consulting Engineers
SCALE 1:500 (A1)	Drawn CA	Project Engineer/Director Date
Vertical: 0 0.5 1 1.5 2 2.5	Datum NIL	Drawing No: Rev
SCALE 1:50 (A1)	Date JUNE 21	18-130- CD03.03 CD2

741

REFER TO CD03.07 FOR LOCATION OF CONTROL LINE



		IP CH. 150 RL.209.75	IP CH. 164.4 RL.209.6	IP CH. 170.61 RL.209.56		IP CH. 180 RL.209.46		IP CH. 200 RL.209.15			P CH. 220 RL.209.09		- IP CH. 240 RL.208.94				IP CH. 270 RL.208.9				BAG-CB131 AIR20808484			IP CH 340 RI 208 89			-	
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.207.00	-2.4 % 5m	6	<u>%0.64</u> n 6.21n	% -1. n 9.	07 <u>%</u> 39m	-1	.55 % 20m	>	-0.: - 20	3 % ≥m >		0.75 % 20m	~><		-0.13 % 30m	>	<		-0.15 % 40m		><		0.17 % 30m	>	 < 0.63 % 20.74r 	n		
CUT/FILL DEPTH	0.112 0.034	-0.003	0.041	0.044	0.045	0.065	2	0.031	860.0		44	0.122	0.089	0.103	0.107	0.123	ç	0.13	0.131 0.128	0.131	0.129	0.146	0.134	0.119	0.123	0.11	0.111	
DESIGN LEVELS ON BLOCK B1 CONTROL EAST	209.87 209.75	209.62 209.6	209.564	209.561	209.56	209.46 209.305		209.15 209.146	: 1 🗄		60.202	209.015	208.94	208.927	208.913	208.9		208.878	208.87 208.867	208.855	208.84	208.857	208.873	208.89	208.953	209.015	209.02	209.02
EXISTING SURFACE ON CENTRELINE	209.76 209.72	209.62	209.52	209.52	209.52	209.4 209.5		209.12 209.1	209.02		66:907	208.89	208.85	208.82	208.81	208.78	1000	208.75	208.74 208.74	208.72	208.71	208.71	208.74	208.77	208.83	208.91	208.91	
CHAINAGE BLOCK B1 CONTROL EAST	145 150	160 1644	170	170.49	170.61	180	2	200 201.33	210		077	230	240	250	260	270		284.44	290 291.84	300	310	320	330	340	350	360	360.74	360.74

LONGSECTION CONTROL LINE 1 East Kerb HORIZONTAL SCALE 1:500 (A1)

VERTICAL SCALE 1:50 (A1)

								UPPER HUNT	ER SHI
							Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (Facsimile: (0 Email: counc
CONCEPT DESIGN	24/12/21	CA					-		
CONCEPT DESIGN	22/06/21]		
DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			
	CONCEPT DESIGN	CONCEPT DESIGN 22/06/21	CONCEPT DESIGN 22/06/21 CA	CONCEPT DESIGN 22/06/21 CA	CONCEPT DESIGN 22/06/21 CA	CONCEPT DESIGN 22/06/21 CA	CONCEPT DESIGN 22/06/21 CA	Image: Concept design 24/12/21 CA Image: Concept design Concept design CA Image: Concept design CA Image: Concept design Concept de	Image: Concept Design 24/12/21 CA Image: Concept Design Image: Conce

IRE COUNCIL e: (02) 6540 1100 (02) 6545 2671 ıncil@upperhunter.nsw.gov.au KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



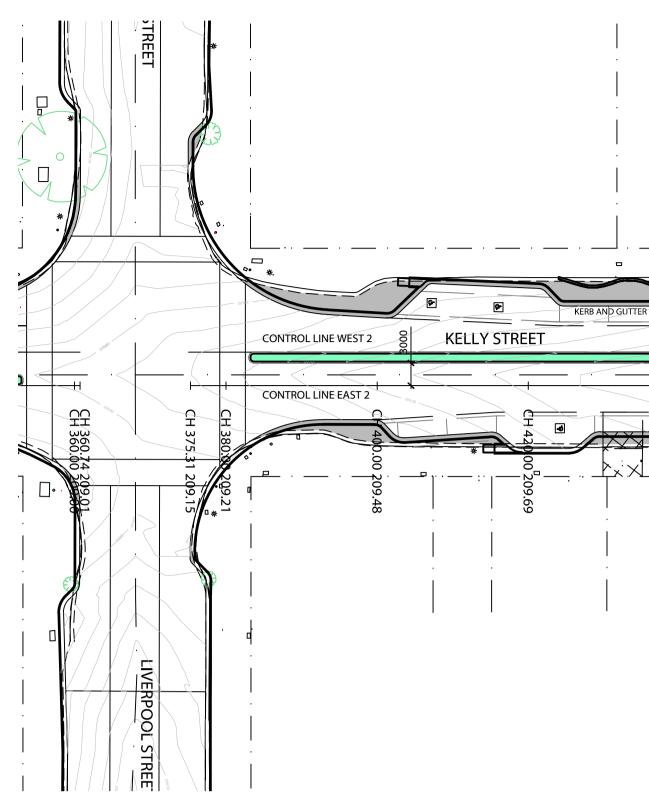
RHM Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

LONG SECTIONS CONTROL LINE EAST 1 SHEET 1 OF 3

Scale	CIVIL DRAWING
Horizontal: 0510152025	Designed BH Approved on behalf of RHM Consulting Engineers
SCALE 1:500 (A1)	Drawn CA Project Engineer/Director Date
Vertical: 0 0.5 1 1.5 2 2.5 SCALE 1:50 (A1)	DatumNILDrawing No:RevDateJUNE 2118-130-CD03.04 CD2

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REFER TO FOR LOCAT CONTROL

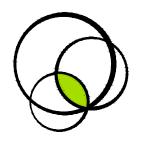


O CD03.07 ATION OF L LINE	TROL LINE WEST 2	KERB AND GUTTER		ND GUTTER
CH 350,74 20901		CONTROL LINE EAST 2		
CH. 383.06 RL.209.3	IP CH. 400 R.L.209.52 IP CH. 412.5 R.L.209.63 IP CH. 425 R.L.209.79 IP CH. 425 R.L.209.89	IP CH. 481.67 RL.210.36	IP CH. 511.64 RL.210.7 IP CH. 520.04 RL.210.81 IP CH. 540 RL.211.06	IP CH. 560 RL.211.23
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.207.00	0.88 % 1.28 % 0.57 % 12.5m 12.5m 17.5m	1.2 % 39.17m 1.13 % 29.96m	<u>1.31 %</u> <u>1.25 %</u> <u>0.8</u> 8.4m <u>19.96m</u> <u>20</u>	5% <u>0.76%</u> <u>0.43%</u> <u>23.66m</u> <u>16.34m</u>
CUT/FILL DEPTH 1 DESIGN LEVELS ON 9000 BLOCK B2 CONTROL EAST 0000 20000 20000 String SURFACE 00000 ON CENTRELINE 00000	209.42 209.52 0.098 209.52 209.608 0.085 209.55 209.608 0.085 209.55 209.608 0.085 209.62 209.608 0.109 209.62 209.726 0.109 209.63 209.726 0.109 209.64 209.796 0.107 209.65 209.796 0.109 209.78 209.876 0.103 209.78 209.876 0.093 209.78 209.876 0.093 209.87 209.876 0.093 209.87 209.899 0.106 209.87 209.899 0.085 209.87 209.998 0.0085	210.1 210.22 210.22 210.34 210.36 210.454 210.458	210.58 210.681 0.104 210.6 210.7 0.101 210.6 210.7 0.101 210.71 210.89 0.097 210.71 210.816 0.097 210.71 210.817 0.093 210.71 210.816 0.093 210.84 210.935 0.093 210.96 211.06 0.102 210.96 211.06 0.102 211.06 211.145 0.089	1.15 211.23 0.083 1.15 211.23 0.083 1.22 211.306 0.084 1.28 211.382 0.098 1.3 211.437 0.10 1.38 211.437 0.10 1.38 211.48 0.104 1.38 211.48 0.104
ON CENTRELINE60606060CHAINAGE BLOCK B215909090CONTROL EAST52988896				21 21 21 21

LONGSECTION CONTROL LINE A1 East Kerb HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:50 (A1)

				-						
								Upper Hunter	UPPER HUNT 130 LIVERPOOL STREET P.O. BOX 208	ER SH Telephone Facsimile:
								nunter	SCONE NSW 2337	Email: cou
CD2 CD1	CONCEPT DESIGN CONCEPT DESIGN	24/12/21 22/06/21	CA CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

SHIRE COUNCIL hone: (02) 6540 1100 nile: (02) 6545 2671 council@upperhunter.nsw.gov.au KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers

 137 Kelly Street, Scone NSW

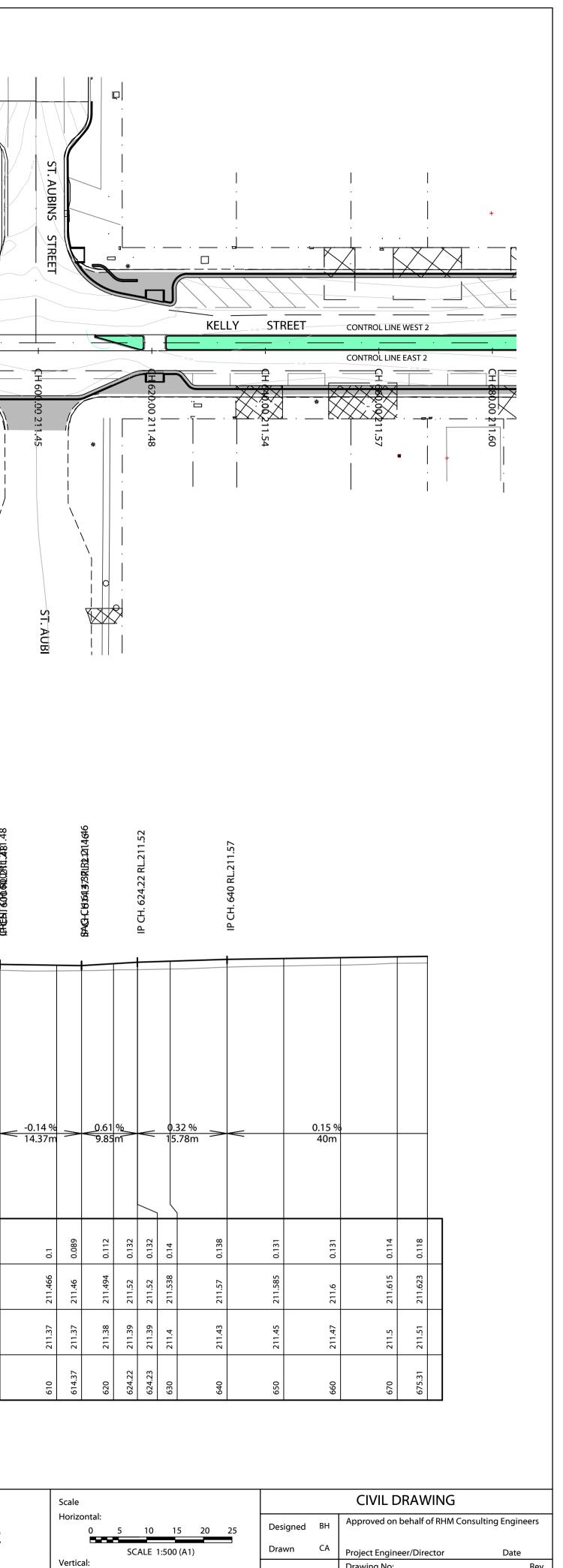
 Tel (02) 6545 2800

 Email rhmce@rhmce.com.au

ABN 82 153 018 800

LONG SECTIONS CONTROL LINE EAST 2 SHEET 2 OF 3

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Rev

Drawing No:

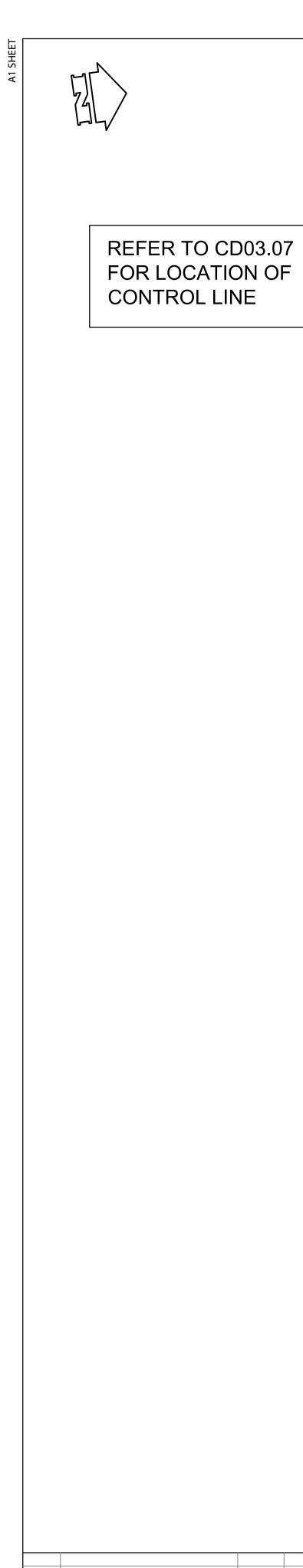
18-130-CD03.05 CD2

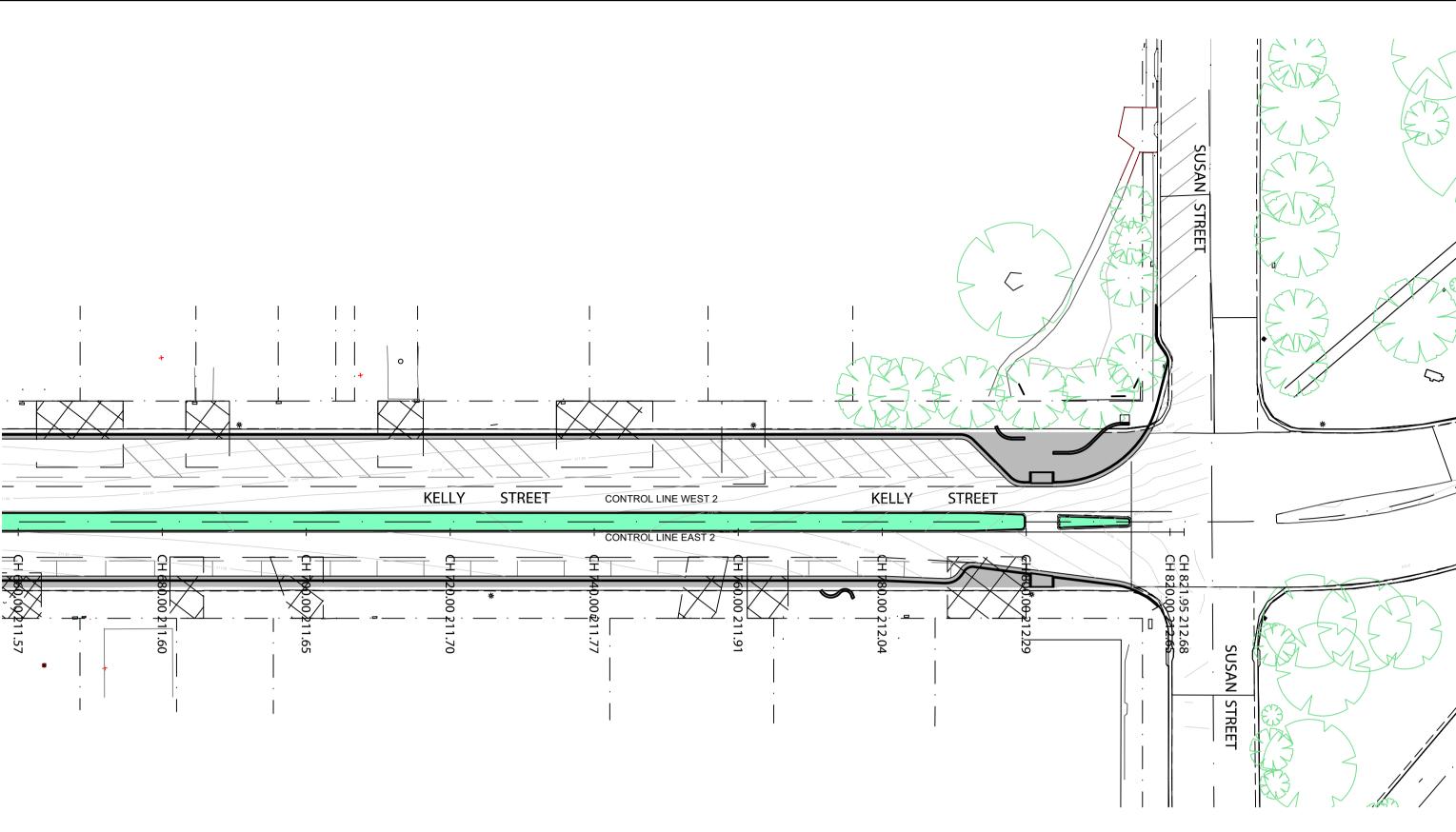
Datum NIL

Date JUNE 21

0 0.5 1 1.5 2 2.5

SCALE 1:50 (A1)





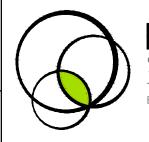
			IP CH. 680 RL 211.63				IP CH. 720 RL.211.72	211.7 L211.							IP CH. 798.77 RL.212.3			T	
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m)	_		0.15 % 40m	V		3 % Im	><	0.33		<u> </u>	~~~~	0.7 20r	% n	<u> </u>	7 % 77m →		<u>1.6</u> 23.	<u>4 %</u> 18m	
Vertical Curve Radius (m) DATUM R.L.207.00																			
CUT/FILL DEPTH	0.127	0.114	0.119	0.117	0.115	0.11	0.108	0.109	0.13	0.14	0.175	0.157	0.119	0.146	0147	0.145	0.14	0.145	0.152
DESIGN LEVELS ON BLOCK B2 CONTROL EAST	211.608	211.615	211.63	211.653	211.675	211.697	211.72	211.755	211.79	211.865	211.94	212.01	212.08	212.197	5012	212.32	212.484	212.648	212.68
EXISTING SURFACE ON CENTRELINE	211.48	211.5	211.51	211.54	211.56	211.59	211.61	211.65	211.66	211.72	211.76	211.85	211.96	212.05	212 16	212.18	212.34	212.5	212.53
CHAINAGE BLOCK B2 CONTROL EAST	665.31	670	680	069	700	710	720	730	740	750	760	770	780	062	798.77	800	810	820	821.95

LONGSECTION CONTROL LINE A2 East Kerb 41)

HORIZONTAL SCALE 1:500 (A1
VERTICAL SCALE 1:50 (A1)

										UPPER HUN	FER SHIRE
_									Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) Facsimile: (02) 65 Email: council@u
	CD2	CONCEPT DESIGN	24/12/21	CA					-		
	CD1	CONCEPT DESIGN	22/06/21	CA							
	REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

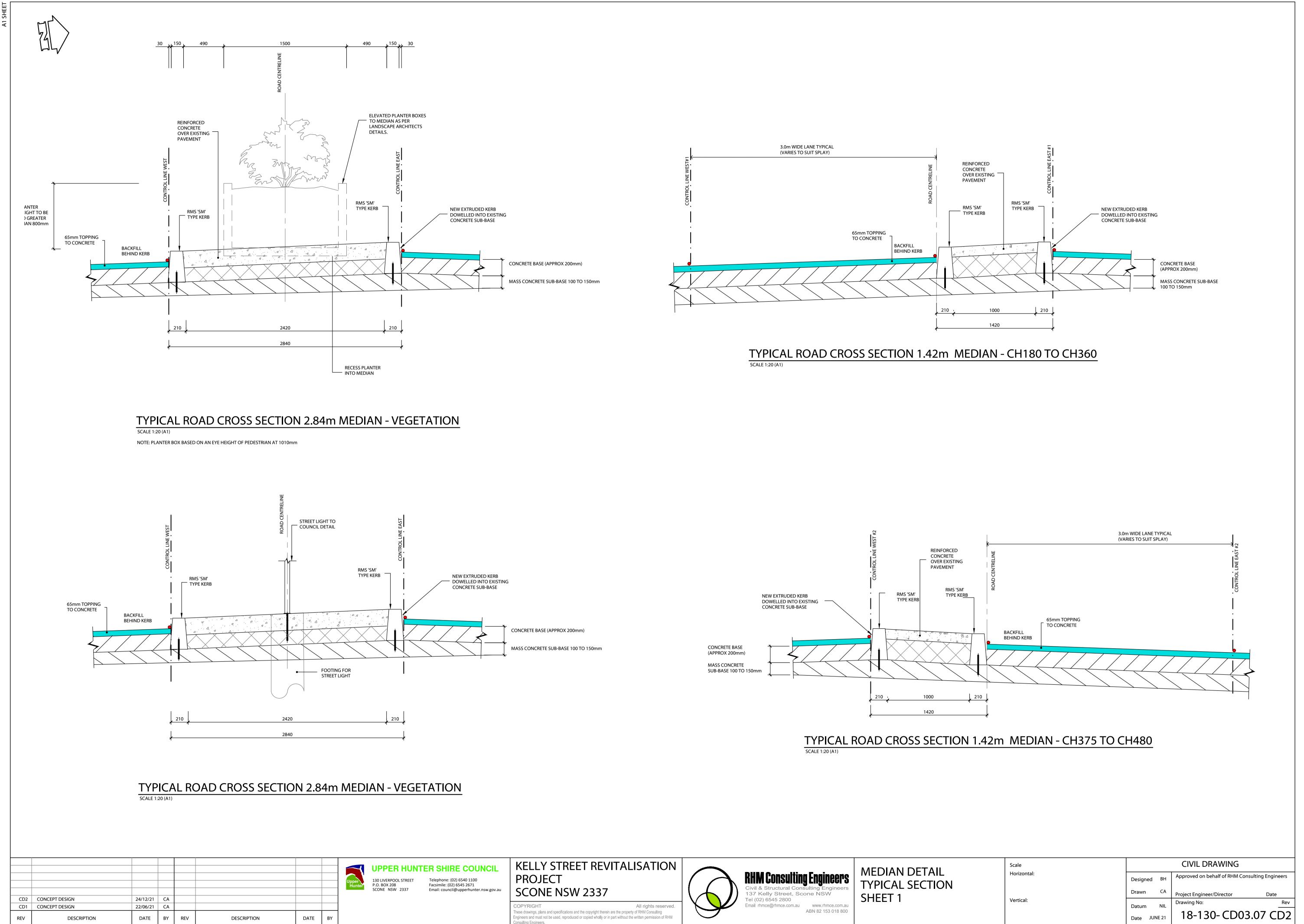
E COUNCIL 2) 6540 1100) 6545 2671 @upperhunter.nsw.gov.au KELLY STREET REVITALISATION PROJECT SCONE NSW 2337

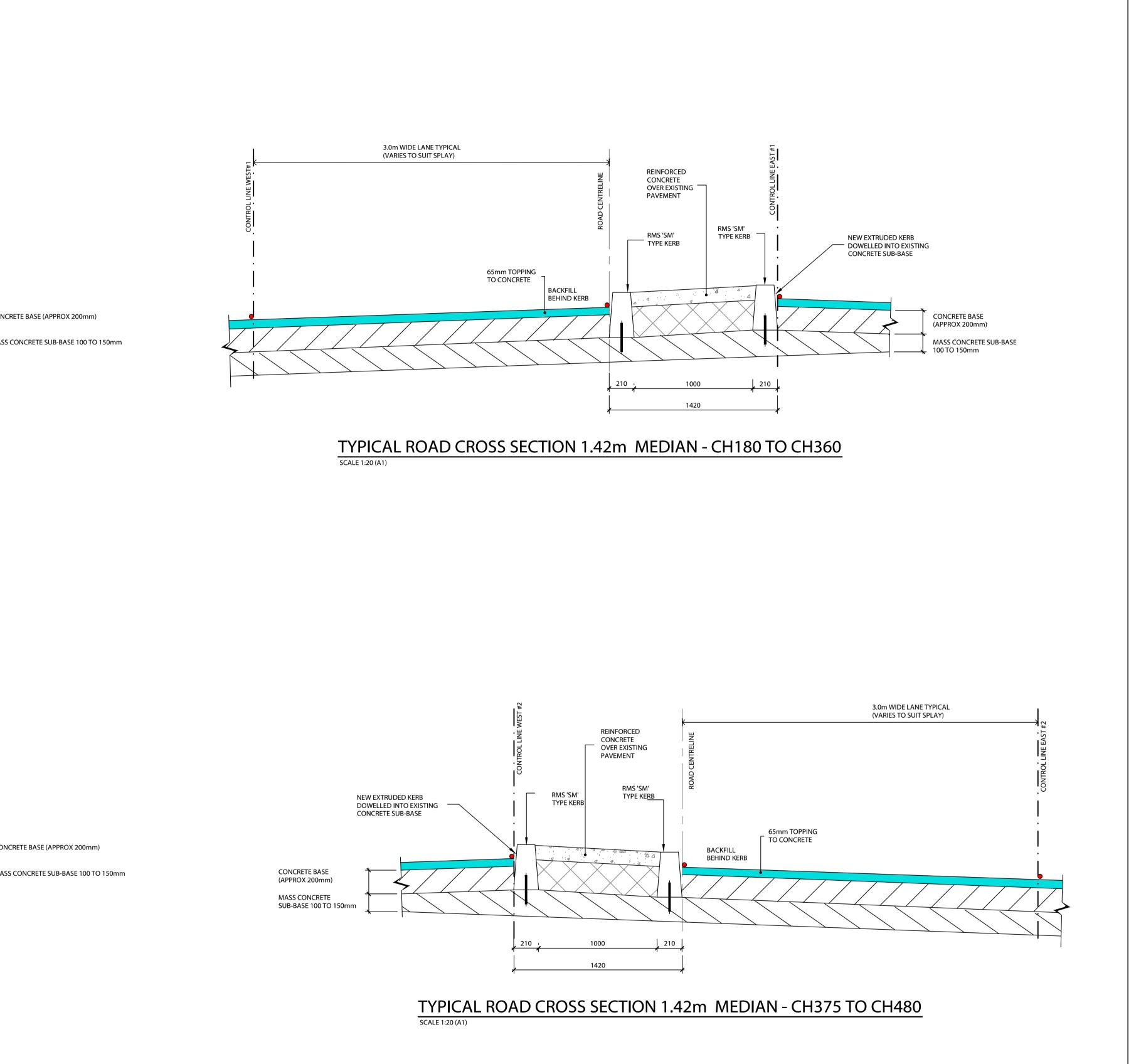


RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

LONG SECTIONS CONTROL LINE EAST 2 SHEET 3 OF 3

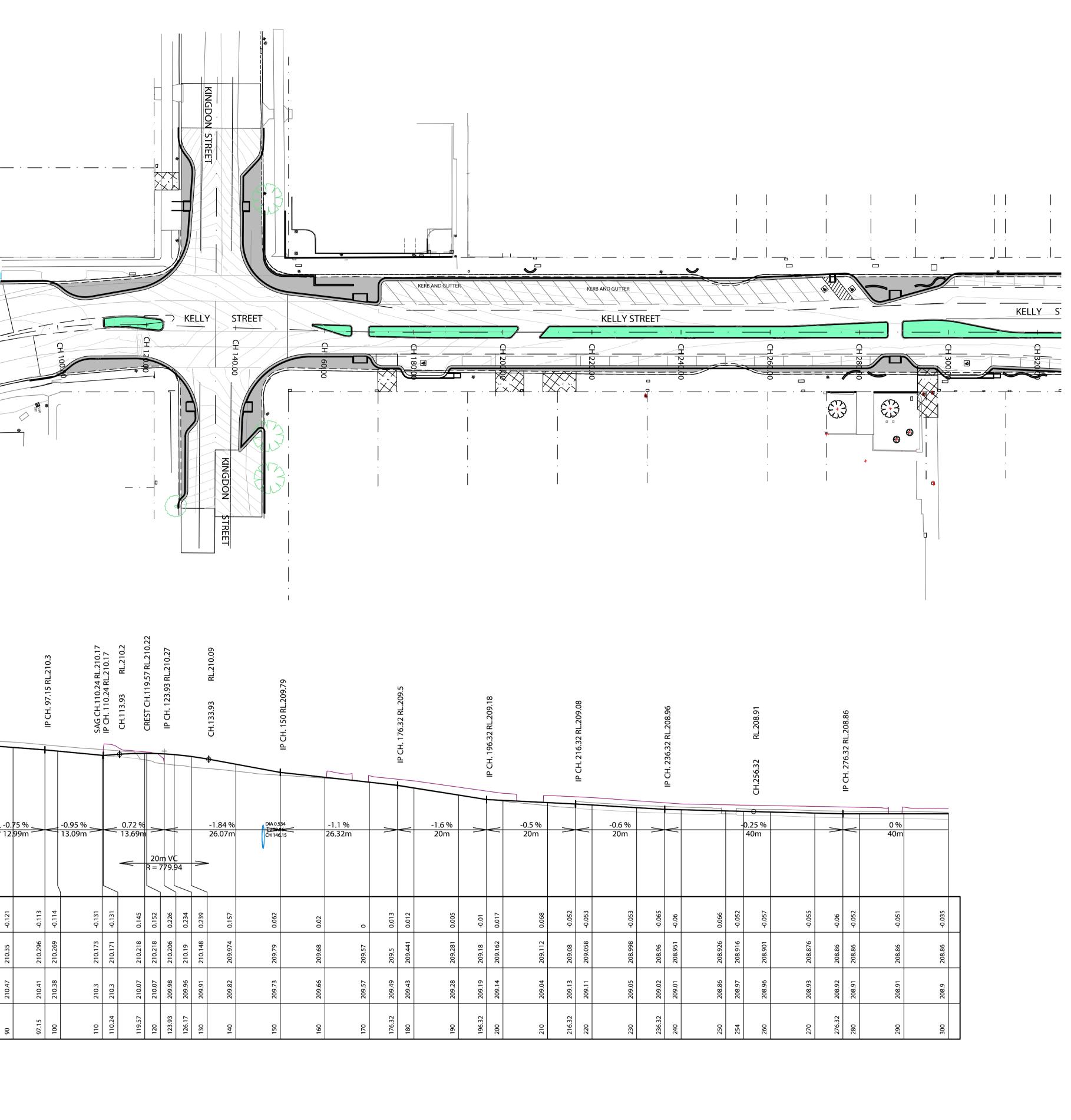
Scale								CIVIL DRAWING	
Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consu	Ilting Engineers
	S	CALE 1:	:500 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.5	1	1.5	2	2.5	Datum	NIL	Drawing No:	Rev
	S	CALE 1	:50 (A1))		Date JUI	NE 21	18-130- CD03.	.06 CD2





Scale		CIVIL DRAWING
Horizontal:	Designed BH	Approved on behalf of RHM Consulting Engineers
	Drawn CA	Project Engineer/Director Date
Vertical:	Datum NIL	Drawing No: Rev
	Date JUNE 21	18-130- CD03.07 CD2

4L/							·於:					KINGDON STREET					KERB AND GUTT				ERB AND GUTTER	
			CH-30.00	×		CH 60.00	CH 80.00		CHIDOOD			KELLY . KINGDON STREET	STREET CH 140.00	CH 60,00							CH CH CH CH CH CH CH CH CH CH CH CH CH C	STRE
		CH0.00									L	·										
		Q4000							IP CH. 97.15 KL.210.3	SAG CH.110.24 RL.210.17 IP CH. 110.24 RL.210.17 CH.113.93 RL.210.2 CH.113.93 RL.210.2	CREST CH.119.57 RL.210.22	CH.133.93 RL.210.09	IP CH. 150 RL.209.79			IP CH. 176.32 RL.209.5		IP CH. 196.32 RL.209.18		IP CH. 216.32 RL.209.08		
Vertical Geometry Grade (%) Vertical Grade Length								-0.75 %	-0.95 % 13.09m	SAG CH.110.24 RL IP CH. 110.24 RL.2 CH.113.93 F	ue 66 CREST CH.11 IP CH. 123.9	CH:133.93 -1.84 9 26.07r	0 DIA 0.534 CH 146.15	-1.1 26.3	% 2m	V P IP CH. 176.32 RL.209.5	<u>-1.6 %</u> 20m	V V IP CH. 196.32 RL.209.18	-0.5 % 20m	P CH. 216.32 RL.209.08	-0.6 % 20m	
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.207.00								-0.75 %	-0.95 % 13.09m	SAG CH.110.24 RL IP CH. 110.24 RL.2 CH.113.93 F	CREST CH.11 CREST CH.11 IP CH. 123.9	CH:133.93 -1.84 9 26.07r	0 DIA 0.534 0 0 0 0 0 0 0 0 0 0 0 0 0	-1.1 26.3	% 2m	P CH. 176.32 RL.209.5	- <u>1.6 %</u> 20m	V V IP CH. 196.32 RL.209.18	-0.5 % 20m	P CH. 216.32 RL.209.08	-0.6 % 20m	
Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m)										SAG CH.110.24 RL IP CH. 110.24 RL.2 D.CH.113.93 F CH.113.93 F	ue 66 CREST CH.11 IP CH. 123.9	CH.133.93		-1.1 26.3 00	% 2m o	0.013 V V IP CH. 176.32 RL.209.5	- 20m		-0.5 % 20m	52	20m	
Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.207.00							4 -0.114	-0.121 -0.113	-0.114	10.173 -0.131 SAG CH.110.24 RL 10.171 -0.131 P CH. 110.24 RL.2 0.131 CH.113.93 F 5020 CH.113.93 F	0.145 0.145 0.145 0.145 0.145 0.152 0.152 0.152 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226 0.226	CH.133.93		02			20m	-0.01	20m	-0.052	20m	
Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.207.00 CUT/FILL DEPTH DESIGN LEVELS ON	212.01	211.29 CHO.00	211.29	210.98	210.85	210.67	55 55 510.394 -0.114	210.35 -0.121 210.296 -0.113	3 210.269 -0.114	3 210.173 -0.131 SAG CH.110.24 RL 3 210.171 -0.131 P CH. 110.24 RL.2 60.21 O CH.113.93 F CH.113.93 F	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	0157 0.234 CH.133.93 CH.133.93 CH.133.93		02	57 0	5 0.013 441 0.012	20m 2000 182 602	209.162 0.017	20m	.13 209.08 -0.052 .11 209.058 -0.053	20m 20m 50:053	-



UPPER HUNTER SHIRE COUNCIL Upper
Hunter130 LIVERPOOL STREETTelephone: (02) 6540 1100P.O. BOX 208
SCONE NSW 2337Facsimile: (02) 6545 2671
Email: council@upperhunter.nsw.gov.au

CD2 CONCEPT DESIGN

CD1 CONCEPT DESIGN

DESCRIPTION

REV

24/12/21 CA

22/06/21 CA

BY

REV

DESCRIPTION

DATE BY

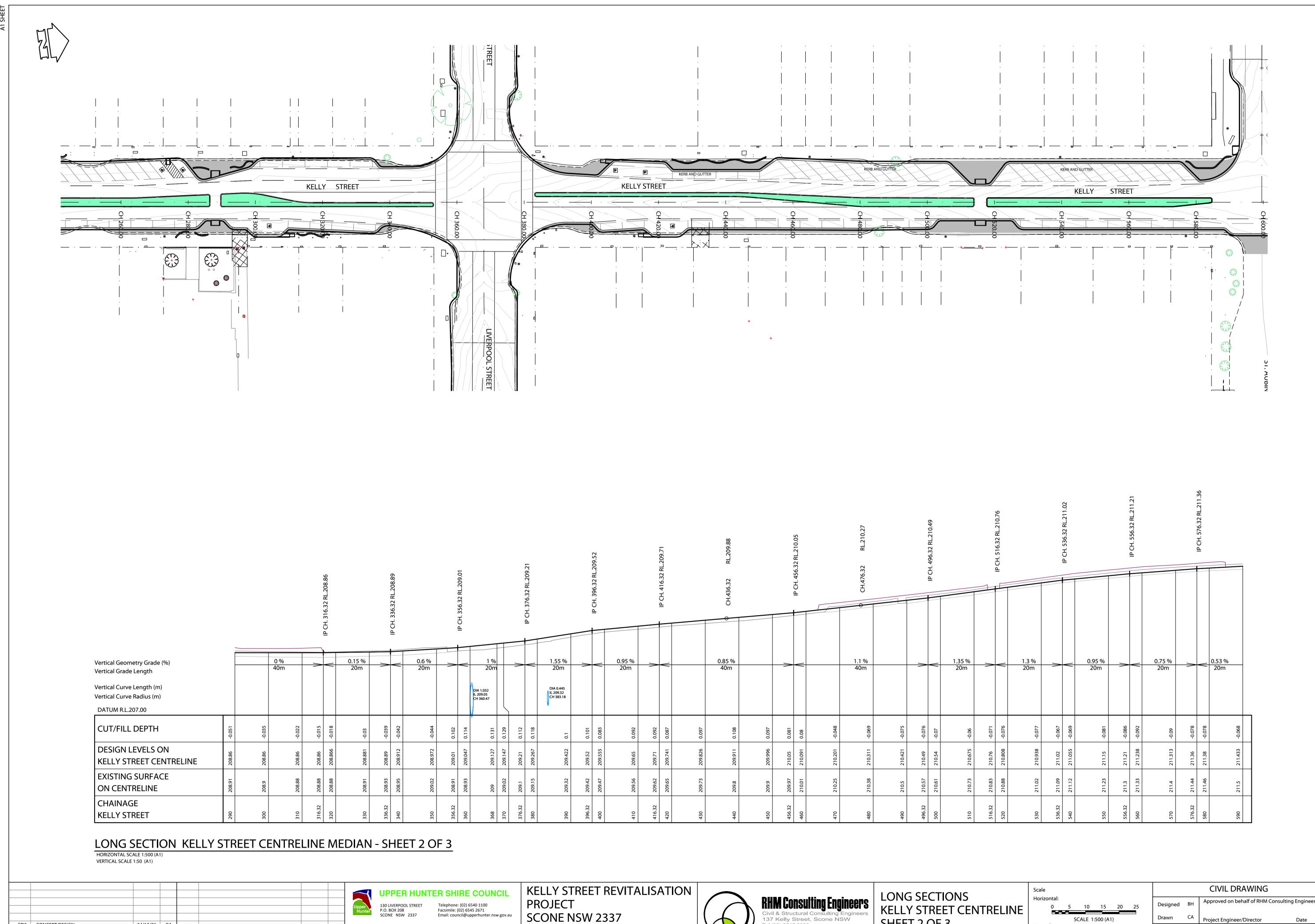
DATE

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



LONG SECTIONS KELLY STREET CENTRELI RHM Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800 SHEET 1 OF 3

	Scale								CIVIL DRAWING	
LINE	Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consu	lting Engineers
		S	CALE 1	:500 (A1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	0.5	1	1.5	2	2.5	Datum	NIL	Drawing No:	Rev
		S	CALE 1	l:50 (A1)			Date JUI	NE 21	18-130- CD03.	10 CD2



			IP CH. 376.32 RL.209.21			IP CH. 396.32 RL.209.52			IP CH. 416.32 RL.209.71		0 CH.436.32 RL.209.88			IP CH. 456.32 RL.210.05		0 CH.476.32 RL.210.27			IP CH. 496.32 RL.210.45			IP CH. 516.32 RL.21	
1 %				1.55 %			0.95 %				0.85 %					1.1 %				1.35 %			
20m DIA 1.032 IL 209.05 CH 360.47				20m DIA 0.445 IL 209.32 CH 383.18	~~~		20m	~~~			40m					40m		~~~		20m	~>		
0.131	0.129	0.112	0.118	0.1	0.101	0.083	0.092	0.092	0.087	0.097	0.108	0.097	0.081	0.08	-0.048	-0.069	-0.075	-0.076	-0.07	-0.06	-0.071	-0.076	
209.127	209.147	209.21	209.267	209.422	209.52	209.555	209.65	209.71	209.741	209.826	209.911	209.996	210.05	210.091	210.201	210.311	210.421	210.49	210.54	210.675	210.76	210.808	
209	209.02	209.1	209.15	209.32	209.42	209.47	209.56	209.62	209.65	209.73	209.8	209.9	209.97	210.01	210.25	210.38	210.5	210.57	210.61	210.73	210.83	210.88	-
368	370	376.32	380	390	396.32	400	410	416.32	420	430	440	450	456.32	460	470	480	490	496.32	500	510	516.32	520	-

CD2 CONCEPT DESIGN

CD1 CONCEPT DESIGN

DESCRIPTION

REV

24/12/21 CA

22/06/21 CA

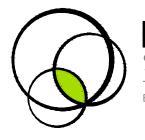
BY

REV

DESCRIPTION

DATE BY

DATE



137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auwww.rhmce.com.au

ABN 82 153 018 800

SHEET 2 OF 3

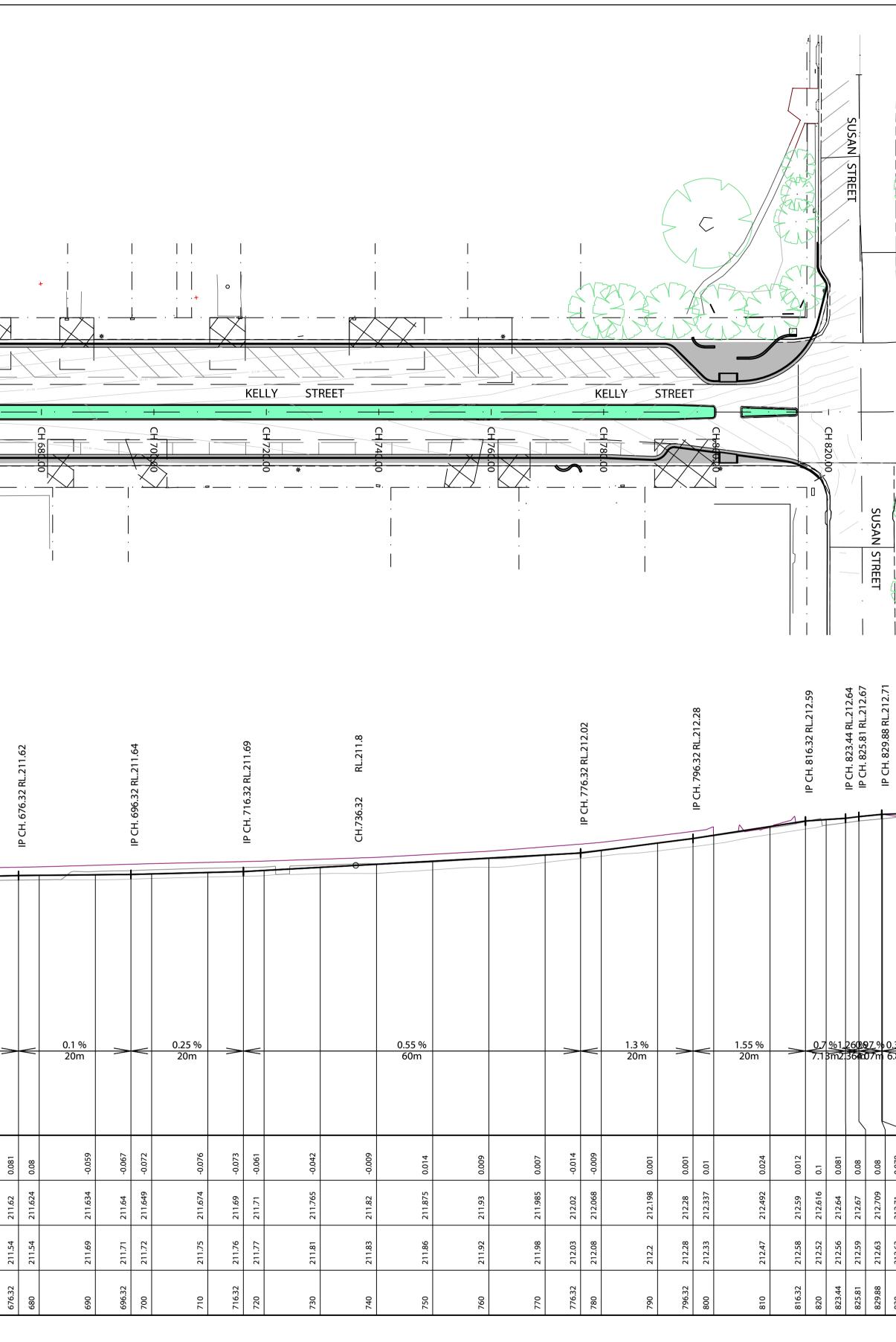
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LINE	Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consult	ing Engineers
		SC	CALE 1:	:500 (A1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	0.5	1	1.5	2	2.5	Datum	NIL	Drawing No:	Rev
		S	CALE 1	:50 (A1))		Date JUN	NE 21	18-130-CD03.	11 CD2

II					SI. AUBINS SIREEI										
											KELLY 2114	STREET			
					CH 600.01		*					X			
			/	IP CH. 596.32 RL.211.47 I <u>P CH. 599.56 RL.211.48</u>	CKES1 CH.599.56 KL.211.48			IP_CH_616.32_RL_211.47	SAG CH.616.32 RL.211.47		CH.636.32 RL.211.52		CH.656.32 RL.211.57		
/ertical Geometry Grade (%) /ertical Grade Length /ertical Curve Length (m)		0.53 % 20m		0.4 % 3.24r		-0. 16	.06 % .76m				0	0.25 % 60m			
				,											
/ertical Curve Radius (m) DATUM R.L.207.00		68	8	0.08	0.08	0.078	0.089	0.074	0.075	0.078	0.069	0.069	0.083	0.073	5000
DATUM R.L.207.00	8 -0.078	-0.068	67 0.08				74	~	62	4	6	5	6,	4	-
DATUM R.L.207.00	211.46 211.38 -0.078	211.5 211.433 -0.0	211.39 211.467 0.0	211.48			211.39 211.474	211.4 211.47	211.4 211.479	211.43 211.504	211.46 211.529	211.49 211.554	211.5 211.579	211.53 211.604	

LONG SECTION KELLY STREET CENTRELINE MEDIAN - SHEET 3 OF 3

HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:50 (A1)

Hunter P.O. BOX 208 Facsimile: (02) 6											
CD2 CONCEPT DESIGN 24/12/21 CA CA Concept Design P.O. BOX 208 SCONE Facsimile: (02) 6 Email: council@N										UPPER HUNT	FER SHIRE
									Upper Hunter	P.O. BOX 208	Telephone: (02) 6 Facsimile: (02) 65 Email: council@u
CD1 CONCEPT DESIGN 22/06/21 CA <th< th=""> <th< th=""> <th<< td=""><td>CD2</td><td>CONCEPT DESIGN</td><td>24/12/21</td><td>CA</td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td></th<<></th<></th<>	CD2	CONCEPT DESIGN	24/12/21	CA					-		
	CD1	CONCEPT DESIGN	22/06/21	CA							
REV DESCRIPTION DATE BY REV DESCRIPTION DATE BY	REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			



RE COUNCIL 02) 6540 1100 2) 6545 2671 il@upperhunter.nsw.gov.au

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



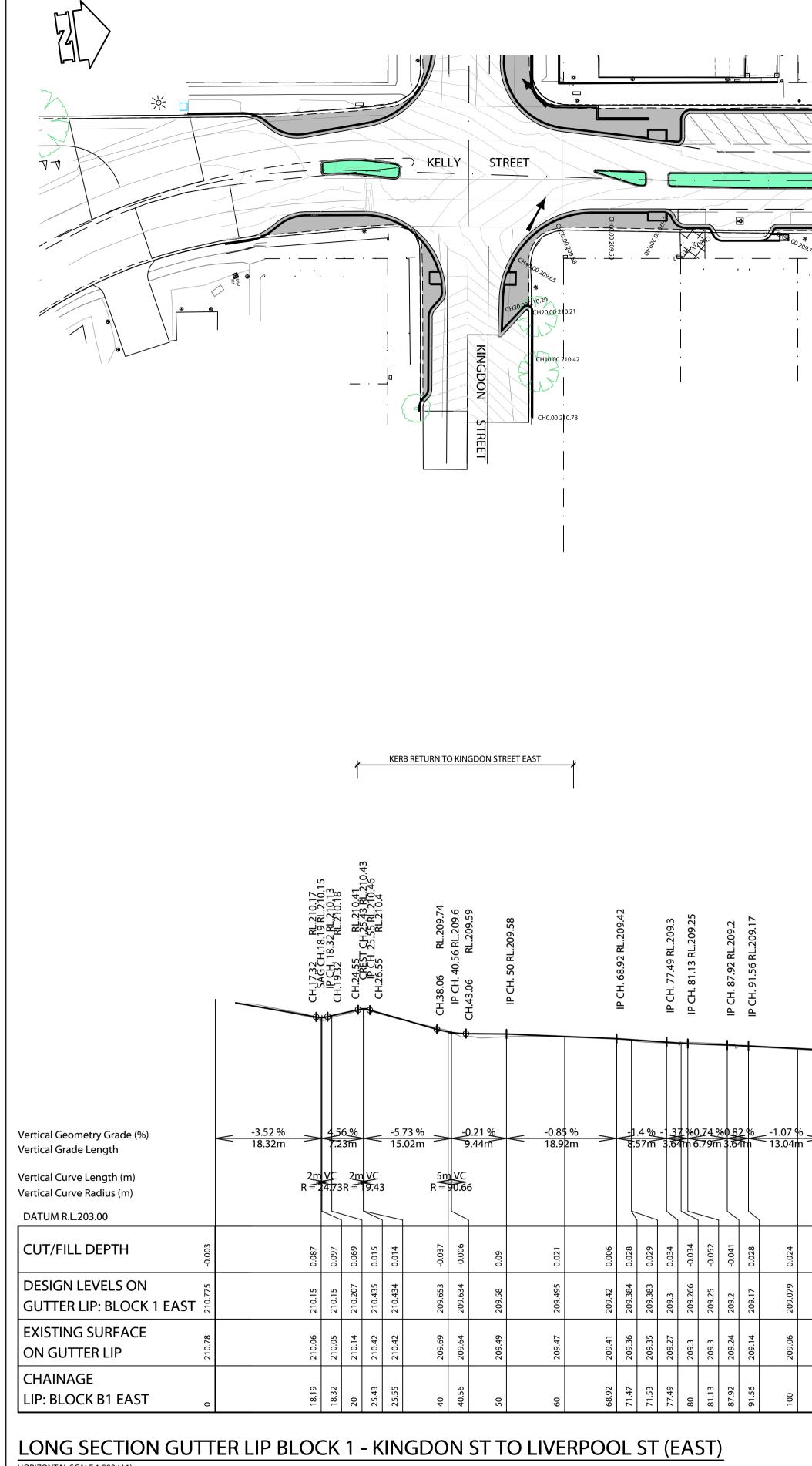
RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

LONG SECTIONS KELLY STREET CENTRELI SHEET 3 OF 3

	IP CH. 836.76 RL.212.73										
0.36	% m		-0.09 23.24	% n							
0.079	-0.044	-0.06	-0.113	-0.112							
212.71	212.734	212.731	212.722	212.713							
212.63	212.78	212.79	212.83	212.83	212.76	212.75					
830	836.76	840	850	860	870	880	890	006	910	920	920.2

	Scale								CIVIL DRAWING	
LINE	Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consulting Engineers	
		SC	ALE 1:	500 (A1)		Drawn	CA	Project Engineer/Director Date	
	Vertical: 0	0.5	1	1.5	2	2.5	Datum	NIL	Drawing No: Rev	/
		SC	CALE 1	:50 (A1))		Date JUN	NE 21	18-130- CD03.12 CD2	2





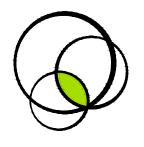
HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:100 (A1)

									UPPER HUNT	ER SHIRE C
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6540 Facsimile: (02) 6545 20 Email: council@upper
CD3	CONCEPT DESIGN	24/12/21	CA						SCONE NSW 2337	Email: council@upper
CD2	CONCEPT DESIGN	03/11/21	CA							
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

									CRITICAL LOCAT	TION FOR RD											
		KELLY STREET							KELLY STRE		OVERFLOW ROUTE	- сн 2с		s:	FLOW ACROSS TYPICAL						
			CH150.00 208.80						CRITICAL LOCATION FOR SHOP FREE BOARD	CH240.00 208.80	СН340:00 508-30 СН340:00 508-31 СН300:00 508-31 СН300:00 508-31 СН300:00 508-31 СН310:00 508-13 СН310:00 508-13 СН340:00 508-13 СН340:000500-13 СН3400-1000500-1000-1000-1000-1000-1000-100				LIVI EAS	ERPOOL STRE	EET				
											, KERB R	ETURN					LIVERPOOI	OL STREET EA	ST		
IP CH. 104.6 RL.209.03		IP CH. 138.09 RL.208.85			SAG CH.184.63 RL.208.64 IP CH. 184.63 RL.208.64 IP CH 180.86 PL 208.74	REST CH. 193.64 RL.208.76 IP CH. 193.64 RL.208.76	IP CH. 198.78 RL.208.64	IP CH. 206.17 RL.208.54 SAG CH.206.17 RL.208.54 IP CH. 216.63 RL.208.63		IP CH. 241.18 RL.208.69 CREST CH.247.15 RL.208.81 IP CH. 247.15 RL.208.81		SAG CH.270.93 RL.208.73 IP CH. 270.93 RL.208.73	CREST CH.283.65 RL.209.05 IP CH. 283.65 RL.209.05	SAG CH.288.16 RL.208.87 IP CH. 288.16 RL.208.87	IP CH. 297.71 RL.209.1		. IP CH. 312.71 RL.209.2				<u> </u>
CH. 104.6 RL.209	-0.54 % 33.5m	P CH. 138.09 RL.208.85	-0.45 % 46.54m		SAG CH.184.63 RL.208.64 NG CH. 184.63 RL.208.64 SAG CH. 184.63 RL.208.64 IP CH. 189.63 RL.208.74	CREST CH. 193.64 RL.208.76 IP CH. 193.64 RL.208.76	IP CH. 198.78 RL.208		<u>0.24 %</u> 24.55m	.208.69 15 RL.208. L.208.81	-0.34 % 23.77 m	SAG CH 270.93 RL 208.73 P CH. 270.93 RL 208.73 575.50 15.25%			CH. 297.71 RL.209.	0.65 % 15m	1 RL		<u>1.71 %</u> 29.22m		•
IP CH. 104.6 RL.209	-0.54 % 33.5m	IP CH. 138.09 RL.208.	46.54m		1.91 %. 5.23m3	CREST CH. 193.64 RL.208.76	IP CH. 198.78 RL.208.	% 0.86 % m 10.47m	<u>0.24 %</u> 24.55m	IP CH. 241.18 RL.208.69		2.52 % 12.72m	-3.98	3 % 2248 m 9955	IP CH. 297.71 RL.209.		IP CH. 312.71 RL		<u>1.71 %</u> 29.22m	043	
CH. 104.6 RL.209	-0.54 % 33.5m	0.122 V IP CH. 138.09 RL.208.	-0.45 % 46.54m		1.91 % 5.23m3	0.092 6000 0.092 6000 0.092 6000 0.045 CREST CH.193.64 RL.208.76 1P CH. 193.64 RL.208.76	4 0.032 J % IP CH. 198.78 RL.208.	-0.115 -0.86 % 10.47m 20055 0.064 0.055	<u>0.24 %</u> 24.55m	7 0.092 0.091 IP CH. 241.18 RL.208.69 0.151 3V% CREST CH.247.15 RL.208.81 0.151 IP CH. 247.15 RL.208.81	767 0.103	73 0.041 58 -0.012 58 -0.012	-3.98	3% 2244 m 995	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.016	0.001 V IP CH. 312.71 RL	0.009	<u>1.71 %</u> 29.22m	.667 -0.043	
209.03 0.021 3.% P CH. 104.6 RL.209	-0.54 % 33.5m 600 246.800 88.	208.85 0.122 V IP CH. 138.09 RL.208. 208.841 0.12 V IP CH. 138.09 RL.208.	46.54m	208.661	1.91 % 5.23m 5.23m 6.002	208.76 0.092 GMG CREST CH. 193.64 RL.208.76 IP CH. 193.64 RL.208.76 IP CH. 193.64 RL.208.76	208.624 0.032 J S IP CH. 198.78 RL.208.624 0.032 G S IP CH. 198.78 RL.208.624 0.032 G S IP CH. 198.78 RL.208.66 P S IP CH.208.66	208.54 -0.115 -0.115 -0.115 208.63 -0.055 208.63 0.064 -0.055 -0.055 -0.055 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.056 -0.	24.55m	208.687 0.092 IP CH. 241.18 RL.208.69 208.69 0.091 CGEST CH.247.15 RL.208.69 208.81 0.151 J% CREST CH.247.15 RL.208.81	0.103	208.73 0.041 15.25 % 15.25 % 208.958 -0.012	209.05 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -3.95 -	208.915 -0.141	209.102 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	209.155 0.016	209.199 0.001 IP CH. 312.71 RL 209.22 0.011 IP CH. 312.71 RL	209.291 0.009 209.324 0.001	<u>1.71 %</u> 29.22m	71 209.667 -0.043	
IP CH. 104.6 RL.209	-0.54 % 33.5m	IP CH. 138.09 RL.208.	46.54m		1.91 %. 5.23m3	CREST CH. 193.64 RL.208.76	IP CH. 198.78 RL.208.	% 0.86 % m 10.47m	<u>0.24 %</u> 24.55m	IP CH. 241.18 RL.208.69		2.52 % 12.72m	-3.98	3 % 2248 m 9955	IP CH. 297.71 RL.209.		IP CH. 312.71 RL		<u>1.71 %</u> 29.22m	43	
IP CH. 104.6 RL.209	-0.54 % 33.5m	0.122 V IP CH. 138.09 RL.208.	46.54m	208.63 208.661	1.91 % 5.23m3	208.76 0.092 GMC I. Ch. 102.00 Microsoft 208.76 0.092 GMC I. Ch. 102.00 Microsoft 208.64 0.045 The IP CH. 193.64 RL.208.76	208.59 208.624 0.032 J S IP CH. 198.78 RL.208	-0.115 -0.86 % 10.47m 20055 0.064 0.055	24.55m	7 0.092 0.091 IP CH. 241.18 RL.208.69 0.151 3V% IP CH. 247.15 RL.208.81 0.151 IP CH. 247.15 RL.208.81	767 0.103	73 0.041 58 -0.012 58 -0.012	208.89 209.05 0.159	3% 2244 m 995	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	209.14 209.155 0.016	209.199 0.001 IP CH. 312.71 RL 209.22 0.011 IP CH. 312.71 RL	209.28 209.291 0.009 209.32 209.324 0.001	1.71 % 29.22m	340 209.71 209.667 -0.043	347.88 209.92

02) 6540 1100 2) 6545 2671 @upperhunter.nsw.gov.au

SCONE NSW 2337



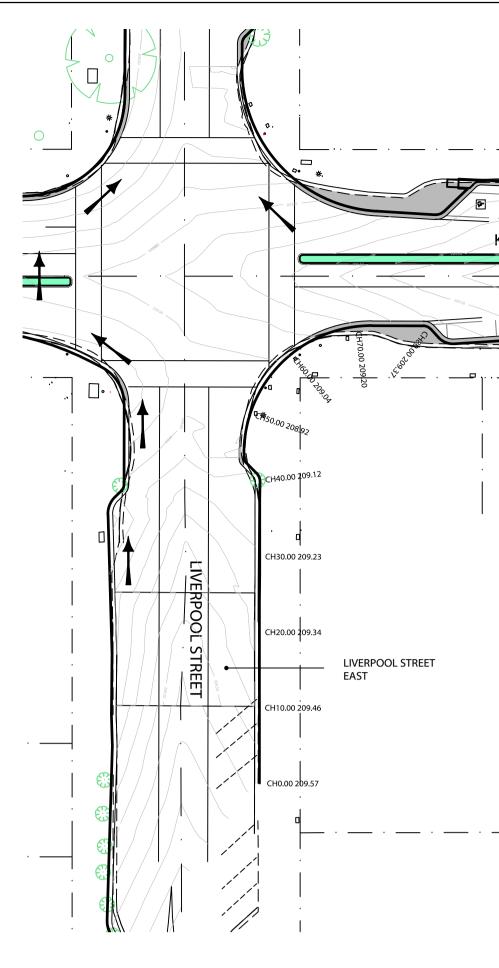
Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au

ABN 82 153 018 800

BLOCK 1 KINGDON ST T LIVERPOOL ST (EAST)

	Scale									
	Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consu	lting Engineers
ГО		S	CALE 1	:500 (A1			Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	1	2	з	4	5	Datum	NIL	Drawing No:	Rev
		S	CALE 1	:100 (A1			Date JUI	NE 21	18-130- CD03.	13 CD3

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EL)									R KELL	Y STRE	KERB AN	D GUTTER			*				orbit				*	BAND GUTTER	TREET
					LIVERPOOL STREET	CH10.00 209.5 CH40.00 209.4 CH10.00 209.4 CH10.00 209.5 CH10.00 200.5 CH10.00 200.5 CH	_ LIVERPOOL S EAST	TREET	[∞] (tH90.00 209.43			CH120.00 209.73		C 1140.00.209.92 	CH150.00 210.02	C+1160.00 210.13				CH190.00 210.52	<u>stortoot</u>		CH220.00 D10.82		
				·	/ / / / · ·																				
		LIVER	OOL STREET E	AST	IPCH, 52.39 RL 208.9 SAG CH:52.39 RL 208.9	KERB RETURN	ויפטציות ניכינ ומ אא אד איז	IP CH. 78.68 RL.209.38 SAG CH.83.61 RL.209.34 IP CH. 83.61 RL.209.34		IP CH. 94.92 RL.209.5	° CH. 106.06 RL.209.61	P CH. 110.81 KL.209.64			IP CH. 146.82 RL.209.98	≫	IP CH. 166.33 RL.210.2		IP CH. 181.51 RL.210.4	IP CH. 186.47 KL.210.46	IP CH 2069 RI 210 79	P CH. 206.9 RL.210.79 CREST CH.206.9 RL.210.79 SAG CH.212.5 RL.210.73 IP CH. 212.5 RL.210.73			
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.202.50		_1.24 % 25.18m	IP CH. 25.18 RL.209.25	IP CH. 40.25 RL.209.12				IP CH. 78.68 RL2 SAG CH.83.61 RL IP CH. 83.61 RL2		IP CH. 94.92 RL.209.	° CH. 106.06 RL.209.61	IP CH. 110.81 KL.209.64	0.94 % 36.01m		P CH. 146.82 RL.209.98	» 1.13 % 19.51m	V IP CH. 166.33 RL210.2		CH. 181.51 RL		6	90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0 90.0			0.88 % 58.76m
Vertical Grade Length Vertical Curve Length (m)	0.02	-1.24 % 25.18m	IP CH. 25.18 RL.209.25	0.9 %	1.81 % 12.14m		1.89 % 12.73m	IP CH. 78.68 RL2 SAG CH.83.61 RL IP CH. 83.61 RL2	_1.41 %_ 11.32m	IP CH. 94.92 RL.209.	IP CH. 106.06 RL.209.61	IP CH. 110.81 KL.209.64	0.94 % 36.01m	0.074	IP CH. 146.82 RL.209.96	1.13 %	0.089 V IP CH. 166.33 RL.210.2		IP CH. 181.51 RL	< 1.61 9 20.43r	6 n		0.043		0.88 % 58.76m
Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.202.50	EAST 600	-1.24 % 25.18m	IP CH. 25.18 RL.209.25	0.045 W.209.12 P. CH. 40.25 RL.209.12	1.81 % 12.14m	< <u>1.77%</u> 13.56m	1.89 % 12.73m	P CH. 78.68 RL 2 E CH. 78.68 RL 2 E CH. 83.61 RL IP CH. 83.61 RL 2 IP CH. 83.61 RL 2	_1.41 %_ 11.32m	2 -0.006 IP CH. 94.92 RL.209.	IP CH. 106.06 RL.209.61	IP CH. 110.81 KL.209.64	0.94 % 36.01m	209:916 0.074	IP CH. 146.82 RL.209.96	<u>1.13 %</u> 19.51m	89 V IP CH. 166.33 RL.210.2	 1.32 % 15.18m 	IP CH. 181.51 RL	< 1.61 9 20.43r	20 0.095 V. 20 0.095	-1.07 % 5.6m	210.796 0.043		0.88 % 58.76m
Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.202.50 CUT/FILL DEPTH DESIGN LEVELS ON	EAST 00:0 95:002	-1.24 % 25.18m 600 6100 6100 6100 6100 6100 6100 6100	0.004 0 0.003 IP CH. 25.18 RL.209.25	209.143 0.045 w.60 209.122 -0.036 P.CH. 40.25 RL.209.12	-1.81 % 12.14m 508:9 0.11 0.11 0.11	< <u>1.77%</u> 13.56m	1.89 % 12.73m	369 0.1 Product 34 0.1 Understand 34 0.1 Understand	1.41 % 11.32m	209.52 -0.006 B 200.52 B 200.55	524 -0.004 Control 61 0.06 30% 64 0.074 30%	209.727 0.083 P.CH. 110.81 RL.209.64	0.94 % 36.01m	209.84 209.916 0.074	IP CH. 146.82 RL.209.96	1.13 % 19.51m	.2 0.089 V IP CH. 166.33 RL.210.2	1.32 % 15.18m 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	.4 0.074 .4 0.074 IP CH. 181.51 RL .46 0.026 .30% .0026 .0026 .0026	< 1.61 % 20.43r		1.07 % 5.6m \$210.73 0.055	210.75 210.796 0.043		210.94 210.973 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.0

LONG SECTION GUTTER LIP BLOCK 2 - LIVERPOOL ST TO SUSAN ST (EAST) SHEET 1 OF 2 HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:100 (A1)

									UPPER HUNT	ER SHIRE COUNCIL
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208	Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671
CD3	CONCEPT DESIGN	24/12/21	CA						SCONE NSW 2337	Email: council@upperhunter.nsw.gov.au
CD2	CONCEPT DESIGN	03/11/21	CA							
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

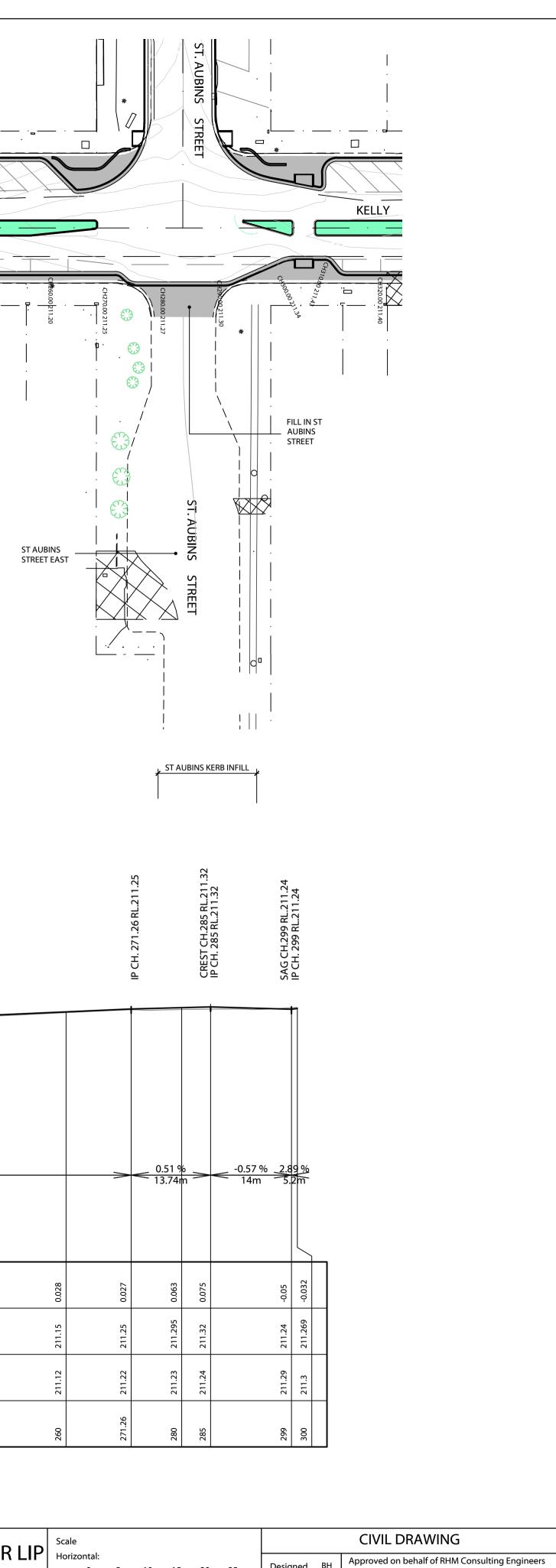
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KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



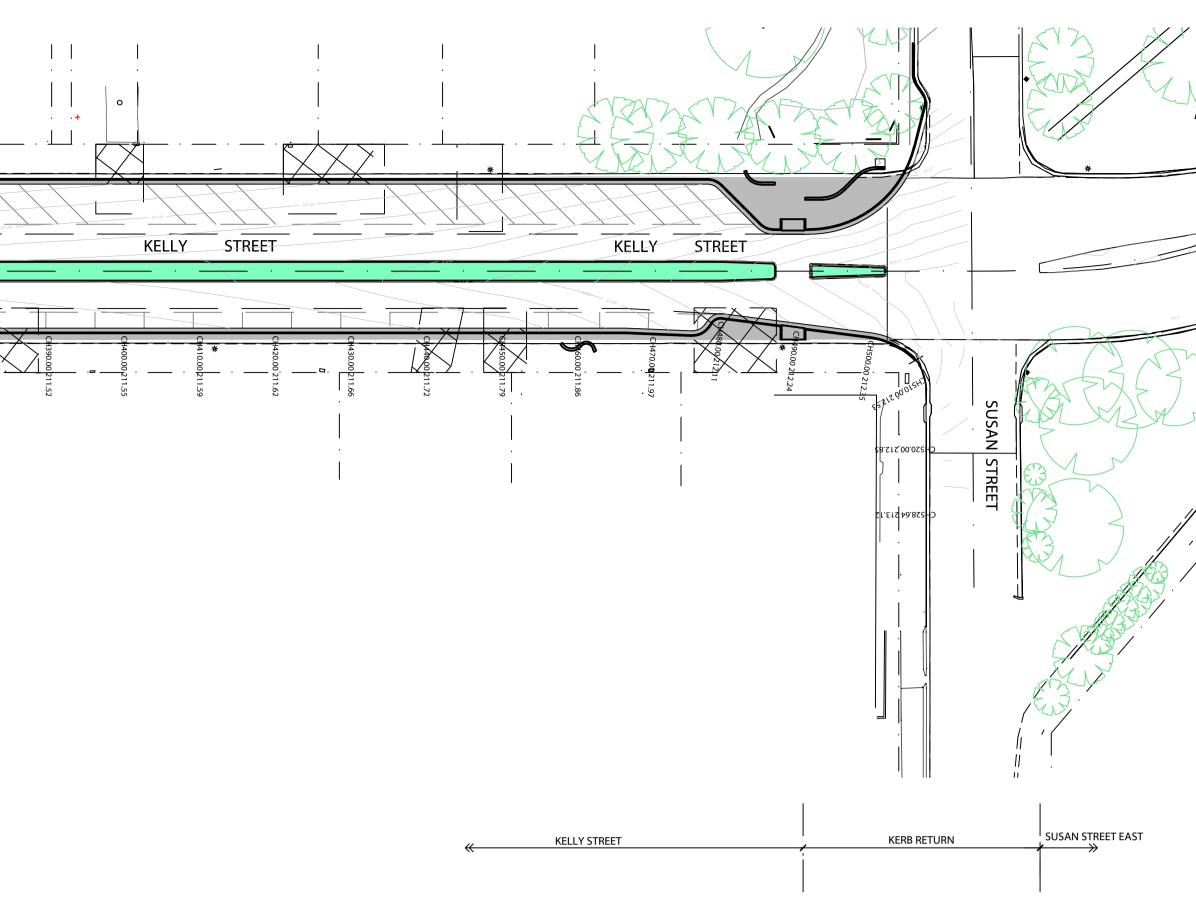
RHA Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

LONG SECTION GUTTER LIP BLOCK 2 LIVERPOOL ST TO SUSAN ST (EAST) SHEET 1 OF 2



		S	CALE 1:	100 (A1)		Date JUN	NE 21	18-130- CD03.	14 CD3
	Vertical: 0	1	2	3	4	5	Datum	NIL	Drawing No:	Rev
		S	CALE 1:	500 (A1)		Drawn	CA	Project Engineer/Director	Date
TO	0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consult	ting Engineers

	C 1230-00 211.30			KELLY STREET	211.50		- 211.50	*	KELLY	STREET		*		KELLY	STREET					*
	ST. AUBINS STREET			CH320.00211.38	* C				C	CH420.00 211.62	CH430.000211.56		60.000_111.86	12200 CCH470.00(211.97 		CH490.00 2H 2.24		- 	SUSAN STREET	
		SAG CH.299 RL.211.24 IP CH. 299 RL.211.24	IP CH. 304.2 RL.211.39 CREST CH.309.33 RL.211.44 IP CH. 309.33 RL.211.44	KELLY STREET	SAG CH.338 RL.211.34 IP CH. 338 RL.211.34		P CH. 366.29 RL.211.44			IP CH. 413.52 RL.211.6		*	KELLY STR	IP CH. 468.94 RL.211.97		IP CH. 487.09 RI 212.18	KER	IP CH. 499.05 KL.212.34	IP CH. 509.86 RL.212.57	SAN STREET EAS
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.202.50		-0.57 % 2 14m	89 %0.97 %	- <u>-0.35 %</u> 28.67m		<u>0.35 %</u> 28.29m		0.34 % 47.22m			0.4 % 37.48m		<u> </u>	3 % 94m	<u>_ 1.16 %</u> 18.14m		< <u>1.27 %</u> 12.56m	2.25 % T0.21m	2.93	% m →
CUT/FILL DEPTH DESIGN LEVELS ON	0.044		9 -0.032 0.067 0.111	0.108	0.005	2	0.056	0.065	4 0.067	0.065	5 0.06	0.03	7 0.046 0.054	2 0.065 0.07	\$ 0.047	0.056		8 0.054 0.029	\$ 0.137	
GUTTER LIP: BLOCK 2 & 3 I	EAST 167:112	211	211.269 2211.39 3211.44	211.40:	3 211.34 4 211.34		211.44	211.486	0 211.554	3 211.6 7 211.626	211.685	211.706 211.75	5 211.807	211.932	212.098	212.18	5	9 212.348 212.57	212.868	
ON GUTTER LIP CHAINAGE	211.25	211.29	211.3 211.32 3 211.33	211.3	211.33 211.34		21112 211138 211138	211.42	211.49	2 211.53	8 211.62	211.65	5 211.76 211.81	6 211.87 4 211.9	212.05	212.12		212.29	212.73	7 212.95
LIP: BLOCK B2 EAST LONG SECTION GU HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:100 (A1)	JTTER LI		27 - LI 27 - LI	VERPOOL S	TTO SUS	SAN ST (EA	R HUNTER	ET 2 OF 2 SHIRE COUNCIL ephone: (02) 6540 1100 simile: (02) 6545 2671 ail: council@upperhunter.nsw.gov.au	₽ KELLY PROJE		REVITALISA	440 451	455.65	465.86 468.94		487.0	ninoone		G SECTI CK 2 LIV	ON GU

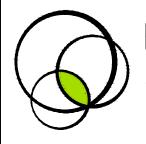


RLIP	Scale	CIVIL DRAWING
	Horizontal: 0 5 10 15 20 25	Designed BH Approved on behalf of RHM Consulting Engineers
	SCALE 1:500 (A1)	Drawn CA Project Engineer/Director Date
	Vertical: 0 1 2 3 4 5	Datum NIL Drawing No: Rev
	SCALE 1:100 (A1)	Date JUNE 21 18-130-CD03.15 CD3

EL)	•								
		STREET			CI WEST			CH 120000 208.57 *	CH140.400 208 3 44
	BOON STREET WEST	Y STREET	KERB RETURN					KELLY STREET	
IP CH. 1.71 RL.208.06	IP CH. 28.09 RL.209.18	CREENT 42:12:42:32:89.3:89.58			IP CH. 72.38 RL.209.13		IP CH. 100 RL.208.67		SAG CH.138.6 RL.208.54 IP CH. 138.6 RL.208.54
Vertical Geometry Grade (%) 3.92 % 4.26 Vertical Grade Length 1.71m 26.3 Vertical Curve Length (m) Vertical Curve Radius (m)	5 % 8m	<u>2.83 %</u> 14.14m	-0.95 % 23.14m	>	- <u>3.28 %</u> 7.0 fm		-1.67 % -0. 27.62m 38	34 % 3.6m	>
DATUM R.L.203.00		209.18 0.037 209.517 0.204 209.58 0.272	209.411 0.177	209.36 0.171	209.13 0.214	209.003 0.149		208.603 0.015	208.54 -0.009
EXISTING SURFACE ON GUTTER LIP	71 208. 71 208. 0 208.	28.09 209.14 40 209.31 42.23 209.31	60 209.23	65.37 209.19	72.38 208.92	80 208.85		120 208.59	138.6 208.55
LONG SECTION GUTTE HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:100 (A1) CD3 CD3 CONCEPT DESIGN CD2 CONCEPT DESIGN CD1 CONCEPT DESIGN REV	ER LIP BLC 24/12/21 CA 03/11/21 CA 22/06/21 CA DATE BY	DCK 1 - KIN	GDON ST	TC	DLIVE	BY	UPPER HUNTER SHIRE 130 LIVERPOOL STREET P.O. BOX 208 Telephone: (02) 654 Facsimile: (02) 654	A40 1100 5 2671 perhunter.nsw.gov.au	KEL PRC SCC DPYRIG se drawing ineers and sulting Eng



KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au

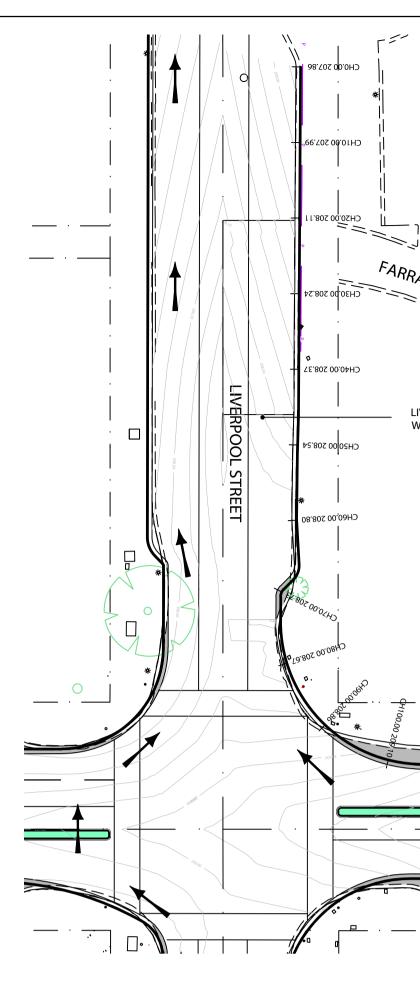
ABN 82 153 018 800

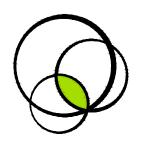
LONG SECTION GUTTER BLOCK 1 KINGDON ST TO LIVERPOOL ST (WEST)

RLIP	Scale								CIVIL DRAWING	
	Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consul	ting Engineers
		SC	CALE 1:	500 (A1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	1	2	3	4	5	Datum	NIL	Drawing No:	Rev
		SC	CALE 1:	100 (A1)		Date JUN	NE 21	18-130- CD03.	16 CD3

	CALE 1:100 (A1)									
								Upper Hunter	UPPER HUNT 130 LIVERPOOL STREET P.O. BOX 208	TER SHIR Telephone: (02 Facsimile: (02) (
CD3 C	CONCEPT DESIGN	24/12/21	CA						SCONE NSW 2337	Email: council@
CD2 C	CONCEPT DESIGN	03/11/21	CA							
CD1 C	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

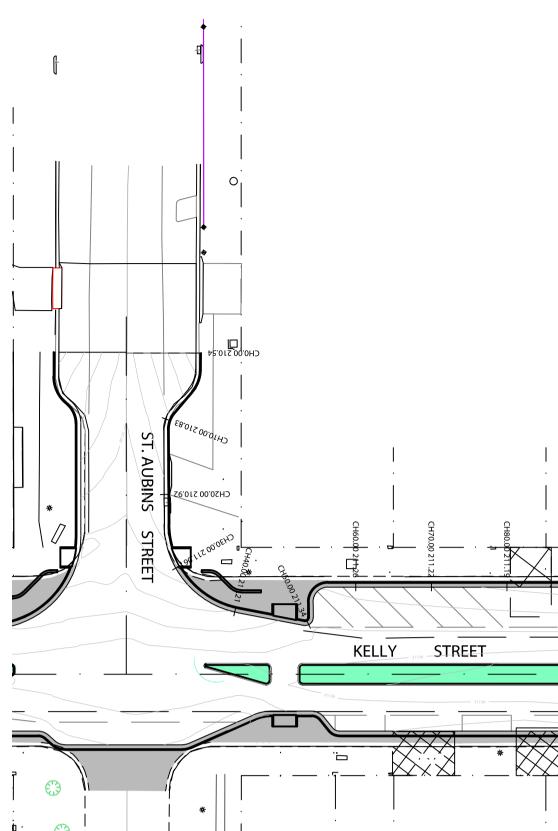
		NUMBER OF OUR STREET	209.57 140.00 10 4.9 KERB AND GUTTER	CHI20000 209.95 CHI20000 200.95 CHI20000 200.95 CHI200	CH28000 210.9 CH28000 210.9 CH2800	CRES CH30433 RL21131 IP CH30433
	CH. 46.01 RI	P CH. 81.19 P CH. 81.19 P CH. 81.19 P CH. 10 P CH. 11 P CH. 11 P CH. 11	IP CH. 13 IP CH. 11 IP CH. 12 SAG CH. 12	H H H H H H H H H H H H H H H H H H H	SAG PPCFG	
						Vertical Geometry Grade (%) Vertical Grade Length
				1.09 % 1.24 % 1.58 % 3.95 % 1.44 % -2.39 %		Vertical Curve Length (m)
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m)	2.55 % >< 13.99m ><	-0.66 % 2.32 % 1.02 % -0.5 % 0.29 % 21.19m 22.45m 7.83m 7.94m 14.03m	$\frac{2.94\%}{1000}$ 0.88% -0.69% n 4.08m 19.38m 13.04m -0.69%	<u>- 1.09 %</u> - 1.24 % - 1.58 % - 3.95 % 1.44 % -2.39 % 14.67m - 17.7m - 17.04m - 10.89m 4.18m 10.06m	$\frac{1.39\%}{1.39\%} > < \frac{1.39\%}{21.53m} = 28.13m$	$\frac{2.55 \%}{10.2 \text{m}} < \frac{-1.02 \%}{15.67 \text{m}} < \frac{-2.02 \%}{23.31 \text{m}} < \frac{-2.86 \%}{6.15 \text{m}}$
Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.203.00						
CUT/FILL DEPTH	0.073 -0 -00.046 0.127 0.13	0.06 0.465 0.066 0.106 0.084 0.129 0.129	0.065 0.071 0.072 0.086 0.042 0.068	0.023 0.011 -0.067 -0.068 0.068 0.068 0.068 0.065	0.058 0.062 0.068 0.044 0.047 0.053	0.076 0.109 0.118 0.118 0.026 0.049 0.052
DESIGN LEVELS ON GUTTER	208.367 208.443 208.443 208.575 208.575 208.575 208.88	208.668 209.096 209.096 209.18 209.22 209.22 209.222 209.222	209.26 209.38 209.402 209.55 209.529 209.546	209.57 209.62 209.811 209.84 209.84 209.84 210.136 210.136 210.54 210.6	210.36 210.576 210.666 210.854 210.993 211.05 211.05	211.2 211.31 211.15 211.15 210.747 210.557 210.557
EXISTING SURFACE	208.29 208.44 208.53 208.53 208.67 208.67 208.67	208.61 208.2 209.03 209.09 209.09	209.2 209.31 209.33 209.49 209.49 209.39	209.55 209.61 209.61 209.88 209.88 209.88 209.88 209.88 209.88 209.88 209.88 209.88 209.88 209.61 200.47 210.05 210.05 210.05 210.05 210.05 210.05 210.05 210.05 210.05 210.05 210.05 210.05 210.05 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 200.61 20	210.3 210.51 210.59 210.81 210.95 211.95	211.12 211.2 211.03 210.3 210.5 210.5
CHAINAGE LIP: BLOCK B2 WEST	40 46.01 51.17 59.83 60 60	80 81.19 81.19 100 100 111.47 111.47 1100 1100 1100 1100 1100 1100 1100 11	133.43 133.43 137.51 137.51 137.51 137.51 160 160 160 160 160 160 160 160	180 184.6 1 184.6 200 2 200 200 2 200 2 2 200 2 2 200 2 2 200 2 2 200 2 2 200 2 2 200 2 2 200 2 2 200 2 2 219.34 2 2 234.42 2 2 240 2 2	244.47 266 266 290 290 294.13	300 304.33 304.33 304.33 304.33 304.33 304.33 304.33 304.33 304.33 304.33 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 320 <t< th=""></t<>
LONG SECTION GUTTER LIP BLOCK 2 - LIVERP		S ST (WEST)				
HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:100 (A1)					Scale	CIVIL DRAWING
CD3 CONCEPT DESIGN 24/12/21 CA CD2 CONCEPT DESIGN 03/11/21 CA CD1 CONCEPT DESIGN 22/06/21 CA REV DESCRIPTION DATE BY REV DESCRIPTION	Upper Upper Upper	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337 Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au		RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800	Scale Horizontal: 0 5 10 15 20 2 SCALE 1:500 (A1) Vertical: 0 1 2 3 4 4	Designed BH Approved on behalf of RHM Consulting Engineers Drawn CA Project Engineer/Director Date Datum NIL Drawing No: Rev







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II.																		
			ST. AUBINS STREET		CH70.00 21122				+ CH110,00 211,17	CH120.00 21128	CH140,002 211.33 CH140,002 211.33 CH140,002 211.25 CH130,000 211.25 KELL	CH100.00 211.3 Y STREET	CH190,00 211.50		CH220000 211 JO KELLY STRE	ET	CH271-2 CH270-C CH270-C CH260 CH260 CH260 CH260 CH260 CH260 CH260 CH260 CH260 CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C CH270-C	
	ST AUBINS ST W	IP CH. 10.03 RL.210.83	KERB RETURN	IP CH. 49 RL.211.35 CREST CH.49 RL.211.35	IP CH. 60.5 RL.211.26	IP CH. 74 RL.211.21	· •	SAG CH.100.24 RL.211.11 IP CH. 100.24 RL.211.11	IP CH. 112.29 RL.211.19				IP CH. 180.33 RL.211.44		KELLY STREET	IP CH. 221.67 RL.211.71	IP CH. 232.91 RL.212.12	KE
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.203.00	2 <u>.22 %3.27 (</u> 3.6m 6.43r	% <u>0.92 %</u> n	1.54 % 25.95m	-0.78 % 11.5m	 <-0.37 % > 13.5m 	<	-0.38 % 26.24m		0.66 % 2.05m		0.37 % 68.05n	5 n		0.65 % 41.34m	~	3.65 % 11.24m	1.29 % 4.66m	-0.8 9
CUT/FILL DEPTH DESIGN LEVELS ON GUTTER LIP: BLOCK B3 WEST EXISTING SURFACE ON GUTTER LIP CHAINAGE LIP: BLOCK B3 WEST	210.52 210.54 210.62 210.62	10.03 210.83 210.83 0 20 210.91 210.922 0.011 20 210.94 210.95 0.015	40 211.18 211.211 0.033	49 211.25 211.35 0.103 60 211.07 211.264 0.191	60.5 211.07 211.26 0.186 74 211.11 211.21 0.102	211.12 211.187		100 211.16 211.11 -0.054 100.24 211.16 211.11 -0.055	112.29 211.18 211.19 0.013	120 211.19 211.218 0.031	140 211.2 211.292 0.088	160 211.24 211.365 0.13	180 211.27 211.439 0.164 180.33 211.28 211.44 0.165	200 211.37 211.568 0.195	220 211.59 211.699 0.106	221.67 211.62 211.71 0.091 232.91 212.03 212.12 0.095	212.09 212.1 212.09 212.1 212.11 212.1	

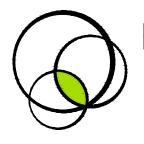
LONG SECTION GUTTER LIP BLOCK 3 - ST AUBINS ST TO SUSAN STREET (WEST) HORIZONTAL SCALE 1:500 (A1)

VERTICAL SCALE 1:100 (A1)

									UPPER HUNT	
CD3	CONCEPT DESIGN	24/12/21	СА					Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 654 Facsimile: (02) 6545 Email: council@upp
CD2	CONCEPT DESIGN	03/11/21	CA					-		
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

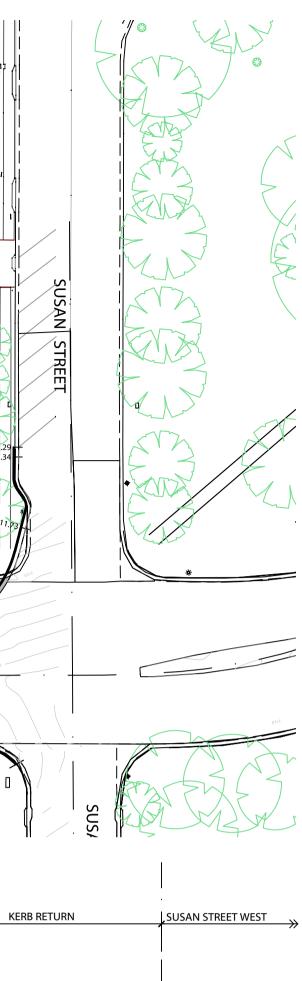
E COUNCIL 2) 6540 1100 6545 2671 @upperhunter.nsw.gov.au

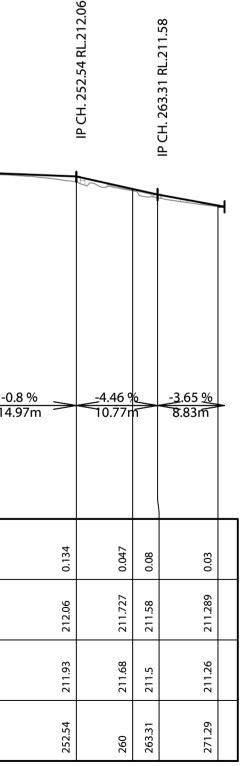
KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



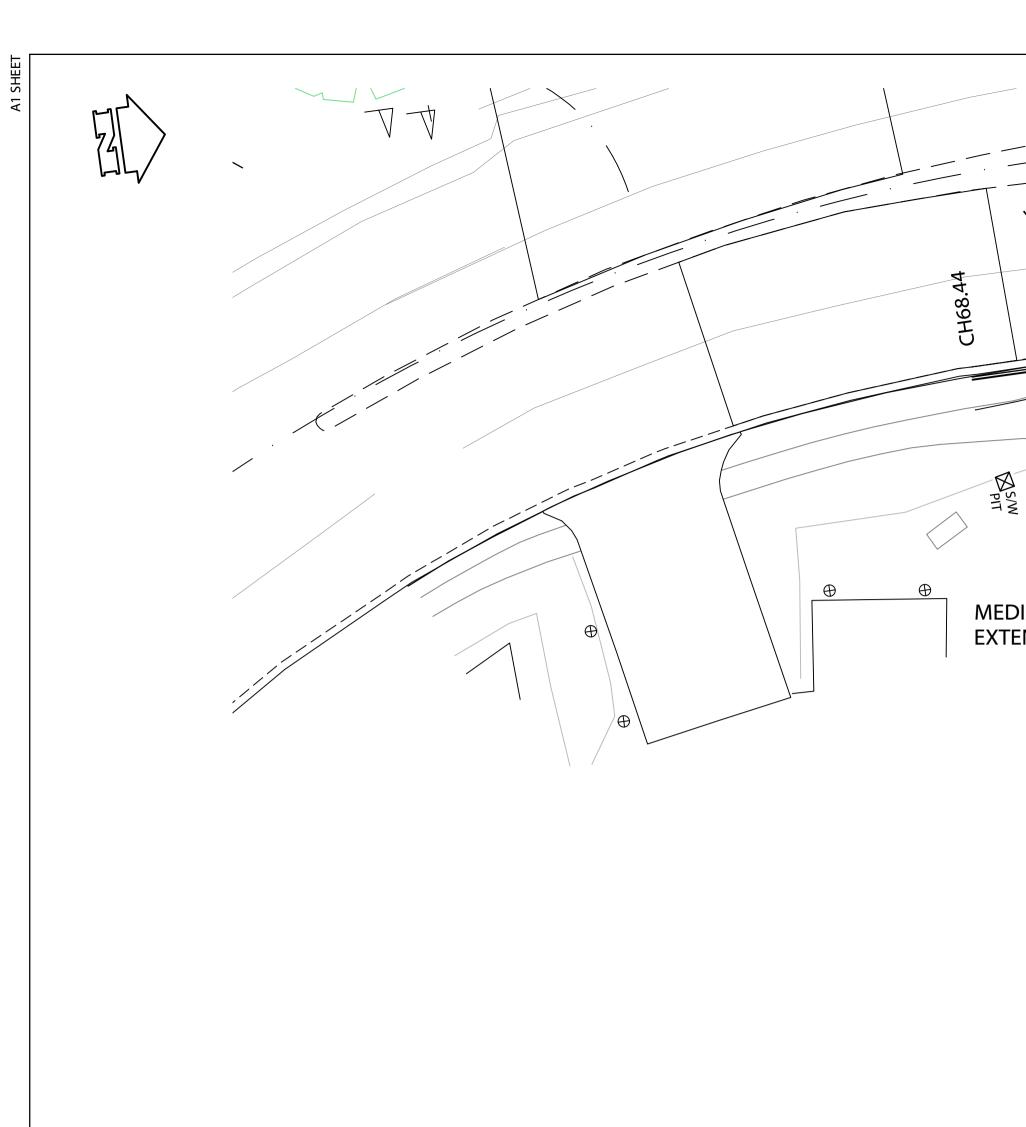
RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

LONG SECTION GUTTER BLOCK 3 ST AUBINS ST T SUSAN ST (WEST)





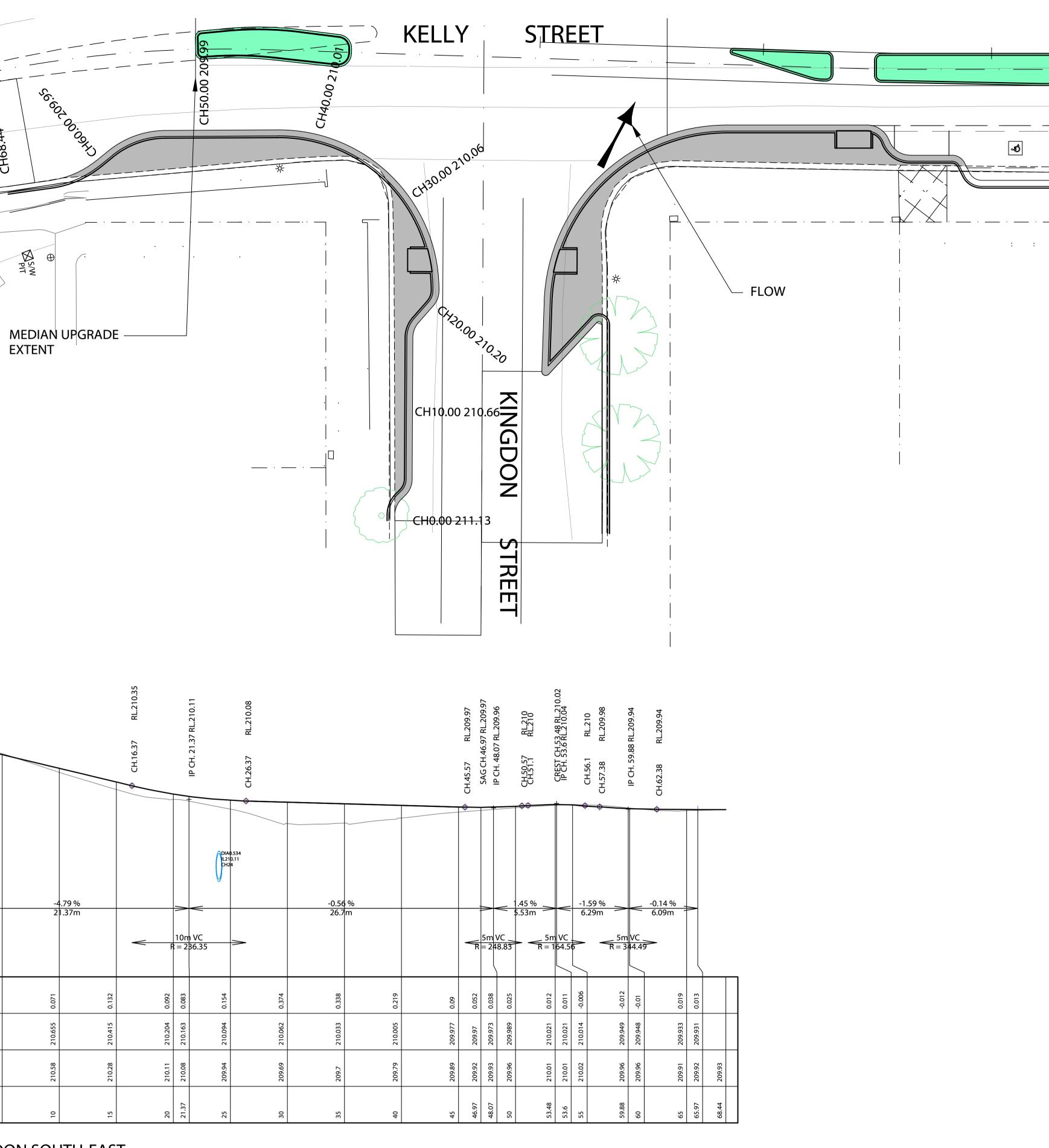
RIP	Scale								CIVIL DRAWING	
TO	Horizontal: 0	5	10	15	20	25	Designed	BH	Approved on behalf of RHM Consul	lting Engineers
		SC	CALE 1	:500 (A1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	1	2	3	4	5	Datum	NIL	Drawing No:	Rev
		SC	CALE 1	:100 (A1)		Date JUI	NE 21	18-130- CD03.	18 CD3



Vertical Geometry Grade (%) Vertical Grade Length			2	1.79 1.37
Vertical Curve Length (m) Vertical Curve Radius (m)				
DATUM R.L.207.00				
CUT/FILL DEPTH	Q-	-0.017	0.071	
DESIGN LEVELS ON LIP KINGDON STREET SOUTHEAST	211.134	210.895	210.655	
EXISTING SURFACE ON LIP	211.13	210.91	210.58	
CHAINAGE LIP KINGDON SOUTHEAST	0	5	10	

LONGSECTION LIP BLOCK KINGDON SOUTH-EAST HORIZONTAL SCALE 1:200 (A1) VERTICAL SCALE 1:40 (A1)

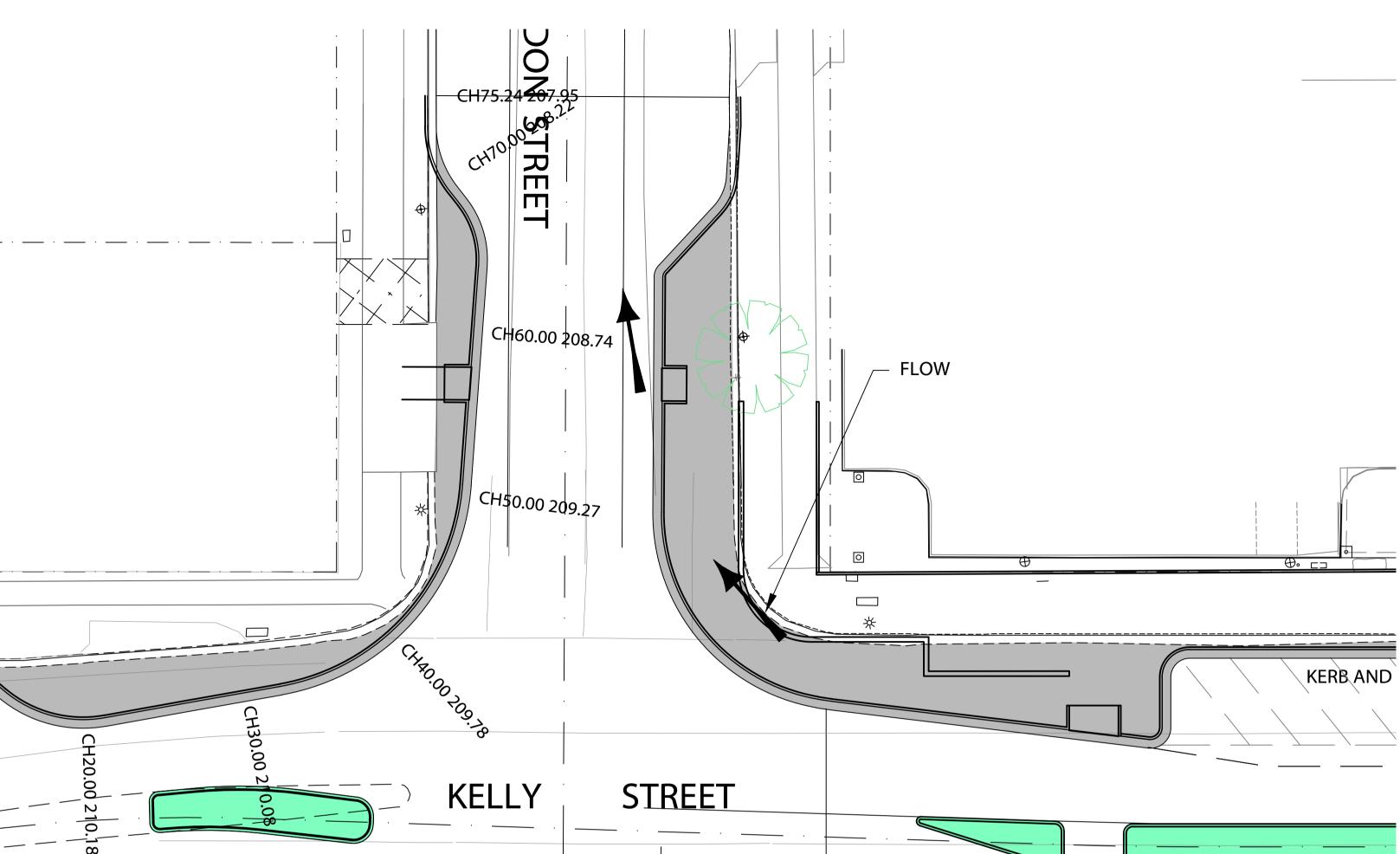
									UPPER HUN1	FER SHIRE
									130 LIVERPOOL STREET	Telephone: (02)
								Upper Hunter	P.O. BOX 208	Facsimile: (02) 65
									SCONE NSW 2337	Email: council@u
CD2	CONCEPT DESIGN	24/12/21	CA							
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

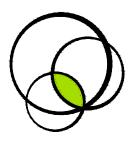


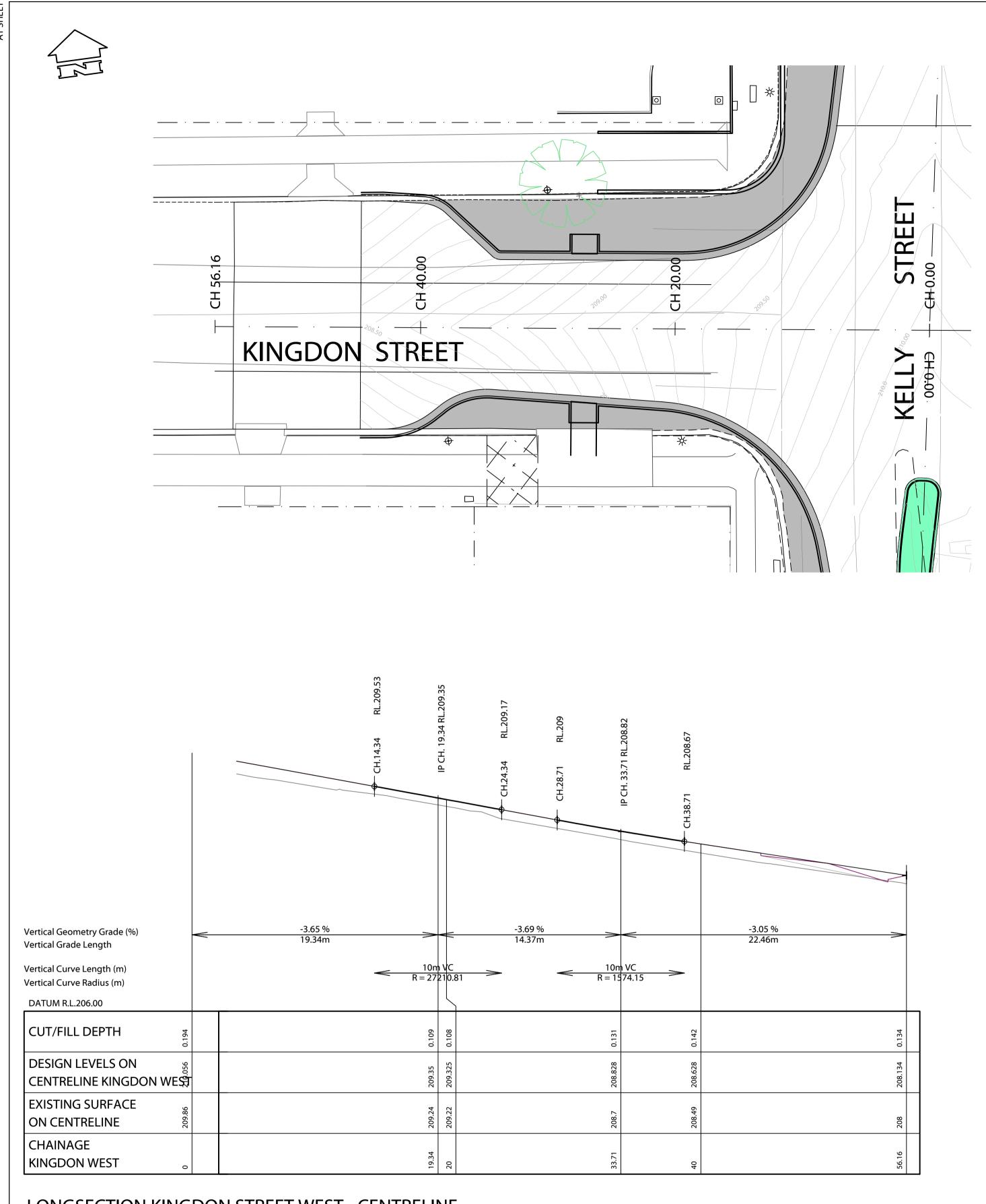
IIRE COUNCIL ne: (02) 6540 1100 : (02) 6545 2671 uncil@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337	Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800	LONG SECTION GUTTER I KELLY STREET SOUTH KINGDON ST (EAST)
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RIP	Scale								CIVIL DRAWING	
:K LIP	Horizont 0	al: 2	4	6	8	10	Designed	вн	Approved on behalf of RHM Con	sulting Engineers
		S	CALE 1	:200 (A ⁻	1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	Rev
			SCALE 1	:40 (A1)		Date JUI	NE 21	18-130- CD03	3.20 CD2

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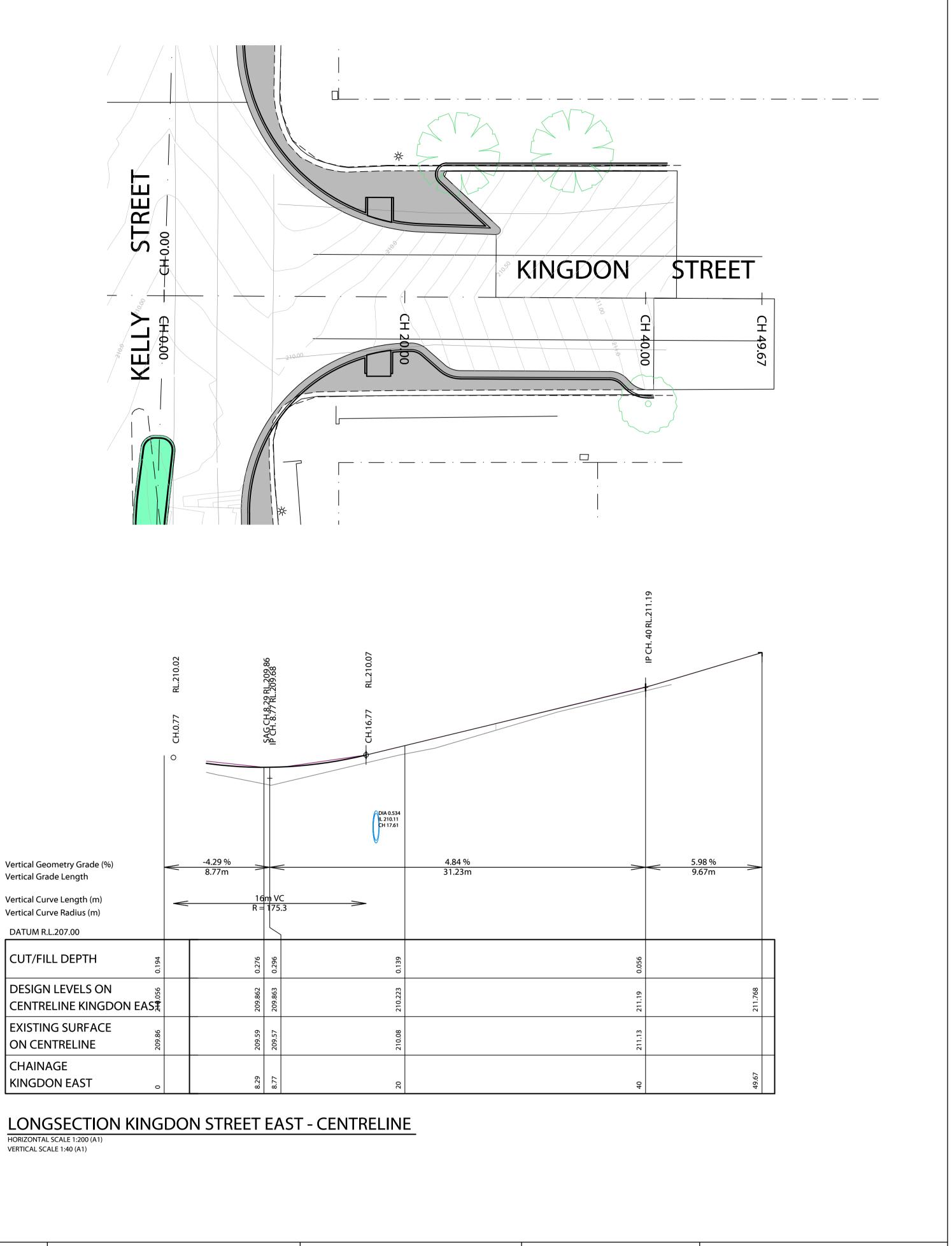


LONGSECTION KINGDON STREET WEST - CENTRELINE HORIZONTAL SCALE 1:200 (A1)

VERTICAL SCALE 1:40 (A1)

									UPPER HUNT	FER SHIRE
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6 Facsimile: (02) 654 Email: council@up
CD1	CONCEPT DESIGN	24/12/21	СА					-		
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			







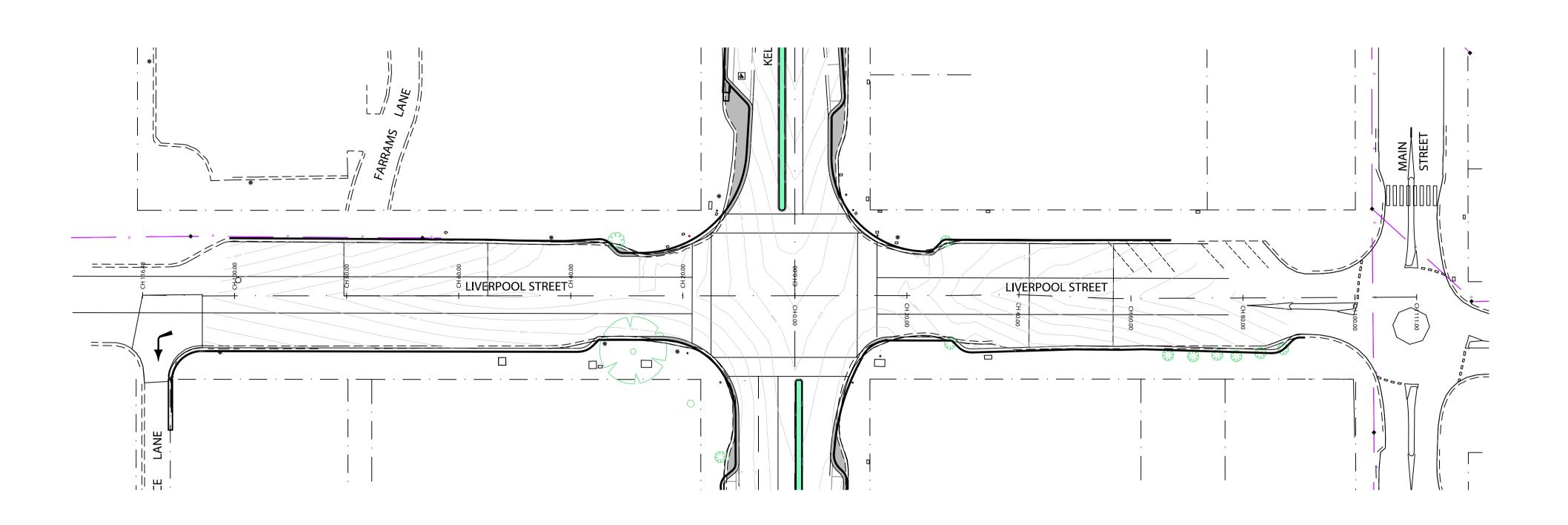
COUNCIL 5540 1100 545 2671 pperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337	
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RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auwww.rhmce.com.au ABN 82 153 018 800 LONG SECTIONS KINGDON STREET CENTRELINE SHEET 1

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Con	sulting Engineers
	S	CALE 1	:200 (A1	1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	Rev
	9	SCALE 1	I:40 (A1)		Date Di	EC 21	18-130- CD03	3.22 CD1

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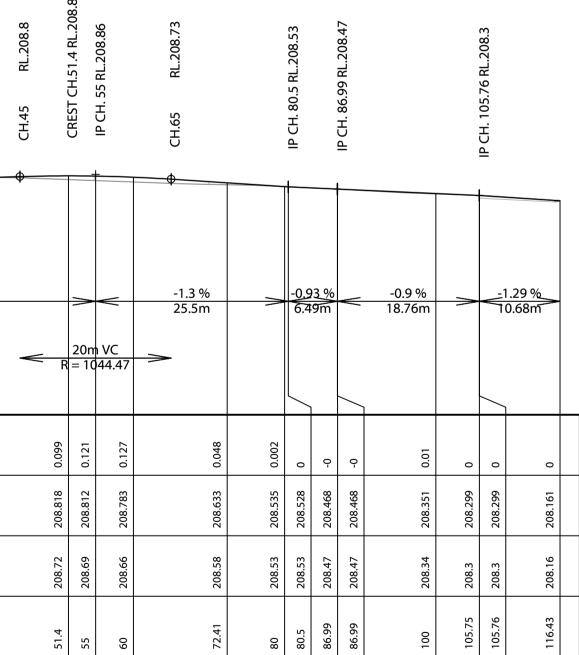


		_		CH.14 RL.208.86		IP CH. 24 RL.208.67	SAG CH.29.13 RL.208.72	CH.34 RL.208.73		
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m) DATUM R.L.202.50			-1.9 % 24m		20n R = 7	VC 94.83		•	0.61	<u>%</u> n
CUT/FILL DEPTH	0.131			0.121	-0.025	-0.109			-0.022	
DESIGN LEVELS ON CENTRELINE LIVERPOOL WEST	209.127			208.769	208.733	208.716			208.768	
EXISTING SURFACE ON CENTRELINE	209			208.65	208.76	208.83			208.79	
CHAINAGE LIVERPOOL WEST	0			20	24	29.13			40	

LONGSECTION LIVERPOOL STREET WEST - CENTRELINE HORIZONTAL SCALE 1:500 (A1)

VERTICAL SCALE 1:100 (A1)

									UPPER HUNI	ER SHIRE COU
								Upper	130 LIVERPOOL STREET	Telephone: (02) 6540 1100
								Upper Hunter	P.O. BOX 208	Facsimile: (02) 6545 2671
									SCONE NSW 2337	Email: council@upperhunte
CD1	CONCEPT DESIGN	24/12/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			
				REV	DESCRIPTION	DATE	ВҮ			



		CH.5.21 RL.209.03	SAG CH.13.13 RL.208.96 IP CH. 15.21 RL.208.85		CH.25.21 RL.209.13		P CH. 35.32 RL.209.41				P CH. 49.81 RL 209.59	T IP CH. 56.85 RL.209.67			IP CH. 75.72 RL.209.86		
Vertical Geometry Grade (%) Vertical Grade Length Vertical Curve Length (m) Vertical Curve Radius (m)	-	 	0m \ = 435	VC 5.35	2.77 % 20.11m		V	<u>1.2</u> 14.4	<u>3 %</u> 49m	N N	<u>1.14 %</u> 7.03m		- 1	<u>1.04 %</u> 8.87m →		<u>1.81 %</u> 35.28m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
CUT/FILL DEPTH	0.131	0.152	0.161	-0.007	-0.107	0-	0-	0.134	0.155	0.001	0-	-0	0.008	-0.005	0.022	-0.013	-0.033
DESIGN LEVELS ON CENTRELINE LIVERPOOL EAST	209.127	208.96	208.965	209.014	209.243	209.408	209.408	209.458	209.465	209.585	209.666	209.666	209.699	209.862		210.301	
EXISTING SURFACE ON CENTRELINE	209	208.81	208.8	209.02	209.35	209.41	209.41	209.32	209.31	209.58	209.67	209.67	209.69	209.87	209.92	210.31	210.53
CHAINAGE LIVERPOOL EAST	0	13.13	15.21	20	29.38	35.32	35.32	39.38	40	49.81	56.85	56.85	60	75.72	80	100	Ξ

DUNCIL 00 Inter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337	$\overline{\mathbf{G}}$
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LONGSECTION LIVERPOOL STREET EAST - CENTRELINE HORIZONTAL SCALE 1:500 (A1) VERTICAL SCALE 1:100 (A1)



LONG SECTIONS LIVERPOOL STREET CENTRELINE SHEET 1

Scale								CIVIL DRAWING	
Horizontal: 0	5	10	15	20	25	Designed	j BH	Approved on behalf of RHM Cons	sulting Engineers
	SCA	LE 1:	500 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	1	2	3	4	5	Datum	NIL	Drawing No:	Rev
	SCA	LE 1:	100 (A1)		Date	DEC 21	18-130- CD03	.23 CD1

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CONCEPT DESIGN		
24/12/21		
CA		
UPPER H 130 LIVERPOOL STR P.O. BOX 208 SCONE NSW 2337	Vertical Geometry Grade Vertical Grade Length Vertical Grade Length Vertical Curve Length (m Vertical Curve Radius (m) DATUM R.L.209.00 CUT/FILL DEPTH DESIGN LEVELS C CENTRELINEST A EXISTING SURFAC ON CENTRELINE EXISTING SURFAC ON CENTRELINE CHAINAGE ST AUBINS WEST CHAINAGE ST AUBINS WEST CHAINAGE ST AUBINS WEST	
R SHIF Telephone: (0 Facsimile: (02 Email: counc	008 5 WE 5 117 0 5 T AL	
	JBI	

DATE BY

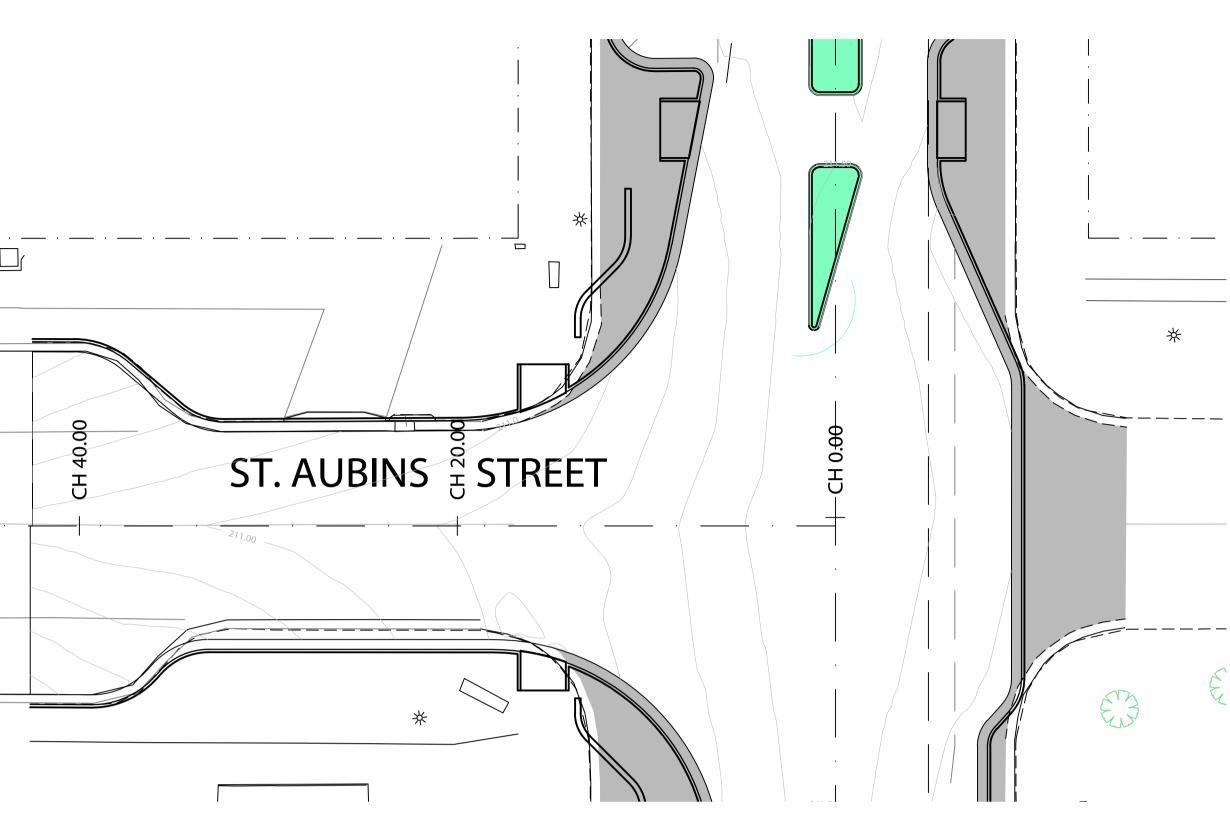
DATE BY

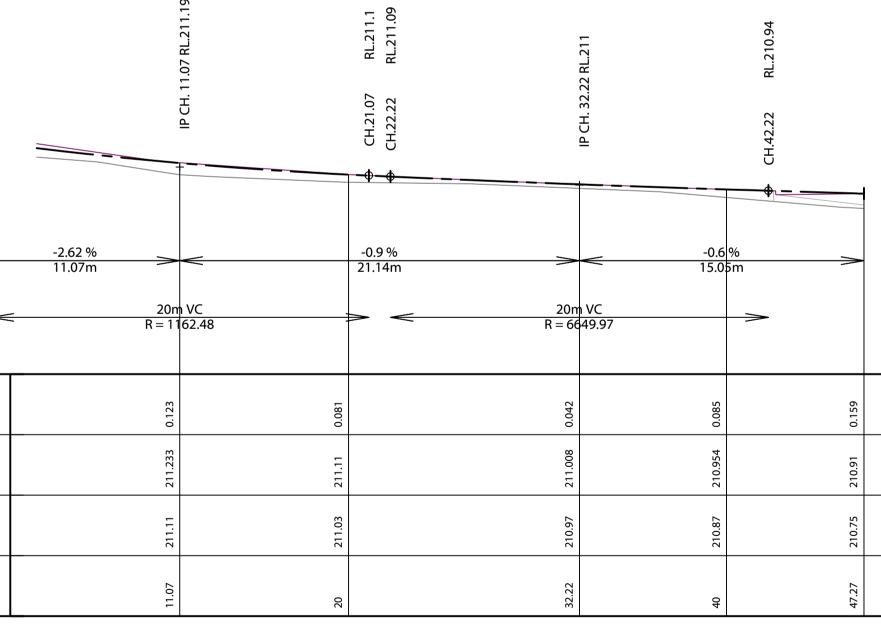
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DESCRIPTION

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DESCRIPTION





INS WEST - CENTRELINE

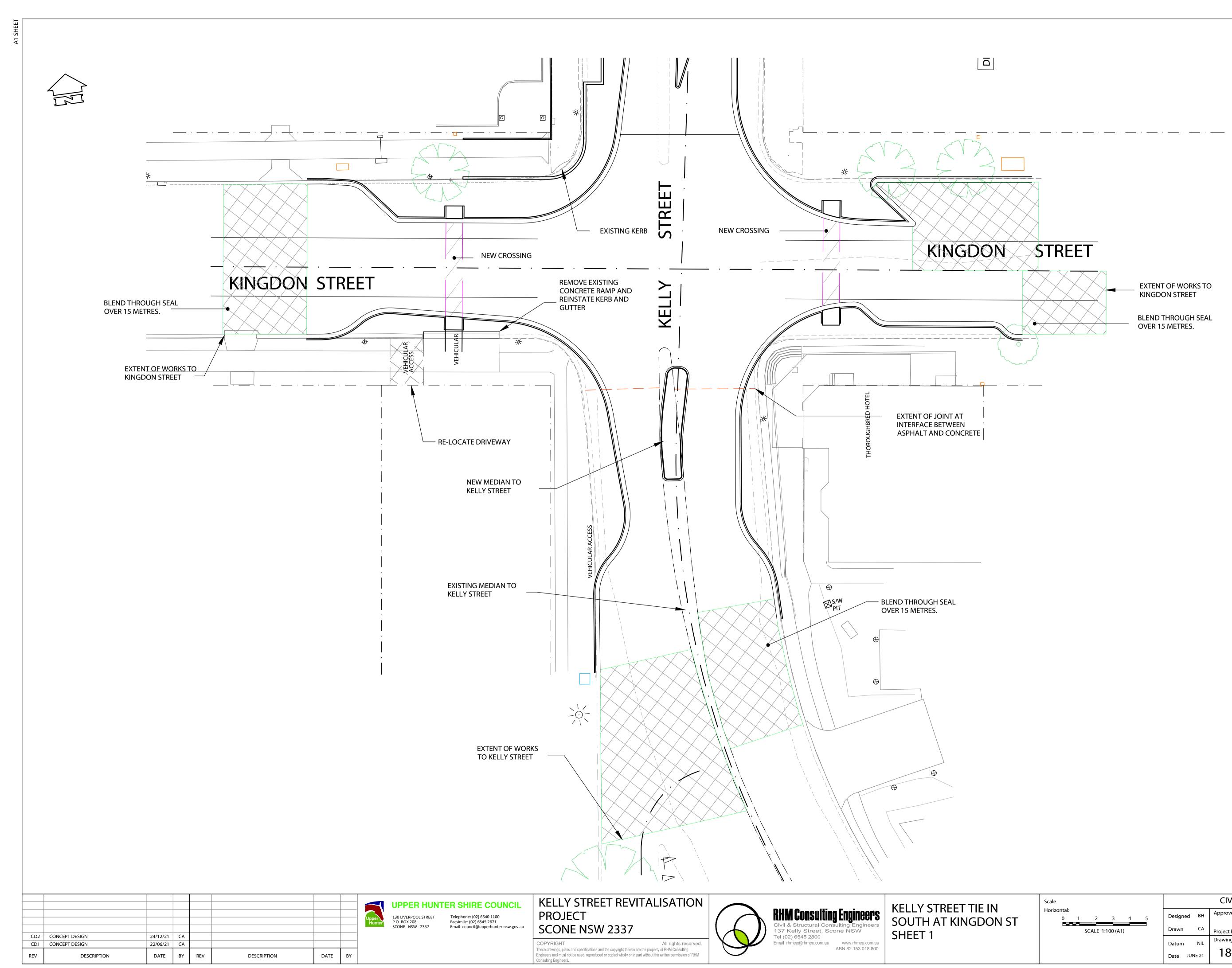


KELLY STREET REVITALISATION PROJECT SCONE NSW 2337

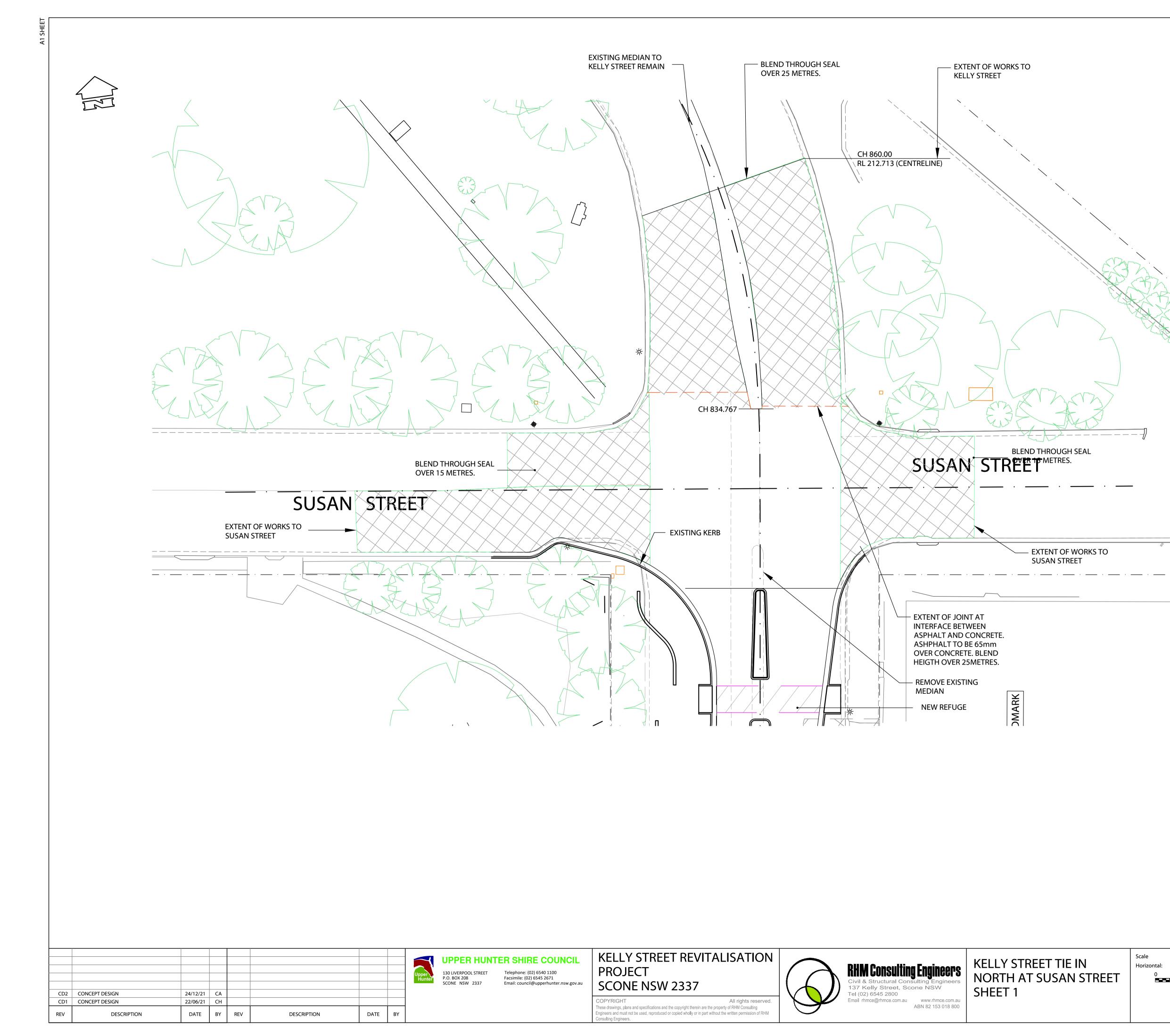


LONG SECTIONS ST AUBINS STREET CENTRELINE SHEET 1

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Consu	lting Engineers
	S	CALE 1	:200 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	
		SCALE 1	:40 (A1))		Date I	DEC 21	18-130- CD03.	24 CDT



Scale		CIVIL DRAWING
Horizontal: 0 1 2 3 4 5	Designed BH	Approved on behalf of RHM Consulting Engineers
SCALE 1:100 (A1)	Drawn CA	Project Engineer/Director Date
	Datum NIL	Drawing No: Rev
	Date JUNE 21	18-130- CD03.30 CD2



	Scale		CIVIL DRAWING
REFT	Horizontal: 0 1 2 3 4 5	Designed BH	Approved on behalf of RHM Consulting Engineers
	SCALE 1:100 (A1)	Drawn CA	Project Engineer/Director Date
		Datum NIL	Drawing No: Rev
		Date JUNE 21	18-130-CD03.40 CD2

. _____ . ____

Centreline Data x=298632.992		2.5%			0.0	08%	-1	.77%		-3.07%			-4.9	9%		
X=298632.992 Y=6451699.79 Z=210.173																
Datum209																
DESIGN SURFACE KELLY STREET	210.418		210.26	210.26	210.11	210.15	210.146	210.173	210.188		210	209.96	210.11	210.11	209.919	
HEIGHT TO MEDIAN																
DESIGN MEDIAN LEVEL																
DEPTH TO EXISTING			-0.16	-0.16	0-	-0.03	0.01	0.13	0		-0.02	-0.01	-0.16	-0.17	0	
EXISTING SURFACE LEVEL			210.1	210.1	210.11	210.12	210.16	210.3	210.19		209.98	209.95	209.95	209.94	209.92	
OFFSET FROM CENTRELINE	-13.02		-6.7	-6.55	-6.52	-6.02	-1.54	0	0.96		7.09	7.59	7.62	7.77	11.59	

CHAINAGE 110.000

Centreline Data X=298632.377 Y=6451689.812 Z=210.269 Datum209		2.5%				<u>-1.15%</u>				-3.92%		.66%			
DESIGN SURFACE KELLY STREET	210.375	210.286	210.286	210.136	210.176		210.274	210.269	210.266	209.943	209.903	210.053	210.053	210.01	
HEIGHT TO MEDIAN															
DESIGN MEDIAN LEVEL															
DEPTH TO EXISTING		-0.23	-0.21	-0.06	-0.07		0.03	0.11	0	o	0.01	-0.14	-0.16	0	
EXISTING SURFACE LEVEL		210.06	210.08	210.08	210.11		210.31	210.38	210.27	209.94	209.92	209.92	209.9	210.01	
OFFSET FROM CENTRELINE	-13.81	-10.25	-10.1	-10.07	-9.57		-0.97	0	1.14	9.36 0.36	9.86	9.89	10.04	11.69	

CHAINAGE 100.000

		2.5%]			-2.04%	f	r
Centreline Data X=298632.71 Y=6451679.866								
z=210.35 Datum209								
DESIGN SURFACE KELLY STREET	210.322	210.241	210.241	210.091	210.131	210.359	210.35	
HEIGHT TO MEDIAN								
DESIGN MEDIAN LEVEL								
DEPTH TO EXISTING					0-	0.04	0.12	
EXISTING SURFACE LEVEL					210.13	210.39	210.47	
OFFSET FROM CENTRELINE	-15.7	-12.46	-12.31	-12.28	-11.78	-0.61	0	

CHAINAGE 90.044

CD5 CD4 CD3 CD2	CONCEPT DESIGN CONCEPT DESIGN CONCEPT DESIGN CONCEPT DESIGN	24/12/21 03/11/21 17/08/21 02/08/21	CA CA CA					Upper Hunter	UPPER HUN 130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	TER SHIRE COUNCIL Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337	\mathcal{C}
CD1	CONCEPT DESIGN	22/06/21	CA								COPYRIGHT All rights reserved. These drawings, plans and specifications and the copyright therein are the property of RHM Consulting	
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY				Engineers and must not be used, reproduced or copied wholly or in part without the written permission of RHM Consulting Engineers.	\sim

Cent X=298 Y=645 Z=210 Dat DES KEL HE ME DE LEV DEF EXI EXIS LEV OFF FRC

Centreline Data X=298641.181	//	3.82%			-2.92%	<u>p</u>	-2.8%	-4.21%	-3.21%			2	2.26%	
Y=6451749.111 Z=209.68														
Datum208										Ļ				
DESIGN SURFACE KELLY STREET	209.258	209.586	209.586	209.436	209.476	209.64	209.68	209.62	209.498	209.458	209.608	209.608	209.785	
COMBINED ROAD SURFACE	209.26	209.59	209.59	209.44	209.48	209.74	209.68	209.62	209.5	209.46	209.61	209.61	209.79	
HEIGHT TO MEDIAN						0.1								
DESIGN MEDIAN LEVEL						209.74								
DEPTH TO EXISTING	-0.1	-0.36	-0.36	-0.2	-0.22	-0.06	-0.02	0	-0.02	0	-0.15	-0.16		
EXISTING SURFACE LEVEL	209.16	209.22	209.23	209.23	209.26	209.58	209.66	209.62	209.48	209.46	209.46	209.45		
OFFSET FROM CENTRELINE	-16.28	17.7-	-7.56	-7.53	-7.03	-1.42	0	1.42	5.21	5.71	5.74	5.89	13.74	

		2.41%			4.22%			-4.44%	2.43%	1.64%	-2.47%	-2.	47%		2.	1%		
Centreline Data	_			-4	4.227													
X=298645.583 Y=6451778.784 Z=209.281																		
Datum208																		
DESIGN SURFACE KELLY STREET	209.1	208.989	208.989	208.839	208.879	209.102	209.16	209.316	209.281	209.304	209.218	209.205	209.154	209.114	209.264	209.264	209.372	
COMBINED ROAD SURFACE	209.1	208.99	208.99	208.84	208.88	209.1	209.16	209.32	209.46	209.3	209.22	209.21	209.15	209.11	209.26	209.26	209.37	
HEIGHT TO MEDIAN								0	0.18									
DESIGN MEDIAN LEVEL								209.32	209.46									
DEPTH TO EXISTING	-0.18	-0.24	-0.23	-0.08	-0.1	-0.09	-0.1	-0.1	0-	-0.06	-0.04	-0.04	-0.03	0.01	-0.14	-0.15		
EXISTING SURFACE LEVEL	208.92	208.75	208.76	208.76	208.78	209.01	209.06	209.22	209.28	209.24	209.17	209.16	209.13	209.12	209.12	209.12		
OFFSET FROM CENTRELINE	-16.82	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.38	

CHAINAGE 160.000

Centreline Data x=298639.507	~	-2.71%	-2.82%	-2.82%	-2.93%
Y=6451739.252 Z=209.79					
Datum209					
DESIGN SURFACE KELLY STREET	209.572	209.75	209.79	209.75	209.581
COMBINED ROAD SURFACE	209.57	209.75	209.79	209.75	209.58
HEIGHT TO MEDIAN					
DESIGN MEDIAN LEVEL					
DEPTH TO EXISTING	-0.27	-0.1	-0.06	-0.03	-0.1
EXISTING SURFACE LEVEL	209.3	209.65	209.73	209.72	209.48
OFFSET FROM CENTRELINE	8-	-1.42	0	1.42	7.18

CHAINAGE 150.000

entreline Data			-3.58%		^{*8.99%}		r
=298634.485 =6451709.676 =210.218							
atum209				L			_
ESIGN SURFACE ELLY STREET	210.218	210.213	209.999	209.959	210.109	210.109	209.85
IEIGHT TO 1EDIAN	0.12	Ŷ					
ESIGN MEDIAN EVEL	210.34	210.21					
EPTH TO XISTING	-0.15	-0.15	-0.18	-0.17	-0.32	-0.32	0
XISTING SURFACE EVEL	210.07	210.07	209.81	209.79	209.79	209.79	209.85
OFFSET ROM CENTRELINE	0	1.11	7.1	7.6	7.63	7.78	10.65

CHAINAGE 120.000

Centreline Data X=298644.226 Y=6451768.876 Z=209.441
Datum208
DESIGN SURFACE KELLY STREET
COMBINED ROAD SURFACE
HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL
DEPTH TO EXISTING
EXISTING SURFACE LEVEL
OFFSET FROM CENTRELINE

Centreline Data
X=298642.836 Y=6451758.973 Z=209.57
Datum208
DESIGN SURFACE KELLY STREET
COMBINED ROAD SURFACE
HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL
DEPTH TO EXISTING
EXISTING SURFACE LEVEL
OFFSET FROM CENTRELINE

RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

KELLY STREET CROSS SECTIONS SHEET 1

CHAINAGE 190.000

	1.04%			3.67%			-4.18%	-0.05%	1.28%	-2.6%		-2.6%		3.13%			
209.203	209.155	209.155	209.005	209.045	209.24	209.294	209.44	209.441	209.459	209.368	209.355	209.243	209.203	209.353	209.353	209.447	
209.2	209.16	209.16	209.01	209.05	209.24	209.29	209,44	209.6	209.46	209.37	209.36	209.24	209.2	209.35	209.35	209.45	
							ę	0.16									
							209.44	209.6									
-0.23	-0.31	-0.3	-0.15	-0.17	-0.13	-0.12	-0.08	-0.01	-0.06	-0.06	-0.06	0.05	0.12	-0.03	-0.02		
208.98	208.85	208.86	208.86	208.87	209.11	209.17	209.36	209.43	209.39	209.31	209.29	209.29	209.32	209.32	209.33		
-16.78	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	9.72	10.22	10.25	10.4	13.38	

CHAINAGE 180.000

	-2.23%		-3.	16% A		2.75%	-0.4%	-4.3%			1	.29%		
											~			
209.274	209.491	209.491	209.341	209.381	209.53	209.57	209.564	209.412	209.408	209.368	209.518	209.518	209.617	
209.27	209.49	209.49	209.34	209.38	209.53	209.72	209.56	209.41	209.41	209.37	209.52	209.52	209.62	
						0.15								
						209.72								
-0.2	-0.31	-0.3	-0.15	-0.16	-0.06	0-	-0.04	-0.01	-0.01	0.02	-0.13	-0.14	-0.01	
209.07	209.18	209.19	209.19	209.22	209.47	209.57	209.52	209.4	209.4	209.39	209.39	209.38	209.61	
-16.6	-6.82	-6.67	-6.64	-6.14	-1.43	0	1.44	4.98	5.06	5.56	5.59	5.74	13.42	
	C					– 1	70							

CHAINAGE 170.000

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Consul	ting Engineers
	S	CALE 1	:200 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8 SCALE 1	1.2 I:40 (A1)		2	Datum Date JUI	NIL NE 21	Drawing No: 18-130- CD04.0	01 CD5

Centreline Data X=298649.654 Y=6451808.506 Z=209.058 Datum208	ſ	0.18%			4.59%			4.19%	-0.189	62.24%	-2.61%	-2.	61%		2.7	17%		
DESIGN SURFACE KELLY STREET	208.73	208.721	208.721	208.571	208.611	208.854	208.909	209055	209.058	209.09	208.998	208.985	208.931	208.891	209.041	209.041	209.153	
COMBINED ROAD SURFACE	208.73	208.72	208.72	208.57	208.61	208.85	208.91	90 602	209.22	209.09	209	208.99	208.93	208.89	209.04	209.04	209.15	
HEIGHT TO MEDIAN								C	0.17	o-								
DESIGN MEDIAN LEVEL								209.06	209.22	209.09								
DEPTH TO EXISTING		-0.15	-0.14	0.01	-0.02	-0.09	-0.1	0.01	0.05	-0.14	-0.12	-0.12	-0.11	-0.08	-0.23	-0.23	-0.12	
EXISTING SURFACE LEVEL		208.57	208.58	208.58	208.59	208.76	208.8	20 802	209.11	208.95	208.88	208.87	208.82	208.81	208.81	208.81	209.04	
OFFSET FROM CENTRELINE	-16.83	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1 42	- 0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.38	

CHAINAGE 220.000

	DESIGI LEVEL
	DEPTH EXISTI
	EXISTI LEVEL
	OFFSE FROM
-	

						<u> </u>												
								-4.44%	0.79%	0.58%	-2.22%	-2	.22%		1.	89%		ł
Centreline Data		1.06%		-	4.99%							\square			5			
X=298648.297 Y=6451798.599 Z=209.112			$\left \right $															
Datum208																		
DESIGN SURFACE KELLY STREET	208.804	208.755	208.755	208.605	208.645	208.909	208.967	209.123	209.112	209.12	209.042	209.031	208.984	208.944	209.094	209.094	209.192	
COMBINED ROAD SURFACE	208.8	208.79	208.75	208.6	208.65	208.91	208.97	209.12	209.27	209.12	209.04	209.03	208.98	208.94	209.09	209.09	209.2	
HEIGHT TO MEDIAN									0.16									
DESIGN MEDIAN LEVEL									209.27									
DEPTH TO EXISTING	0	-0.14	-0.14	0.01	-0.01	-0.09	-0.1	0.02	-0.07	-0.1	-0.07	-0.07	-0.06	-0.02	-0.17	-0.18	-0.08	
EXISTING SURFACE LEVEL	208.81	208.61	208.62	208.62	208.63	208.82	208.87	209.14	209.04	209.02	208.97	208.96	208.93	208.92	208.92	208.92	209.11	
OFFSET FROM CENTRELINE	-16.88	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.38	

							C⊦	łA	INAGI	E 2	210	0.000							
									-4.57%	2.04%	-0.83%	-1.7%	-1	.7%		3.	26%		_
Centreline Data		3.02%	_	•	-	4.89%		M											
X=298646.94 Y=6451788.691 Z=209.162				\square															
Datum208							-												
DESIGN SURFACE KELLY STREET	208.963		208.822	208.822	208.672	208.712	208.971	209.031	209.191	209.162	209.15	209.09	209.082	209.046	209.006	209.156	209.156	209.325	
COMBINED ROAD SURFACE	208.96		208.82	208.82	208.67	208.71	208.97	209.03	209.19	209.32	209.15	209.09	209.08	209.05	209.01	209.16	209.16	209.32	
HEIGHT TO MEDIAN									0	0.16									
DESIGN MEDIAN LEVEL									209.19	209.32									
DEPTH TO EXISTING			-0.14	-0.13	0.02	-0.01	-0.07	-0.08	60:0-	-0.02	-0.03	-0.03	-0.03	-0.02	0.01	-0.14	-0.14	-0.12	
EXISTING SURFACE LEVEL			208.68	208.69	208.69	208.71	208.91	208.95	209.1	209.14	209.12	209.06	209.05	209.02	209.02	209.02	209.01	209.2	
OFFSET FROM CENTRELINE	-16.87		-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.38	
							CF	ΗA	INAG	E 2	200	0.000							

24/12/21 CA

03/11/21 CA

17/08/21 CA

02/08/21 CA

22/06/21 CA

BY

REV

DESCRIPTION

DATE

Centrelin X=298653.7 Y=6451838. Z=208.926 Datum DESIG

KELLY HEIGH MEDIA

Centreline X=298652.3 Y=6451828.

Z=208.951 Datum DESIG KELLY

HEIGH MEDIA

DESIGN LEVEL

DEPTH EXISTI

EXISTI LEVEL OFFSE

FROM

Centrelii X=298651 Y=645181 Z=208.998 Datur DESIG KELLY

HEIGH MEDIA DESIG

LEVEL

DEPTI EXIST EXIST

LEVEL

OFFSE FROM

UPPER HUNTER SHIRE C 130 LIVERPOOL STREET P.O. BOX 208 Hunter SCONE NSW 2337

DATE BY

CD5 CONCEPT DESIGN

CD4 CONCEPT DESIGN

CD3 CONCEPT DESIGN

CD2 CONCEPT DESIGN

CD1 CONCEPT DESIGN

DESCRIPTION

REV

entreline Data =298653.725 =6451838.229 =208.926		1.31%	┣		-4.24	4%			-2.22%	-2.04%	0.06%	-2.36%		2.36%		2.3	38%		
atum208																			
ESIGN SURFACE ELLY STREET	208.736	200 675	200.002		626.802	208.565	208.79	208.819	208.897	208.926	208.927	208 844	208.832	208.782	208.742	208.892	208.892	209.013	
IEIGHT TO 1EDIAN									0	0.14	0								
ESIGN MEDIAN EVEL									208.9	209.06	208.93								
DEPTH TO XISTING			0.0		c0.0	٩	-0.12	-0.12	-0.08	-0.07	-0.1	-01	-0.1	-0.12	-0.04	-0.19	-0.18		
XISTING SURFACE EVEL		00 E 0	01002	00.007	86.802	208.56	208.67	208.7	208.82	208.86	208.82	40 208 74	208.73	208.66	208.7	208.7	208.72		
OFFSET ROM CENTRELINE	-16.82	C C L	12.12 12.0E	00.21	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	C6 4	5.42	7.52	8.02	8.05	8.2	13.27	

CHAINAGE 250.000

									- 1.50/	0.760/					2.4	7%		
Centreline Data								-2.65%	-2.15%	0.76%	-1.84%	-1	84%					
X=298652.368 Y=6451828.321 Z=208.951	İ	1%	\mathbb{T}		4.71%										5			
Datum208																		
DESIGN SURFACE KELLY STREET	208.7	208 654	208.654	208.504	208.544	208.793	208.828	208.92	208.951	208.94	208.875	208.866	208.827	208.787	208.937	208.937	209.061	
HEIGHT TO MEDIAN								0	0.13	0								
DESIGN MEDIAN LEVEL								208.92	209.08	208.94								
DEPTH TO EXISTING	0.02	-010	-0.12	0.03	0.01	-0.1	-0.1	0.05	0.06	-0.09	-0.1	-0.11	-0.12	-0.09	-0.24	-0.24		
EXISTING SURFACE LEVEL	208.72	208 53	208.54	208.54	208.55	208.69	208.73	208.97	209.01	208.85	208.77	208.76	208.71	208.7	208.7	208.69		
OFFSET FROM CENTRELINE	-16.84	C C1-	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.19	

CHAINAGE 240.000

												1					2.	42%		
eline Data									-3.42%	-0.719	1.18%	-2.26%		-2.	26%	Γ	2.			
51.011 818.414 998		0.27%	L	\vdash		4.65%														
ım208																				
GN SURFACE Y STREET	208.7		208.687	208.687	208.537	208.577	208.824	208.868	208 988	208.998	209.015		208.936	208.924	208.877	208.837	208.987	208.987	209.112	
GHT TO DIAN									C	0.16	0									
GN MEDIAN EL									99 208,99	209.15	209.01									
TH TO TING	0.07		-0.14	-0.13	0.02	-0.01	-0.11	-0.11	0.01	0.05	-0.12		-0.12	-0.12	-0.12	-0.09	-0.24	-0.25	-0.17	
TING SURFACE	208.77		208.55	208.55	208.55	208.57	208.72	208.76	602	209.05	208.89		208.82	208.81	208.76	208.74	208.74	208.74	208.94	
SET M CENTRELINE	-16.83		-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	C4 [-	0	1.42		4.92	5.42	7.52	8.02	8.05	8.2	13.38	

CHAINAGE 230.000

ER SHIRE COUNCIL Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337	
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RHM Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au www.rhmce.com.au ABN 82 153 018 800 KELLY STREET CROSS SECTIONS SHEET 2

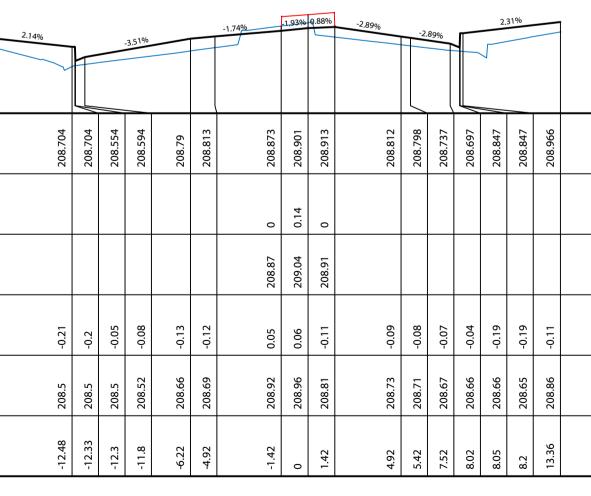
Centreline Data X=298655.082 Y=6451848.136 Z=208.901		
Datum208		
DESIGN SURFACE KELLY STREET	208.795	
HEIGHT TO MEDIAN		
DESIGN MEDIAN LEVEL		
DEPTH TO EXISTING		
EXISTING SURFACE LEVEL		
OFFSET FROM CENTRELINE	-16.73	

Centreline Data	1	2.84%			-2.41%			-1.84%	-1.52%	1.7%	-3.41%	-3.	41%		1.	94%		
X=298656.439 Y=6451858.044 Z=208.876			F		-2.41%										5			
_Datum208																		
DESIGN SURFACE KELLY STREET	208.842	208.733	208.733	208.583	208.623	208.762	208.786	208.85	208.876	208.9	208.781	208.764	208.692	208.652	208.802	208.802	208.903	
HEIGHT TO MEDIAN								ę	0.15	0								
DESIGN MEDIAN LEVEL								208.85	209.03	208.9								
DEPTH TO EXISTING		-0.28	-0.28	-0.13	-0.13	-0.13	-0.11	0.04	0.06	-0.12	-0.08	-0.08	-0.05	-0.02	-0.17	-0.18	-0.11	
EXISTING SURFACE LEVEL		208.45	208.45	208.45	208.49	208.63	208.67	208.89	208.93	208.78	208.7	208.69	208.64	208.63	208.63	208.63	208.8	
OFFSET FROM CENTRELINE	-16.78	-12.94	-12.79	-12.76	-12.26	-6.49	-5.19	-1.69	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.39	

Centreline Data X=298657.796 Y=6451867.951 Z=208.86 Datum208		2.34%	-2.13%		-1.36%			-2.12%	<u></u>	-2,24%	1.76%	-3.9%	-3	9%		1.	42%		
DESIGN SURFACE KELLY STREET	208.839	208.74	208.776	208.776	208.626	208.666	208.71	208.738	208.812	208.86	208.885	208.748	208.729	208.647	208.607	208.757	208.757	208.83	
HEIGHT TO MEDIAN									0	0.15	0								
DESIGN MEDIAN LEVEL									208.81	209.01	208.89								
DEPTH TO EXISTING		-0.27	-0.26	-0.25	-0.1	-0.13	-0.1	-0.1	0.06	0.05	-0.13	-0.06	-0.05	-0.02	0.01	-0.15	-0.15		
EXISTING SURFACE LEVEL		208.47	208.52	208.52	208.52	208.54	208.61	208.64	208.87	208.91	208.75	208.69	208.68	208.63	208.61	208.61	208.61		
OFFSET FROM CENTRELINE	-16.8	-12.56	-10.85	-10.7	-10.67	-10.17	-6.94	-5.64	-2.14	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.39	

CHAINAGE 280.000

CHAINAGE 270.000



CHAINAGE 260.000

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Consu	Ilting Engineers
	S	CALE 1	:200 (A	1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8 SCALE 1	1.2 1:40 (A1	1.6)	2	Datum Date JUN	NIL NE 21	Drawing No: 18-130- CD04.	.02 CD5

									UPPER HUNT	ER SHIRE
CD5	CONCEPT DESIGN	24/12/21	CA						130 LIVERPOOL STREET	Telephone: (02)
CD4	CONCEPT DESIGN	03/11/21	CA					Upper Hunter	P.O. BOX 208	Facsimile: (02) 6
CD3	CONCEPT DESIGN	17/08/21	CA						SCONE NSW 2337	Email: council@
CD2	CONCEPT DESIGN	02/08/21	CA							
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

Centreline Data		1.83%	-1.84%	-	-1	.91%		-3.32	2%	0.7%	-3.41%		-3.	4%		2.08%	
X=298659.153 Y=6451877.859 Z=208.86				F											1		
Datum208	-							<u> </u>				Ļ					
DESIGN SURFACE KELLY STREET	208.787	208.709	208.789	208.789	208.639	208.679	208.707	208.774	208.86	208.87	208.751	208.711	208.861	208.861	208.712	208.783	
HEIGHT TO MEDIAN									0.15								
DESIGN MEDIAN LEVEL									209.01								
DEPTH TO EXISTING		-0.24	-0.22	-0.22	-0.07	-0.1	-0.09	0.09	0.05	-0.13	-0.09	-0.06	-0.21	-0.21	-0.03		
EXISTING SURFACE LEVEL		208.46	208.57	208.57	208.57	208.58	208.62	208.87	208.91	208.74	208.67	208.65	208.65	208.65	208.68		
OFFSET FROM CENTRELINE	-16.85	-12.58	-8.24	-8.09	-8.06	-7.56	-6.09	-2.59	0	1.42	4.9	5.4	5.43	5.58	9.97	13.39	

CHAINAGE 300.000

Centreline Data										-2.45%	-0.36%	-2							
X=298660.51 Y=6451887.766 Z=208.86		0.75%	╞			-2.15	5%					-3.75%		-3.75%		2.73%			
Datum208																			
DESIGN SURFACE KELLY STREET	208.736	208.699	208.699	208.549	208.589	208.625	208.636	208.711	208.787	208.86	208.855	208.724	208.705	208.546	208.506	208.656	208.656	208.74	
HEIGHT TO MEDIAN										0.12									
DESIGN MEDIAN LEVEL										208.98									
DEPTH TO EXISTING		-0.22	-0.21	-0.06	-0.09	-0.11	-0.11	-0.12	0.05	0.04	-0.13	-0.08	-0.07	0.11	0.15	٩ ٩	-0.01	0.06	
EXISTING SURFACE LEVEL		208.48	208.48	208.48	208.5	208.51	208.52	208.59	208.84	208.9	208.72	208.65	208.64	208.66	208.65	208.65	208.65	208.8	
OFFSET FROM CENTRELINE	-16.89	-11.97	-11.82	-11.79	-11.29	-10.5	-10	-6.5	-3	0	1.42	4.92	5.42	9.65	10.15	10.18	10.33	13.39	

CHAINAGE 310.000

Centreline Data										-1.84%	1.4%	-3.45%				1	97%		
X=298661.867 Y=6451897.674 Z=208.86		1.21%	Ŧ	5.02%			-2.27	%				5.45%	-3.	.45%	F	5	9770		
Datum208																			
DESIGN SURFACE KELLY STREET	208.684	208.639	208.639	208.489	208.529	208.635	208.646	208.725	208.805	208.86	208.84	208.719	208.702	208.629	208.589	208.739	208.739	208.84	
HEIGHT TO MEDIAN										0.13									
DESIGN MEDIAN LEVEL										208.99									
DEPTH TO EXISTING		60.0-	-0.09	0.06	-0.09	-0.13	-0.13	-0.14	-0.14	0.02	-0.13	-0.08	-0.07	-0.05	-0.03	-0.18	-0.18	-0.03	
EXISTING SURFACE LEVEL		208.55	208.55	208.55	208.44	208.5	208.51	208.58	208.67	208.88	208.71	208.64	208.63	208.57	208.56	208.56	208.56	208.81	
OFFSET FROM CENTRELINE	-16.95	-13.28	-13.13	-13.1	-12.6	-10.5	-10	-6.5	-3	0	1.42	4.93	5.43	7.56	8.06	8.09	8.24	13.39	

DEPTH TO EXISTING			-0.12	-0.12	0.03	-0.12	-0.09	-0.09	-0.13	-0.15	0.03	-0.13	CL 0-	-0.11	-0.09	-0.06	-0.21	-0.22	0.02		DEPTH TO EXISTING
EXISTING SURFACE LEVEL					208.54 0	208.43 -	208.5	208.51 -	208.59 -	- 208.69	208.91						208.58 -	208.57 -	208.91		EXISTING SURFACE
OFFSET FROM CENTRELINE	-16.76			m	-13.1	-12.6	-10.5	-10	-6.5	÷.	0	42					6	9.15	14.22	_	OFFSET FROM CENTRELINE
		1						С	ΗA		AGE	33	30.000			1	I	<u> </u>	1		
Centreline Data X=298663.224 Y=6451907.581 Z=208.866 Datum208		1.5%		-5.15	5%			-2.86	%		-1.41%	-0.62	6 -3.08%	-3.(8%	7	1.5%				Centreline Data X=298667.295 Y=6451937.304 Z=208.972 Datum208
DESIGN SURFACE KELLY STREET	208.663		208.61	208.61	208.46	208.5	208.609	208.623	208.723	208.823	208.866	208.857	208.733	208.718	208.654	208.614	208.764	208.764	208.835]	DESIGN SURFACE KELLY STREET
HEIGHT TO MEDIAN											0										HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL											208.87										DESIGN MEDIAN LEVEL
DEPTH TO EXISTING			-0.07	-0.08	0.07	-0.07	-0.11	-0.11	-0.14	-0.16	0.02	-0.15	-0.11	-0.1	-0.08	-0.05	-0.2	-0.2			DEPTH TO EXISTING
EXISTING SURFACE LEVEL			208.54	208.53	208.54	208.43	208.5	208.51	208.58	208.66	208.88	208.71	208.63	208.62	208.57	208.57	208.57	208.56			EXISTING SURFACE LEVEL
OFFSET	-16.78		-13.28	m	-13.1	-12.6	-10.5					1.42	5.43	5.93			8.53	8.68	13.39		OFFSET FROM CENTRELINE

	50		20	20	50	8	50	2	5	20	20					3 2	3	20	
OFFSET FROM CENTRELINE	-16.78		-10.64	-10.49	-10.46	-10	-9.96	-6.5	-3	0	1.42		0.3/ 6.41	6.87	0.0/	7.05	co.,	14.24	
						С	HA	۸IN	AG	ίE	34	0.000							
Centreline Data X=298664.581 Y=6451917.489 Z=208.881 Datum208		0.98%	-1.32%			-3.45	5%		-1.3	%	-0.5%	-2.77%	-2.	77%		2.	09%		,
DESIGN SURFACE KELLY STREET	208.699	208.665	208.665 208.515	208.555	208.583	208.6	208.721	208.842		208.881	208.873	208.749	208.735	208.679	208.639	208.789	208.789	208.894	
HEIGHT TO MEDIAN																			

Centreline Data X=298665.938 Y=6451927.396 Z=208.912 Datum208		0.31%			-3.6	5%		ł	-1.74%	-1.54%	-1.63%			1.7	11%		
DESIGN SURFACE KELLY STREET	208.735	208.716	208.716	208.566	208.604	208.606	208.732	208.86	208.912	208.89	208 81	208.809	208.77	208.92	208.92	209	
HEIGHT TO MEDIAN																	
DESIGN MEDIAN LEVEL																	
DEPTH TO EXISTING	-0.06	-0.2	-0.2	-0.05	-0.07	-0.07	-0.11	-0.14	0.04	-0.12	-015	-0.15	-0.12	-0.27	-0.28	-0.06	
EXISTING SURFACE LEVEL	208.67	208.51	208.52	208.52	208.53	208.53	208.62	208.72	208.95	208.77	208 66	208.66	208.65	208.65	208.64	208.94	
OFFSET FROM CENTRELINE	-16.78	-10.64	-10.49	-10.46	-10	-9.96	-6.5	-3	0	1.42	637	6.41	6.87	6.9	7.05	14.24	

Datum208
DESIGN SURFACE KELLY STREET
HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL
DEPTH TO EXISTING
EXISTING SURFACE
OFFSET FROM CENTRELINE

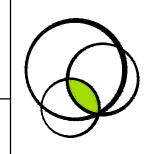
Centreline Data X=298674.08 Y=6451986.841 Z=209.555

CHAINAGE 320.000

RE COUNCIL : (02) 6540 1100 (02) 6545 2671 ncil@upperhunter.nsw.gov.au

DESIGN MEDIAN LEVEL

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800 KELLY STREET CROSS SECTIONS SHEET 3

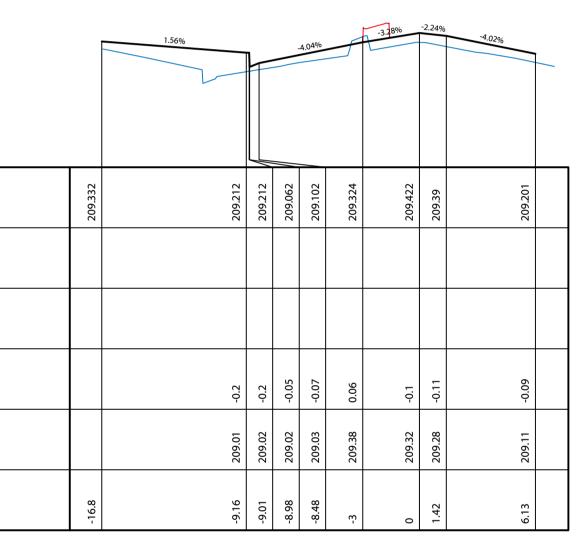
X=298672.723 Y=6451976.934 Z=209.422
Datum208
DESIGN SURFACE KELLY STREET
HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL
DEPTH TO EXISTING
EXISTING SURFACE LEVEL
OFFSET FROM CENTRELINE

Centreline Data

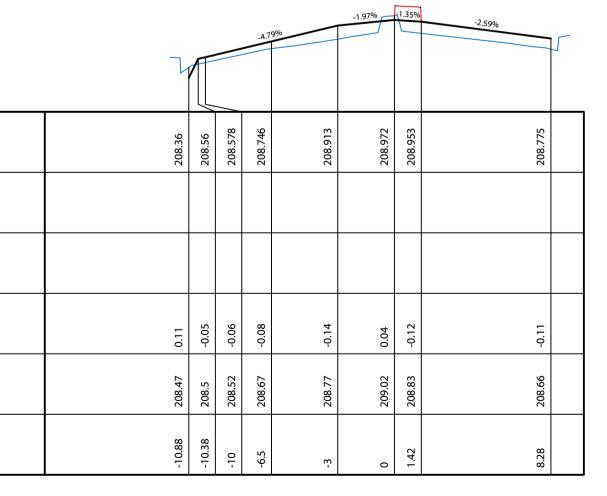
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	1.4%		-3.5	96%	-	-4.17%	-2.46%	-3.16%			1.41	%		
209.478	209.359	209.359	209.209	209.249	209.43	209.555	209.52	209.377	209.376	209.336	209.486	209.486	209.58	
	-0.23	-0.22	-0.07	-0.09	0.08	-0.08	-0.1	-0.11	-0.11	-0.09	-0.24	-0.24	-0.09	
	209.13	209.14	209.14	209.16	209.51	209.47	209.42	209.27	209.27	209.25	209.25	209.24	209.49	
-16.8	-8.26	-8.11	-8.08	-7.58	-3	0	1.42	5.95	5.98	6.48	6.51	6.66	13.32	

CHAINAGE 400.000



CHAINAGE 390.000



CHAINAGE 350.000

Scale		CIVIL DRAWING
Horizontal: 02_4_6810	Designed BH	Approved on behalf of RHM Consulting Engineers
SCALE 1:200 (A1)	Drawn CA	Project Engineer/Director Date
Vertical: 0 0.4 0.8 1.2 1.6 2	Datum NIL	Drawing No: Rev 18-130- CD04.03 CD5
SCALE 1:40 (A1)	Date JUNE 21	18-130-CD04.03 CD5

	x=298675.437 Y=6451996.749 Z=209.65 Datum208																				x=298679.50 Y=6452026.4 Z=209.911 Datum 2
	DESIGN SURFACE KELLY STREET		209.466	209.338	209.338	209.188	209.228	209.391	209.409	209.566	209.65	209.608	209.502	209.489	209.431	209.391	209.541	209.541	209.633		DESIGN KELLY S
	HEIGHT TO MEDIAN																				HEIGHT MEDIAI
	DESIGN MEDIAN LEVEL																				DESIGN LEVEL
	DEPTH TO EXISTING			-0.31	-0.29	-0.14	-0.12	-0.11	-0.11	0.05	60.0-	-0.08	-0.08	-0.08	-0.08	-0.05	-0.2	-0.21			DEPTH EXISTIN
	EXISTING SURFACE			209.03	209.04	209.05	209.11	209.28	209.3	209.61	209.56	209.52	209.43	209.41	209.35	209.34	209.34	209.33			EXISTIN LEVEL
	OFFSET FROM CENTRELINE		-16.79	-12.63	-12.48	-12.45	-11.95	-7.64	-7.14	ę.	0	1.42	5.29	5.79	7.9	8.4	8.43	8.58	13.34		OFFSET FROM (
								C	ΞH.	AIN	AGE 4	410).000								
															-	UF	PE	RI	HUN	TER SHIRE CC	UNCIL
	CONCEPT DESIGN	24/12/21												Upp Hu	er				TREET	Telephone: (02) 6540 11	
CD4 CD3	CONCEPT DESIGN CONCEPT DESIGN	03/11/21	CA CA										_	Hu	nter		BOX 20 NE NS		337	Facsimile: (02) 6545 267 Email: council@upperhu	1 nter.nsw.gov.au
	CONCEPT DESIGN CONCEPT DESIGN	02/08/21	CA																		-
(רח)			CA																		
CD2 CD1	CONCEPT DESIGN	22/06/21	I CA																		

CHAINAGE 420.000

Centreline Data		2.66%	F	-4.4	7%		-4	47%	-3.51%	-1.07%	-2.32%		-2.32%		3.32%			
X=298676.794 Y=6452006.656 Z=209.741																		
Datum208																		
DESIGN SURFACE KELLY STREET	209.489	209.366	209.366	209.216	209.256	209.449	209.472	209.636	209.741	209.726	209.645	209.634	209.534	209.494	209.644	209.644	209.743	
HEIGHT TO MEDIAN																		
DESIGN MEDIAN LEVEL																		
DEPTH TO EXISTING		-0.21	-0.21	-0.06	-0.07	-0.11	-0.11	0.06	-0.09	-0.11	-0.11	-0.11	0	0.07	-0.08	-0.07		
EXISTING SURFACE LEVEL		209.15	209.16	209.16	209.18	209.34	209.36	209.7	209.65	209.62	209.54	209.53	209.53	209.56	209.57	209.57		
OFFSET FROM CENTRELINE	-16.79	-12.17	-12.02	-11.99	-11.49	-7.17	-6.67	ċ.	0	1.42	4.92	5.42	9.72	10.22	10.25	10.4	13.39	

CHAINAGE 430.000

Centreline Data X=298678.151 Y=6452016.564 Z=209.826 Datum209		1.91%	-5.14%		41%		-4.41%	_	-4.32	196	-0.54%	-2.84%	-2.	84%		1.5	81%		
DESIGN SURFACE KELLY STREET	209.537	209.439	209.538	209.538	209.388	209.428	209.52	209.542	209.697	209.826	209.819	209.719	209.705	209.645	209.605	209.755	209.755	209.849	
HEIGHT TO MEDIAN																			
DESIGN MEDIAN LEVEL																			
DEPTH TO EXISTING		-0.2	-0.21	-0.2	-0.05	-0.07	-0.08	-0.08	0.08	-0.1	-0.12	-0.09	-0.09	-0.08	-0.05	-0.2	-0.2		
EXISTING SURFACE LEVEL		209.24	209.33	209.34	209.34	209.36	209.44	209.46	209.77	209.73	209.7	209.63	209.61	209.57	209.56	209.56	209.55		
OFFSET FROM CENTRELINE	-16.79	-11.7	-9.78	-9.63	-9.6	-9.1	-7	-6.5	-3	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.35	

Centreline Data

LEVEL	209.68	209.53	209.52	209.53	209.45	209.7	209.76		210.05		210.01	209.98	209.91	209.9	209.86	209.85	209.84	209.84			FRO	M CENTRE
OFFSET FROM CENTRELINE	-17.06	-13.19	-13.04	-13.01	-12.51	-7.08	-5.86		-2.36		0	1.42	4.92	5.42	7.59	8.09	8.12	8.27	13.37			
						C	Ή	41r	٨	GE	Ξ4	60	.000									
Centreline Data X=298680.864 Y=6452036.379 Z=209.996		2.24%	7	-4.45%		5.01%		-6.01%	•	-3.81	₿% ·	-1.14%	-2.38%	-2.	38%		2.0	99%			X=29868 Y=64520 Z=210.3 Datu	066.101
Datum209 DESIGN SURFACE KELLY STREET	209.6		209.503	209.618	209.618	209.468	209.508	209.65	209.68	209.89	209.996	209.98	209.897	209.885	209.834	209.794	209.944	209.944	210.051	7	KELL	IY STREET
HEIGHT TO MEDIAN	2(5	5	2(2(2(2(5	2(5(5(5	2(2(2(2(5(5		MED	IAN
DESIGN MEDIAN																				-	LEVE	
LEVEL DEPTH TO																				-	DEP1 EXIS	rh to Ting
EXISTING EXISTING SURFACE			-0.13	-0.14	-0.13	0.02	0-	-0.03	-0.04	0.07	-0.1	-0.11	-0.09	-0.09	-0.08	-0.05	-0.2	-0.21		_	EXIS ⁻ LEVE	TING SUR
LEVEL			209.38	209.48	209.48	209.49	209.51	209.62	209.64	209.96	209.9	209.87	209.8	209.79	209.75	209.74	209.74	209.74		_	OFFS FROM	SET M CENTRE
OFFSET FROM CENTRELINE	-16.73		-12.41	-9.83	-9.68	-9.65	-9.15	-6.79	-6.29	-2.79	0	1.42	4.92	5.42	7.54	8.04	8.07	8.22	13.34		L	
						C	ΞH	All	NA	G	Ξ4	50	0.000									
Centreline Data								A 17%		-4.71	0%	-2.5%	-2.23%	-2.	23%		1.7	76%			Centre	line Data
X=298679.508 Y=6452026.471 Z=209.911		2.62%	7	-6.91%	H	.17%		-4,11	_								1				X=29868 Y=64520 Z=210.2	056.194
																				—		
Datum209 DESIGN SURFACE KELLY STREET	209.595		209.471	209.626	209.626	209.476	209.516	209.603	209.624	209.77	209.911	209.876	209.798	209.787	209.74	209.7	209.85	209.85	209.941			GN SURF/ Y STREET
DESIGN SURFACE	209.595		209.471	209.626	209.626	209.476	209.516	209.603	209.624	209.77	209.911	209.876	209.798	209.787	209.74	209.7	209.85	209.85	209.941	_	KELL	GN SURF Y STREET
DESIGN SURFACE KELLY STREET HEIGHT TO	209.595		209.471	209.626	209.626	209.476	209.516	209.603	209.624	209.77	209.911	209.876	209.798	209.787	209.74	209.7	209.85	209.85	209.941	_	KELL HEIG MED	GN SURF/ Y STREET iHT TO IAN GN MEDI/
DESIGN SURFACE KELLY STREET HEIGHT TO MEDIAN DESIGN MEDIAN	209.595		-0.16 209.471	-0.22 209.626	-0.22 209.626	-0.06 209.476	-0.08 209.516	-0.08 209.603	-0.08 209.624	0.09	-0.11 209.911	-0.09 209.876	-0.09	-0.09 209.787	-0.08 209.74	-0.05 209.7	-0.2 209.85	-0.21 209.85	209.941		KELL HEIG MED DESI LEVE DEP1	GN SURF/ Y STREET iHT TO IAN GN MEDI/
DESIGN SURFACE KELLY STREET HEIGHT TO MEDIAN DESIGN MEDIAN LEVEL DEPTH TO	209.595				1 -0.22														209.941		KELL HEIG MED DESI LEVE DEPT EXIS	GN SURFA Y STREET HT TO IAN GN MEDIA CING TING SUR

Z=210.091																		
_Datum209								\										
DESIGN SURFACE KELLY STREET	209.679	209.615	209.615	209.465	209.505	209.782	209.845	210.024	210.091	210.1	210.003	209.989	209.929	209.889	210.039	210.039	210.185	
HEIGHT TO MEDIAN																		
DESIGN MEDIAN LEVEL																		
DEPTH TO EXISTING	0-	-0.09	-0.09	0.06	-0.05	-0.08	-0.08	0.03	-0.08	-0.12	-0.09	-0.09	-0.07	-0.04	-0.19	-0.2		
EXISTING SURFACE LEVEL	209.68	209.53	209.52	209.53	209.45	209.7	209.76	210.05	210.01	209.98	209.91	209.9	209.86	209.85	209.84	209.84		
OFESET																		

HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL
DEPTH TO EXISTING
EXISTING SURFACE

Centreline Data X=298686.292 Y=6452076.009 Z=210.421

Datum209

DESIGN SURFACE KELLY STREET

LEVEL OFFSET FROM CENTRELINE

RFACE ET

DIAN

URFACE

TRELINE

IRFACE FT EDIAN URFACE

FROM CENTRELINE

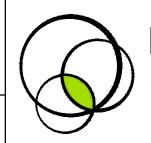
CHAINAGE 440.000

Centreline Data

X=298682.221

Y=6452046.286

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers

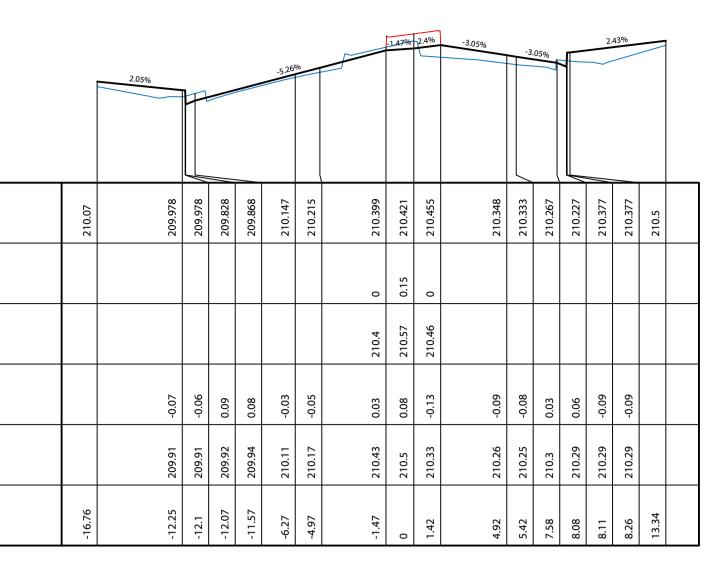
 137 Kelly Street, Scone NSW

 Tel (02) 6545 2800

 Email rhmce@rhmce.com.au

 ABN 82 153 018 800 KELLY STREET CROSS SECTIONS SHEET 4

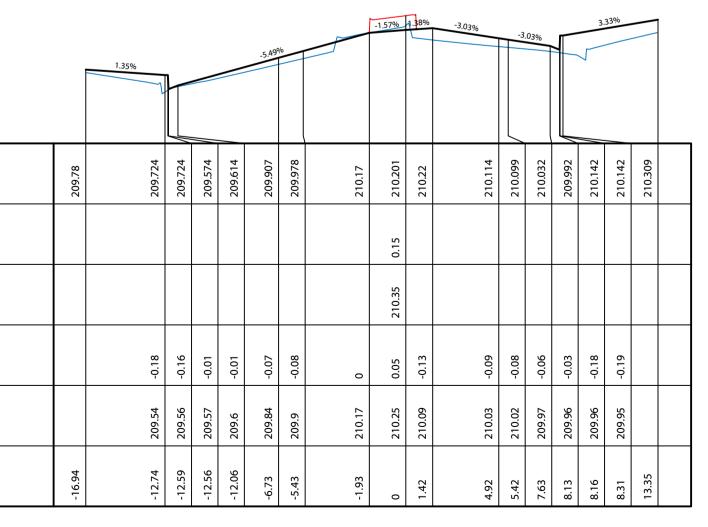
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CHAINAGE 490.000

	1.67%	7				-5410	/6		-1.72%	2.08%	-3.13%		-3.	13%		2.	12%		
209.922		209.847	209.847	209.697	209.737	210.025	210.095	210.285	210.311	210.34		210.231	210.215	210.144	210.104	210.254	210.254	210.36	
								0.01	0.15										
								210.3	210.46										
		-0.14	-0.13	0.02	-0	-0.05	-0.06	0.03	0.07	-0.12		-0.09	-0.08	-0.05	-0.03	-0.18	-0.18		
		209.71	209.71	209.71	209.74	209.98	210.04	210.31	210.38	210.22		210.14	210.14	210.09	210.08	210.08	210.07		
-16.76		-12.29	-12.14	-12.11	-11.61	-6.3	-5	-1.5	0	1.42		4.92	5.42	7.68	8.18	8.21	8.36	13.34	

CHAINAGE 480.000



CHAINAGE 470.000

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Consult	ing Engineers
	S	CALE 1	:200 (A1	1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8	1.2 1:40 (A1	1.6)	2	Datum Date JUI	NIL NE 21	Drawing No: 18-130- CD04.(04 CD5

X=298694.434		Datum210
Y=6452135.454 Z=211.15 Datum210		DESIGN SUBLACE 211.347 211.347 211.347 211.347 211.347 211.197 211.218 211.128 211.212 211.128 211.213 211.128 211.213 211.128 211.213 211.128 211.213 211.128 211.213 211.128 211.213 211.128 211.213 211.128 211.213 211.128 211.213 211.128 211.213 211.149 211.213 211.141 211.213 211.141 211.213 211.141 211.213 211.141 211.213 211.141 211.213
DESIGN SURFACE KELLY STREET	210.987 210.821 210.821 210.671 210.671 210.711 210.058 211.031 211.031 211.031 211.013 211.013 211.013 211.013 211.013 211.025 211.025 211.025 211.111	HEIGHT TO MEDIAN
HEIGHT TO MEDIAN	0	DESIGN MEDIAN LEVEL
DESIGN MEDIAN LEVEL	211.15	DEPTH TO EXISTING
DEPTH TO EXISTING	-0.2 -0.19 -0.04 -0.07 -0.07 -0.04 -0.01 -0.05 -0.09 -0.09 -0.03 -0.03 -0.03 -0.03 -0.03 -0.03 -0.04 -0.016 -0.04 -0.04 -0.03 -0.04 -0.03 -0.04 -0.03 -0.04 -0.04 -0.04 -0.05 -0.04 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07 -0.07	EXISTING SURFACE 211.15 211.15 211.15 211.15 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 211.12 <
EXISTING SURFACE LEVEL	210.62 210.62 210.63 210.63 210.64 210.64 210.87 211.05 211.05 210.92 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 210.87 211.05 210.87 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 211.05 21.05 21.05 21.05 21.05 21.05 21.05 2	OLL -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 -7.5 <th< td=""></th<>
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	CHAINAGE 540.000	
Centreline Data X=298691.72 Y=6452115.639 Z=210.938 Datum210		Centreline Data 0.75% 4.56% X=298695.791 Y=6452145.361 Z=211.238 Datum210
DESIGN SURFACE KELLY STREET	210.603 210.603 210.542 210.542 210.542 210.542 210.542 210.542 210.542 210.542 210.542 210.542 210.542 210.542 210.542 210.543 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.544 210.545 210.546 210.546 210.547 210.548 210.548 211.001	DESIGN SURFACE 210.959 211.13 210.959 211.13 211.238 211.13 211.238 211.13 211.238 211.13 211.238 211.13 211.238 211.13 211.138 211.13 211.138
HEIGHT TO MEDIAN		HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL	211.08	DESIGN MEDIAN LEVEL

Centreline Data X=298698.505 Y=6452165.176 Z=211.38

Datum210

Centreline Data

					- 40/-		-1.68%	2% -2	2.81%	-2.81	%	2.27%	6	1							C	HA	NAG	5E 5	540.0	00				
Centreline Data X=298687.649 Y=6452085.916 Z=210.54 Datum209		.81%			4,84%										Centreline Data X=298691.72 Y=6452115.639 Z=210.938 Datum210			1.34%				5.03%		0,16%	0.21%	3.23%	-3.23%		3.19%	
DESIGN SURFACE KELLY STREET	210.22	210.136	210.136 209.986	210.026	210.283 210.346	210.515	210.54	210.568	210.47	210.456	210.398 210.358	210.508	210.508		DESIGN SUR KELLY STREE		210.603	C10 E40	210.542	210.392	210.432	210.699 210.764	40 OTC	210.94 210.938	210.935	210.822	210.806 210.738	210.698	210.848	210.848 211.001
HEIGHT TO MEDIAN						0	0.15	0							HEIGHT TO MEDIAN									0.14	0					
DESIGN MEDIAN LEVEL						210.52	210.69	210.57							DESIGN MED	IAN								211.08	210.94					
DEPTH TO EXISTING		-0.19	-0.18 -0.03	-0.05	-0.05	0.04	0.07	-0.11	-0.09	-0.09	-0.07	-0.19	-0.2		DEPTH TO EXISTING			ç	-0.19 -0.19	-0.04	-0.06	-0.06	-0	0.08	60.0-	-0.07	-0.07	-0.03	-0.18	-0.18 0.03
EXISTING SURFACE		209.95	209.95 209.95	209.97	210.23 210.28	210.55	210.61	210.46	210.38	210.37	210.32 210.31	210.31	210.31		EXISTING SU LEVEL	RFACE			210.36	210.36	210.37	210.64 210.7	210.83	211.02	210.84	210.75	210.74 210.68	210.67	210.67	210.67 211.03
OFFSET FROM CENTRELINE	-16.84	-12.23	-12.08 -12.05	-11.55	-6.25 -4.95	-1.45	0	1.42	4.92	5.42	7.45	7.98	8.13		OFFSET FROM CENT	ELINE	-16.76		-12.2	-12.02	-11.52	-6.22 -4.92	C4 I-	-1:42	1.42	4.92			8.05	8.2 13.01
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	24/12/24										\leq	UPF	PER	HUNTER	SHIRE COUNCIL	KELLY S		REV	/ITA	ALIS	AT	ION	۱			ווח		ne	 	. F
CONCEPT DESIGN CONCEPT DESIGN	24/12/21 CA 03/11/21 CA									U	oper	130 LIVI P.O. BO	ERPOOL X 208	STREET Telep Facsi	phone: (02) 6540 1100 imile: (02) 6545 2671	PROJEC	_ [1			M GU	1120	IUΠĮ	JENQ
CONCEPT DESIGN	17/08/21 CA									1 -	lanter	SCONE	NSW		il: council@upperhunter.nsw.gov.au		NSW 2	2337						\mathcal{A}		137	Kelly S	Street	t, Sco	ulting one N
CONCEPT DESIGN	02/08/21 CA									4										A !!	l nights		$\dashv \lambda$			Tel (0	2) 6545 hmce@rh	5 2800		www
CONCEPT DESIGN DESCRIPTION	22/06/21 CA DATE BY	REV			DESCRIPTI	ON		DATE	BY							COPYRIGHT These drawings, plans and Engineers and must not be Consulting Engineers.	specifications and the used, reproduced or co	copyright therei pied wholly or i	n are the pr in part witho	operty of RI	HM Consu	reserved Iting ion of RHM	. <i>(</i>		7		millewill		maa	ABN 82

210.466 210.466 210.316 210.356 210.481 210.481 210.682 210.682

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-8.37 -8.22 -8.19 -7.69 -7.69 -6.23 -1.43 -1.43 -1.43 -1.43 -1.43 -1.43 -5.38 5.56 5.56

CHAINAGE 510.000

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210.87

13.37

Centreline Data X=298690.363 Y=6452105.731 Z=210.808 Datum210		3.08%	-4,66%			5.19%		- 1.26%	0.12%		2.69%				1.579	6	-
DESIGN SURFACE KELLY STREET	210.597	210.434	C7301C	210.642	210.492	210.532	210.541	210.608	210.79	210.808	210.81	210.717	210.677	210.827	210.827	210.95	
HEIGHT TO MEDIAN										0.14	0						
DESIGN MEDIAN LEVEL										210.94	210.81						
DEPTH TO EXISTING		-0.2	0	-0.10	-0.02	-0.04	-0.04	-0.05	0.02	0.08	-0.1	-0.08	-0.05	-0.2	-0.21	0.03	
EXISTING SURFACE LEVEL		210.24	34.010	210.47	210.47	210.49	210.5	210.56	210.81	210.88	210.71	210.64	210.63	210.62	210.62	210.98	
OFFSET FROM CENTRELINE	-16.81	-11.52	90 6	-6.91	-6.88	-6.38	-6.22	-4.92	-1.42	0	1.42	4.88	5.38	5.41	5.56	13.4	

CHAINAGE 520.000

Ś

Centreline Data X=298689.006 Y=6452095.824 Z=210.675

Datum209

DESIGN SURFACE

DESIGN MEDIAN LEVEL

EXISTING SURFACE

OFFSET FROM CENTRELINE

KELLY STREET

HEIGHT TO MEDIAN

DEPTH TO EXISTING



KELLY STREET CROSS SECTIONS SHEET 5

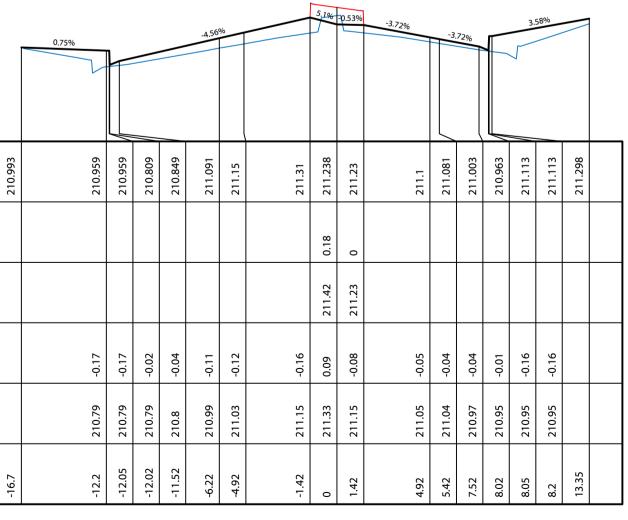
DEPTH TO EXISTING

EXISTING SURFACE

OFFSET FROM CENTRELINE

ers neers com.au 18 800

	-1.48%			-3.35%		2.85	<mark>% ₽.18</mark>	%	-3.319	6	-3,3	1%		2.4	5%		
211.212	211.347	211.347	211.197	211.237	211.244	211.288	211.42	211.38	211.382	211.266	211.25	211.18	211.14	211.29	211.29	211.418	
								0.17	0								
								211.55	211.38								
	-0.21	-0.2	-0.05	-0.07	-0.07	-0.09	-0.13	0.08	-0.1	-0.05	-0.04	-0.03	0	-0.15	-0.15	0.05	
	211.14	211.15	211.15	211.16	211.17	211.2	211.29	211.46	211.28	211.22	211.21	211.15	211.14	211.14	211.14	211.47	
-16.68	-7.56	-7.41	-7.38	-6.88	-6.68	-5.38	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.42	



CHAINAGE 560.000

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Consu	lting Engineers
	S	CALE 1	:200 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No: 18-130- CD04.	
	S	SCALE	1:40 (A1))		Date JUN	NE 21	10-130-0004.	

									UPPER HUNT	ER SHIRE (
CD5	CONCEPT DESIGN	24/12/21	CA							Telephone: (02) 654
CD4	CONCEPT DESIGN	03/11/21	CA					Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208	Facsimile: (02) 6545
CD3	CONCEPT DESIGN	17/08/21	CA						SCONE NSW 2337	Email: council@upp
CD2	CONCEPT DESIGN	02/08/21	CA]		
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

CHA	INAC	GE 59	0.000

	0		4	5		י ע	2 0	<u>،</u> ر		
Centreline Data		С	HAIN	AC	GE 6	00	0.0	00		
X=298699.862 Y=6452175.084 Z=211.433 Datum211		0.28%	-2.4%	T	-2.4%		3.55	%	T	-
DESIGN SURFACE KELLY STREET	211.433	211.437	211.353	211.341	211.263	211.223	211.373	211.373	211.514	
HEIGHT TO MEDIAN										
DESIGN MEDIAN LEVEL										
DEPTH TO EXISTING	0.07	-0.11	-0.09	-0.09	-0.05	-0.02	-0.17	-0.18	-0.09	
EXISTING SURFACE LEVEL	211.5	211.33	211.26	211.25	211.21	211.2	211.2	211.19	211.42	
OFFSET FROM CENTRELINE	0	1.42	4.92	5.42	8.7	9.2	9.23	9.38	13.37	

Centreline Data	
X=298703.933 Y=6452204.806 Z=211.479	
Datum211	
DESIGN SURFACE KELLY STREET	
HEIGHT TO MEDIAN	
DESIGN MEDIAN LEVEL	
DEPTH TO EXISTING	
EXISTING SURFACE LEVEL	
OFFSET FROM CENTRELINE	

Centreline Data		C	HAIN	AC	3E 6 I	0.0	00	0		
X=298701.219 Y=6452184.991 Z=211.48	_	0.02%	-2.1%		-2.1%		0.55%)		
Datum211									<u> </u>	
DESIGN SURFACE KELLY STREET	211.48	211.48	211.407	211.396	211.314	211.274	211.424	211.424	211.443	
HEIGHT TO MEDIAN										
DESIGN MEDIAN LEVEL										
DEPTH TO EXISTING	-0.08	-0.1	-0.1	-0.1	-0.07	-0.02	-0.17	-0.17	-0.11	
EXISTING SURFACE LEVEL	211.4	211.38	211.3	211.29	211.24	211.25	211.25	211.26	211.33	
OFFSET FROM CENTRELINE	0	1.42	4.92	5.42	9.32	9.82	9.85	10	13.28	

CHAINAGE 610 000

Centreline Data										
X=298702.576 Y=6452194.899 Z=211.474	r •	-0.54%	-2.93%		2.93%		2.7	2%	7	
Datum211						L				
DESIGN SURFACE KELLY STREET	211.474	211.466	211.364	211.349	211.268	211.228	211.378	211.378	211.495	
HEIGHT TO MEDIAN										
DESIGN MEDIAN LEVEL										
DEPTH TO EXISTING	-0.09	-0.1	-0.06	-0.05	-0.03	0	-0.15	-0.15	-0.05	
EXISTING SURFACE LEVEL	211.39	211.37	211.31	211.3	211.24	211.23	211.23	211.23	211.44	
OFFSET FROM CENTRELINE	0	1.42	4.92	5.42	8.19	8.69	8.72	8.87	13.2	

		1.69%	\mathbb{H}			-2.39	%		0.04%	2.4%	-1.99%	-1.	99%		2.5	57%		
Centreline Data																		
X=298705.29 Y=6452214.714 Z=211.504																		
Datum210																		
DESIGN SURFACE KELLY STREET	211.457	211.373	211.373	211.223	211.263	211.39	211.421	211.505	211.504	211.538	211.469	211.459	211.417	211.377	211.527	211.527	211.66	
HEIGHT TO MEDIAN								0	0.17									
DESIGN MEDIAN LEVEL								211.5	211.67									
DEPTH TO EXISTING	-0.09	-0.31	-0.31	-0.16	-0.19	-0.13	-0.13	-0.11	-0.08	-0.14	-0.13	-0.13	-0.13	-0.1	-0.25	-0.25	-0.13	
EXISTING SURFACE LEVEL	211.37	211.06	211.06	211.06	211.07	211.26	211.29	211.4	211.43	211.4	211.33	211.33	211.29	211.28	211.28	211.27	211.53	
OFFSET FROM CENTRELINE	-17.13	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.38	

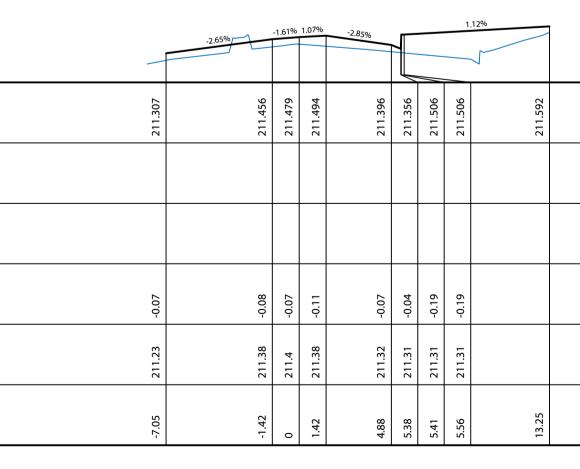
X=298706.647 Y=6452224.621 Z=211.529 Datum210 DESIGN SURFACE KELLY STREET HEIGHT TO MEDIAN DESIGN MEDIAN LEVEL DEPTH TO EXISTING EXISTING SURFACE LEVEL OFFSET FROM CENTRELINE

Centreline Data

									0.06%	2.87%	-3.08%	6				2	.4%		
	1.65%					-3.03	%						-3.	08%					1
		2	F																1
																			1
															V				
		211.335	211.335	211.185	211.225	211.385	211.424	211.53	211.529	211.57		211.462	211.447	211.382	211.342	211.492	211.492	211.617	
4		21	21	21	21	21	21	21	21	21		21	21	21	21	21	21	21	
								0	0.17										
								3											
								211.53	211.7										
		-0.25	-0.25	-0.1	-0.12	-0.11	-0.11	-0.11	-0.07	-0.14		-0.11	-0.1	-0.07	-0.05	-0.2	-0.2	-0.1	
		Ŷ	Ŷ	Ŷ	ې ا	- -	Ŷ	Ŷ	Ŷ	<u> </u>		Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	ې 	
		211.08	211.09	211.09	۲.	211.28	.31	211.42	211.46	.43		211.36	.35	.31	e.	e.	.29	.51	1
		211	211	211	211.1	211	211.31	 211	211	211.43		211	211.35	211.31	211.3	211.3	211.29	211.51	
			2	2	2														
/		-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42		4.92	5.42	7.52	8.02	8.05	8.2	13.4	
_																			

CHAINAGE 640.000

CHAINAGE 630.000



CHAINAGE 620.000

RE COUNCIL (02) 6540 1100 2) 6545 2671 il@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337
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Centreline Data X=298710.718 Y=6452254.344 Z=211.604 Datum210 211.221 211.221 211.071 211.111 211.367 211.367 211.43 DESIGN SURFACE .352 KELLY STREET 211. HEIGHT TO MEDIAN DESIGN MEDIAN LEVEL DEPTH TO EXISTING -0.07 -0.07 0.08 0.05 -0.03 EXISTING SURFACE 211.15 211.15 211.15 211.16 211.34 211.38 LEVEL OFFSET -12.2 -12.05 -12.02 -11.52 -6.22 -4.92 FROM CENTRELINE

						-4.27	0/0		0.06%	1.46%	-3.81%	-3.	81%		0.	.66%		1
		1.63%	┠			-4.27	/0											
Centreline Data																		l
X=298709.361 Y=6452244.436 Z=211.579																		
Datum210																		
DESIGN SURFACE KELLY STREET	211.333	211.259	211.259	211.109	211.149	211.375	211.431	211.58	211.579	211.6	211.467	211.448	211.368	211.328	211.478	211.478	211.512	
HEIGHT TO MEDIAN								C	0.16	0								
DESIGN MEDIAN LEVEL								211.58	211.74	211.6								
DEPTH TO EXISTING		-0.13	-0.12	0.03	0	-0.05	-0.07	-0.11	-0.08	-0.13	-0.06	-0.06	-0.02	0.01	-0.14	-0.14	-0.02	
EXISTING SURFACE LEVEL		211.13	211.14	211.14	211.15	211.33	211.36	211.47	211.5	211.47	211.4	211.39	211.35	211.34	211.34	211.34	211.49	
OFFSET FROM CENTRELINE	-16.75	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.45	

Centreline Data X=298708.004 Y=6452234.529 Z=211.554 Datum210	,	1.7%				-3.65	%		0.06%	2.17%	-3.89%	-3	89%		1.	05%		
DESIGN SURFACE KELLY STREET	211.376	211.297	211.297	211.147	211.187	211.38	211.427	211.555	211.554	211.585	211.449	211.429	211.347	211.307	211.457	211.457	211.512	
HEIGHT TO MEDIAN								0	0.16									
DESIGN MEDIAN LEVEL								211.56	211.72									
DEPTH TO EXISTING		-0.19	-0.18	-0.03	-0.06	-0.07	-0.08	-0.1	-0.07	-0.13	-0.07	-0.06	-0.02	0.01	-0.14	-0.14	-0.01	
EXISTING SURFACE LEVEL		211.11	211.11	211.11	211.12	211.31	211.34	211.45	211.49	211.45	211.38	211.37	211.33	211.32	211.32	211.32	211.5	
OFFSET FROM CENTRELINE	-16.87	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.44	

KELLY STREET CROSS SECTIONS SHEET 6

_		-0.29%	0.76%	-3.47%					1.	08%		
	Ľ					-3.	47%					
									7			
	9	211.604	211.615		211.493	211.476	211.403	211.363	211.513	211.513	211.569	
	211.6	211	211		211	211	211	211	211	211	211	
		0.15										
	0	0	0									
	9	76	62									
	211.6	211.76	211.62									
	-0.11	-0.07	-0.11		-0.07	-0.06	-0.03		-0.15	-0.16	-0.02	
	Υ	Ģ	Ģ		0	0-	°,	0 -	0-	.0-	- O	
	6	33			13	4	2	9	9	9	5	
	211.49	211.53	211.5		211.43	211.41	211.37	211.36	211.36	211.36	211.55	
	t2		5		2	2	5	2	5		39	
	-1.42	0	1.42		4.92	5.42	7.52	8.02	8.05	8.2	13.39	

CHAINAGE 670.000

CHAINAGE 660.000

CHAINAGE 650.000

Scale	CIVIL DRAWING
Horizontal: 0 2 4 6 8 10	Designed BH Approved on behalf of RHM Consulting Engineers
SCALE 1:200 (A1)	Drawn CA Project Engineer/Director Date
Vertical: 0 0.4 0.8 1.2 1.6 2	Datum NIL Drawing No: Re Data IIINE 21 18-130-CD04.06 CD2 18-130-CD04.06 CD2
SCALE 1:40 (A1)	Date JUNE 21 18-130-CD04.00 CD.

									UPPER HUNT	FER SHIF
CD5	CONCEPT DESIGN	24/12/21	CA						130 LIVERPOOL STREET	Telephone: (0
CD4	CONCEPT DESIGN	03/11/21	CA					Upper Hunter	P.O. BOX 208	Facsimile: (02
CD3	CONCEPT DESIGN	17/08/21	CA						SCONE NSW 2337	Email: council
CD2	CONCEPT DESIGN	02/08/21	CA							
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

X=298712.075 Y=6452264.251 Z=211.624																		
Datum210																		
DESIGN SURFACE KELLY STREET	211.375	211.285	211.285	211.135	211.175	211.409	211.466	211.62	211.624	211.63	211.52	211.504	211.438	211.398	211.548	211.548	211.623	
HEIGHT TO MEDIAN								0	0.15	0								
DESIGN MEDIAN LEVEL								211.62	211.77	211.63								
DEPTH TO EXISTING	-0.02	-0.13	-0.12	0.03	Q-	-0.06	-0.07	0.03	-0.08	-0.12	-0.08	-0.08	-0.06	-0.02	-0.17	-0.18		
EXISTING SURFACE	211.35	211.16	211.16	211.16	211.17	211.35	211.4	211.65	211.54	211.51	211.44	211.43	211.38	211.37	211.37	211.37		
OFFSET FROM CENTRELINE	-16.73	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.44	
	CHAINAGE 680.000																	

CHAINAGE 69	90.000
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Centreline Data																		
X=298713.432 Y=6452274.159 Z=211.634	·	1.19%	П			-4.37°	%	1.8	86% 1.3	3%	-2.95%	-2	.95%	F	1.	89%		
Datum211																		
DESIGN SURFACE KELLY STREET	211.385	211.329	211.329	211.179	211.219	211.45	211.507	211.66	211.634	211.653	211.549	211.534	211.472	211.432	211.582	211.582	211.682	
HEIGHT TO MEDIAN								0	0.17	0								
DESIGN MEDIAN LEVEL								211.66	211.8	211.65								
DEPTH TO EXISTING		-0.16	-0.15	0-	-0.03	-0.08	-0.09	-0.01	0.06	-0.12	-0.09	-0.08	-0.06	-0.03	-0.18	-0.19	-0.03	
EXISTING SURFACE LEVEL		211.17	211.17	211.18	211.19	211.37	211.42	211.65	211.69	211.54	211.46	211.45	211.41	211.4	211.4	211.4	211.65	
OFFSET FROM CENTRELINE	-16.92	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.46	

CHAINAGE 700	.000
--------------	------

Centreline Data X=298714.789 Y=6452284.066 Z=211.649 Datum211		0.69%	H			-4.49	6		3.58%	1.82%	-2.77%	-2.	.77%		2.	55%		
DESIGN SURFACE KELLY STREET	211.4	211.365	211.365	211.215	211.255	211.489	211.546	211.7	211.649	211.675	211.578	211.564	211.506	211.466	211.616	211.616	211.75	
HEIGHT TO MEDIAN								ç	0.18	0								
DESIGN MEDIAN LEVEL								211.7	211.83	211.68								
DEPTH TO EXISTING	0-	-0.19	-0.19	-0.04	-0.07	-0.11	-0.12	-0.02	0.07	-0.12	-0.09	-0.08	-0.07	-0.04	-0.19	-0.19	0-	
EXISTING SURFACE LEVEL	211.4	211.17	211.18	211.18	211.19	211.38	211.43	211.68	211.72	211.56	211.49	211.48	211.44	211.43	211.43	211.43	211.75	
OFFSET FROM CENTRELINE	-17.21	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1 42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.43	

Centreline Data

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RHM Consulting Engineers

 137 Kelly Street, Scone NSW

 Tel (02) 6545 2800

 Email rhmce@rhmce.com.au

 ABN 82 153 018 800

KELLY STREET CROSS SECTIONS SHEET 7

CHAINAGE 710.000

							17 \			20								
Centreline Data x=298716.146 Y=6452293.974 z=211.674 Datum211		1.26%	H			-4.24	%		3.239	64%	-2.58%	-2	2.58%		2.7	75%		
DESIGN SURFACE KELLY STREET	211.464	211.402	211.402	211.252	211.292	211.517	211.572	CZ 11C	211.674	211.698	211.607	211.594	211.54	211.5	211.65	211.65	211.792	
HEIGHT TO MEDIAN								c	0.18	0								
DESIGN MEDIAN LEVEL								CZ 11C	211.25	211.7								
DEPTH TO EXISTING	-0.01	-0.22	-0.21	-0.06	-0.09	-0.11	-0.12	CU U	0.08	-0.11	60.0-	-0.08	-0.07	-0.04	-0.19	-0.19		
EXISTING SURFACE LEVEL	211.45	211.19	211.19	211.19	211.2	211.41	211.45	7 11C	211.75	211.59	211.52	211.51	211.47	211.46	211.46	211.46		
OFFSET FROM CENTRELINE	-17.13	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	C7 17	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.35	

CHAINAGE 720.000

						CI	17 \		L /	50								
Centreline Data									2.10/	0.69%					24	42%		
X=298717.503 Y=6452303.881 Z=211.71		2.07%	\mathbb{T}			-4.07	%		2.1%	0.69%	-2.39%	-2.	.39%	F				
Datum211	-		1															
DESIGN SURFACE KELLY STREET	211.538		-	211.439	211.329	211.545	211.598	211.74	211.71	211.72	211.636	211.624	211.574	211.534	211.684	211.684	211.808	
HEIGHT TO MEDIAN								o	0.17	0								
DESIGN MEDIAN LEVEL								211.74	211.88	211.72								
DEPTH TO EXISTING	-0.1		62.0-	-0.24	-0.07	-0.12	-0.12	-0.02	0.06	-0.11	-0.08	-0.08	-0.06	-0.03	-0.18	-0.19		
EXISTING SURFACE LEVEL	211.44		211.19	211.2	211.2	211.43	211.47	211.72	211.77	211.61	211.55	211.54	211.51	211.5	211.5	211.5		
OFFSET FROM CENTRELINE	-17		-12.2	-12.05	-12.02 -11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.32	

CHAINAGE 730.000

Centreline Data									-0.01%	-0.72%					2.0	6%		
K=298718.86 Y=6452313.789 Z=211.765	l	1.54%				-3.96°	%				-2.39%	-2.	39%	F				
Datum211																		
DESIGN SURFACE KELLY STREET	211.55	211.476	211.476	211.326	211.366	211.575	211.627	211.765	211.765	211.755	211.671	211.66	211.609	211.569	211.719	211.719	211.824	
HEIGHT TO MEDIAN								0	0.15	0								
DESIGN MEDIAN LEVEL								211.77	211.91	211.76								
DEPTH TO EXISTING	-0.11	-0.27	-0.26	-0.11	-0.13	-0.12	-0.12	-0.01	0.04	-0.11	-0.08	-0.08	-0.06	-0.03	-0.18	-0.18	-0.05	
EXISTING SURFACE LEVEL	211.44	211.21	211.21	211.22	211.24	211.46	211.51	211.76	211.81	211.65	211.59	211.58	211.55	211.54	211.54	211.54	211.77	
OFFSET FROM CENTRELINE	-17.03	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.29	

Datum211
DESIGN SURFACE KELLY STREET
HEIGHT TO MEDIAN
DESIGN MEDIAN LEVEL
DEPTH TO EXISTING
EXISTING SURFACE LEVEL
OFFSET FROM CENTRELINE

Centreline Data X=298721.574 Y=6452333.604 Z=211.875

Datum211

HEIGHT TO MEDIAN

DEPTH TO EXISTING

Centreline Data X=298720.217 Y=6452323.696 Z=211.82

Datum211

KELLY STREET

HEIGHT TO MEDIAN

DEPTH TO EXISTING

DESIGN SURFACE

DESIGN MEDIAN LEVEL

EXISTING SURFACE

OFFSET FROM CENTRELINE

LEVEL

LEVEL

DESIGN SURFACE KELLY STREET

DESIGN MEDIAN

EXISTING SURFACE

OFFSET FROM CENTRELINE

X=298722.931 Y=6452343.511 Z=211.93

Centreline Data

Datum 211

	1.73%				-3.53	%		4.93%	0.69%	-3.45%	-3.	45%		1.5	34%		
211.691	211.614	211.614	211.464	211.504	211.691	211.737	211.86	211.93	211.94	211.819	211.802	211.729	211.689	211.839	211.839	211.907	
							0	0.12	0								
							211.86	212.05	211.94								
-0.29	-0.33	-0.33	-0.18	-0.2	-0.13	-0.11	-0.14	-0.01	-0.18	-0.1	-0.09	-0.05	-0.02	-0.17	-0.18	-0.01	
211.4	211.28	211.29	211.29	211.3	211.56	211.63	211.72	211.92	211.76	211.72	211.71	211.68	211.67	211.67	211.66	211.9	
-16.67	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.27	

CHAINAGE 760.000

	2.07%				-3.82	%	1	-	3.53%	-0.72%	-2.88%	-2,	88%		1.8	39%		
	2.07%														5			
211.641	211.549	211.549	211.399	211.439	211.642	211.691		211.825	211.875	211.865	211.764	211.75	211.689	211.649	211.799	211.799	211.895	
								0	0.12	0								
								211.83	212	211.87								
-0.24	-0.3	-0.29	-0.14	-0.16	-0.13	-0.12		0.01	-0.01	-0.14	-0.1	-0.09	-0.06	-0.03	-0.18	-0.18	-0.08	
211.41	211.25	211.26	211.26	211.27	211.51	211.57		211.83	211.86	211.72	211.67	211.66	211.63	211.62	211.62	211.61	211.82	
-16.65	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92		-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.26	

CHAINAGE 750.000

	1.69%					-3.84	%		-2.12%	-2.12%	-2.31%	-2.	31%		2.0	01%		
211.587		211.512	211.512	211.362	211.402	211.606	211.656	211.79	211.82	211.79	211.709	211.698	211.649	211.609	211.759	211.759	211.861	
								0	0.12	0								
								211.79	211.94	211.79								
-0.15		-0.29	-0.28	-0.13	-0.15	-0.12	-0.13	o-	0.01	-0.13	-0.08	-0.08	-0.06	-0.03	-0.18	-0.18	-0.08	
211.44		211.22	211.23	211.23	211.25	211.48	211.53	211.79	211.83	211.66	211.63	211.62	211.59	211.58	211.58	211.58	211.78	
-16.6		-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.28	

CHAINAGE 740.000

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Consu	lting Engineers
	S	CALE 1	:200 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	
	S	CALE	1:40 (A1))		Date JUI	NE 21	18-130- CD04.	07 CD5

									UPPER HUNT	TER SHIRE CO
CD5	CONCEPT DESIGN	24/12/21	CA					Upper	130 LIVERPOOL STREET	Telephone: (02) 6540 11
CD4	CONCEPT DESIGN	03/11/21	CA					Upper Hunter	P.O. BOX 208	Facsimile: (02) 6545 2671
CD3	CONCEPT DESIGN	17/08/21	CA						SCONE NSW 2337	Email: council@upperhu
CD2	CONCEPT DESIGN	02/08/21	CA							
CD1	CONCEPT DESIGN	22/06/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

Centreline Data X=298724.288 Y=6452353.419 Z=211.985 Datum211		1.38%				-3.78	%		-2.46%	1.75%	-3.29%	-3	.29%		1.6	2
DESIGN SURFACE KELLY STREET	211.741	211.679	211.679	211.529	211.569	211.769	211.818	211.95	211.985	212.01	211.895	211.879	211.81	211.77	211.92	
HEIGHT TO MEDIAN								0	0.15	0						-
DESIGN MEDIAN LEVEL								211.95	212.13	212.01						-
DEPTH TO EXISTING	-0.28	-0.34	-0.33	-0.18	-0.19	-0.15	-0.14	-0.14	-0.01	-0.16	60.0-	-0.08	-0.05	-0.02	-0.17	-
EXISTING SURFACE LEVEL	211.46	211.34	211.35	211.35	211.37	211.62	211.68	211.81	211.98	211.85	211.8	211.8	211.76	211.75	211.75	
OFFSET FROM CENTRELINE	-16.66	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	-

CHAINAGE 780.000

CHAINAGE 770.000

Centreline Data		1.67%				-4.029	%		-1.94%	Q.86%	-2.43%	-2.	43%		1.4	46%		
X=298725.644 Y=6452363.326 Z=212.068			\mathbb{F}												7			
Datum211																		
DESIGN SURFACE KELLY STREET	211.819	211.744	211.744	211.594	211.634	211.847	211.9	212.04	212.068	212.08	211.995	211.983	211.932	211.892	212.042	212.042	212.116	
HEIGHT TO MEDIAN								0	0.14	0								
DESIGN MEDIAN LEVEL								212.04	212.21	212.08								
DEPTH TO EXISTING	-0.24	-0.3	-0.3	-0.15	-0.16	-0.12	-0.12	-0.11	0.01	-0.12	-0.09	-0.09	-0.06	-0.03	-0.18	-0.19	-0.04	
EXISTING SURFACE LEVEL	211.58	211.44	211.45	211.45	211.47	211.72	211.78	211.93	212.08	211.96	211.9	211.9	211.87	211.86	211.86	211.85	212.08	
OFFSET FROM CENTRELINE	-16.67	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	4.92	5.42	7.52	8.02	8.05	8.2	13.25	

CHAINAGE 790.000

Centreline Data X=298727.001 Y=6452373.234 Z=212.198 Datum211	_	2.86%				-4.51	%		-3%	-0.04%	-2.39%	-2.3	19%		2.419	6	
DESIGN SURFACE KELLY STREET	211.938	211.81	211.81	211.66	211.7	211.939	211.997	212.155	212.198	212.197	212.1	212.088	212.051	212.011	212.161	212.161	212.282
HEIGHT TO MEDIAN								o	0.13	0							
DESIGN MEDIAN LEVEL								212.16	212.33	212.2							
DEPTH TO EXISTING	-0.25	-0.25	-0.24	-0.09	-0.11	-0.11	-0.1	-0.11	ρ	-0.15	-0.09	-0.08	-0.06	-0.03	-0.18	-0.18	-0.04
EXISTING SURFACE LEVEL	211.68	211.56	211.57	211.57	211.59	211.83	211.89	212.04	212.2	212.05	212.01	212.01	211.99	211.98	211.98	211.98	212.25
OFFSET FROM CENTRELINE	-16.7	-12.2	-12.05	-12.02	-11.52	-6.22	-4.92	-1.42	0	1.42	5.51	6.01	7.54	8.04	8.07	8.22	13.24

AI SHEE

x=298730.033 Y=6452395.366 Z=212.528 Datum212	P	-0.39%	-2.81%		3.5	5%	1	-
DESIGN SURFACE KELLY STREET	212.528	212.523	212.334	212.294	212.444	212.444	212.603	
HEIGHT TO MEDIAN	0.1							
DESIGN MEDIAN LEVEL	212.64							
DEPTH TO EXISTING	ю. о-	-0.14	-0.05	-0.03	-0.18	-0.19	-0.07	
EXISTING SURFACE LEVEL	212.5	212.38	212.28	212.26	212.26	212.26	212.53	
OFFSET FROM CENTRELINE	0	1.42	8.13	8.63	8.66	8.81	13.33	

Centreline Data								
X=298729.715 Y=6452393.049 Z=212.492	F	-0.54%	-2.81%	Ч	2.	36%		٢
Datum212					1		$ \square $	
DESIGN SURFACE KELLY STREET	212.492	212.484	212.304	212.264	212.414	212.414	212.528	
HEIGHT TO MEDIAN	0.11							
DESIGN MEDIAN LEVEL	212.6							
DEPTH TO EXISTING	-0.02	-0.14	20.0-	-0.04	-0.2	-0.2	-0.03	
EXISTING SURFACE LEVEL	212.47	212.34	212.24	212.22	212.22	212.21	212.49	
OFFSET FROM CENTRELINE	o	1.42	7.83	8.33	8.36	8.51	13.32	

CHAINAGE 810.000

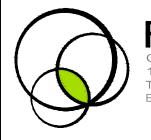
CHAINAGE 812.339

		-0.65%	_٦	-4.67%	6	-4.7%	-1.18%		-2.81%			1.28%		
Centreline Data X=298728.358 Y=6452383.141 Z=212.337 Datum211	/											1		
DESIGN SURFACE KELLY STREET	212.147	915 515	212.219	212.069	212.109	212.27	212.337	212.32	912 176	212.136	212.286	212.286	212.364	
HEIGHT TO MEDIAN														
DESIGN MEDIAN LEVEL														
DEPTH TO EXISTING	-0.36	د م- ۲	-0.22	-0.07	-0.09	-0.1	-0.01	-0.15	-0.05	-0.03	-0.18	-0.18	o-	
EXISTING SURFACE LEVEL	211.79	211 99	212	212	212.02	212.17	212.33	212.18	C1 C1C	212.11	212.11	212.11	212.36	
OFFSET FROM CENTRELINE	-16.69	ب م	-5.4	-5.37	-4.87	-1.42	0	1.42	655	7.05	7.08	7.23	13.3	

CHAINAGE 800.000

02) 6540 1100) 6545 2671 @upperhunter.nsw.gov.au

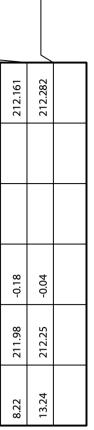
KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



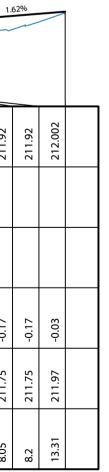
RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

KELLY STREET CROSS SECTIONS SHEET 8

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Centreline Data



Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Cor	sulting Engineers
	S	CALE 1	:200 (A1)		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	Rev
	9	SCALE 1	I:40 (A1)		Date JUI	NE 21	18-130- CD04	4.08 CD5

		0.01%			3.46%	_	\square	-1.73%		\mathbf{I}				
Centreline Data											~			
X=298660.845 Y=6451721.605 Z=210.416														
_Datum209														
DESIGN SURFACE KELLY STREET	210.343	210.342	210.342	210.192	210.232	210.274	210.416	210.346	210.313	210.273	210.423	210.423	210.491	
DEPTH TO EXISTING	-0.18	-0.15	-0.15	0	-0.03	-0.05	-0.15	-0.11	-0.15	-0.12	-0.27	-0.28	-0.36	
EXISTING SURFACE LEVEL	210.16	210.19	210.19	210.19	210.2	210.23	210.27	210.24	210.17	210.15	210.15	210.14	210.13	
OFFSET FROM CENTRELINE	-8.4	ę	-5.85	-5.82	-5.32	-4.1	0	4.1	5.99	6.49	6.52	6.67	7.08	

		2.5%				3.76%	_	\uparrow	-2.4%	┯┫	3.98%	1			
Centreline Data															
X=298658.865 Y=6451721.886 Z=210.32															
Datum209															
DESIGN SURFACE KELLY STREET	210.424		210.228	210.228	210.078	210.118	210.166	210.32	210.221	210.213	210.173	210.323	210.323	210.401	
DEPTH TO EXISTING			-0.15	-0.15	0	-0.03	-0.05	-0.16	-0.09	-0.11	-0.08	-0.23	-0.24	-0.38	
EXISTING SURFACE LEVEL			210.08	210.08	210.08	210.09	210.12	210.16	210.13	210.11	210.09	210.09	210.09	210.02	
OFFSET FROM CENTRELINE	-13.9		-6.06	-5.91	-5.88	-5.38	-4.1	0	4.1	4.45	4.95	4.98	5.13	7.08	

CHAINAGE 22.000

CHAINAGE 24.000

Centreline Data X=298656.885 Y=6451722.168 Z=210.223		-1.9%		1.99%				
Datum209								
DESIGN SURFACE KELLY STREET	210.223	210.15	210.145	210.11	210.26	210.26	210.311	
DEPTH TO EXISTING	-0.14	60.0-	-0.09	-0.06	-0.21	-0.23	-0.42	
EXISTING SURFACE LEVEL	210.08	210.06	210.06	210.05	210.05	210.03	209.89	
OFFSET FROM CENTRELINE	0	3.84	4.1	4.34	4.37	4.52	7.08	

CHAINAGE 20.000

Centreline Data x=298655.76 Y=6451722.328 Z=210.168 Datum209		-1.1%	0.	.27%	_			
DESIGN SURFACE KELLY STREET	210.168	210.125	210.123	210.085	210.235	210.235	210.24	
DEPTH TO EXISTING	-0.13	-0.1	-0.11	-0.08	-0.23	-0.24	-0.4	
EXISTING SURFACE LEVEL	210.04	210.02	210.02	210.01	210	209.99	209.84	
OFFSET FROM CENTRELINE	0	3.94	4.1	4.44	4.47	4.62	6.61	

24/12/21 CA

ΒY

REV

DESCRIPTION

DATE

CD1 CONCEPT DESIGN

REV

DESCRIPTION

CHAINAGE 18.864

DATE BY

Z=210.61
Datum210
DESIGN SURFACE KELLY STREET
DEPTH TO EXISTING
EXISTING SURFAC LEVEL

Centreline Data X=298664.805 Y=6451721.042

OFFSET FROM CENTREL

Centreline Data X=298662.825 Y=6451721.323 Z=210.513 Datum210 **DESIGN SURFA** KELLY STREET

DEPTH TO EXISTING

EXISTING SURFACE LEVEL

OFFSET FROM CENTRELINE

UPPER HUNTER SHIRE CO Telephone: (02) 6540 1 Facsimile: (02) 6545 267 130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337 Hunter Email: council@upperh

ACE						210.61		210.539	210.504	210.464	210.614	210.614	210.609
						-0.11		-0.06	-0.11	-0.09	-0.24	-0.25	-0.26
FACE						210.5		210.48	210.39	210.37	210.37	210.36	210.35
LINE						0		4.1	6.1	6.6	6.63	6.78	7.08
					C⊦	łA	IN	AGE	E 28	3.0	00		
			Ŧ	-3	.16%	\uparrow		-1.72%			_		
		Ļ								ų			
ACE	210.467	210.457	210.457	210.307	210.347	210.384	210.513	210.442	210.408	210.368	210.518	210.518	210.581

210	210	210	21(210	21(21(
0	4.1	6.1	6.6	6.63	6.78	7.08
CHA	AINAGE	E 30).0	00		
	1 7 40					

Centreline Data								
X=298666.785 Y=6451720.76 Z=210.706		-1.75%			_			
Datum210								
DESIGN SURFACE KELLY STREET	210.706	210.635	210.6	210.56	210.71	210.71	210.736	
DEPTH TO EXISTING	-0.08	-0.04	60.0-	-0.07	-0.22	-0.23	-0.26	
EXISTING SURFACE LEVEL	210.62	210.6	210.51	210.49	210.49	210.48	210.47	
OFFSET FROM CENTRELINE	0	4.1	6.1	6.6	6.63	6.78	7.08	

CHAINAGE 32.000

Centreline Data X=298668.766 Y=6451720.479 Z=210.803		-1.77%			/			
Datum210 DESIGN SURFACE	m		5	5	5	5	2	
KELLY STREET	210.803	210.731	210.695	210.655	210.805	210.805	210.862	
DEPTH TO EXISTING	-0.06	-0.02	-0.06	-0.03	-0.19	-0.19	-0.26	
EXISTING SURFACE LEVEL	210.74	210.71	210.64	210.62	210.62	210.61	210.6	
OFFSET FROM CENTRELINE	0	4.1	6.1	6.6	6.63	6.78	7.08	

-0.13 -0.13 -0.18 -0.15 -0.15 0.11 0.26 0.37 0.34 210.29 210.3 210.31 210.31 210.32 210.34 210.39 210.36 210.27 210.26 210.25 210.25 210.25 -6.56 -5.94 -5.76 -5.76 -5.26 -4.1 6.1 6.6 6.78 7.08 4.1 CHAINAGE 26.000

COUNCIL 0 1100 2671 erhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337	
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HM Consulting Engineers Civil & Structural Consul 37 Kelly Street, Scone NSW Tel (02) 6545 2800 mail rhmce@rhmce.com.au www.rhmce.com.au ABN 82 153 018 800

Centreline Data

X=298670.746

Y=6451720.197

Datum210

DEPTH TO

EXISTING

LEVEL

DESIGN SURFACE KELLY STREET

EXISTING SURFACE

OFFSET FROM CENTRELINE

Z=210.9

KINGDON STREET - EAST CROSS SECTIONS SHEET 1

-0.02 0 -0.15 -0.16 -0.25

210.77 210.75 210.75 210.75 210.73

4.1 6.1 6.63 6.78 6.78 7.08

Centreline Data		-1.79%		\mathbf{A}				
X=298672.726 Y=6451719.915 Z=210.997								
Datum210								
DESIGN SURFACE KELLY STREET	210.997	210.923	210.887	210.847	210.997	210.997	211.05	
DEPTH TO EXISTING	-0.06	-0.01	0.02	0.04	-0.11	-0.12	-0.18	
EXISTING SURFACE LEVEL	210.94	210.91	210.9	210.88	210.88	210.88	210.87	
OFFSET FROM CENTRELINE	0	4.1	6.1	6.6	6.63	6.78	7.08	

0.9

.84

CHAINAGE 38.000

CHAINAGE 36.000

0.01

82

CHAINAGE 34.000

Centreline Data X=298674.706 Y=6451719.634 Z=211.093 Datum210		-1.71%						
DESIGN SURFACE KELLY STREET	211.093	211.023	210.985	210.945	211.095	211.095	211.12	
DEPTH TO EXISTING	-0.06	-0.02	0.01	0.05	-0.1	-0.1	-0.17	
EXISTING SURFACE LEVEL	211.04	211.01	211	211	211	211	210.95	
OFFSET FROM CENTRELINE	0	4.1	6.34	6.84	6.87	7.02	8.02	

CHAINAGE 40.000

		-1.18	%	F	1			
Centreline Data								
X=298676.686 Y=6451719.352 Z=211.19								
Datum210								
DESIGN SURFACE KELLY STREET	211.19	211.142	211.101	211.061	211.211	211.211	211.236	
DEPTH TO EXISTING	-0.06	-0.04	ę	0.19	0.04	0.06	0.13	
EXISTING SURFACE LEVEL	211.13	211.1	211.1	211.25	211.25	211.27	211.37	
OFFSET FROM CENTRELINE	0	4.1	7.59	8.09	8.12	8.27	9.27	

Scale								CIVIL DRAWING	
Horizontal: 0	2	4	6	8	10	Designe	d BH	Approved on behalf of RHM Con	sulting Engineers
	S	CALE 1	:200 (A1))		Drawn	CA	Project Engineer/Director	Date
Vertical: 0	0.4	0.8	1.2	1.6	2	Datum Date	NIL DEC 21	Drawing No: 18-130- CD04	 .09 CD1

CHAINAGE 40.706

		-1.29	%	F	1			
Centreline Data								
X=298677.385 Y=6451719.253 Z=211.232								
Datum210								
DESIGN SURFACE KELLY STREET	211.232	211.179	211.134	211.094	211.244	211.244	211.269	
DEPTH TO EXISTING	-0.06	-0.04	o	0.19	0.05	0.06		
EXISTING SURFACE LEVEL	211.17	211.14	211.13	211.29	211.29	211.31		
OFFSET FROM CENTRELINE	0	4.1	7.6	8.1	8.13	8.28	9.28	

					CH	AINAG	E 19	9.340		
								Upper Hunter	UPPER HUNT 130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	TER SHIRE CC Telephone: (02) 6540 13 Facsimile: (02) 6545 267 Email: council@upperhu
CD1	CONCEPT DESIGN	24/12/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

Centreline Data				
X=298617.936 Y=6451727.707 Z=209.35				
Datum208				<u> </u>
DESIGN SURFACE KELLY STREET	209.35	209.183	209.131	
DEPTH TO EXISTING	-0.1	-0.03	-0.02	
EXISTING SURFACE LEVEL	209.24	209.15	209.11	
OFFSET FROM CENTRELINE	0	4.1	5.37	

CHAINAGE 20.000

	1	-4.14%		
Centreline Data X=298617.284 Y=6451727.8 Z=209.325 Datum208				
DESIGN SURFACE KELLY STREET	209.325	209.156	209.103	
DEPTH TO EXISTING	-0.11	-0.03	-0.01	
EXISTING SURFACE LEVEL	209.22	209.13	209.09	
OFFSET FROM CENTRELINE	0	4.1	5.37	

CHAINAGE 22.000

Centreline Data X=298615.303 Y=6451728.081 Z=209.252 Datum208		-3%			-1.32%			-4.36%		
DESIGN SURFACE KELLY STREET	209.176	209.287	209.287	209.137	209.177	209.198	209.252	209.073	209.018	
DEPTH TO EXISTING		-0.26	-0.25	-0.1	-0.11	-0.06	-0.11	-0.01	0	
EXISTING SURFACE LEVEL		209.02	209.03	209.04	209.07	209.14	209.15	209.06	209.02	
OFFSET FROM CENTRELINE	-10.04	-6.34	-6.19	-6.16	-5.66	-4.1	0	4.1	5.37	

CHAINAGE 24.000

	,	-2.06%			1.91%		\frown	-4.57%		
Centreline Data			F							
X=298613.323 Y=6451728.363 Z=209.178										
Datum208										<u> </u>
DESIGN SURFACE KELLY STREET	209.104	209.182	209.182	209.032	209.072	209.1	209.178	208.991	208.932	
DEPTH TO EXISTING		-0.25	-0.24	-0.09	-0.1	-0.1	-0.14	0	0.01	
EXISTING SURFACE LEVEL		208.93	208.94	208.94	208.97	209	209.04	208.99	208.95	
OFFSET FROM CENTRELINE	-10.02	-6.21	-6.06	-6.03	-5.53	-4.1	0	4.1	5.37	

Centreline Data		1.01%			-4.67%			-5.49%							
X=298605.403 Y=6451729.489 Z=208.886			F					0.49%					0.19%		*
_Datum208															
DESIGN SURFACE KELLY STREET	208.806	208.764	208.764	208.614	208.654	208.695	208.886	208.661	208.591	208.551	208.701	208.701		208.72	
DEPTH TO EXISTING		-0.25	-0.24	-0.09	-0.11	-0.11	-0.13	0.04	0.06	0.08	-0.07	-0.07			
EXISTING SURFACE LEVEL		208.52	208.52	208.52	208.55	208.58	208.76	208.7	208.65	208.64	208.63	208.63			
OFFSET FROM CENTRELINE	-9.93	-5.66	-5.51	-5.48	-4.98	-4.1	0	4.1	5.38	5.88	5.91	6.06		16.15	
					Cŀ	łA	IN	AGE	32	2.0	00)			

Centreline Data X=298609.363

Y=6451728.926

Datum208

DEPTH TO EXISTING

LEVEL

DESIGN SURFACE KELLY STREET

EXISTING SURFACE

OFFSET FROM CENTRELINE

Z=209.031

		CHAINAGE 52.000													
Centreline Data X=298607.383 Y=6451729.208 Z=208.957 Datum208		0.47%			-3.89%	0		-5.22%					0.21%		
DESIGN SURFACE KELLY STREET	208.888	208.868	208.868	208.718	208.758	208.798	208.957	208.743	208.676	208.636	208.786	208.786		208.807	
DEPTH TO EXISTING		-0.29	-0.28	-0.13	-0.15	-0.15	-0.13	0.03	0.05	0.07	-0.08	-0.08		0.04	
EXISTING SURFACE LEVEL		208.58	208.59	208.59	208.61	208.65	208.83	208.77	208.73	208.71	208.71	208.7		208.85	
OFFSET FROM CENTRELINE	-9.94	-5.8	-5.65	-5.62	-5.12	-4.1	0	4.1	5.37	5.87	5.9	6.05		16.16	

OFFSET FROM CENTRELINE	-9.93	-5.66	-5.51	-5.48	-4.98	-4.1	0	4.1	5.38	5.88	5.91	6.06		16.15	
					Cŀ	ΗA	IN	AGE	32	2.0	00)			
Centreline Data X=298607.383 Y=6451729.208 Z=208.957		0.47%			-3.89%			-5.22%					0.21%		
_Datum208															
DESIGN SURFACE KELLY STREET	208.888	208.868	208.868	208.718	208.758	208.798	208.957	208.743	208.676	208.636	208.786	208.786		208.807	
DEPTH TO EXISTING		-0.29	-0.28	-0.13	-0.15	-0.15	-0.13	0.03	0.05	0.07	-0.08	-0.08		0.04	
EXISTING SURFACE LEVEL		208.58	208.59	208.59	208.61	208.65	208.83	208.77	208.73	208.71	208.71	208.7		208.85	
OFFSET FROM CENTRELINE	-9.94	-5.8	-5.65	-5.62	-5.12	-4.1	0	4.1	5.37	5.87	5.9	6.05		16.16	

Centreline Data
X=298607.383 Y=6451729.208 Z=208.957
Datum208
DESIGN SURFACE KELLY STREET
DEPTH TO EXISTING

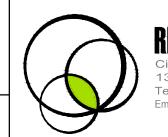
Centreline Data

208.96		208.97	208.97	208.82	208.86	208.9	209.03	208.82	208.76	
		-0.28	-0.28	-0.13	-0.17	-0.18	-0.13	0.02	0.04	
		208.69	208.69	208.69	208.7	208.72	208.9	208.84	208.8	
-9.96		-5.94	-5.79	-5.76	-5.26	-4.1	0	4.1	5.37	
		44	۹IN	JA	GE	E 2	8.0	000		
	-1.17%			-2	2.53%			-4.79%		

Centreline Data X=298611.343 Y=6451728.645 Z=209.104 Datum208		-1.17%				2.53%			-4.79%	6		
DESIGN SURFACE KELLY STREET	209.032		209.078	209.078	208.928	208.968	209	209.104		208.908	208.847	
DEPTH TO EXISTING			-0.25	-0.24	-0.09	-0.13	-0.15	-0.14		0.01	0.02	
EXISTING SURFACE LEVEL			208.83	208.83	208.83	208.84	208.85	208.97		208.92	208.87	
OFFSET FROM CENTRELINE	66:6-		-6.07	-5.92	-5.89	-5.39	-4.1	0		4.1	5.37	

CHAINAGE 26.000

HIRE COUNCIL one: (02) 6540 1100 ile: (02) 6545 2671 council@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337		Civil & Str 137 Kelly Tel (02) 65
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Consulting Engineers Structural Consult elly Street, Scone NSW 6545 2800 ce@rhmce.com.au www.rhmce.com.au ABN 82 153 018 800

KINGDON STREET - WES CROSS SECTIONS SHEET 1

EXISTING SURFACE 208.45 208.45 208.46 208.48 208.51 LEVEL OFFSET FROM CENTRELINE -5.53 -5.38 -5.35 -4.85 -4.1 -9.94

CHAINAGE 34.000

	-0.33%				-3.19	%		-59	6		
208.96		208.973	208.973	208.823	208.863	208.9	209.031		208.825	208.762	
		-0.28	-0.28	-0.13	-0.17	-0.18	-0.13		0.02	0.04	
		208.69	208.69	208.69	208.7	208.72	208.9		208.84	208.8	
-9.96		-5.94	-5.79	-5.76	-5.26	-4.1	0		4.1	5.37	

CHAINAGE 30.000

X=298597.483 Y=6451730.616 Z=208.628		7.06%	_ ۱		-5.9	9%			-4.55%	_		1.63 %		
Datum208		L	\mathbf{K}											
DESIGN SURFACE KELLY STREET	208.455	208.311	208.311	208.161	208.201	208.386	208.628	208.441	208.183	208.143	208.293	208.293	208.386	
DEPTH TO EXISTING		-0.2	-0.19	-0.04	-0.06	-0.1	-0.14	-0.01	0.01	0.01	-0.14	-0		
EXISTING SURFACE LEVEL		208.11	208.12	208.12	208.14	208.28	208.49	208.43	208.19	208.15	208.15	208.29		
OFFSET FROM CENTRELINE	96:6-	-7.92	-7.77	-7.74	-7.24	-4.1	0	4.1	77.6	10.27	10.3	10.45	16.11	
						C	`HA	INAGE	40 000					

208.44 208.29 208.33 208.33

-0.19 -0.03 -0.05 -0.08

208.2

-6.47 -6.32 -6.29 -5.79 -4.1

208.659 208.659 208.509 208.549

-0.21 -0.2 -0.05 -0.07 -0.08

Centreline Data X=298597.483

Centreline Data X=298599.463 Y=6451730.334 Z=208.689

Datum208

DEPTH TO

EXISTING

LEVEL

OFFSET

Centreline Data

X=298601.443

Z=208.752

Y=6451730.053

Datum208

DEPTH TO

EXISTING

LEVEL

OFFSET

Centreline Data

X=298603.423

Y=6451729.771

Datum208

DEPTH TO EXISTING

DESIGN SURFACE

KELLY STREET

Z=208.818

DESIGN SURFACE

EXISTING SURFACE

FROM CENTRELINE

KELLY STREET

DESIGN SURFACE

EXISTING SURFACE

FROM CENTRELINE

KELLY STREET

208.543

9.95

208.631

9.95

208.719

CHAINAGE 40.000

P		4.6%			1.16	%	
208.689	208.5	208.278	208.238	208.388	208.388	208.463	
-0.14	0-	0.03	0.05	-0.1	-0.11		
cc.802	208.5	208.31	208.29	208.29	208.28		
D	4.1	8.94	9.44	9.47	9.62	16.12	

CHAINAGE 38.000

%			-6.23%			-5.05%	ő			\checkmark	0.51%	
208.554	208.554	208.404	208.444	208.497	208.752	208.545	208.393	208.353	208.503	208.503	208.546	
-0.19	-0.18	-0.03	-0.05	-0.07	-0.14	0.01	0.06	0.08	-0.07	-0.08		
208.37	208.37	208.37	208.39	208.43	208.62	208.56	208.45	208.43	208.43	208.42		
-5.63	-5.48	-5.45	-4.95	-4.1	0	4.1	7.11	7.61	7.64	7.79	16.13	

CHAINAGE 36.000

	-5.76%					0.17%	
208.818	208.582	208.506	208.466	208.616	208.616	208.633	
-0.13	0.04	0.07	0.1	-0.06	-0.06		
208.68	208.63	208.58	208.56	208.56	208.56		
0	4.1	5.42	5.92	5.95	6.1	16.14	

ST	Scale	CIVIL DRAWING
51	Horizontal: 0 2 4 6 8 10	Designed BH Approved on behalf of RHM Consulting Engineers
	SCALE 1:200 (A1)	Drawn CA Project Engineer/Director Date
	Vertical: 0 0.4 0.8 1.2 1.6 2	Datum NIL Drawing No: Rev
	SCALE 1:40 (A1)	Date DEC 21 18-130-CD04.10 CD1

		1/12 6.00			-6	.7%			-5%			1.91%	
Centreline Data													
X=298592.817 Y=6451731.279 Z=208.484													
Datum207													
DESIGN SURFACE KELLY STREET	208.248	208.058	208.058	207.908	207.948	208.209	208.484	208.279	207.988	207.948	208.098	208.098	208.203
DEPTH TO EXISTING	0-	0.09	0.08	0.22	0-	-0.07	-0.15	-0.02	Ŷ	0.17	0.02	0.02	
EXISTING SURFACE LEVEL	208.25	208.15	208.14	208.13	207.95	208.14	208.33	208.25	207.99	208.12	208.12	208.12	
OFFSET FROM CENTRELINE	-9.98	-8.68	-8.53	-8.5	8-	-4.1	0	4.1	16.6	10.41	10.44	10.59	16.08

CHAINAGE 44.712

			1		-6	.51%			-4.93%	F		1.9%		1
Centreline Data														
X=298593.523 Y=6451731.179 Z=208.506														
Datum207														
DESIGN SURFACE KELLY STREET	208.28	208.095	208.095	207.945	207.985	208.239	208.506	208.303	208.016	207.976	208.126	208.126	208.23	
DEPTH TO EXISTING	-0.03	0.08	0.07	0.21	-0.02	-0.08	-0.15	-0.02	ę	0.17	0.02	0.03		
EXISTING SURFACE LEVEL	208.25	208.18	208.17	208.16	207.97	208.15	208.36	208.28	208.01	208.14	208.14	208.15		
OFFSET FROM CENTRELINE	-9.98	-8.67	-8.52	-8.49	-7.99	-4.1	0	4.1	9.93	10.43	10.46	10.61	16.09	

CHAINAGE 44.000

		12.189			-6	.03%			-4.74%			1.81%	
Centreline Data													
X=298595.503 Y=6451730.897 Z=208.567													
Datum207													
DESIGN SURFACE KELLY STREET	208.367	208.2	208.2	208.05	208.09	208.32	208.567	208.372	208.098	208.058	208.208	208.208	208.308
DEPTH TO EXISTING			-0.11	0	-0.06	-0.1	-0.15	-0.01	0	0.16	0.01	0.02	
EXISTING SURFACE LEVEL			208.09	208.05	208.03	208.22	208.42	208.37	208.1	208.21	208.22	208.22	
OFFSET FROM CENTRELINE	76.9-	-8.59	-8.44	-8.41	-7.91	-4.1	0	4.1	88.8	10.38	10.41	10.56	16.1

CHAINAGE 42.000

				-						
									UPPER HUNT	ER SHIRE C
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6540 Facsimile: (02) 6545 2 Email: council@uppe
								_		
CD1	CONCEPT DESIGN	24/12/21	CA					4		
REV	DESCRIPTION	DATE	ВҮ	REV	DESCRIPTION	DATE	BY			

A1 SHE

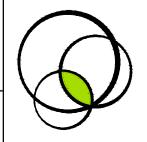




1.01	

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KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

KINGDON STREET - WES CROSS SECTIONS SHEET 2

ст	Scale								CIVIL DRAWING	
-21	Horizontal: 0	2	4	6	8	10	Designed	∦ BH	Approved on behalf of RHM Con	sulting Engineers
		S	CALE 1	:200 (A ⁻	1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	Rev
		S	SCALE 1	1:40 (A1)		Date	DEC 21	18-130-CD04	1.11 CD1

		5.7%	1-	-().87%		-1.66%		3.32%		1	.49%		ł
Centreline Data										F				
X=298699.467 Y=6451951.119 Z=209.26														
_Datum208														
DESIGN SURFACE KELLY STREET	209.558	209.257	209.257	209.107	209.147	209.192	209.26	209.124	208.955	208.915	209.065	209.065	209.139	
DEPTH TO EXISTING		-0.04	-0.1	-0.03	-0.04	0.02	0.1	-0.03	0.06	0.12	-0.03	-0.03	0.06	
EXISTING SURFACE LEVEL		209.22	209.16	209.08	209.11	209.21	209.36	209.1	209.02	209.03	209.03	209.04	209.2	
OFFSET FROM CENTRELINE	-15.24	-9.96	-9.81	-9.78	-9.28	-4.1	o	1.1	9.2	9.7	9.73	9.88	14.88	

		4.31%	_			
Centreline Data				F	0.619	6
X=298694.511 Y=6451951.78 Z=209.122						
_Datum208						
DESIGN SURFACE KELLY STREET	209.483		209.184	209.184	209.034	209.074
DEPTH TO EXISTING			-0.22	-0.21	-0.06	-0.08
EXISTING SURFACE LEVEL			208.96	208.97	208.97	209
OFFSET FROM CENTRELINE	-15.18		-8.24	-8.09	-8.06	-7.56

CHAINAGE 25.000

Centreline Data	
X=298689.556 Y=6451952.451 Z=209.014	
Datum208	
DESIGN SURFACE KELLY STREET	
DEPTH TO EXISTING	
EXISTING SURFACE LEVEL	
OFFSET FROM CENTRELINE	

Centreline Data	
X=298686.457 Y=6451952.871 Z=208.976	
Datum208	
DESIGN SURFACE KELLY STREET	
DEPTH TO EXISTING	
EXISTING SURFACE LEVEL	
OFFSET FROM CENTRELINE	

									UPPER HUNT	ER SHIRE CO
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6540 1 Facsimile: (02) 6545 26 Email: council@upperh
CD1	CONCEPT DESIGN	24/12/21	СА					-		
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	ВҮ			
L	1	•								

RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

CHAINAGE 35.000

LIVERPOOL STREET - EAS CROSS SECTIONS SHEET 1

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208.87	208.77	208.68	208.64	208.64	208.62				LEVEL
o	4.1	7.37	7.87	7.9	8.05	15.82			OFFSET FROM CI
	CHA	AINA	GΕ	16	5.8	372			
E COUNCIL 2) 6540 1100 6545 2671 @upperhunter.nsw.gov.au	PRC	LY ST)JECT)NF N	-				LIS	ATION	$\left(\int_{a}^{b} \right)$

Centreline Data X=298704.432 Y=6451950.525 Z=209.399 Datum208		4.88%			-2	2.08%		-2.47%		-4.8%
DESIGN SURFACE KELLY STREET	209.559		209.302	209.302	209.152	209.192	209.298	209.399	209.202	
DEPTH TO EXISTING		c		-0.02	0.06	-0.02	-0.01	0.01	-0.06	
EXISTING SURFACE LEVEL			209.3	209.28	209.21	209.17	209.29	209.41	209.14	
OFFSET FROM CENTRELINE	-15.15		-9.88	-9.73	-9.7	-9.2	-4.1	o	4.1	

CHAINAGE 40.000

	1.12%	┠─	-2	.49%		-2.48%		-4.32%		3.	45%	\neg	
209.407	209.349	209.349	209.199	209.239	209.364	209.465	209.288	209.058	209.018	209.168	209.168	209.334	
0.24	0	0	0.15	0	-0.01	-0.15	-0.12	-0.02	0.04	-0.11	-0.1	0-	
209.64	209.35	209.35	209.35	209.24	209.36	209.31	209.17	209.04	209.06	209.06	209.07	209.33	
-15.04	8.6-	-9.65	-9.62	-9.12	-4.1	0	4.1	9.45	9.95	9.98	10.13	14.95	
	209.64 0.24	209.64 0.24 209.407 209.35 0 209.349	209.64 0.24 209.407 209.63 0.24 209.407 209.35 0 209.349 209.35 0 209.349	209.64 0.24 209.407 209.64 0.24 209.407 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349	209.64 0.24 209.407 209.64 0.24 209.407 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0.15 209.199 209.239 0.15 209.239	209.64 0.24 209.407 209.64 0.24 209.407 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0.15 209.199 209.364 0 209.239 209.364 0 209.364	209.64 0.24 209.407 209.64 0.24 209.407 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0 209.349 209.35 0.15 209.199 209.36 0.15 209.199 209.36 0.15 209.364 209.36 -0.01 209.364 209.31 -0.15 209.364	.04 209.64 0.24 209.407 8 209.464 0.24 209.407 8 209.35 0 209.349 55 209.35 0 209.349 52 209.35 0 209.349 65 209.35 0 209.349 7 209.35 0.15 209.339 1 209.36 -0.01 209.364 2 209.31 -0.15 209.364 2 209.31 -0.15 209.465 2 209.31 -0.15 209.364 2 209.31 -0.15 209.366 2 2 2 2 2 2 2 2	04 209.64 0.24 209.407 03 209.35 0 209.407 55 209.35 0 209.349 55 209.35 0 209.349 55 209.35 0 209.349 52 209.35 0 209.349 52 209.35 0.15 209.349 22 209.35 0.15 209.349 22 209.35 0.15 209.349 22 209.35 0.15 209.349 22 209.35 0.15 209.364 209.31 -0.11 209.364 0 209.36 -0.01 209.368 -0.01 209.17 -0.12 209.388 -0.01 209.04 -0.02 209.368 -0.01 209.058 209.058 -0.02 209.058	04 209,64 0.24 209,407 8 209,435 0 209,407 8 209,355 0 209,349 8 209,355 0 209,349 96 203,35 0 209,349 12 209,355 0 209,349 12 209,355 0,15 209,349 12 209,356 -0,01 209,364 209,31 -0,15 209,364 0 209,31 -0,15 209,364 0 209,17 -0,12 209,364 0 209,13 -0,15 209,364 0 209,17 -0,12 209,368 -0,01 209,04 -0,02 209,368 -0,01 209,04 -0,02 209,058 -0,01 200,04 0.04 209,058 -0,01	(04 209,64 0.24 209,407 8 209,35 0 209,407 8 209,35 0 209,349 95 209,355 0 209,349 95 209,355 0 209,349 95 209,355 0 209,349 92 209,355 0,15 209,349 1 209,356 0 209,349 1 209,356 0,01 209,364 1 209,366 -0,01 209,364 2 209,31 -0,15 209,465 2 209,31 -0,15 209,364 2 209,31 -0,15 209,364 2 209,31 -0,15 209,364 2 209,316 -0,01 209,364 2 209,316 -0,01 209,368 2 209,165 209,465 209,058 5 209,0465 209,058 209,058 6 209,056 0.04	(04 209,64 0.24 209,407 3 209,64 0.24 209,407 3 209,355 0 209,349 55 209,355 0 209,349 55 209,355 0 209,349 52 209,355 0,15 209,339 22 209,356 0,15 209,339 2 209,356 0,01 209,364 1 209,356 -0,01 209,364 1 209,366 -0,01 209,364 2 209,31 -0,15 209,465 2 209,31 -0,15 209,364 2 209,31 -0,15 209,364 2 209,31 -0,15 209,364 2 209,364 0 209,364 2 209,165 -0,15 209,465 2 209,165 -0,11 209,058 5 209,014 -0,12 209,058 6 209,016 -0	(04 209,64 0.24 209,407 3 209,35 0 209,349 55 209,355 0 209,349 55 209,355 0 209,349 55 209,355 0 209,349 52 209,355 0,115 209,349 52 209,355 0,115 209,349 7 209,356 0,115 209,349 7 209,31 -0,15 209,364 7 209,364 0 209,364 7 209,364 0 209,364 7 209,31 -0,15 209,364 209,31 -0,15 209,364 0 209,04 -0,11 209,388 0 5 209,04 -0,01 209,058 6 0.04 209,058 0 6 209,06 0.04 209,058 8 209,06 0.01 209,168 9 209,07 -0.1

CHAINAGE 41.833

Centreline Data X=298711.208 Y=6451949.649 Z=209.488 Datum208		-0.19%				-2.55%			-4.11%		3.	33%		
DESIGN SURFACE KELLY STREET	209.355	209.365	209.365	209.215	209.255	209.383	209.488	209.319	209.102	209.062	209.212	209.212	209.374	
DEPTH TO EXISTING	0.31	ę	0	0.13	-0	-0	-0.22	-0.12	0	0.06	-0.08	-0.08	-0.01	
EXISTING SURFACE LEVEL	209.67	209.36	209.37	209.34	209.25	209.38	209.27	209.2	209.1	209.13	209.13	209.14	209.36	
OFFSET FROM CENTRELINE	-15.05	8.6-	-9.65	-9.62	-9.12	-4.1	o	4.1	9.38	9.88	9.91	10.06	14.93	

CHAINAGE 30.000

09.122

0.12

24

0.24%

208.964 208.924 209.074 209.074

-0.02 0.05 -0.1 -0.1

208.94 208.97 208.97 208.98

7.4 7.9 7.93 8.08

208.839 208.799 208.949 208.949

-0.06 0.08 -0.07

208.77 208.88 208.88 208.88

7.38 7.91 8.06

208.76 208.72 208.87 208.87

-0.08 -0.08 -0.23 -0.25

CHAINAGE 20.000

		3.1	32%		
208.941	208.901	209.051	209.051	209.232	
0.09	0.16	0.01	0.02	0.04	
209.03	209.06	209.07	209.08	209.27	
9.52	10.02	10.05	10.2	14.93	

лст	Scale								CIVIL DRAWING	
AST	Horizontal: 0	2	4	6	8	10	Designed	BH	Approved on behalf of RHM Cons	ulting Engineers
		SC	CALE 1	:200 (A1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	Rev
		S	CALE	1:40 (A1))		Date	DEC 21	18-130- CD04	.12 CD1

Centreline Data X=298640.014		2.24%				72%			0.09%				3.05%	0		
X=298840.014 Y=6451959.203 Z=208.717 Datum208																_
DESIGN SURFACE KELLY STREET	208.719		208.557	208.557	208.407 208.447	208.564	208.717		208.72	208.723	208.683	208.833	208.833		209.063	
DEPTH TO EXISTING			0-	-0.05	0.01 -0.02	0.05	0.11		0.08	0.04	0.08	-0.07	-0.07			
EXISTING SURFACE LEVEL			208.56	208.5	208.42 208.43	208.61	208.83		208.8	208.77	208.76	208.76	208.76			
OFFSET FROM CENTRELINE	-15.12		-7.92	-7.77	-7.74 -7.24	-4.1	0		4.1	7.01	7.51	7.54	7.69		15.25	
					СН	AIN	NAG	iE 30).00	0						
Centreline Data	\setminus												3.17%	0	9	
X=298640.878 Y=6451959.085 Z=208.716		2.21%				3.66%			0.01%							
Datum208 DESIGN SURFACE	721		561	261	411 451	566	716		717	717	677	827	827		067	
KELLY STREET	208.721		208.561		208.451		208.716		208.717	208.717	208.677	3 208.827	9 208.827		209.067	-
EXISTING EXISTING SURFACE			9		11 0 44 -0.01		33 0.11		60.09	75 0.04	5 0.07	75 -0.08	'4 -0.09			_
OFFSET	 		208.56		208.41		208.83		208.8	208.75	208.75	208.75	208.74			_
	-15.13		-7.93	8	5 5		0		4.1	7.01	7.51	7.54	7.69		15.25	
Centreline Data X=298644.968 Y=6451958.525 Z=208.727		2.07%	2-				VAG	iE 29	9.12	8			7		1	
Centreline Data X=298644.968 Y=6451958.525	208.73	2.07%	-0.18 208.58 -7.	208.58	СН	AIN 508:285	0.05 208.727	iE 29	9.12	8					1	
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO		2.07%	208.58	-0.17 208.58	208.43	AIN 0 508:582	208.727	iE 29	9.12	8					1	
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING SURFACE		2.07%	-0.18 208.58	208.41 -0.17 208.58	-0.02 208.43 H	AIN 508:58 0 208:582	0.05 208.727	iE 29	9.12	8					1	
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING EXISTING SURFACE LEVEL OFFSET	208.73	CHAI	-7.93 208.4 -0.18 208.58	-7.78 208.41 -0.17 208.58	-7.75 208.41 -0.02 208.43 H	-4.1 208.58 0 208.582	0 208.78 0.05 208.727	iE 29	9.12	8						
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING SURFACE EXISTING SURFACE Centreline Data X=298645.959 Y=6451958.389 Z=208.733	208.73		-7.93 208.4 -0.18 208.58	-7.78 208.41 -0.17 208.58	-7.75 208.41 -0.02 208.43 HD	-4.1 208.58 0 208.582	0 208.78 0.05 208.727	iE 29	9.12	8						
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING SURFACE LEVEL OFFSET FROM CENTRELINE	208.73	CHAI	-7.93 208.4 -0.18 208.58	-7.78 208.41 -0.17 208.58	-7.75 208.41 -0.02 208.43 HD	AIA -4.1 208:282 0 208:282 0 208:282 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 208.78 0.05 208.727		9.12	8						
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING SURFACE EXISTING SURFACE CENTRELINE	-15.17 208.73	CHAI	-7.93 208.4 -0.18 208.58	208.585 -7.78 208.41 -0.17 208.58	-7.75 208.41 -0.02 208.43 A -0.03 208.47 A -0.03 208.48 A -0.03 208.47 A -0.03 20	11A 208.587	0 208.78 0.05 208.727		9.12	8						
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING SURFACE LEVEL OFFSET FROM CENTRELINE Centreline Data X=298645.959 Y=6451958.389 Z=208.733 Datum208 DESIGN SURFACE KELLY STREET	-15.17 208.73	CHAI	208.585 -7.93 208.4 -0.18 208.58	-0.18 208.585 -7.78 208.41 -0.17 208.58	208.435 208.435 -7.75 208.41 -0.02 208.43 A -0.03 208.47 A -0.03 2	-0.01 208.587	208.733 0.05 208.727		9.12	8						
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING SURFACE EXISTING SURFACE Centreline Data X=298645.959 Y=6451958.389 Z=208.733 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO EXISTING SURFACE	-15.17 208.73	CHAI	-0.19 208.585 -7.93 208.4 -0.18 208.58	208.4 -0.18 208.585 -7.78 208.41 -0.17 208.58	-0.03 208.435 -0.03 208.435 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.03 208.47 -0.	208.57 -0.01 208.587 -4.1 208.58 0 208.582 0000	0.02 208.733 0.05 208.727 0.05 208.727		9.12	8						
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO SURFACE CENTRELINE CFFSET FROM CENTRELINE Centreline Data X=298645.959 Y=6451958.389 Z=208.733 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO SURFACE KELLY STREET	-15.17 - 208.73	CHAI	-7.93 208.39 -0.19 208.585 -7.93 208.4 -0.18 208.58	-7.78 208.4 -0.18 208.585 -7.78 208.41 -0.17 208.58	-7.75 208.4 -0.03 208.435 . -0.03 208.435 . -7.75 208.41 -0.02 208.43	-4.1 208.58 0 208.582 0 208.582 0 208.582	0 208.76 0.02 208.733 0.05 208.727 0 208.72 0.05 208.727		9.12	8						
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO SURFACE CENTRELINE CFFSET FROM CENTRELINE Centreline Data X=298645.959 Y=6451958.389 Z=208.733 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO SURFACE KELLY STREET	-15.17 - 208.73	2.03%	-7.93 208.39 -0.19 208.585 -7.93 208.4 -0.18 208.58	-7.78 208.4 -0.18 208.585 -7.78 208.41 -0.17 208.58	-7.75 208.4 -0.03 208.435 . -0.03 208.435 . -7.75 208.41 -0.02 208.43	-4.1 208.58 0 208.582 0 208.582 0 208.582	0 208.76 0.02 208.733 0.05 208.727 0 208.72 0.05 208.727		9.12	8						ER SH
Centreline Data X=298644.968 Y=6451958.525 Z=208.727 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO SURFACE CENTRELINE CFFSET FROM CENTRELINE Centreline Data X=298645.959 Y=6451958.389 Z=208.733 Datum208 DESIGN SURFACE KELLY STREET DEPTH TO SURFACE KELLY STREET	-15.17 - 208.73	2.03%	-7.93 208.39 -0.19 208.585 -7.93 208.4 -0.18 208.58	-7.78 208.4 -0.18 208.585 -7.78 208.41 -0.17 208.58	-7.75 208.4 -0.03 208.435 . -0.03 208.435 . -7.75 208.41 -0.02 208.43	-4.1 208.58 0 208.582 0 208.582 0 208.582	0 208.76 0.02 208.733 0.05 208.727 0 208.72 0.05 208.727		9.12		/pper Hunter	1 P	JPPI 30 LIVER	POOL STRI	UNTE	R SH

	•			'	'			· ·	0	'	'			
	208.28	208.27	208.27	208.18	208.54	208.77	208.68	208.61	208.72	208.72	208.73			
-14.97	-10.04	-9.89	-9.86	-9.36	-4.1	0	4.1	917	9.67	9.7	9.85	15.23		
					СН	AINAG		00			1.36%			Centreline Data X=298615.245 Y=6451962.593 Z=208.812 Datum207
	4.35%	K	_		-3.95%									DESIGN SURFACE KELLY STREET
208.7	208.508	208.508	208.358	208.398	208.606	208.768	208.78	208.795	208.755	208.905	208.905	208.978		DEPTH TO EXISTING
-0.11		-0.18 2		-0.1 2	-0.03 2	0.02	-0.04 2	-010- 2		-0.12 2	-0.12 2	0.09		EXISTING SURFACE LEVEL
208.59 -(208.33 -(208.32 -(208.29 -(208.57 -(208.79 0	208.74 -(208.68			208.79 -(209.06 0		OFFSET FROM CENTRELINE
			1	1				1	1	1	ı I			

						CH	AINAC	JE 50.0	00					
Centreline Data X=298625.153 Y=6451961.237 Z=208.799 Datum207		2.52%				-4.53%			1.15%			<u>1.92</u> %		
DESIGN SURFACE KELLY STREET	208.609	208.485	208.485	208.335	208.375	208.613	208.799	208.752	208.693	208.653	208.803	208.803	208.906	
DEPTH TO EXISTING		-0.2	-0.21	-0.06	-0.19	-0.07	-0.03	-0.07	0.08	0.07	-0.08	-0.08		

-9.9 -9.87 -9.37

208.534 208.534 208.384 208.424 208.56

-0.14 -0.21 -0.05 -0.03

208.39 208.33 208.33 208.37 208.37 208.59

-7.93 -7.78 -7.75 -7.25

EXISTING SURFACE

OFFSET FROM CENTRELINE

Centreline Data

X=298630.107

Y=6451960.559 Z=208.768

Datum208

DEPTH TO EXISTING

LEVEL

OFFSET

Centreline Data

X=298635.06

Z=208.737

Y=6451959.881

Datum208

KELLY STREET

DEPTH TO EXISTING

LEVEL

OFFSET

DESIGN SURFACE

EXISTING SURFACE

FROM CENTRELINE

DESIGN SURFACE KELLY STREET

EXISTING SURFACE

FROM CENTRELINE

LEVEL

CHΔ	ΙΝΔ	3F 5(0.000
			5.000

		1.71%				-4.98%			-2.73%			3%		
Centreline Data														
X=298620.199 Y=6451961.915 Z=208.817														
Datum207														
DESIGN SURFACE KELLY STREET	208.545	208.462	208.462	208.312	208.352	208.613	208.817	208.706	208.566	208.526	208.676	208.676	208.835	
DEPTH TO EXISTING		-0.19	-0.2	-0.05	-0.16	-0.16	-0.09	-0.06	-0.04	0.02	-0.04	-0.02	0.03	
EXISTING SURFACE LEVEL		208.27	208.26	208.26	208.19	208.46	208.73	208.64	208.52	208.54	208.64	208.65	208.87	
OFFSET FROM CENTRELINE	-14.92	-10.03	-9.88	-9.85	-9.35	-4.1	0	4.1	426	9.74	9.77	9.92	15.23	
	-		•							•		· · ·		

Centreline Data X=298618.81 Y=6451962.105 Z=208.818

Datum207 DESIGN SURFACE

KELLY STREET DEPTH TO EXISTING

EXISTING SURFACE LEVEL

OFFSET

FROM CENTRELINE

CHAINAGE 35.000

0.11

85

CHAINAGE 40.000

R SHIRE COUNCIL Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au	KELLY STREET F PROJECT SCONE NSW 23	REVITALISATION	
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LIVERPOOL STREET - WE CROSS SECTIONS SHEET 1

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RHM Consulting Engineers Civil & Structural Consult 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au www.rhmce.com.au ABN 82 153 018 800

9.18 9.68 9.71 9.86 15.23

208.762 208.722 208.872 208.872 209.043

-0.07 0.12 -0.03 -0.02 0.02

208.69 208.84 208.85 208.85 209.06

9.46 9.96 9.99 10.14 15.23

LEVEL OFFSET FROM CENTRELINE

EXISTING SURFACE

DEPTH TO EXISTING

DESIGN SURFACE KELLY STREET

Datum207

Y=6451963.271 Z=208.783

Centreline Data X=298610.291

	1.51%					-5.12%		
208.488		208.415	208.415	208.265	208.305	208.573	208.783	
		-0.22	-0.23	-0.08	-0.23	-0.15	-0.13	
		208.19	208.18	208.18	208.08	208.42	208.66	
-14.87		-10.01	-9.86	-9.83	-9.33	-4.1	0	
-14.87		208.19	208.18	208.18	208.08	208.42	208.66	

CHAINAGE 60.000

	1.61%					-5.18%		
208.517		208.438	208.438	208.288	208.328	208.6	208.812	
		-0.2	-0.21	-0.06	-0.24	-0.19	-0.12	
		208.24	208.23	208.23	208.09	208.41	208.69	
-14.9		-10.02	-9.87	-9.84	-9.34	-4.1	0	

CHAINAGE 55.000

	1.69%				-5.06%			-3,11%			5.33%		
208.537	208.455	208.455	208.305	208.345	208.611	208.818	208.691	208.53	208.49	208.64	208.64	208.815	
	-0.19	-0.2	-0.05	-0.18	-0.18	-0.1	-0.06	-0.03	0.07	-0.02	-0.02	0.03	
	208.26	208.26	208.25	208.16	208.44	208.72	208.63	208.5	208.55	208.62	208.62	208.84	
-14.91	-10.03	-9.88	-9.85	-9.35	-4.1	0	4.1	9.28	9.78	9.81	9.96	15.23	
		•	•					01	•				

CHAINAGE 51.401

гст	Scale	CIVIL DRAWING
'EST	Horizontal: 0 2 4 6 8 10	Designed BH Approved on behalf of RHM Consulting Engineers
	SCALE 1:200 (A1)	Drawn CA Project Engineer/Director Date
	Vertical: 0 0.4 0.8 1.2 1.6 2	Datum NIL Drawing No: Rev
	SCALE 1:40 (A1)	Date DEC 21 18-130- CD04.13 CD1

		1.73%	П			-3.84%		
Centreline Data			T					
X=298575.614 Y=6451968.016 Z=208.396								
_Datum207								
DESIGN SURFACE KELLY STREET	208.236	208.15	208.15	208	208.04	208.238	208.396	
DEPTH TO EXISTING		-0.14	-0.15	0	-0.18	-0.08	-0.02	
EXISTING SURFACE LEVEL		208.01	208	208	207.86	208.16	208.38	
OFFSET FROM CENTRELINE	-14.9	-9.94	-9.79	-9.76	-9.26	-4.1	0	

		1.99%	П			-4.08%		
Centreline Data			F					
X=298590.477 Y=6451965.987 Z=208.535								
Datum207								
DESIGN SURFACE KELLY STREET	208.362	208.265	208.265	208.115	208.155	208.367	208.535	
DEPTH TO EXISTING		-0.19	-0.19	-0.04	-0.1	-0.06	ę	
EXISTING SURFACE LEVEL		208.07	208.07	208.07	208.05	208.31	208.53	
OFFSET FROM CENTRELINE	-14.85	86.6-	-9.83	-9.8	-9.3	-4.1	o	
		CHAI	NA	٩G	E 8	30.	000	

		2.06%				-4.37%		
entreline Data =298595.43 =6451965.307 =208.6 Datum207								
DESIGN SURFACE CELLY STREET	208.403	208.303	208.303	208.153	208.193	208.42	208.6	
DEPTH TO EXISTING	-0.11	-0.14	-0.14	0.01	-0.22	-0.09	-0.03	
XISTING SURFACE EVEL	208.29	208.17	208.16	208.16	207.97	208.33	208.57	
OFFSET ROM CENTRELINE	-14.81	-9.98	-9.83	-9.8	-9.3	-4.1	0	
		CHAII	NA	١G	E 7	75.0	000	

Centreline Data								
X=298600.384 Y=6451964.627 Z=208.665								
Datum207								
DESIGN SURFACE KELLY STREET	208.431	208.341	208.341	208.191	208.231	208.474	208.665	
DEPTH TO EXISTING		-0.14	-0.15	-0	-0.25	-0.13	-0.07	
EXISTING SURFACE LEVEL		208.2	208.19	208.19	207.98	208.34	208.59	
OFFSET FROM CENTRELINE	-14.83	66:6-	-9.84	-9.81	-9.31	-4.1	0	
		CHAI	NA	١G	E7	70.(000	
		1.65%				-4.94%		

		1.65%				-4.94%		
			\mathbb{H}					
Centreline Data								
X=298605.337 Y=6451963.949 Z=208.73								
Datum207								
DESIGN SURFACE KELLY STREET	208.46	208.38	208.38	208.23	208.27	208.527	208.73	
DEPTH TO EXISTING		-0.15	-0.16	-0.02	-0.25	-0.14	-0.11	
EXISTING SURFACE LEVEL		208.23	208.21	208.21	208.02	208.38	208.62	
OFFSET FROM CENTRELINE	-14.85	-10	-9.85	-9.82	-9.32	-4.1	0	
	•		•			•		

CHAINAGE 65.000

									UPPER HUNT	ER SHIRE CO
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6540 1 Facsimile: (02) 6545 26 Email: council@upperh
									SCORE NSW 2557	Linan. council@uppern
CD1	CONCEPT DESIGN	24/12/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	ВҮ			

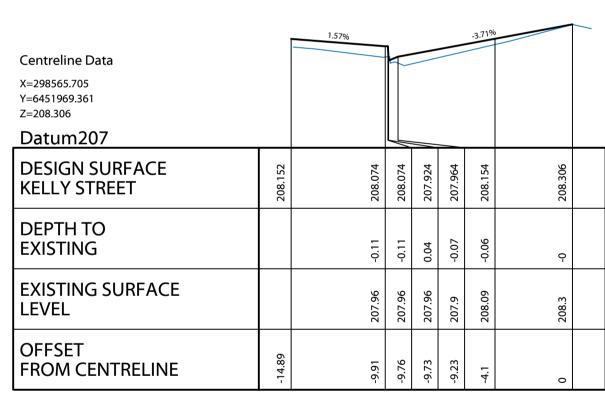
	1	1.81%	Π			-3.91%		_
Centreline Data								
X=298580.569 Y=6451967.343 Z=208.441								
Datum207								
DESIGN SURFACE KELLY STREET	208.278	208.188	208.188	208.038	208.078	208.281	208.441	
DEPTH TO EXISTING		-0.14	-0.14	0.01	-0.18	-0.08	-0.01	
EXISTING SURFACE LEVEL		208.05	208.04	208.04	207.89	208.2	208.44	
OFFSET FROM CENTRELINE	-14.91	96:6-	-9.81	-9.78	-9.28	-4.1	0	

CHAINAGE 90.000

	1	1.89%	ה			-3.98%		_
Centreline Data			Ţ					
X=298585.523 Y=6451966.667 Z=208.486								
Datum207								
DESIGN SURFACE KELLY STREET	208.32	208.227	208.227	208.077	208.117	208.323	208.486	
DEPTH TO EXISTING		-0.13	-0.14	0.01	-0.16	-0.07	0	
EXISTING SURFACE LEVEL		208.09	208.09	208.09	207.96	208.26	208.49	
OFFSET FROM CENTRELINE	-14.89	26.6-	-9.82	-9.79	-9.29	-4.1	0	

CHAINAGE 85.000

COUNCIL 6540 1100 645 2671 upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337		RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800	LI Cf Sf
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CHAINAGE 105.000

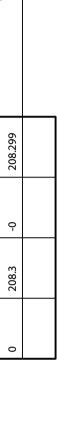
		1.65%	-			-3.77%	
Centreline Data							
X=298570.66 Y=6451968.688 Z=208.351							
_Datum207							
DESIGN SURFACE KELLY STREET	208.194	208.112	208.112	207.962	208.002	208.196	208.351
DEPTH TO EXISTING		-0.13	-0.14	0.01	-0.2	-0.07	-0.01
EXISTING SURFACE LEVEL		207.98	207.98	207.98	207.81	208.12	208.34
OFFSET FROM CENTRELINE	-14.9	-9.93	-9.78	-9.75	-9.25	-4.1	0

CHAINAGE 100.000

LIVERPOOL STREET - WES CROSS SECTIONS SHEET 2

OFFSET FROM CENTRELINE	-14.89		-9.91	-9.76	-9.73	-9.23	-4.1	
		CH	AII	NA	G	E 1	05	5.752
		1.57%		-			-3.71%	
Centreline Data								
X=298565.705 Y=6451969.361 Z=208.306								
Datum207								
DESIGN SURFACE KELLY STREET	208.152		208.074	208.074	207.924	207.964	208.154	

		1.56%				-3.7%	
Centreline Data							
X=298564.96 Y=6451969.462 Z=208.299							
Datum207							
DESIGN SURFACE KELLY STREET	208.145	208.068	208.068	207.918	207.958	208.148	
DEPTH TO EXISTING		-0.12	-0.13	0.02	-0.06	-0.05	
EXISTING SURFACE LEVEL		207.95	207.94	207.94	207.9	208.1	
OFFSET FROM CENTRELINE	-14.89	19.9-	-9.76	-9.73	-9.23	-4.1	
		•					





сст	Scale								CIVIL DRAWING	
EST	Horizontal: 0	2	4	6	8	<u>1</u> 0	Designed	BH	Approved on behalf of RHM Consulti	ng Engineers
		S	CALE 1	:200 (A1	1)		Drawn	CA	Project Engineer/Director	Date
	Vertical: 0	0.4	0.8	1.2	1.6	2	Datum	NIL	Drawing No:	Rev
			SCALE	1:40 (A1)		Date Di	EC 21	18-130- CD04.1	4 CD1

	scone NSW 2337 Email: council@upperhunter.nsw.gov.au Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW							
	SCONE NSW 2337 SCONE NSW 2337 SCONE NSW 2337 137 Kelly Street, Scone NSW					KELLY STREET REVITALISA		
SUUNE NSW 2337 137 Kelly Street, Scone NSW	Tel (02) 6545 2800				HUNTER SHIRE COUNCIL	KELLY STREET REVITALISA		RHM Consulting Engineers
	These drawings, plans and specifications and the copyright therein are the property of RHM Consulting ABN 82 153 018 800	 CONCEPT DESIGN 24/12/21 CA		Upper 130 LIVERPOOL Hunter P.O. BOX 208	DL STREET Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671	PROJECT SCONE NSW 2337	nts reserved.	137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au www.rhmce.com.a

Centreline Data												
X=298799.839 Y=6452174.334 Z=212.74		\vdash	_	-4.27%	0		-3.35%		Η			
Datum212												
DESIGN SURFACE KELLY STREET	212.587	212.587	212.437	212.477	212.58	212.74	212.614	212.534	212.494	212.644	212.644	
DEPTH TO EXISTING		0.01	0.16	0.13	0.03	-0.11	0.03	0.12	0.16			
EXISTING SURFACE LEVEL		212.6	212.6	212.6	212.61	212.63	212.65	212.66	212.66			
OFFSET FROM CENTRELINE	-6.85	-6.7	-6.67	-6.17	-3.75	0	3.75	6.17	6.67	6.7	6.85	
FROM CENTRELINE	-6.85	-6.7	-6.67	-6.17	-3.75	0	3.75	6.17	6.67	6.7	6.85	

Datum212												
DESIGN SURFACE KELLY STREET	212.526	212.526	212.376	212.416	212.52	212.685	212.563	212.485	212.445	212.595	212.595	
DEPTH TO EXISTING		0.02	0.17	0.13	0.04	-0.1	0.04	0.12	0.17			
EXISTING SURFACE LEVEL		212.54	212.54	212.55	212.56	212.58	212.6	212.61	212.61			
OFFSET FROM CENTRELINE	-6.81	-6.66	-6.63	-6.13	-3.75	0	3.75	6.13	6.63	6.66	6.81	
		C	ΞH.	All	NA	١G	E 5.00	0				

Centreline Data												
X=298794.886 Y=6452175.016 Z=212.685		\vdash	_	-4.38%	2		-3.25%		Η			
Datum212												
DESIGN SURFACE KELLY STREET	212.526	212.526	212.376	212.416	212.52	212.685	212.563	212.485	212.445	212.595	212.595	
DEPTH TO EXISTING		0.02	0.17	0.13	0.04	-0.1	0.04	0.12	0.17			
EXISTING SURFACE LEVEL		212.54	212.54	212.55	212.56	212.58	212.6	212.61	212.61			
OFFSET												

CHAINAGE 10.00)()

Centreline Data												
X=298789.932 Y=6452175.698 Z=212.628	1	\vdash		-4.48%	2		-3.149	6	Η			
Datum212												
DESIGN SURFACE KELLY STREET	212.465	212.465	212.315	212.355	212.46	212.628	212.511	212.437	212.397	212.547	212.547	
DEPTH TO EXISTING		0.02	0.17	0.13	0.04	-0.1	0.04	0.12	0.17			
EXISTING SURFACE LEVEL		212.48	212.48	212.49	212.5	212.52	212.55	212.56	212.56			
OFFSET FROM CENTRELINE	-6.78	-6.63	-6.6	-6.1	-3.75	0	3.75	6.1	6.6	6.63	6.78	

CHAINAGE	15.000

Centreline Data												
X=298784.979 Y=6452176.38 Z=212.566	1			-4.47%		\neg	-2.939	6	Ħ			
Datum212												
DESIGN SURFACE KELLY STREET	212.404	212.404	212.254	212.294	212.398	212.566	212.456	212.388	212.348	212.498	212.498	
DEPTH TO EXISTING		0.02	0.17	0.13	0.04	-0.1	0.04	0.12	0.18	0.03		
EXISTING SURFACE LEVEL		212.42	212.42	212.42	212.44	212.47	212.49	212.51	212.53	212.53		
OFFSET FROM CENTRELINE	-6.75	-6.6	-6.57	-6.07	-3.75	0	3.75	6.07	6.57	6.6	6.75	

	Centreline Data
	X=298666.483
	Y=6452189.301
	Z=210.987
_	Datum210

Centreline Data		2.22%				-2.66%			-3.21%	_		4.74%	-			
X=298671.436 Y=6452188.623 Z=211.024																
_Datum210			l								l					
DESIGN SURFACE KELLY STREET	211.13		210.975	210.975	210.825	210.865	210.915	211.024		210.893	210.865	210.825	210.975	210.975	211.048	
DEPTH TO EXISTING	-0.08		-0.12	-0.12	0.03	-0.02	-0.06	-0.04		-0.01	-0.01	0	-0.07	-0.02	-0.07	
EXISTING SURFACE LEVEL	211.05		210.85	210.85	210.85	210.85	210.86	210.98		210.88	210.85	210.83	210.91	210.96	210.98	
OFFSET FROM CENTRELINE	-13.68		-6.68	-6.53	-6.5	-6	-4.1	0		4.1	4.98	5.48	5.51	5.66	7.21	

		1.33%			-1.66%			-3.09%		4.63%	-			
Centreline Data			h					5.69%						
X=298676.39 Y=6452187.944 Z=211.065														
Datum210														
DESIGN SURFACE KELLY STREET	211.168	211.076	211.076	210.926	210.966	210.997	211.065	210.939	210.911	210.871	211.021	211.021	211.091	
DEPTH TO EXISTING	-0.04	900-	-0.07	0.08	0.04	-0.04	-0.05	-0.01	0-	0.03	-0.12	-0.09	-0.08	
EXISTING SURFACE LEVEL	211.13	0110	211.01	211.01	211	210.95	211.02	210.93	210.91	210.9	210.91	210.93	211.01	
OFFSET FROM CENTRELINE	-13.65	69 9	-6.54	-6.51	-6.01	-4.1	0	4.1	5.01	5.51	5.54	5.69	7.21	

		1.33%				-1.66%			-2.000		4.63%				
Centreline Data				T		-1.00%			-3.09%						
X=298676.39 Y=6452187.944 Z=211.065															
_Datum210			L												
DESIGN SURFACE KELLY STREET	211.168		211.076	211.076	210.926	210.966	210.997	211.065	210.939	210.911	210.871	211.021	211.021	211.091	
DEPTH TO EXISTING	-0.04		-0.06	-0.07	0.08	0.04	-0.04	-0.05	-0.01	Υ	0.03	-0.12	-0.09	-0.08	
EXISTING SURFACE LEVEL	211.13		211.01	211.01	211.01	211	210.95	211.02	210.93	210.91	210.9	210.91	210.93	211.01	
OFFSET FROM CENTRELINE	-13.65		-6.69	-6.54	-6.51	-6.01	-4.1	0	4.1	5.01	5.51	5.54	5.69	7.21	

		1.33%				-1.66%			-3.09%		4.63%	_			
Centreline Data			1			-1.0070			5.09%						
X=298676.39 Y=6452187.944 Z=211.065															
_Datum210			L												
DESIGN SURFACE KELLY STREET	211.168		211.076	211.0/6	210.926	210.966	210.997	211.065	210.939	210.911	210.871	211.021	211.021	211.091	
DEPTH TO EXISTING	-0.04		-0.06	-0.07	0.08	0.04	-0.04	-0.05	-0.01	ę	0.03	-0.12	-0.09	-0.08	
EXISTING SURFACE LEVEL	211.13		211.01	211.01	211.01	211	210.95	211.02	210.93	210.91	210.9	210.91	210.93	211.01	
OFFSET FROM CENTRELINE	-13.65		-6.69	-6.54	-6.51	-6.01	-4.1	0	4.1	5.01	5.51	5.54	5.69	7.21	

EXISTING	SUF

OFFSET
OTTSET
FROM CENTR

	·	0.76%	П		-0.73%	þ		-2.96%		0.05%	5			
Centreline Data								10078						
X=298681.344 Y=6452187.266 Z=211.11														
_Datum210														
DESIGN SURFACE KELLY STREET	211.238	211.176	211.176	211.026	211.066	211.08	211.11	210.989	210.961	210.921	211.071	211.071	211.072	
DEPTH TO EXISTING		-0.08	-0.08	0.07	0.02	-0.07	-0.08	-0.03	-0.01	0.03	-0.07	0-	0.02	
EXISTING SURFACE LEVEL		211.1	211.1	211.1	211.09	211.01	211.03	210.96	210.95	210.95	211	211.07	211.09	
OFFSET FROM CENTRELINE	-14.88	6.69	-6.54	-6.51	-6.01	-4.1	0	4.1	5.04	5.54	5.57	5.72	7.22	

Ś

Centreline Data		2.17%	וד		-3.489	%		-3.46%			1.	2%		
X=298666.483 Y=6452189.301 Z=210.987										1				
_Datum210	_													
DESIGN SURFACE KELLY STREET	211.041	210.872	210.872	210.722	210.762	210.844	210.987	210.845	210.781	210.741	210.891	210.891	210.947	
DEPTH TO EXISTING		-0.07	-0.08	0.07	0	-0.06	-0.05	0-	0.01	0.08	-0.06	-0.01	-0.11	
EXISTING SURFACE LEVEL		210.8	210.8	210.8	210.76	210.79	210.94	210.84	210.79	210.82	210.83	210.88	210.84	
OFFSET FROM CENTRELINE	-14.91	-7.13	-6.98	-6.95	-6.45	-4.1	0	4.1	5.95	6.45	6.48	6.63	11.2	

CHAINAGE 35.000

CHAINAGE 30.000

CHAINAGE 25.000

Centreline Data X=298658.959 Y=6452190.332 Z=210.938 Datum210		3.4%				-4.28%		
DESIGN SURFACE KELLY STREET	210.849	210.667	210.667	210.517	210.557	210.763	210.938	
DEPTH TO EXISTING		-0.01	-0.02	0.13	-0.05	-0.08	-0.11	
EXISTING SURFACE LEVEL		210.65	210.65	210.65	210.5	210.68	210.82	
OFFSET FROM CENTRELINE	-14.96	9.59	-9.44	-9.41	-8.91	-4.1	0	

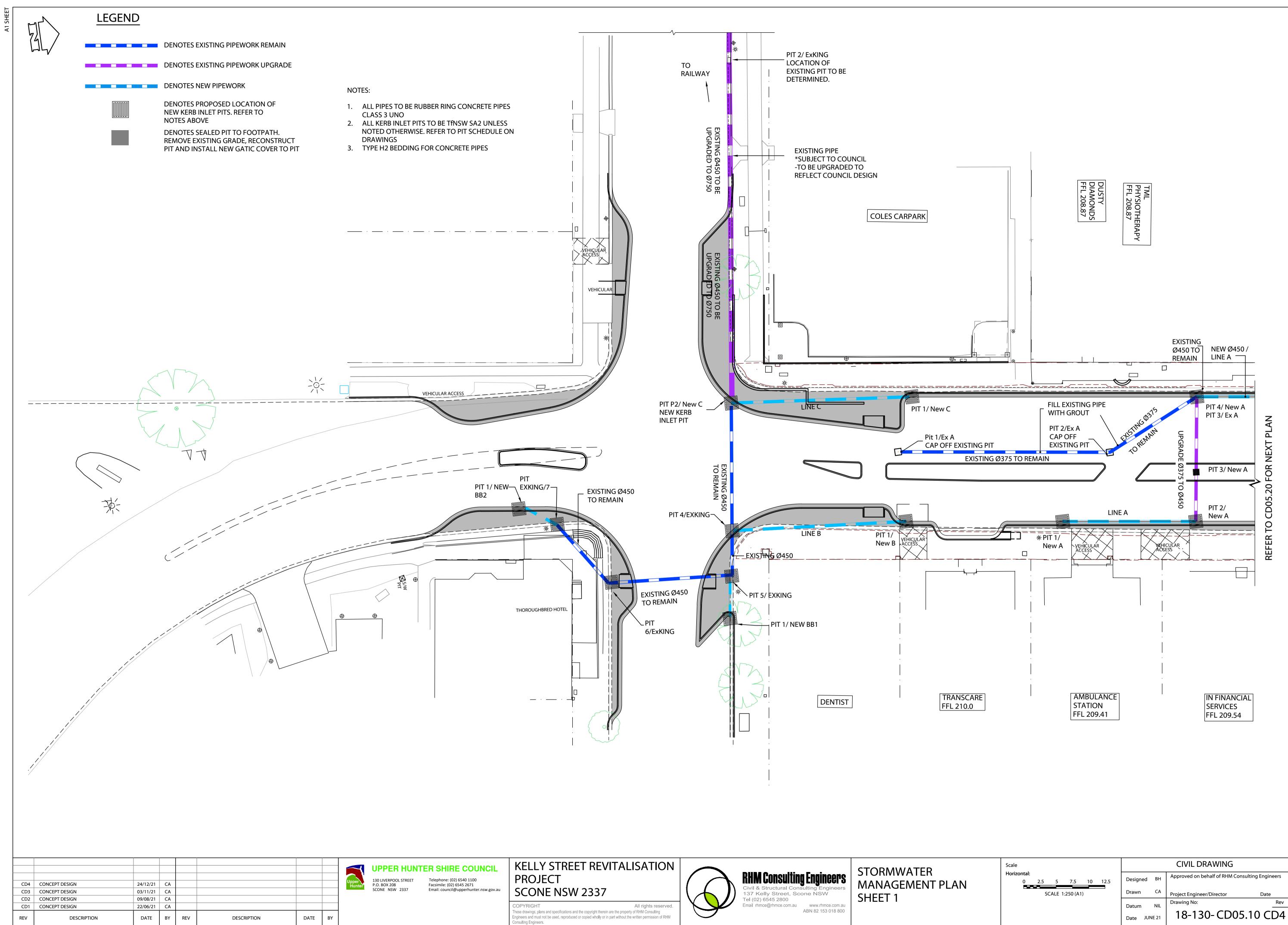
CHAINAGE 42.594

Centreline Data X=298661.529 Y=6452189.98 Z=210.954		3.26%				-3.62%			-3.91%		4.22%			
Datum210														
DESIGN SURFACE KELLY STREET	210.915	210.741	210.741	210.591	210.631	210.806	210.954	210.794	210.595	210.555	210.705	210.705	210.846	
DEPTH TO EXISTING		-0.04	-0.05	0.1	-0.07	-0.08	-0.08	-0.05	-0.01	0.09	-0.04	-0.03	0.01	
EXISTING SURFACE LEVEL		210.7	210.69	210.69	210.56	210.73	210.87	210.75	210.59	210.64	210.67	210.68	210.85	
OFFSET FROM CENTRELINE	-14.95	-9.61	-9.46	-9.43	-8.93	-4.1	0	4.1	9.19	9.69	9.72	9.87	13.2	

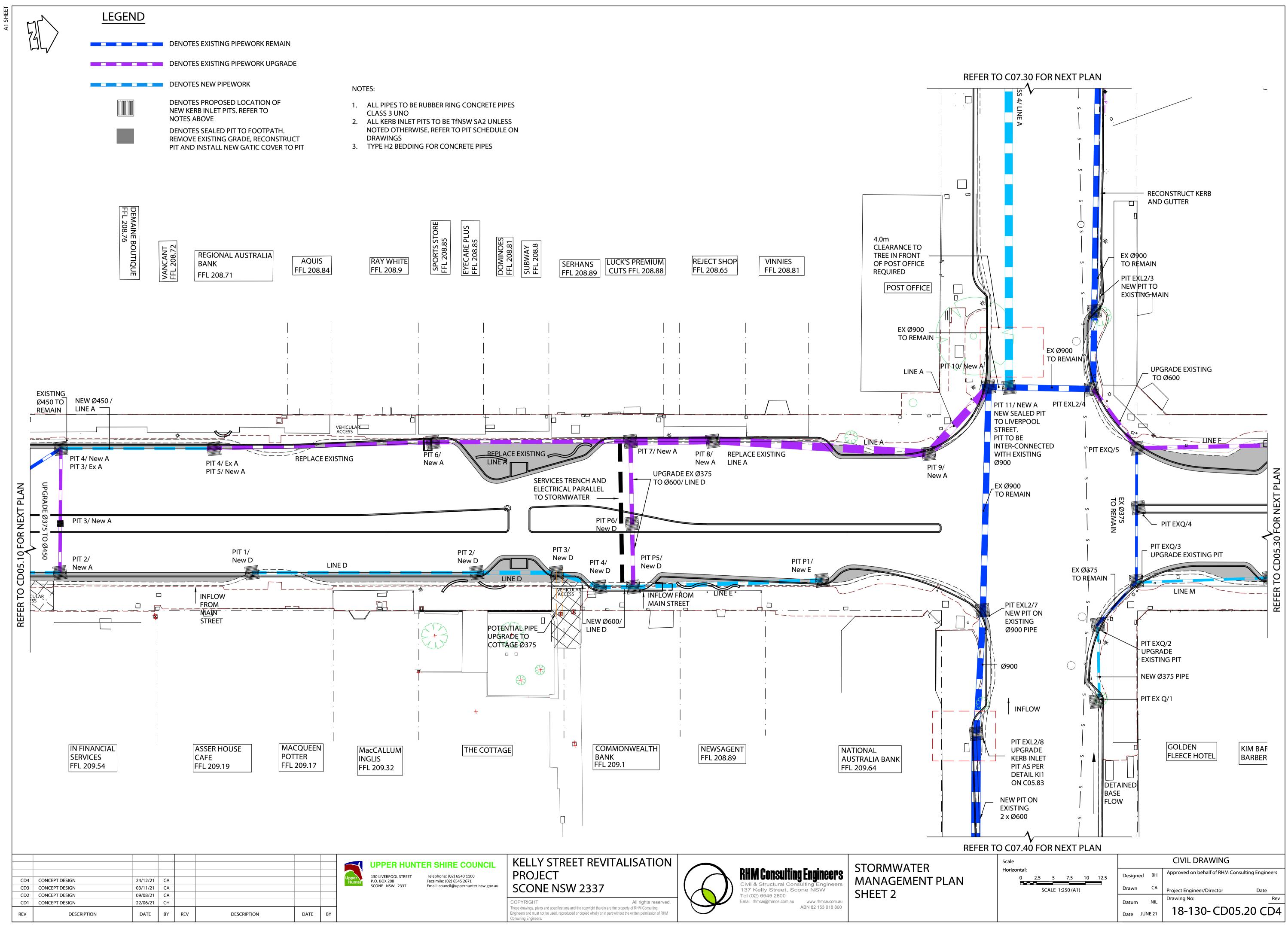
ST AUBINS STREET - WES CROSS SECTIONS SHEET 1

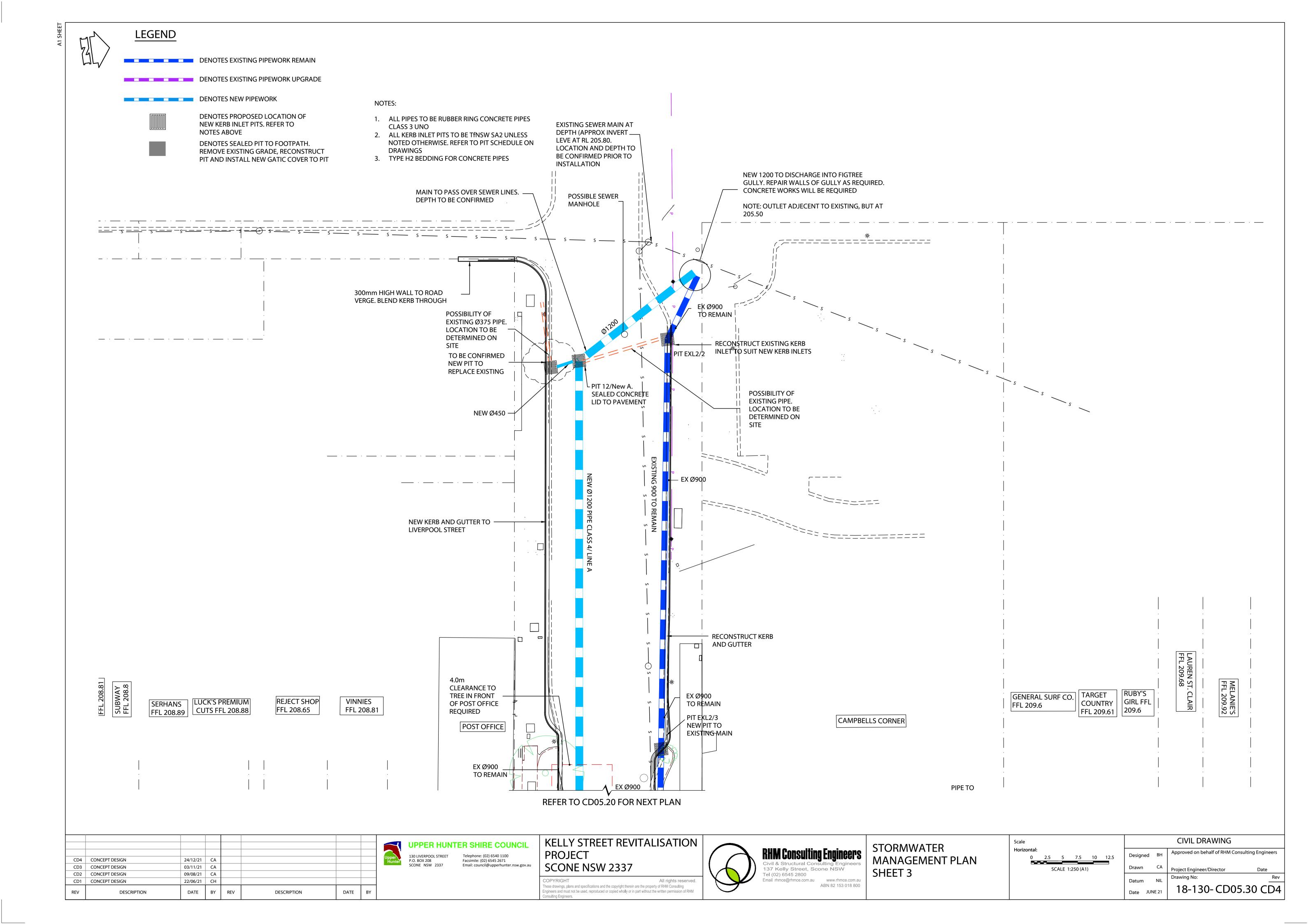
сст	Scale		CIVIL DRAWING
EDI	Horizontal: 0 2 4 6 8 10	Designed BH	Approved on behalf of RHM Consulting Engineers
	SCALE 1:200 (A1)	Drawn CA	Project Engineer/Director Date
	Vertical: 0 0.4 0.8 1.2 1.6 2	Datum NIL	Drawing No: Rev
	SCALE 1:40 (A1)	Date DEC 21	18-130- CD04.15 CD1

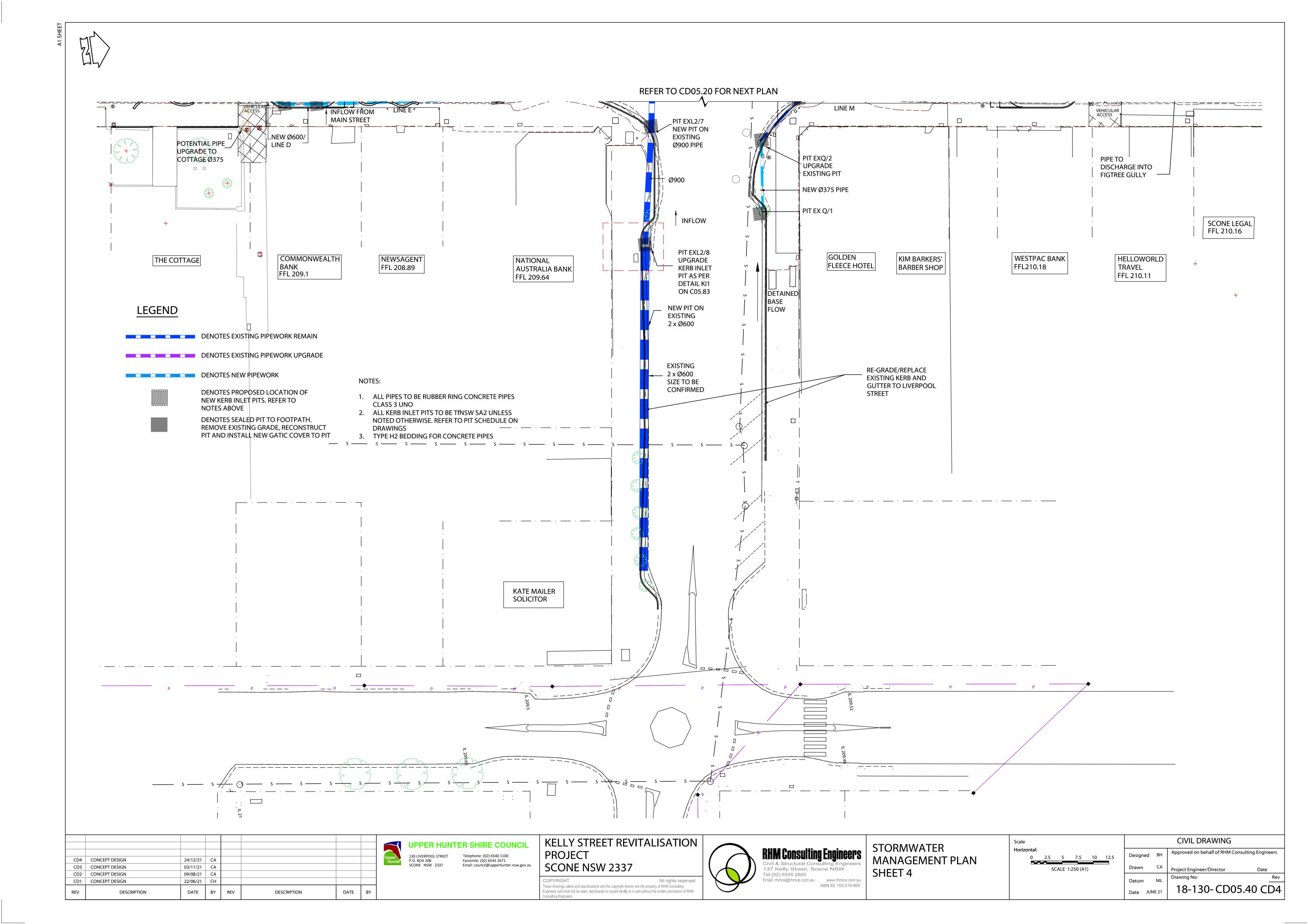
CHAINAGE 40.000

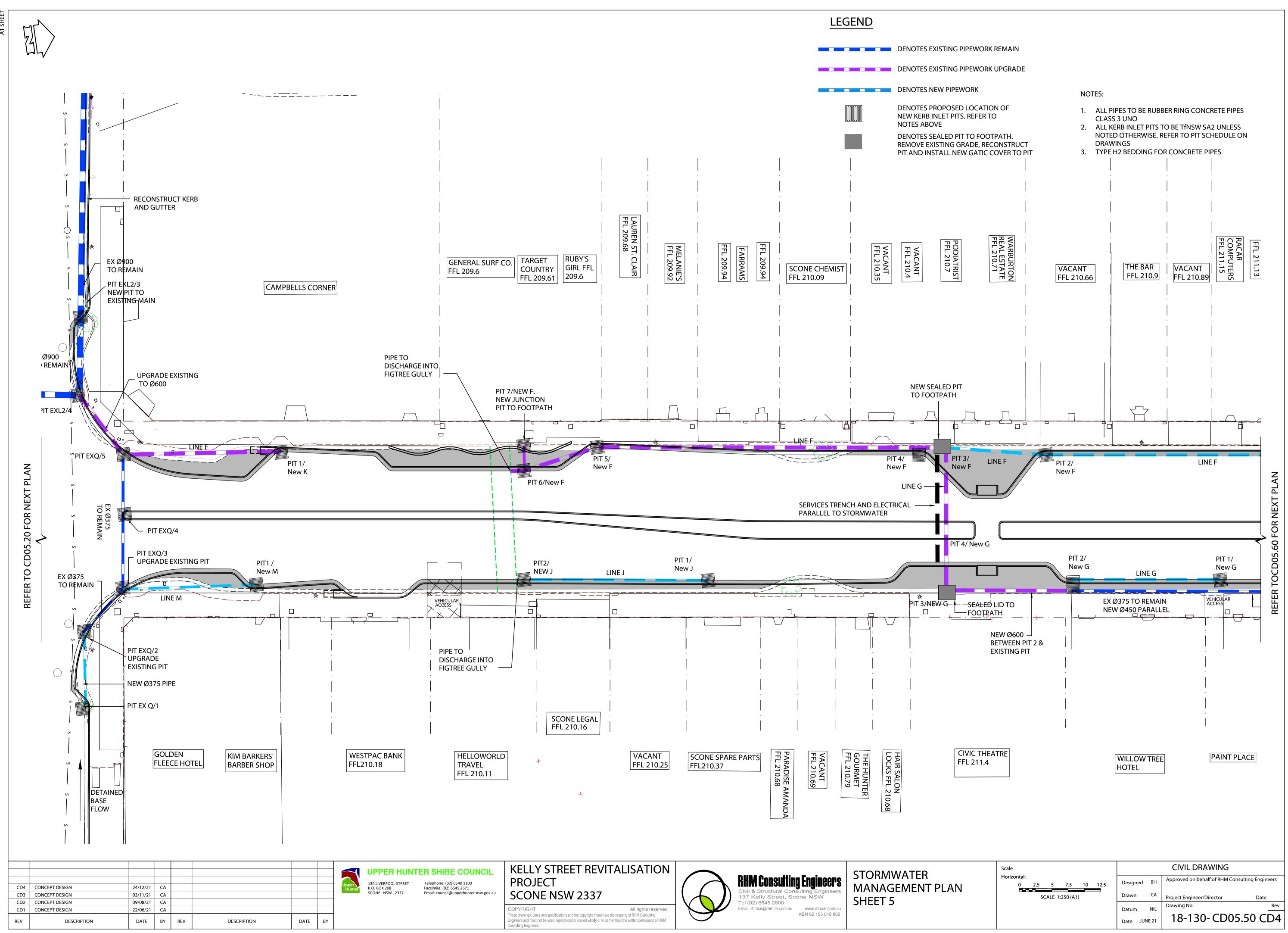


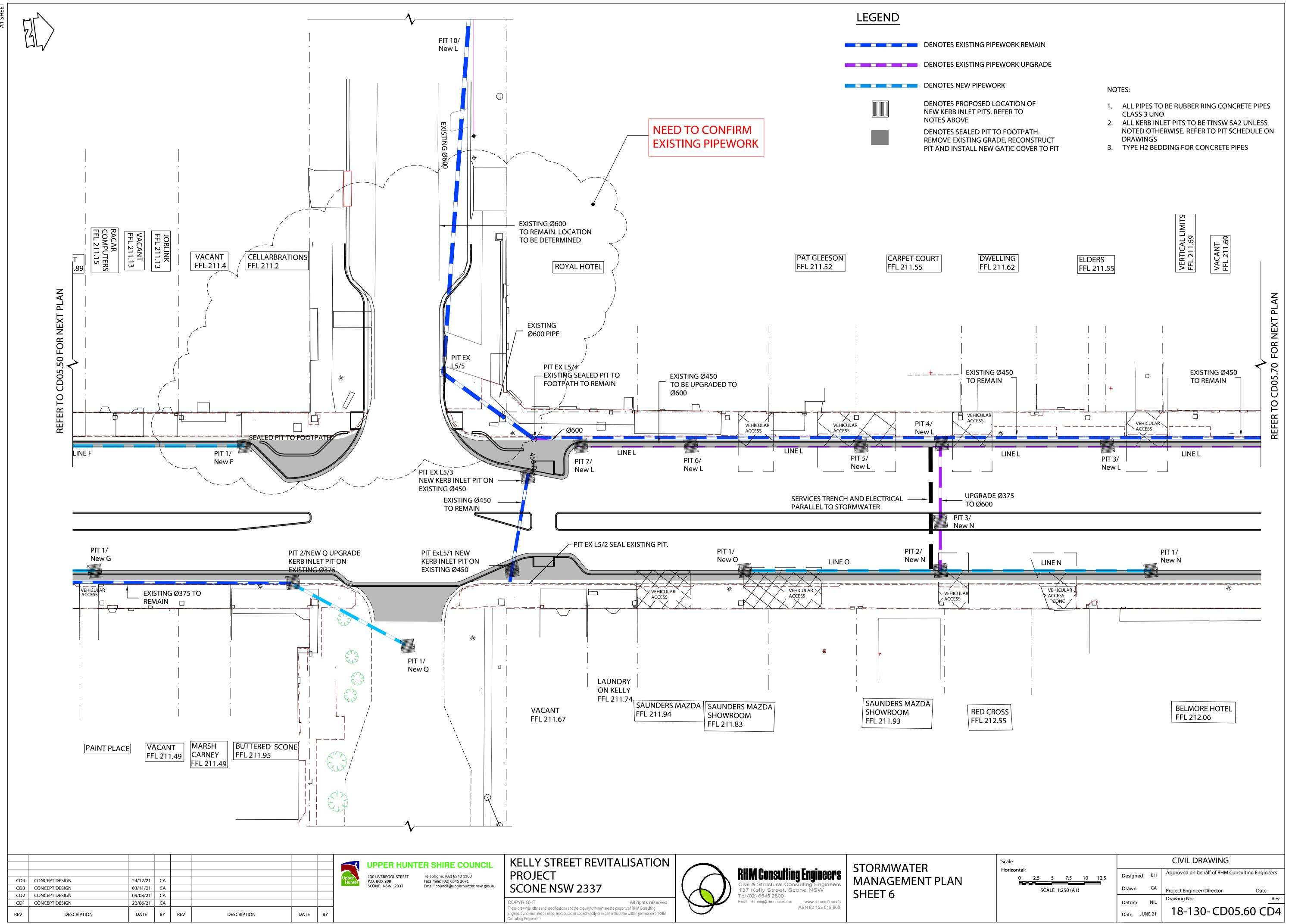
RE COUNCIL 02) 6540 1100 2) 6545 2671 il@upperhunter.nsw.gov.au	KELLY STREET REVITA PROJECT SCONE NSW 2337	ALISATION	
	COPYRIGHT These drawings, plans and specifications and the copyright therein are the p		

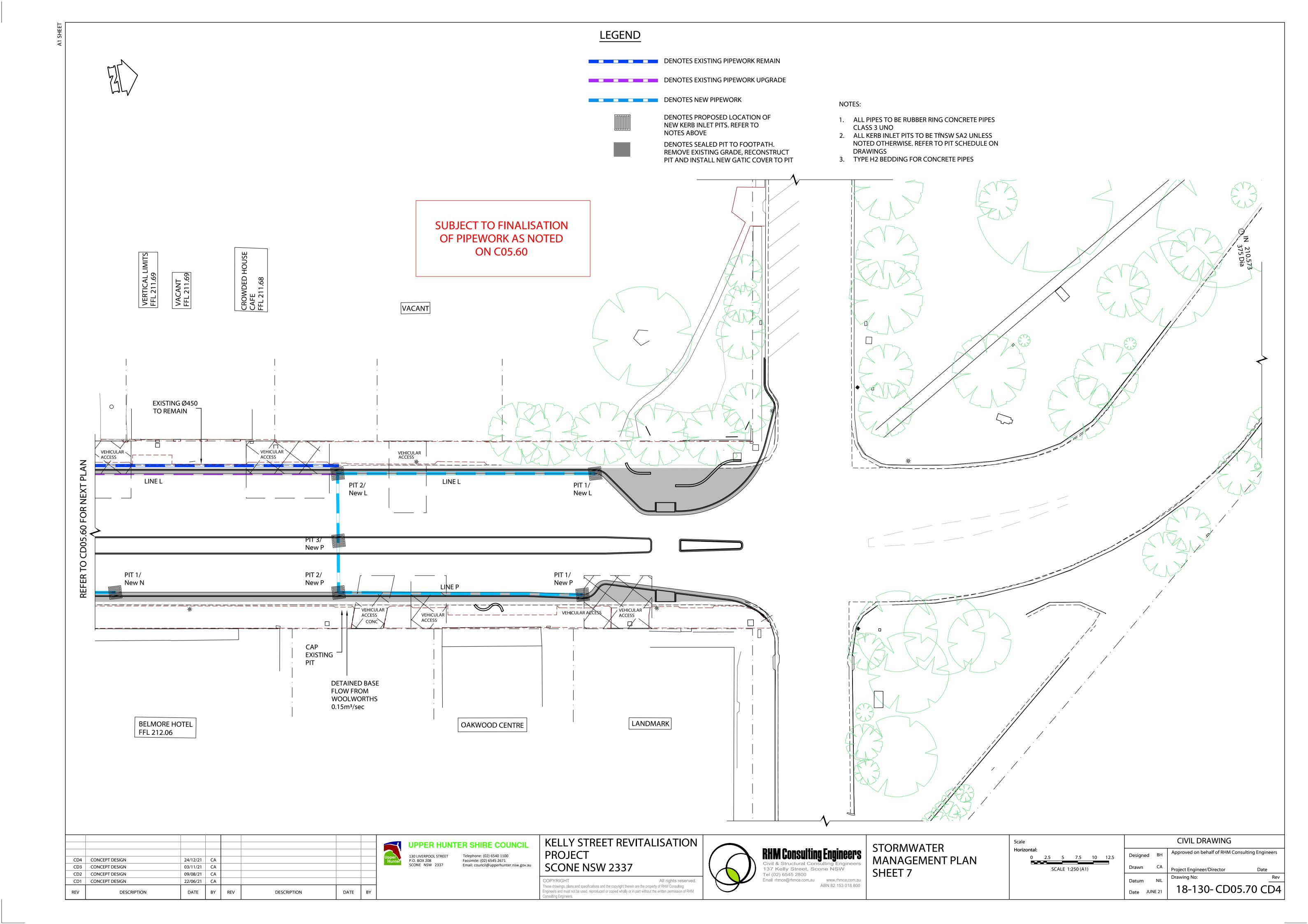












PIPE FLOW (m3/s) 0 0 0 0 PIPE FLOW (m3/s) 0 0 0 0 0 PIPE FLOW (m3/s) 0 0 0 0 0 0 PIPE FLOW (m3/s) 0 0 0 0 0 0 0 PIPE SIZE (mm) & TYPE 900BCP 900BCP 900BCP 900BCP 900BCP 900BCP DATUM R.L 203.00 500 61 1 61 1 61 1 61 1 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						
PIPE SIZE (mm) & TYPE 900RCP 900RCP PIPE GRADE 1.6% 0.4% DATUM R.L 203.00 DEPTH TO DESIGN SURFACE 52 52 52 10 52 10 52 10 52 10 52 10 52 10 52 10 52 10 52 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 12 10 13 10 <td< th=""><th>(</th><th>L2/B</th><th>L2</th><th></th><th></th><th>م</th></td<>	(L2/B	L2			م
PIPE SIZE (mm) & TYPE 900RCP 900RCP PIPE GRADE 1.6% 0.4% DATUM R.L 203.00 DEPTH TO DESIGN SURFACE 55 SURFACE 55 900 200 000 200 000 200 0000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 200 000 20						
PIPE SIZE (mm) & TYPE 900RCP 900RCP PIPE GRADE 1.6% 0.4% DATUM R.L 203.00 DEPTH TO DESIGN SURFACE 52 10 52 10 52 10 52 10 52 10 52 10 52 10 52 10 52 10 52 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 12 10 13 10 14 10 15 10 16 10 17 10 18 10 19 10 10 10 10 10 <td< td=""><th></th><td></td><td></td><td></td><td></td><td></td></td<>						
PIPE GRADE 1.6% 0.4% 3.2% DATUM R.L 203.00 0.4% 3.2% DEPTH TO DESIGN SURFACE 52 12 6/1 INVERT LEVEL 520 520 900 6/1 DESIGN SURFACE 1900 100 100 100 EXISTING STORMWATER 100 100 100 100	PIPE FLOW (m3/s)	0		0		
DATUM R.L 203.00	PIPE SIZE (mm) & TYPE	SOORCP		900RCP	< 900RCP	-
DEPTH TO DESIGN 32 SURFACE 53 INVERT LEVEL 508.52 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.72 508.72 208.73 508.72 208.74 508.72 208.75 508.72 208.75 508.72 208.75 508.72 208.75 508.72 208.75 508.72 208.75 508.72 208.75 508.72	PIPE GRADE	1.6%		0.4%	3.2%	٠
SURFACE SURFACE	DATUM R.L 203.00					
30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 <td< td=""><th></th><td>2.35</td><td>2.21</td><td>2</td><td>2 1.79</td><td>1.79</td></td<>		2.35	2.21	2	2 1.79	1.79
LEVEL 10/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 <th>INVERT LEVEL</th> <td>206.32</td> <td>206.55</td> <td>206.6</td> <td>206.6 206.7</td> <td>206.7</td>	INVERT LEVEL	206.32	206.55	206.6	206.6 206.7	206.7
EXISTING STORMWATER CHAINAGE 5303 10 100 100 100 100 100 100 100 100 1		208.67	208.76		208.6	208.49
		78.54	93.03		105.98	109.13

LONGSECTION Ex L2

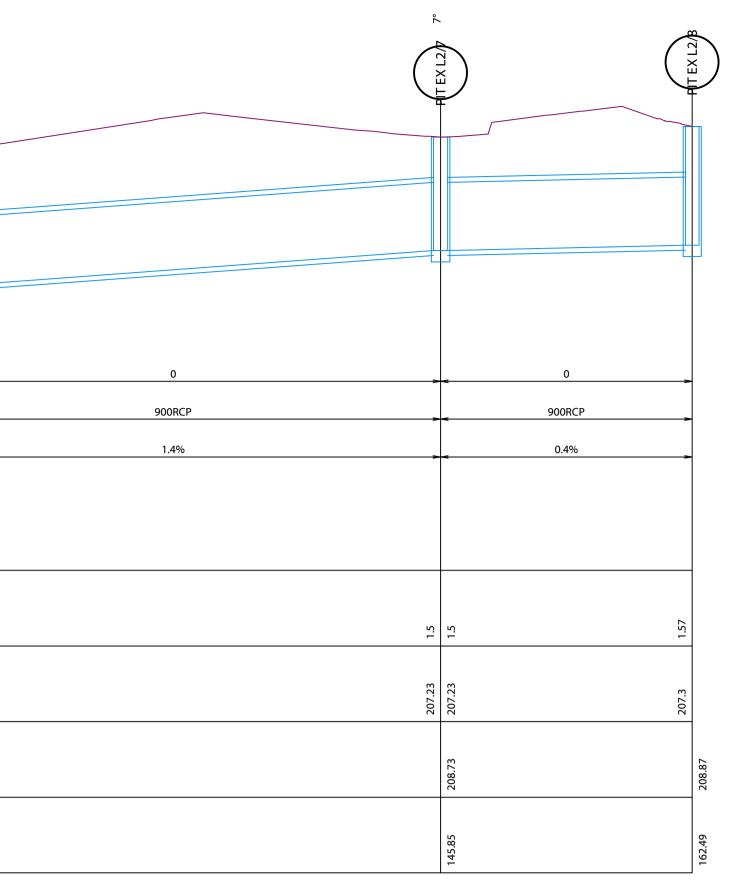
HORIZONTAL SCALE 1:250 VERTICAL SCALE 1:500

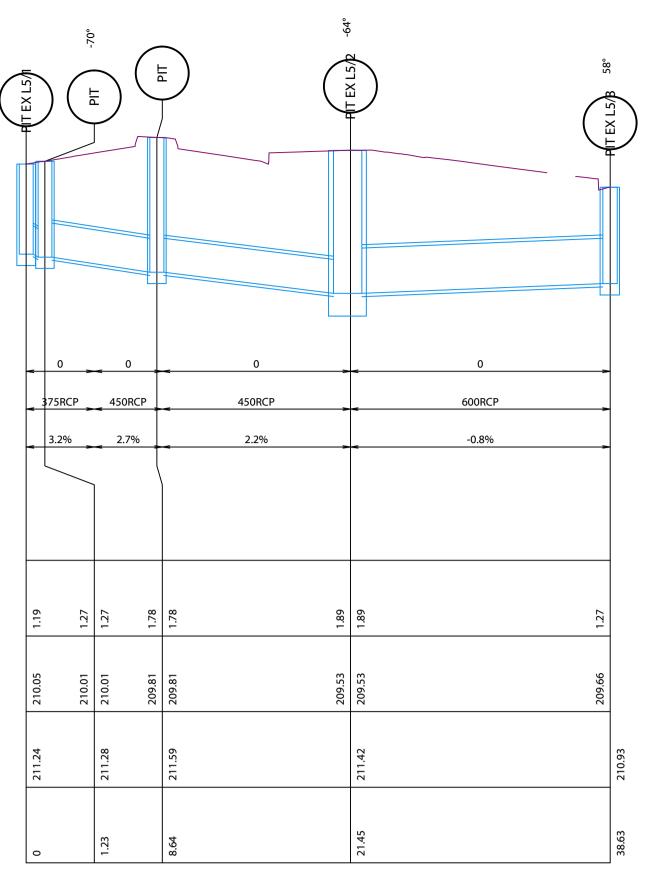
	ξĝ	
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	L	
PIPE FLOW (m3/s)		
PIPE SIZE (mm) & TYPE		
PIPE GRADE		0
		600RCP
		1%
DATUM R.L 206.00		
DEPTH TO DESIGN		
SURFACE	1.27	1.27
INVERT LEVEL	209.66	209.66
DESIGN SURFACE		
LEVEL		210.93
EXISTING STORMWATER		
CHAINAGE		38.63

LONGSECTION Ex L5

HORIZONTAL SCALE 1:250 VERTICAL SCALE 1:500

CD3 CD2	CONCEPT DESIGN CONCEPT DESIGN	24/12/21 03/11/21	CA CA					Upper Hunter	UPPER HUNT 130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	ER SHIRE COUNCIL Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337
CD1	CONCEPT DESIGN	09/08/21	CA								COPYRIGHT All rights reserved.
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY				These drawings, plans and specifications and the copyright therein are the property of RHM Consulting Engineers and must not be used, reproduced or copied wholly or in part without the written permission of RHM Consulting Engineers.

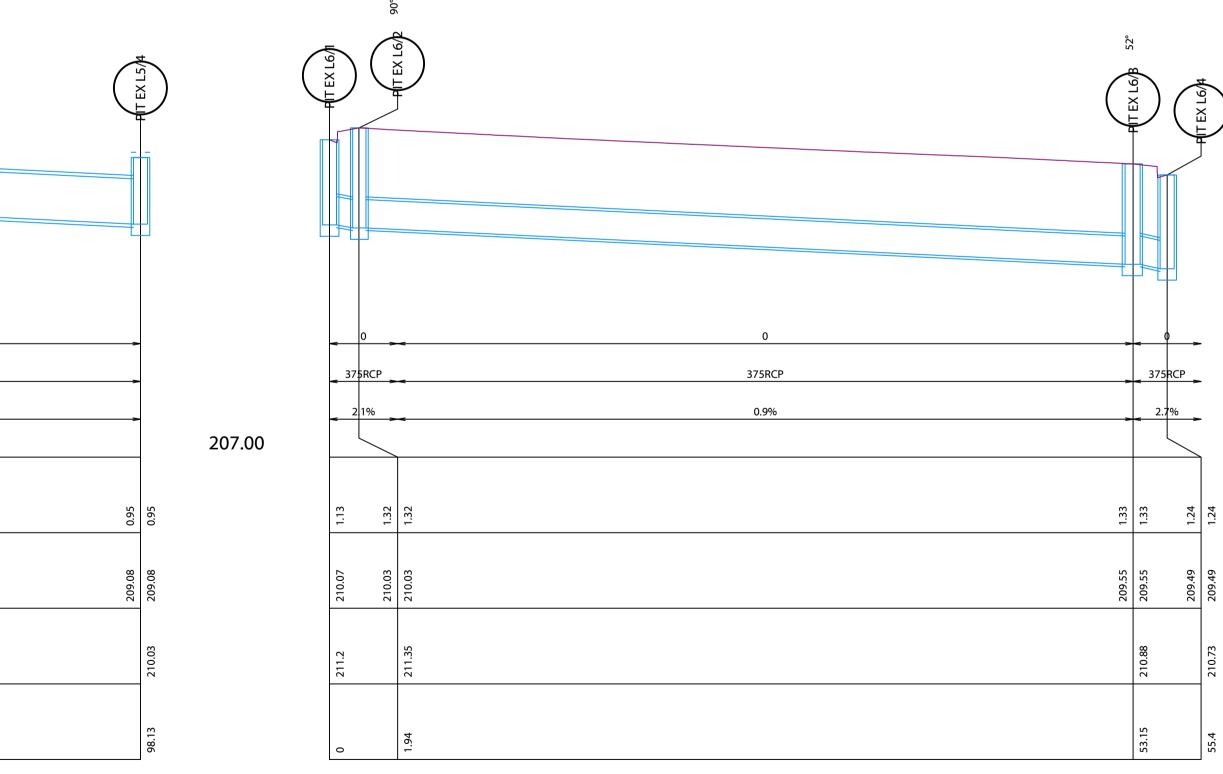




LONGSECTION Ex L5

HORIZONTAL SCALE 1:250 VERTICAL SCALE 1:500

206.00



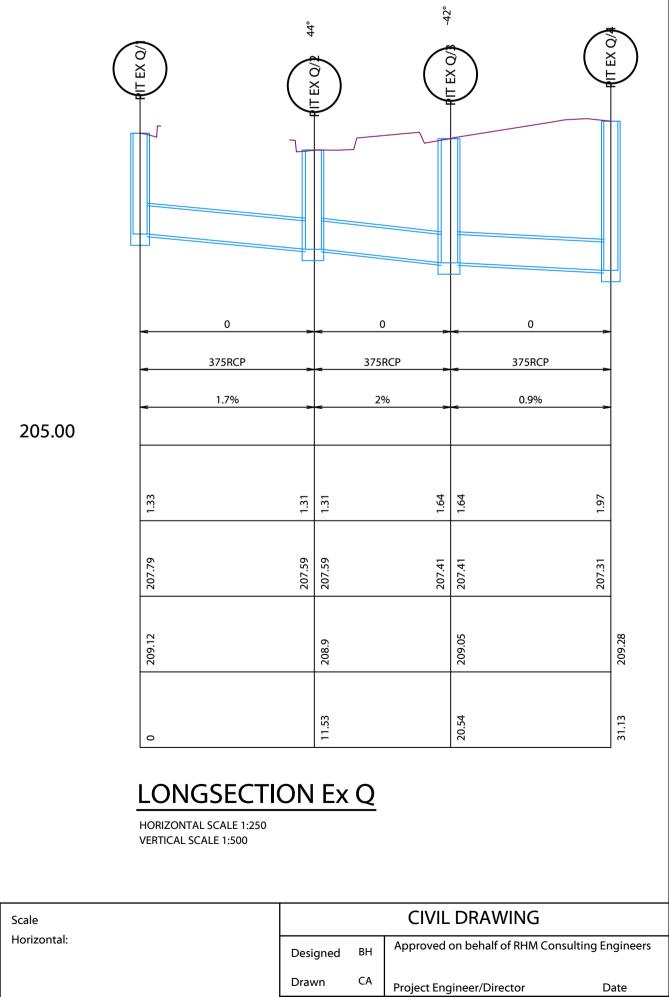
LONGSECTION Ex L6

HORIZONTAL SCALE 1:250 VERTICAL SCALE 1:500



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STORMWATER EXISTING PIPE LONG SECTIONS SHEET 1



Drawing No:

18-130- CD05.75 CD3

Datum

Date JULY 21

NIL

Rev

205.00

Scale

A1 SHE

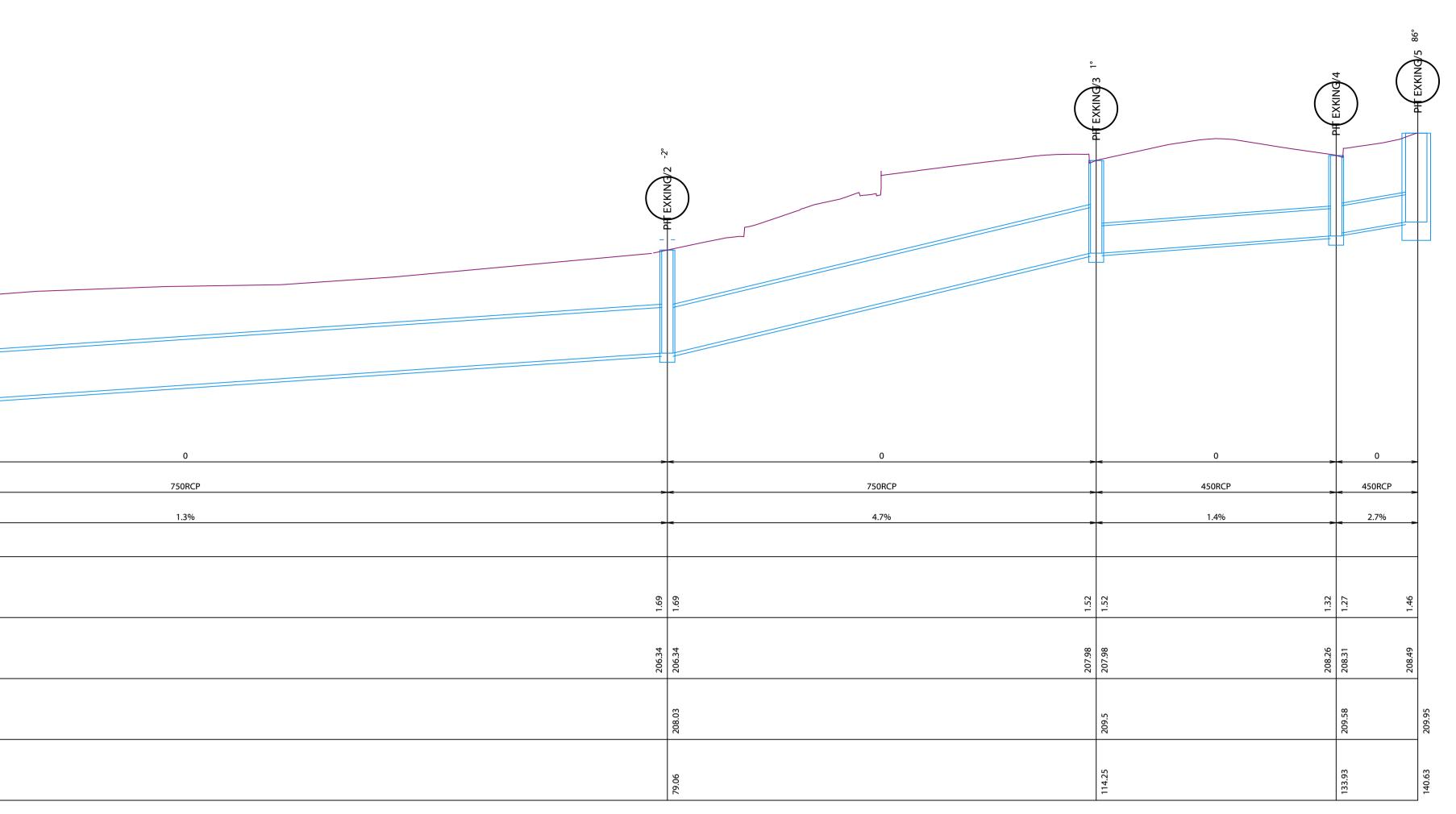
PIPE FLOW (m3/s)					
PIPE SIZE (mm) & TYPE					
PIPE GRADE		- 0		-	
		≤ 375RCP			
		= 1%		-	
DATUM R.L 204.00					203.00
DEPTH TO DESIGN SURFACE	1.97	1.97	1.71	1.71	
INVERT LEVEL	207.31	207.31	207.21	207.21	
DESIGN SURFACE LEVEL		209.28		208.92	
EXISTING STORMWATER CHAINAGE		31.13		41.15	

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(Inull)	
205.29	205.29
	0

LONGSECTION EX Q HORIZONTAL SCALE 1:250 VERTICAL SCALE 1:500 LONGSECTION ExKing

HORIZONTAL SCALE 1:250 VERTICAL SCALE 1:500

									UPPER HUNT	ER SHIRE
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208	Telephone: (02) Facsimile: (02) 6
CD3	CONCEPT DESIGN	24/12/21	CA						SCONE NSW 2337	Email: council@
CD2	CONCEPT DESIGN	03/11/21	CA							
CD1	CONCEPT DESIGN	09/08/21	CA							
REV	DESCRIPTION	DATE	ВҮ	REV	DESCRIPTION	DATE	BY			



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STORMWATER EXISTING PIPE PIPE LONG SECTIONS SHEET 2

Scale	CIVIL DRAWING						
Horizontal:	Designed BH		Approved on behalf of RHM Consulting Engineers				
	Drawn	CA	Project Engineer/Director Dat	e			
	Datum	NIL	Drawing No:	Rev			
	Date JU	JLY 21	18-130- CD05.76 C	D3			

0 PIPE FLOW (m3/s) 450RCP 450RCP PIPE SIZE (mm) & TYPE 1.5% 0.4% **PIPE GRADE** DATUM R.L 202.00 DEPTH TO DESIGN SURFACE 1.46 1.46 1.5 INVERT LEVEL 208.77 208.77 49 DESIGN SURFACE EXISTING STORMWATER CHAINAGE 59.7

LONGSECTION ExKing HORIZONTAL SCALE 1:250

VERTICAL SCALE 1:250

									UPPER HUNT	
CD3	CONCEPT DESIGN	24/12/21	СА					Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (Facsimile: (0 Email: counc
CD2	CONCEPT DESIGN	03/11/21	CA							
CD1	CONCEPT DESIGN	09/08/21	CA							
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

Vertical Geometry Grade (%) Vertical Grade Length			0 % 22.52m	Λ	
DATUM R.L.202.50		/			
DEPTH BELOW DESIGN	-209.51	-209.51		-209.87	-209.87
DESIGN LEVELS ON OUTLET PIPE CENTRELINE	0	0		0	0
DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE	209.51	209.51		209.87	209.87
CHAINAGE ON PIPE CENTRELINE	0	0		22.524	22.524

LONGSECTION Figtree Gully

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

HIRE COUNCIL Dife: (02) 6540 1100 Le: (02) 6545 2671 souncil@upperhunter.nsw.gov.au KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers Civil & Structural Consulting Engineers 137 Kelly Street, Scone NSW Tel (02) 6545 2800 Email rhmce@rhmce.com.au ABN 82 153 018 800

STORMWATER EXISTING PIPE PIPE LONG SECTIONS SHEET 3

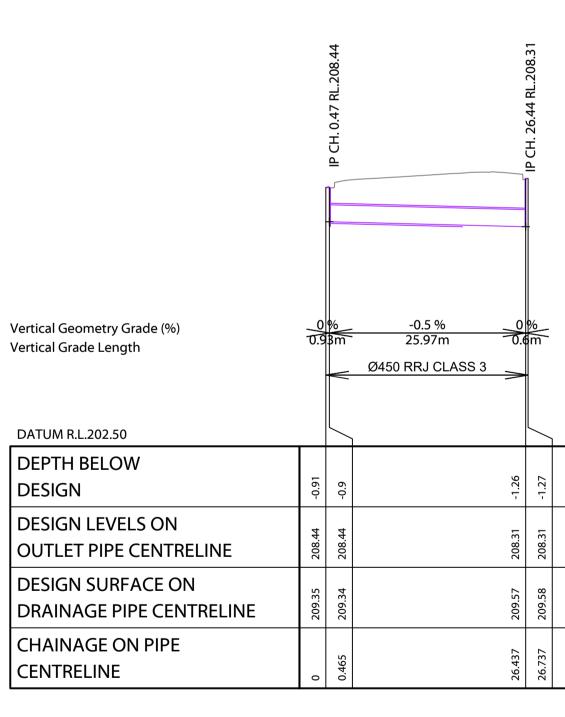
Scale	CIVIL DRAWING							
Horizontal:	Designed BH		Approved on behalf of RHM Consulting Engineers					
	Drawn	CA	Project Engineer/Director Date					
	Datum	NIL	Drawing No: R	Rev				
	Date JU	LY 21	18-130- CD05.77 CD	3				

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	IP CH. 0.47 RL.207.87	IP CH. 19.97 RL.207.67 IP CH. 20.9 RL.207.67 IP CH. 27.54 RL.207.6	IB EH: 38:03%2-31	IP CH. 62.66 RL.207.4 IP CH. 63.59 RL.207.4	P CH. 96.38 RL.207.23	P CH. 126.8 RL.207.05 IP CH. 127.73 RL.207.05 IP CH. 127.73 RL.207.05 IP CH. 139.62 RL.206.98 IP CH. 140.55 RL.206.98		IP CH. 186.55 KL.206.7 IP CH. 189.41 RL.206.6 IP CH. 189.41 RL.206.6 IP CH. 190.91 RL.206.6	
Vertical Geometry Grade (%) Vertical Grade Length	<u>0%</u> -1.03 % 0.93m 19.51m			-0.49 %0 % 22.63m 	-0.52 %0 %0.61 % 32.8m0 93m29.49m Ø600 RRJ CLASS 3	5 _0%0.59 %_0%_ n 0.93m 11.89m 0.93m	-0.62 %0 %0.62 % 32.22m0.93m 12.85m 0. 2xØ600 RRJ CLASS 3>	93705m 	-1.03 % 72.54n Ø1200 RRJ CLASS 4
DATUM R.L.202.50									
DEPTH BELOW DESIGN	-1.2	-1.27 -1.29 -1.62 -1.61	-1.13 -1.1	-1.14 -1.14	-1.4 -1.41 -1.42	-1.5 -1.49 -1.51 -1.52	-1.73 -1.75	-1.8 -1.97 -1.99 -2.04	
DESIGN LEVELS ON OUTLET PIPE CENTRELINE	207.87 207.87	207.67 207.67 207.6 207.6 207.6	207.51	207.4	207.23	207.05 207.05 206.98 206.98	206.7 206.78	206.7 206.6 206.6 206.506	
DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE	209.07 209.07	208.94 208.96 209.22 209.21	208.64 208.61	208.54	208.63	208.55 208.54 208.49 208.5	208.47 208.47	208.5 208.57 208.59 208.55 208.55	
CHAINAGE ON PIPE CENTRELINE	0 0.465	19.971 20.901 27.536 28.466	39.101 40.031	62.657	96.383 97.313 100	126.802 127.732 139.624 140.554	172.774 173.704 186.549	187.479 189.411 190.911 200	

LONGSECTION New A

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

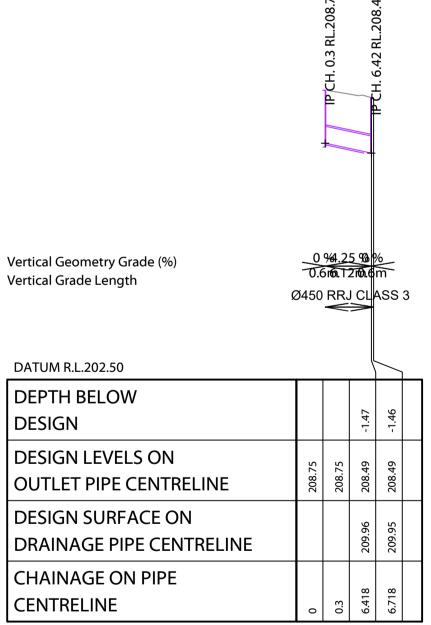


Vertical Grade Length

DATUM R.L.2
DEPTH B
DESIGN
DESIGN L
OUTLET F
DESIGN S
DRAINAG
CHAINAG
CENTREL

LONGSECTION New B HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

CD3 CD2		24/12/21	CA					Upper Hunter	UPPER HUNT 130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	TER SHIRE COUNCIL Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337	
CD1		09/08/21	CA					-			COPYRIGHT All rights reserved.	
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY				These drawings, plans and specifications and the copyright therein are the property of RHM Consulting Engineers and must not be used, reproduced or copied wholly or in part without the written permission of RHM Consulting Engineers.	\bigcirc



LONGSECTION New BB1

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

Vertical Geometry Grade (%) Vertical Grade Length DATUM R.L.202.50		72.81 5533 RR.↓	30nor	n	3
DEPTH BELOW					
DESIGN	5	-0.99	-1.04	-1.02	
DESIGN LEVELS ON	97	97	82	82	
OUTLET PIPE CENTRELINE	208.97	208.97	208.82	208.82	
DESIGN SURFACE ON	97	96	86	84	
DRAINAGE PIPE CENTRELINE	209.97	209.96	209.86	209.84	
CHAINAGE ON PIPE			4	4	
CENTRELINE	0	0.3	5.634	5.934	

LONGSECTION New BB2

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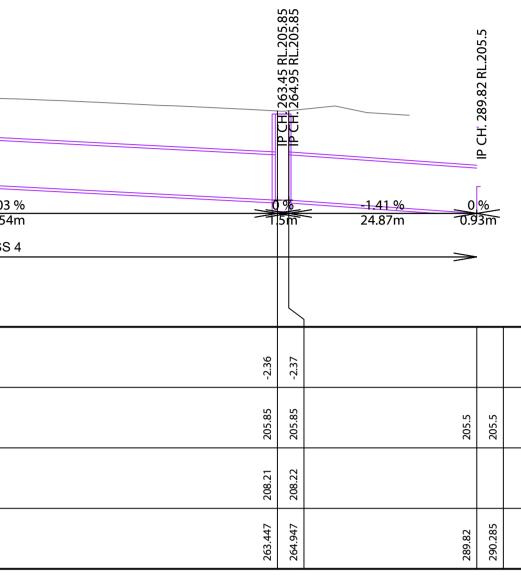
HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

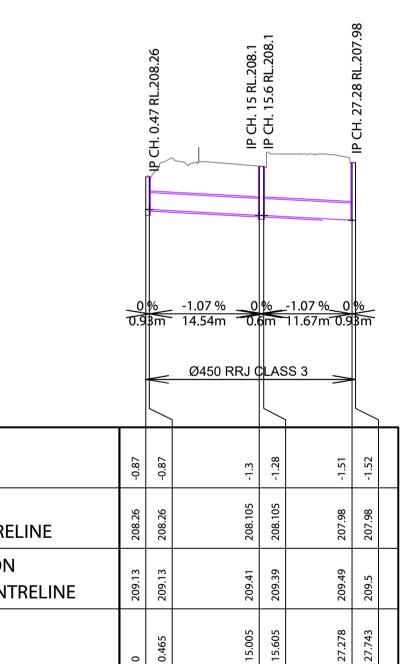
Vertical Geometry Grade (%) Vertical Grade Length

DATUM R.L.202.50
DEPTH BELOW
DESIGN
DESIGN LEVELS ON
OUTLET PIPE CENTRE
DESIGN SURFACE ON
DRAINAGE PIPE CENT
CHAINAGE ON PIPE
CENTRELINE

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

STORMWATER NEW PIPE PIPE LONG SECTIONS SHEET 1





LONGSECTION New C

Scale	CIVIL DRAWING								
Horizontal:	Designed	BH	Approved on behalf of RHM Consulting Engineers						
	Drawn	CA	Project Engineer/Director Date						
	Datum	NIL	Drawing No: Rev						
	Date JUL	Y 21	18-130-CD05.78 CD3						

		IP CH. 0.47 RL.207.55		5	IP CH. 35.1 RL.207.34	IP CH 4643 RI 20726	IP CH. 47.36 RL.207.26	10 CH 53 13 DI 207 22	IP CH. 54.36 RL.207.22	IP CH. 58.6 RL.207.18 IP CH. 59.53 RI 207.18			IP CH. 68.36 RL.207.13 IP CH. 69.29 RL.207.13		IP CH. 81.01 RL.207.05
Vertical Geometry Grade (%) Vertical Grade Length	0/0.	% 3m	-0.62 % 33.7m	0	% 3m	<u>0.71 %_0</u> 11.33m 0.9	940.6 3 60 0	i6.90	43.94 3 na 3	10% 0.93r	-0.5 118.84	7 <u>% 0</u> 4m0.9	% 3m	0.68 %0 11.72m 0.9	% %
DATUM R.L.202.50			Ø450 RRJ CLASS 3	N		5	Q	<u>7600</u>	RR.		ASS	3		~>	
DEPTH BELOW DESIGN	-1.24	-1.24		-1.3	-1.31	-1.38	-1.36	-1.33	-1.32	-1.4	-1.42	-1.84	-1.83	-1.52	-1.49
DESIGN LEVELS ON OUTLET PIPE CENTRELINE	207.55	207.55		207.34	207.34	207.26	207.26	207.22	207.22	207.18	207.18	207.13	207.13	207.05	207.05
DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE	208.79	208.79		208.64	208.65	208.64	208.62	208.55	208.54	208.58	208.6	208.97	208.96	208.57	208.54
CHAINAGE ON PIPE CENTRELINE	0	0.465		34.166	35.096	46.43	47.36	53.434	54.364	58.598	59.528	68.365	69.295	81.012	81.477

LONGSECTION New D

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

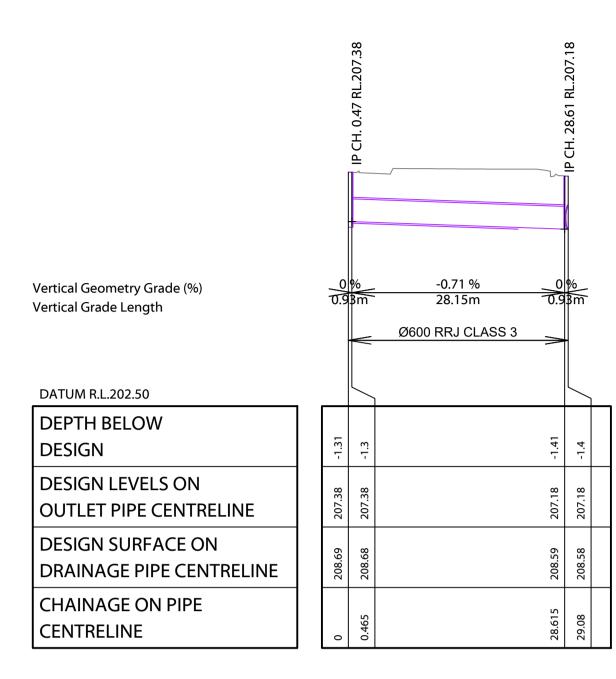
> ~ 22 66 49.27 RL 50.2 RL IP CH. -1.43 % 48.8m <u>0</u>% -1.25 % <u>0</u> 0.93m 14.4m 0.9 0.98r Ø450 RRJ CLASS 3 26 209.8 209.8 04 211

		LO	UV I							
				SCALE 1:50 LE 1:100	0					
CD3 CD2 CD1	CONCEPT DESIGN CONCEPT DESIGN CONCEPT DESIGN	24/12/21 03/11/21 09/08/21	CA CA CA					Upper Hunter	UPPER HUNT 130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6540 Facsimile: (02) 6545 2 Email: council@uppe
REV	DESCRIPTION	DATE	ВҮ	REV	DESCRIPTION	DATE	ВҮ			

Vertical Geometry Grade (%) Vertical Grade Length

DATUM R.L.202.50 DEPTH BELOW DESIGN DESIGN LEVELS ON OUTLET PIPE CENTRELINE DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE CHAINAGE ON PIPE

CENTRELINE



LONGSECTION New E

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

IP CH. 64.59 RL.208.92	IP CH. 69.13 RL.208.85			IP CH. 118.24 RL.208.37	IP CH. 119.17 RL.208.37	IP CH 129 95 RI 208 25	H P CH. 130.88 RL 208.25 IP CH. 131.99 RL 208.15			
0-%94	0166		-1 % 48.18m		%	<u>-1.11 % _9</u> 10.78m 0.8				
	79 3m		48.18m Ø600 RRJ CL		3m	10.78m 0.9		in		
-1.42 -1.41	-1.39	-1.37	-1.24	-1.09	-1.1	-1.28	-1.3	-1.39	-1.39	
208.92 208.92	208.85	208.85	208.552	208.37	208.37	208.25	208.25	208.15	208.15	
210.34 210.33	210.24	210.22	209.79	209.46	209.47	209.53	209.55	209.54	209.54	
64.592 65.522	69.126	70.056	100	118.236	119.166	129.949	130.879	131.987	132.452	

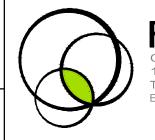
		IP CH. 0.47 RL.209.72		IP CH. 22.11 BL 209.49	P CH. 23.04 RL.209.49
Vertical Geometry Grade (%) Vertical Grade Length	-0 10.9	∲⁄₀ 3m	-1.06 % 21.64m	0.9	% 3m
			Ø450 RRJ CLASS 3_		
			-		
DATUM R.L.202.50		<u> </u>]		\leq
DEPTH BELOW				4	4
DESIGN	-1.21	-1.2		-1.24	-1.24
DESIGN LEVELS ON	72	72		49	49
OUTLET PIPE CENTRELINE	209.72	209.72		209.49	209.49
DESIGN SURFACE ON	93	92		73	73
DRAINAGE PIPE CENTRELINE	210.93	210.92		210.73	210.73
CHAINAGE ON PIPE		5		90	36
CENTRELINE	0	0.465		22.106	23.036

LONGSECTION New G

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

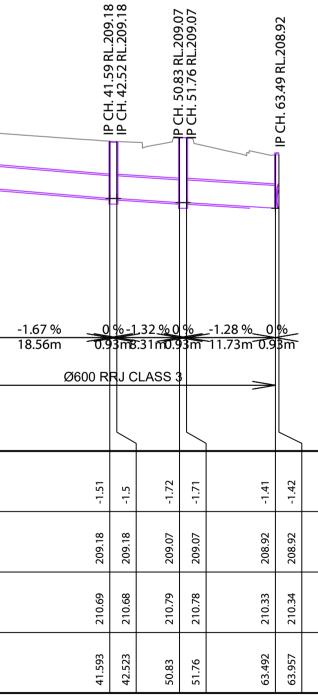
FER SHIRE COUNCIL
Telephone: (02) 6540 1100
Facsimile: (02) 6545 2671
Email: council@upperhunter.nsw.gov.au

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



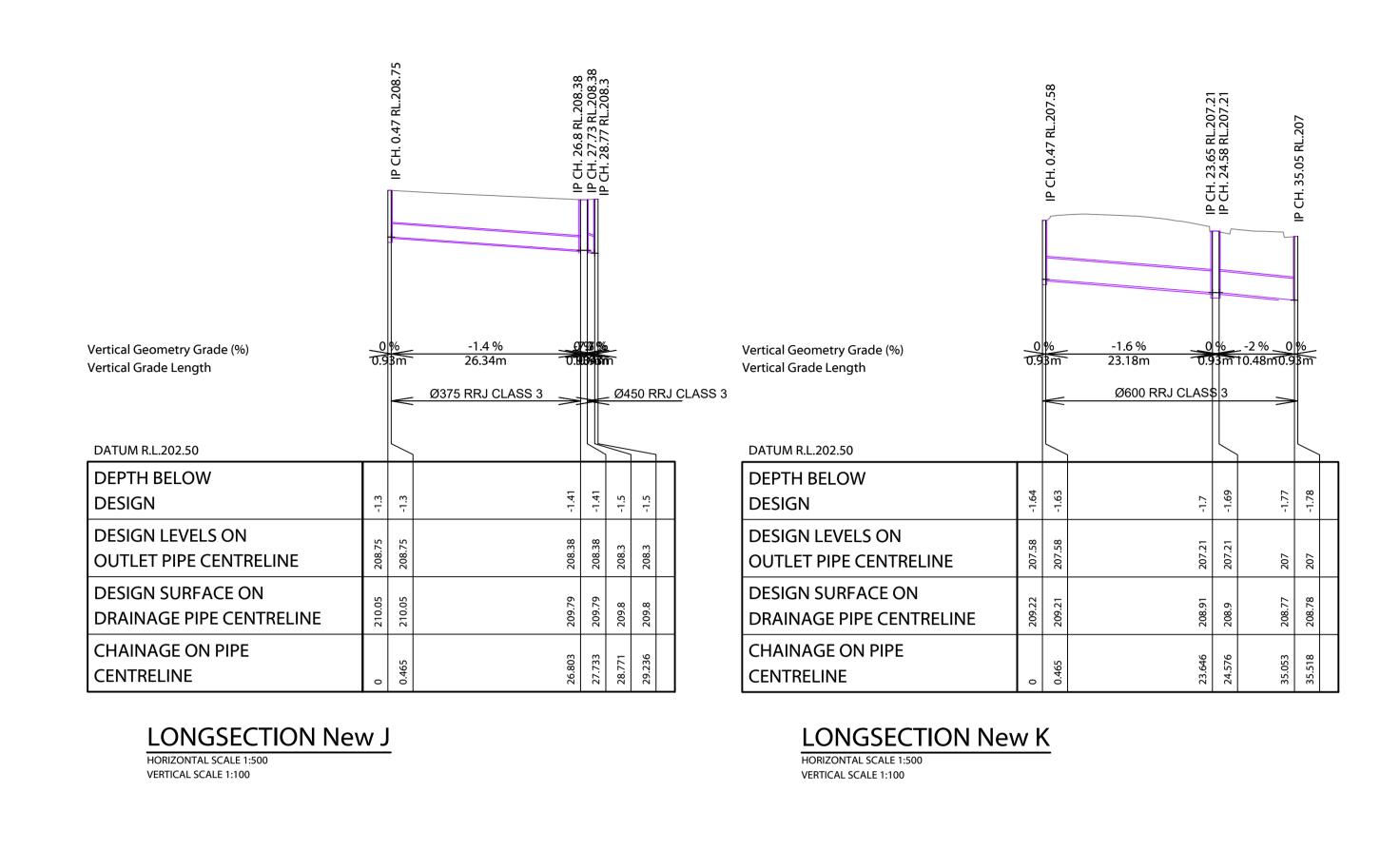
RHM Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

STORMWATER NEW PIPE PIPE LONG SECTIONS SHEET 2



	-								
Scale	CIVIL DRAWING								
Horizontal:	Designed	BH	Approved on behalf of RHM Consulting Engineers						
	Drawn	CA	Project Engineer/Director Date						
	Datum	NIL	Drawing No: Rev	v					
	Date JU	ILY 21	18-130- CD05.79 CD3	3					



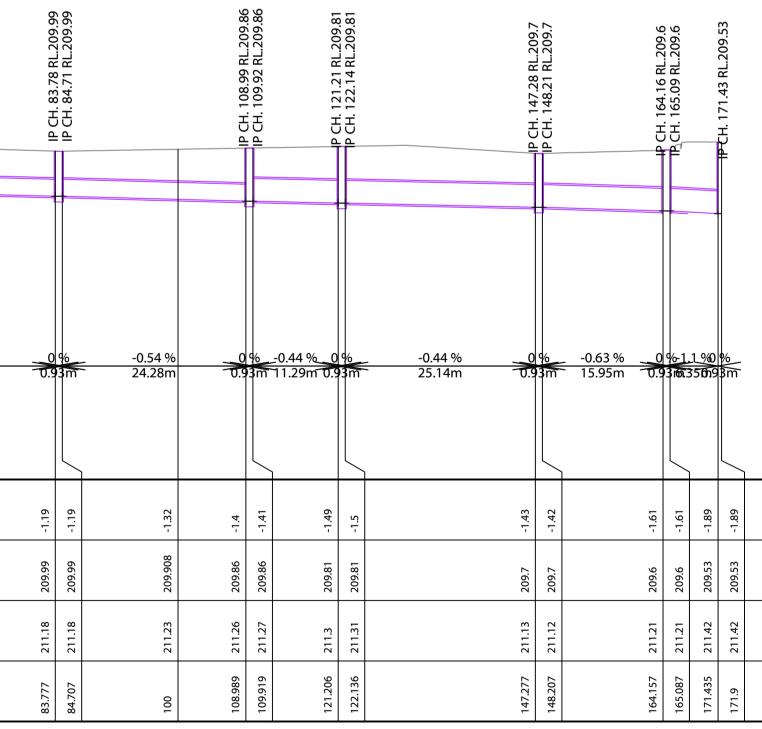


		IP CH. 0.47 RL.210.45	IP CH. 40.94 RL.210.2	IP CH. 41.87 RL.210.2	
Vertical Geometry Grade (%) Vertical Grade Length	0/0	% 23m	-0.62 % 40.48m	% 3m	-0.5 % 41.9m
DATUM R.L.202.50					1
DEPTH BELOW DESIGN	-1.26	-1.25	-1.23	-1.22	
DESIGN LEVELS ON OUTLET PIPE CENTRELINE	210.45	210.45	210.2	210.2	
DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE	211.71	211.7	211.43	211.42	
CHAINAGE ON PIPE CENTRELINE		0.465	40.943	41.873	

LONGSECTION New L

HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

									UPPER HUNT	ER SHIRE C
								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 6540 Facsimile: (02) 6545 2 Email: council@uppe
CD3 CD2	CONCEPT DESIGN CONCEPT DESIGN	24/12/21 03/11/21	CA CA					_		
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Vertical Geometry Grade (%) Vertical Grade Length

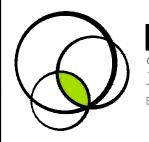
DATUM R.L.202.50 DEPTH BELOW DESIGN DESIGN LEVELS ON 208.1 208.1 OUTLET PIPE CENTRELINE DESIGN SURFACE ON 209. DRAINAGE PIPE CENTRELINE CHAINAGE ON PIPE CENTRELINE

LONGSECTION New M HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

HIRE COUNCIL
one: (02) 6540 1100 ile: (02) 6545 2671 council@upperhunter.nsw.gov.au

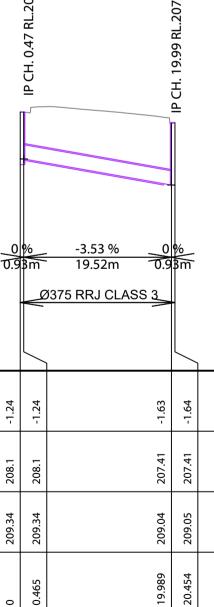
onsulting Engineers.

KELLY STREET REVITALISATION PROJECT SCONE NSW 2337



RHM Consulting Engineers Civil & Structural Consulting Engineers

137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auwww.rhmce.com.au ABN 82 153 018 800 STORMWATER NEW PIPE PIPE LONG SECTIONS SHEET 3



Scale	CIVIL DRAWING						
Horizontal:	Designed	BH	Approved on behalf of RHM Consulting Engir				
	Drawn	CA	Project Engineer/Director	Date			
	Datum	NIL	Drawing No:	Rev			
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								Upper Hunter
CD3	CONCEPT DESIGN	24/12/21	CA					
CD2	CONCEPT DESIGN	03/11/21	CA					
CD1	CONCEPT DESIGN	09/08/21	CA					
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY	

LONGSECTION New Q



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 SCONE
 NSW 2337
 Email: council@upperhunter.nsw.gov.au

		_			-
Vertical Geometry Grade (%) Vertical Grade Length	0/p9	% 3m	-1.03 % 19.44m Ø375 RRJ CLAS	0 0.9 S 3	%) 3 1
	<u> </u>				
DEPTH BELOW DESIGN				-1.34	-1.32
DESIGN LEVELS ON OUTLET PIPE CENTRELINE	210.23	210.23		210.03	210.03
DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE				211.37	211.35
CHAINAGE ON PIPE CENTRELINE	0	0.465		19.906	20.371

LONGSECTION New N HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

0.23

Vertical Geometry Grade (%) 0% -0.96 % 0%0.75 %0 % -0.85 % 0% Vertical Grade Length 0% -0.96 % 0%0.75 %0 % -0.85 % 0% Datum R.L.202.50 0 0% -0.96 % 0%0.75 %0 % -0.85 % 0% Datum R.L.202.50 0 571 581 58602 5711 9811 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 5711 58602 57117 58602 57117 58602 57117 58602 57117 58602 57117 58702 587117 58602 57117 <			IP CH. 0.47 RL.210.3		IB EH: 33.95 RL:218		🚽 IB EH: 38:34 RE:289:95		IP CH. 50.98 RL.209.86
DATUM R.L.202.50 Ø450 RRJ CLASS 3 DEPTH BELOW 521: DESIGN 571: DESIGN LEVELS ON 6012 OUTLET PIPE CENTRELINE 511: DESIGN SURFACE ON 51: DESIGN SURF					0				
DEPTH BELOW DESIGN 211:55 2103 -1.25 DESIGN LEVELS ON 000000000000000000000000000000000000	Vertical Grade Length	0/9. 9.9					9% 33m	<u>-0.85 % 0</u> 10.63m0.9	
DESIGN LEVELS ON OUTLET PIPE CENTRELINE21155 211552103 21155DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE21152 2112820366 2117221172920366 2036620366 21172211729203686 20368203686 									
OUTLET PIPE CENTRELINE 21155 2103 DESIGN SURFACE ON 51152 51152 5036 DRAINAGE PIPE CENTRELINE 51152 51152 5036 CHAINAGE ON PIPE 51128 50366 50366	DESIGN	-1.25	-1.25	-1.44	-1.46	-1.82	-1.84	-1.42	-1.4
DRAINAGE PIPE CENTRELINE 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 12 1		210.3	210.3	210	210	209.95	209.95	209.86	209.86
CHAINAGE ON PIPE 0 0 33.849 0.465 0.465 33.779 0.465 0.465 33.415 33.415 40.345 51.444 51.444 51.444		211.55	211.55	211.44	211.46	211.77	211.79	211.28	211.26
		0	0.465	31.849	32.779	39.415	40.345	50.979	51.444

03

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PROJECT SCONE NSW 2337

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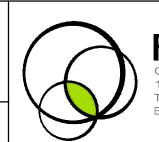


RHM Consulting Engineers

137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

STORMWATER NEW PIPE PIPE LONG SECTIONS SHEET 4

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KELLY STREET REVITALISATION

CHAINAGE ON PIPE CENTRELINE LONGSECTION New P HORIZONTAL SCALE 1:500 VERTICAL SCALE 1:100

					IP CH. 29.54 RL.210	
Vertical Geometry Grade (%)	0.93	6	-0.69 %		‰ 3m	
Vertical Grade Length	0.95	m	29.07m	0.9	\$m	
		<	Ø450 RRJ CLASS 3	->	-	
DATUM R.L.202.50	L	\leq				
DEPTH BELOW		_		_	_	
DESIGN	-1.14	-1.14		-1.44	-1.44	
DESIGN LEVELS ON		0				
OUTLET PIPE CENTRELINE	210.2	210.2		210	210	
DESIGN SURFACE ON	4	4		4	4	
DRAINAGE PIPE CENTRELINE	211.34	211.34		211.44	211.44	
CHAINAGE ON PIPE				<u>%</u>	11	
CENTRELINE	0	0.465		29.536	30.001	

LONGSECTION New O

VERTICAL SCALE 1:100

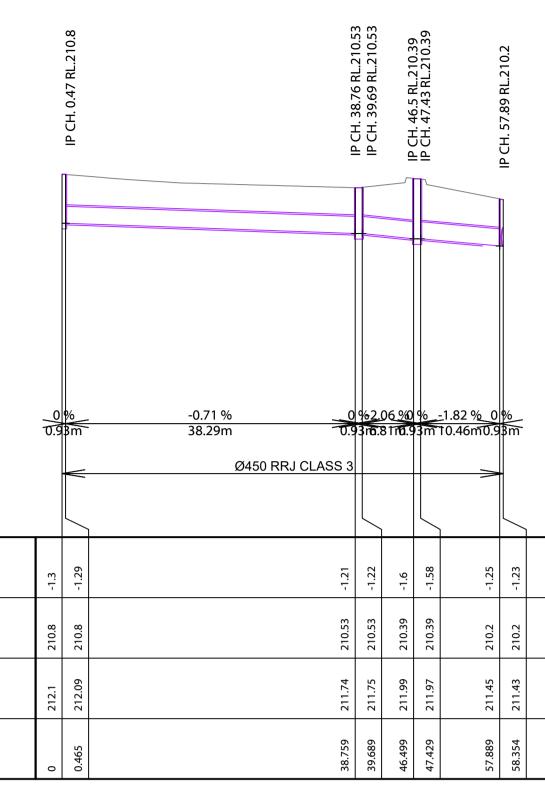
DATUM R.L.202.50
DEPTH BELOW
DESIGN

Vertical Geometry Grade (%)

Vertical Grade Length

LDIGI DESIGN SURFACE ON DRAINAGE PIPE CENTRELINE

DESIGN LEVELS ON OUTLET PIPE CENTRELINE



Scale	CIVIL DRAWING							
Horizontal:	Designed	ВН	Approved on behalf of RHM Consulting Engineers					
	Drawn	CA	Project Engineer/Director Date					
	Datum	NIL	Drawing No: Rev					
		LY 21	18-130- CD05.81 CD3					

FABRICATED STEEL GRATE TO AS 3996 REFER TO PIT SCHEDULE FOR SIZE AND CLASS — STANDARD 100 THICK PRECAST **R.C. JUNCTION PIT COVER WITH** REMOVABLE INSERT. R.L. OF TOP OF COVER TO MATCH SURROUNDING GROUND LEVEL. COVER SIZE TO DETAIL AT ASPHALT PAVEMENT DETAIL AT CONCRETE PAVEMENT/FLOOR MATCH PIT - REFER PIT SCHEDULE FOR INTERNAL SIZE CONCRETE COLLAR TO PERIMETER AT TOP OF PIT (20 CHAMFER) - 90 U.P.V.C. – 90 U.P.V.C. - SL82 MESH FABRIC CENTRAL AG. DRAIN AG. DRAIN - SL82 MESH FABRIC CENTRAL (REFER NOTE BELOW) (REFER NOTE BELOW) - SHAPE INVERT OF PIT SHAPE INVERT OF PIT A (x B) A (x B) REFER SCHEDULE ON DWG C06.100 REFER SCHEDULE NOTES: NOTES: 1. PROVIDE 600mm LENGTH OF 90mm DIA. AGRICULTURAL PIPE CAST THROUGH UPSTREAM WALL OF PIT WITH GEOTEXTILE OR 1. PROVIDE 600mm LENGTH OF 90mm DIA. AGRICULTURAL PIPE SIMILAR FILTER OVER. CAST THROUGH UPSTREAM WALL OF PIT WITH GEOTEXTILE OR 2. REINFORCEMENT NOT REQUIRED IF DEPTH OF PIT IS LESS THAN 1000mm. SIMILAR FILTER OVER. 2. REINFORCEMENT NOT REQUIRED IF DEPTH OF PIT IS LESS THAN 1000mm. 3. PROVIDE STEP IRONS AT 300mm MAX. CTS. IF DEPTH OF PIT EXCEEDS 1000mm 3. PROVIDE STEP IRONS AT 300mm MAX. CTS. IF DEPTH OF PIT EXCEEDS 1000mm **STANDARD JUNCTION PIT (R.C. COVER) STANDARD JUNCTION PIT** SCALE 1:20 (GRATE COVER) SCALE 1:20 WHERE DEPTH EXCEEDS 1200mm PROVIDE G.I STEEL STEP IRONS AT 300 c/cFROM TOP TO 860 x 690mm BOTTOM OF PIT. OPENING C.J C.J **REFR REINFORCEMENT** SCHEDULE 90 U.P.V.C. AG. DRAIN (w) SECTION (w) 910 MIN SCALE 1:20 'C.J' - DENOTES CONSTRUCTION JOINT PLAN OF PIT 'I.V' - DENOTES INVERT LEVEL OF PIPE. CAST IN-SITU PIT DETAILS PIT PIT REINFORCEMENT SCHEDULE DEPTH (d) mm BASE/ WALL PLAN DIMENSION (w) mm THICKNESS (t) mm **BASE/ WALL REINFORCEMENT** > 1200 < 1790 > 2400 < 2690 < 1190 > 1800 < 2390 SL82 MESH CENTRAL < 1800 150 N12-250 CENTRAL N12-250 CENTRAL N12-250 CENTRAL > 1800 175 N12-250 CENTRAL N12-250 CENTRAL N12-200 CENTRAL N12-200 CENTRAL < 3000 225 N12-250 CENTRAL N12-200 CENTRAL N12-150 CENTRAL N12-150 CENTRAL * NOTE: 1. ALL PIPES TO BE (MIN) 150mm CLEAR OF ALL INTERNAL CORNERS OF PITS. 2. MINIMUM COVER TO REINFORCEMENT 50mm. 3. F'c = 25 MPa AT 28 DAYS. 4. ALL SUB-SOIL DRAINS TO BE PLACED FOR A DISTANCE OF 4 metres FROM EACH WEEP HOLE. 5. WALL THICKNESS IN CHIMNEY TO BE ADJUSTED TO SUIT TYPE OF PIT LID.

> 24/12/21 CA DATE DATE REV DESCRIPTION BY

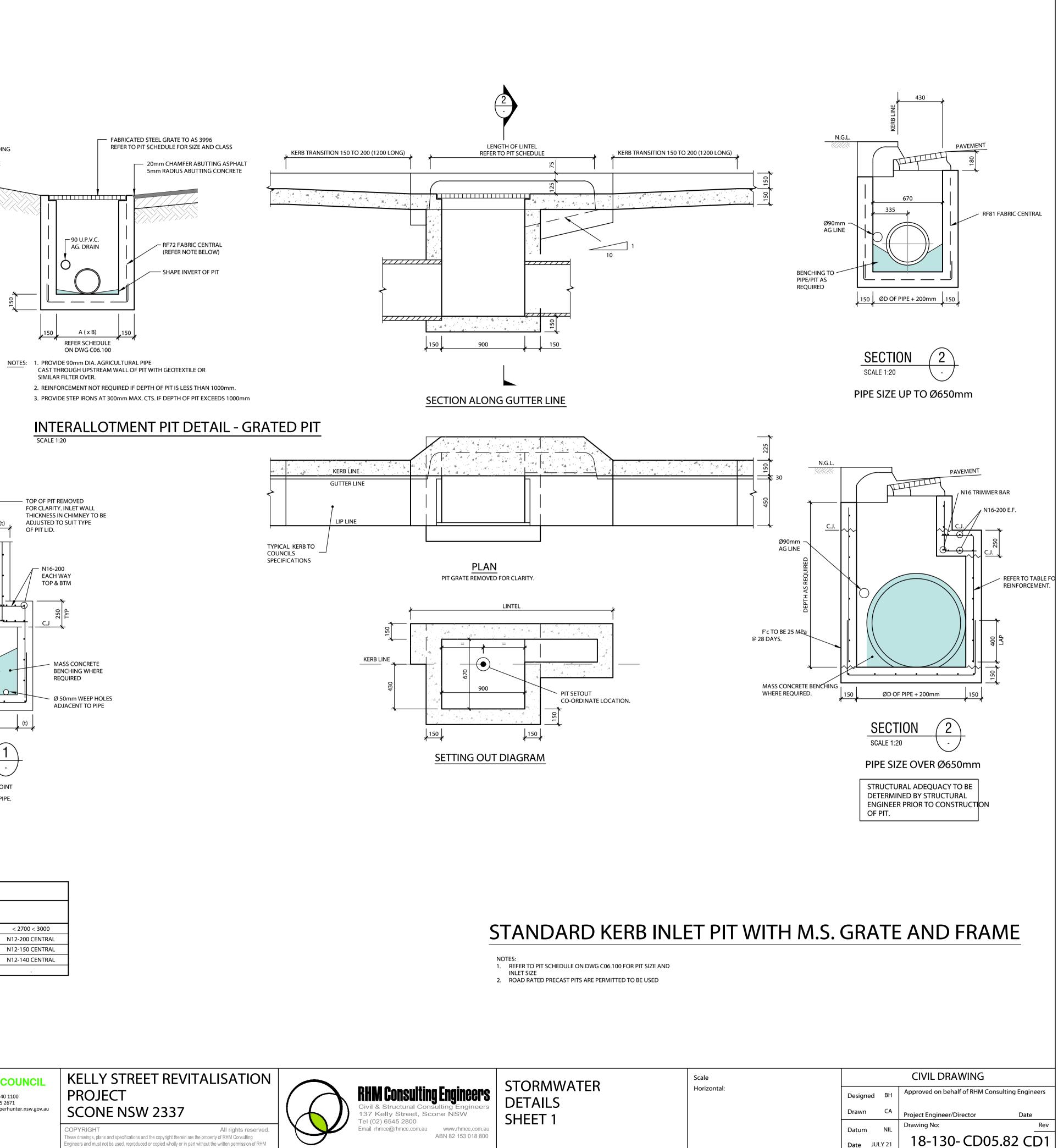
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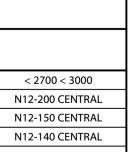
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UPPER HUNT	ER SHIRE
130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: (02) 65 Facsimile: (02) 654 Email: council@up
	130 LIVERPOOL STREET P.O. BOX 208

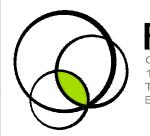
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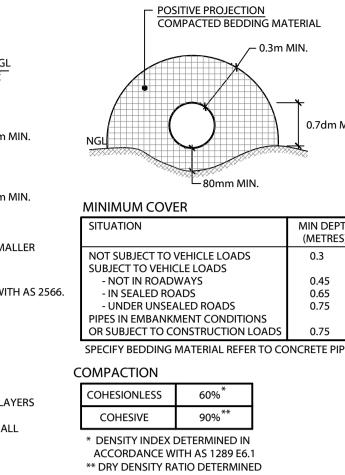
ER SHIRE COUNCIL Telephone: (02) 6540 1100 Facsimile: (02) 6545 2671 Email: council@upperhunter.nsw.gov.au	KELLY STREET REVITALISATION PROJECT SCONE NSW 2337						
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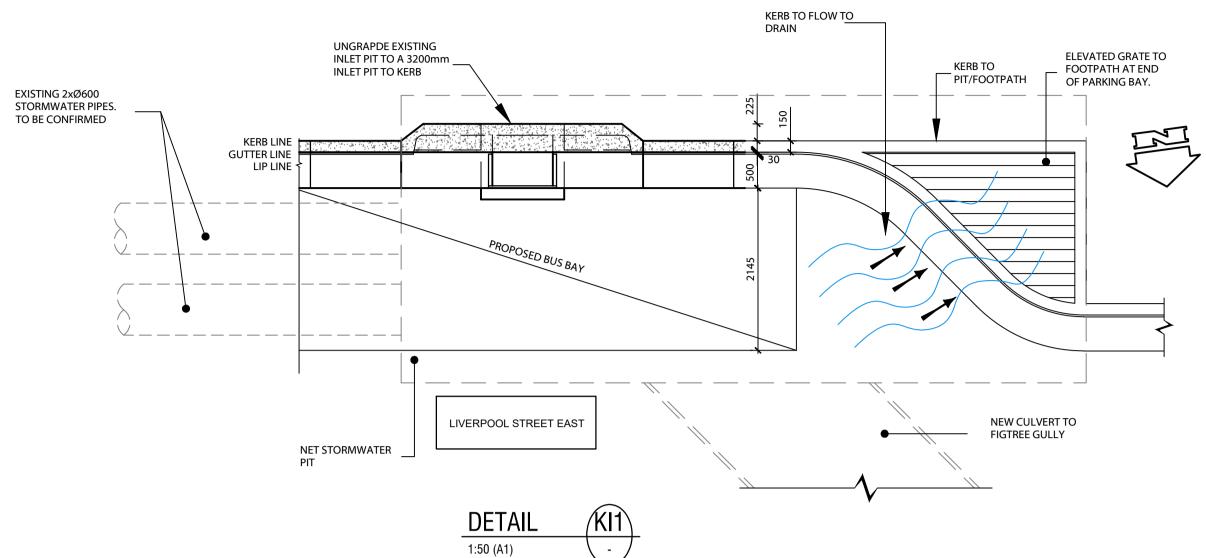
onsulting Engineers



BED 8	A HAUNCH	S	ELECT	SELECT FILL	300		
SIEVE	WT PASSING %	SIEVE	WT PASSING %		150mm MIN.	NGL	
19	100	19	100	BEDDING MATERIAL			
2.36	100-50	9.50	100-50	r () () () () () () () () () (150mm MIN.		─ 80mm MIN.
0.60	90-20	2.36	100-30		~	MINIMUM COVE	
0.30	60-10	0.60	50-15	* - *		SITUATION	MIN (M
0.15	25-0	0.075	25-0	Z = dm + 0.2m OR 2dm WHICHEV d = PIPE DIAMETER	/ER IS SMALLER	NOT SUBJECT TO V	
	SELECT FILL COMPACTED FILL	BED (* DEM ACC ** DR	ZONE COMPACTION & HAUNCH 60%* SIDE COHESIONLESS 60%* COHESIVE 90%** NSITY INDEX DETERMINED IN CORDANCE WITH AS 1289 E6.1 Y DENSITY RATIO DETERMINED CCORDANCE WITH AS 1289 E4.1	DENSITY OF FILL MATERIAL kg/m SATURATED CLAY 210 NORMAL CLAY 190 SANDY CLAY 180 CLAYEY SAND 160 LOOSE GRANULAR MATERIAL 150 - COMPACTION SHALL BE CARRIED NOT EXCEEDING 150mm. FOR PIPE DIAMETER < 250mm LAYER THICKIN NOT EXCEED 80mm.	0 0 0 0 OUT IN LAYERS ES WITH NESS SHALL	OR SUBJECT TO CO SPECIFY BEDDING N COMPACTION COHESIONLESS COHESIVE * DENSITY INDEX D ACCORDANCE WI ** DRY DENSITY RA IN ACCORDANCE	TH AS 1289 E6.1 TIO DETERMINED WITH AS 1289 E4.1
		HAUNCH		BED & HAU	JNCH	SE	LECT
				SIEVE	WT PASSING %	SIEVE	WT PASSING %
≥ 0.2d				19	100	19	100
¹ ≥ 0.3m ¹				2.36	100-50	9.50	100-50
	500 OR 150 IF > 1500.			0.60	90-20	2.36	100-30
Y = 0.3d				0.30	60-10	0.60	50-15
				0.15	25-0	0.075	25-0
			VIL- PIPE BEDD	0.075	10-0		
TO SCALE	ER DRAINA	GE DETA	AL- PIPE BEDD	0.15	25-0		

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								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208 SCONE NSW 2337	Telephone: Facsimile: (I Email: coun
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KELLY STREET REVITALISATION HIRE COUNCIL PROJECT ،one: (02) 6540 1100 iile: (02) 6545 2671 council@upperhunter.nsw.gov.au SCONE NSW 2337



RHM Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

STORMWATER DETAILS SHEET 2

Scale			CIVIL DRAWING	
Horizontal:	Designed	вн	Approved on behalf of RHM Consulting	ng Engineers
	Drawn	CA	Project Engineer/Director	Date
	Datum	NIL	Drawing No:	Rev
	Date JU	JLY 21	18-130- CD05.8	3 CD1

PIT & GRATE SCHEDULE FOR ALL DRAINAGE FEATURES, OUTLETS AND COLLECTION PITS

	Discharge to:	Pit Type	Grate Type	Grate Level	Invert Level	Pit Depth	Comment
Pit EXKING/7	KINGDON ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	Infill Gatic Cover	210.07	208.82	1.25	Bed pit with mass concrete as re achieve pipe invert level. Seal inter between pipe outlet and pit wall.
PIT EXKING/6	KINGDON ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA2 (L)	209.97	208.77	1.20	resurfaced to suit footpath level. Bed pit with mass concrete as re achieve pipe invert level. Seal int between pipe outlet and pit wall.
PIT 1/New BB1	KINGDON ST OUTLET	900 x 900 x 1600 Deep Concrete Pit	SAS	210.15	208.60	1.55	resurfaced to suit design level. Bed pit with mass concrete as re achieve pipe invert level. Seal into between pipe outlet and pit wall.
PIT 1/New BB2	KINGDON ST OUTLET	900 x 900 x 1100 Deep Concrete Pit	SA2 (R)	209.93	208.97	0.96	Bed pit with mass concrete as re achieve pipe invert level. Seal int between pipe outlet and pit wall.
PIT EXKING/5	KINGDON ST OUTLET	900 x 900 x 1100 Deep Concrete Pit	Infill Gatic Cover	209.45	208.49	0.96	Bed pit with mass concrete as re achieve pipe invert level. Seal int between pipe outlet and pit wall. resurfaced to suit footpath level.
PIT EXKING/4	KINGDON ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SAS	209.55	208.31	1.24	Bed pit with mass concrete as re achieve pipe invert level. Seal int between pipe outlet and pit wall. resurfaced to suit design level.
PIT EXKING/2	KINGDON ST OUTLET	1200 x 1200 x 2000 Deep Concrete Pit	SA2 (R)	208.20	206.34	1.86	Replace existing pit and kerb inle with mass concrete as required pipe invert level. Seal intefrace b pipe outlet and pit wall.
PIT 1/ New B	KINGDON ST OUTLET	900 x 900 x 1000 Deep Concrete Pit	SA3 (L)	209.35	208.44	0.91	Bed pit with mass concrete as re achieve pipe invert level. Seal int between pipe outlet and pit wall.
PIT 1/ New C	KINGDON ST OUTLET	900 x 900 x 900 Deep Concrete Pit	SA3 (R)	209.13	208.31	0.82	Bed pit with mass concrete as re achieve pipe invert level. Seal int between pipe outlet and pit wall.
PIT 2/New C	KINGDON ST OUTLET	1200 x 1200 x 1500 Deep Concrete Pit	SA3 (R)	209.36	207.98	1.38	Replace existing pit and kerb inle with mass concrete as required pipe invert level. Seal intefrace b pipe outlet and pit wall.
		PIT SCHEI	DULE - LIVERF	POOL ST OU	ITLET		
PIT 1/ New A	LIVERPOOL ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA3 (R)	209.04	207.87	1.17	Bed pit with mass concrete as r achieve pipe invert level. Seal in between pipe outlet and pit wall.
PIT 2/ New A	LIVERPOOL ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA3 (R)	208.89	207.67	1.00	Bed pit with mass concrete as n achieve pipe invert level. Seal int
				200.03	201.01	1.22	between pipe outlet and pit wall.
PIT 3/ New A	LIVERPOOL ST OUTLET	900 x 900 x 1600 Deep Concrete Pit	Gatic Cover	209.07	207.60	1.22	Bed pit with mass concrete as re achieve pipe invert level. Seal int
PIT 3/ New A PIT 4/ New A		900 x 900 x 1600 Deep Concrete Pit 900 x 900 x 1200 Deep Concrete Pit	Gatic Cover				Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. resurfaced to suit finished level. Bed pit with mass concrete as reaching the pit with mass concrete as reachi
	OUTLET			209.07	207.60	1.47	Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. resurfaced to suit finished level. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe outlet and pit wall.
PIT 4/ New A	OUTLET	900 x 900 x 1200 Deep Concrete Pit	SA3 (L)	209.07 208.60	207.60 207.51	1.47	Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall, resurfaced to suit finished level. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into
PIT 4/ New A PIT 5/New A	OUTLET	900 x 900 x 1200 Deep Concrete Pit 900 x 900 x 1200 Deep Concrete Pit	SA3 (L) SAS	209.07 208.60 208.52	207.60 207.51 207.40	1.47 1.09 1.12	 Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. resurfaced to suit finished level. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall.
PIT 4/ New A PIT 5/New A PIT 6/ New A	OUTLET LIVERPOOL ST OUTLET LIVERPOOL ST OUTLET LIVERPOOL ST OUTLET	900 x 900 x 1200 Deep Concrete Pit 900 x 900 x 1200 Deep Concrete Pit 900 x 900 x 1400 Deep Concrete Pit	SA3 (L) SAS	209.07 208.60 208.52 208.53	207.60 207.51 207.40 207.23	1.47 1.09 1.12 1.30	Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. resurfaced to suit finished level. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall.
PIT 4/ New A PIT 5/New A PIT 6/ New A	OUTLET UNERPOOL ST OUTLET	900 x 900 x 1200 Deep Concrete Pit 900 x 900 x 1200 Deep Concrete Pit 900 x 900 x 1400 Deep Concrete Pit 2000 x 2000 x 1600 Deep Concrete Pit	SA3 (L) SAS SAS SAS SAS	209.07 208.60 208.52 208.53 208.53	207.60 207.51 207.40 207.23 207.05	1.47 1.09 1.12 1.30 1.53	Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. resurfaced to suit finished level. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall. Bed pit with mass concrete as reachieve pipe invert level. Seal into between pipe outlet and pit wall.

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								Upper Hunter	130 LIVERPOOL STREET P.O. BOX 208	Telephon Facsimile
									SCONE NSW 2337	Email: cou
CD1	CONCEPT DESIGN	24/12/21	CA					-		
REV	DESCRIPTION	DATE	BY	REV	DESCRIPTION	DATE	BY			

hone: (02) 6540 1100 nile: (02) 6545 2671 council@upperhunter.nsw.gov.au	

ALISATION PROJECT SCONE NSW 2337



PIT Ex L2/2

LVERPOOL ST OUTLET

RHM Consulting Engineers 137 Kelly Street, Scone NSWTel (02) 6545 2800Email rhmce@rhmce.com.auABN 82 153 018 800

PIT SCHEDULE SHEET 1

PIT 1/New D	LNERPOOL ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA3 (R)
PIT 2/New D	LIVERPOOL ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SAS
PIT 3/New D	LIVERPOOL ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SA3 (R)
PIT 4/New D	LNERPOOL ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SAS
PIT 5/New D	LIVERPOOL ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	SAS
PIT 6/New D	LNERPOOL ST OUTLET	900 x 900 x 1800 Deep Concrete Pit	Gatic Cover
PIT 1/New E	LIVERPOOL ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SAS
PIT EXL2/8	LIVERPOOL ST OUTLET	Existing	SAS
PIT EXL2/7	LNERPOOL ST OUTLET	Existing	SAS
PIT Ex Q/1	LIVERPOOL ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SA2 (R)
PIT Ex Q/2	LIVERPOOL ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SAS
PIT Ex Q/3	LNERPOOL ST OUTLET	900 x 900 x 1700 Deep Concrete Pit	SA2 (L)
PIT 1/New M	LIVERPOOL ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SAS
РГГ Ex Q/4	LIVERPOOL ST OUTLET	900 x 900 x 2000 Deep Concrete Pit	Gatic Cover
PIT Ex Q/5	LIVERPOOL ST OUTLET	900 x 900 x 1800 Deep Concrete Pit	SA2 (R)
PIT 1/New K	LIVERPOOL ST OUTLET	900 x 900 x 1700 Deep Concrete Pit	SA2 (R)
PIT Ex L2/4	LIVERPOOL ST OUTLET	1200 x 1200 x 2300 Deep Concrete Pit	SA2 (L)
PIT Ex L2/3	LIVERPOOL ST OUTLET	1200 x 1200 x 2400 Deep Concrete Pit	SA2 (R)

Pit Name

PIT 11/New A

PIT 12/New A

Discharge to:

LIVERPOOL ST OUTLET

LIVERPOOL ST OUTLET

	Pit Type	Grate Type	Grate Level	Invert Level	Pit Depth	Comment
1;	200 x 1200 x 2100 Deep Concrete Pit	Gatic Cover	208.59	206.60	1.99	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit finished level.
1:	200 x 1200 x 2400 Deep Concrete Pit	Gatic Cover	208.13	205.85	2.28	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit finished level.
9(00 x 900 x 1300 Deep Concrete Pit	SA3 (R)	208.80	207.55	1.25	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
9(00 x 900 x 1400 Deep Concrete Pit	SAS	208.64	207.34	1.30	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
9(00 x 900 x 1400 Deep Concrete Pit	SA3 (R)	208.60	207.26	1.34	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
9(00 x 900 x 1400 Deep Concrete Pit	SAS	208.54	207.22	1.32	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
9(00 x 900 x 1500 Deep Concrete Pit	SAS	208.58	207.18	1.40	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
90	00 x 900 x 1800 Deep Concrete Pit	Gatic Cover	208.86	207.13	1.73	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit finished level.
9(00 x 900 x 1400 Deep Concrete Pit	SAS	208.71	207.38	1.33	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
E	xisting	SAS	208.87	207.30	1.57	Replace existing kerb inlet. Bed pit with mass concrete as required to achieve pip invert level. Seal intefrace between pipe outlet and pit wall.
E	xisting	SAS	208.73	207.23	1.50	Replace existing kerb inlet. Bed pit with mass concrete as required to achieve pip invert level. Seal intefrace between pipe outlet and pit wall.
9(00 x 900 x 1400 Deep Concrete Pit	SA2 (R)	209.12	207.79	1.33	Replace existing pit and kerb inlet. Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall.
90	00 x 900 x 1400 Deep Concrete Pit	SAS	208.93	207.59	1.34	Replace existing pit and kerb inlet. Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall.
90	00 x 900 x 1700 Deep Concrete Pit	SA2 (L)	209.06	207.41	1.65	Replace existing pit and kerb inlet. Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall.
90	00 x 900 x 1300 Deep Concrete Pit	SAS	209.34	208.10	1.24	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
90	00 x 900 x 2000 Deep Concrete Pit	Gatic Cover	209.24	207.31	1.93	Replace existing pit. Bed pit with mass concrete as required to achieve pipe inver level. Seal intefrace between pipe outlet and pit wall.
90	00 x 900 x 1800 Deep Concrete Pit	SA2 (R)	208.87	207.21	1.66	Replace existing pit and kerb inlet. Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall.
90	00 x 900 x 1700 Deep Concrete Pit	SA2 (R)	209.22	207.58	1.64	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
1;	200 x 1200 x 2300 Deep Concrete Pit	SA2 (L)	208.74	206.55	2.19	Replace existing pit and kerb inlet. Bed pit with mass concrete as required to achiev pipe invert level. Seal intefrace between pipe outlet and pit wall.
1:	200 x 1200 x 2400 Deep Concrete Pit	SA2 (R)	208.65	206.32	2.33	Replace existing pit and kerb inlet. Bed pit with mass concrete as required to achiev pipe invert level. Seal intefrace between pipe outlet and pit wall.
E	xisting	Existing				Existing pit and inlet to remain

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Pit Name	Discharge to:	Pit Type	Grate Type	Grate Level	Invert Level	Pit Depth	Comment
PIT 1/New F	KELLY ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SA2 (L)	211.09	209.80	1.29	Bed pit with mass concrete as required achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 2/New F	KELLY ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SAS	210.36	209.10	1.26	Bed pit with mass concrete as required achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 3/New F	KELLY ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	Infill Gatic Cover	210.38	208.92	1.46	Bed pit with mass concrete as required achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to b resurfaced to suit footpath level.
PIT 4/New F	KELLY ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	SA2 (L)	210.22	208.85	1.37	Bed pit with mass concrete as required achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 5/New F	KELLY ST OUTLET	900 x 900 x 1200 Deep Concrete Pit	SAS	209.46	208.37	1.09	Bed pit with mass concrete as required achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 6/New F	KELLY ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	SA2 (R)	209.64	208.25	1.39	Bed pit with mass concrete as required achieve pipe invert level. Seal intefrace between pipe outlet and pit wall.
PIT 7/New F	KELLY ST OUTLET	Existing	Infill Gatic Cover	209.49	208.22	1.27	Replace existing kerb inlet with infill ga cover and resurface to footpath level. I pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall.
PIT 1/New Q	KELLY ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	SA2 (L)	211.65	210.23	1.42	Bed pit with mass concrete as require achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 2/New Q	KELLY ST OUTLET	2000 x 2000 x 1200 Deep Concrete Pit	SA2 (L)	211.16	210.03	1.13	Bed pit with mass concrete as require achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 1/New G	KELLY ST OUTLET	2000 x 2000 x 1400 Deep Concrete Pit	SA3 (L)	210.98	209.72	1.26	Bed pit with mass concrete as require achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 2/New G	KELLY ST OUTLET	2000 x 2000 x 1300 Deep Concrete Pit	SAS	210.74	209.49	1.25	Bed pit with mass concrete as require achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 3/New G	KELLY ST OUTLET	900 x 900 x 1600 Deep Concrete Pit	Infill Gatic Cover	210.67	209.18	1.49	Bed pit with mass concrete as require achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to resurfaced to suit footpath level.
PIT 4/New G	KELLY ST OUTLET	900 x 900 x 1800 Deep Concrete Pit	Gatic Cover	210.78	209.07	1.71	Bed pit with mass concrete as require achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to resurfaced to suit finished level.
PIT 1/New J	KELLY ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SA2 (L)	210.05	208.75	1.30	Bed pit with mass concrete as require achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 2/New J	KELLY ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	SA2 (L)	209.77	208.38	1.39	Bed pit with mass concrete as require achieve pipe invert level. Seal interface between pipe outlet and pit wall.

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Pit Name	Discharge to:	Pit Type	Grate Type	Grate Level	Invert Level	Depth	Comment
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PIT 1/New L	ST.AUBINS ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SA2 (L)	211.71	210.45	1.26	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 2/New L	ST.AUBINS ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA2 (R)	211.37	210.2	1.17	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 3/New L	ST.AUBINS ST OUTLET	900 x 900 x 1200 Deep Concrete Pit	SAS	211.1	209.99	1.11	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 4/New L	ST.AUBINS ST OUTLET	900 x 900 x 1400 Deep Concrete Pit	SA2 (R)	211.21	209.86	1.35	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 5/New L	ST.AUBINS ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	SA2 (R)	211.19	209.81	1.38	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 6/New L	ST.AUBINS ST OUTLET	900 x 900 x 1600 Deep Concrete Pit	SAS	211.2	209.7	1.5	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
T 7/New L	ST.AUBINS ST OUTLET	900 x 900 x 1700 Deep Concrete Pit	SA2 (R)	211.2	209.6	1.6	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT Ex L5/1	ST.AUBINS ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SAS	211.24	210.01	1.23	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit design level.
PIT Ex L5/2	ST.AUBINS ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	Gatic Cover				Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit design level.
PIT Ex L5/3	ST.AUBINS ST OUTLET	900 x 900 x 1700 Deep Concrete Pit	SA2 (R)	211.42	209.81	1.61	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit design level.
PIT Ex L5/4	ST.AUBINS ST OUTLET	Existing	Infill Gatic Cover	211.41	209.53	1.88	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit footpath level.
PIT Ex L5/5	ST.AUBINS ST OUTLET	2000 x 2000 x 1300 Deep Concrete Pit	SA2 (R)	210.9	209.66	1.24	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit design level.
PIT 1/New P	ST.AUBINS ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA3 (L)	212.03	210.8	1.23	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 2/New P	ST.AUBINS ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA2 (L)	211.69	210.53	1.16	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 3/New P	ST.AUBINS ST OUTLET	900 x 900 x 1600 Deep Concrete Pit	Gatic Cover	211.87	210.39	1.48	Bed pit with mass concrete as required to achieve pipe invert level. Seal intefrace between pipe outlet and pit wall. Pit to be resurfaced to suit finished level.
PIT 1/New N	ST.AUBINS ST OUTLET	900 x 900 x 1300 Deep Concrete Pit	SA2 (L)	211.55	210.30	1.25	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 2/New N	ST.AUBINS ST OUTLET	900 x 900 x 1500 Deep Concrete Pit	SA2 (L)	211.42	210.00	1.42	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 3/New N	ST.AUBINS ST OUTLET	900 x 900 x 1800 Deep Concrete Pit	Gatic Cover	211.63	209.95	1.68	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.
PIT 1/New O	ST.AUBINS ST OUTLET	900 x 900 x 1200 Deep Concrete Pit	SAS	211.34	210.20	1.14	Bed pit with mass concrete as required to achieve pipe invert level. Seal interface between pipe outlet and pit wall.

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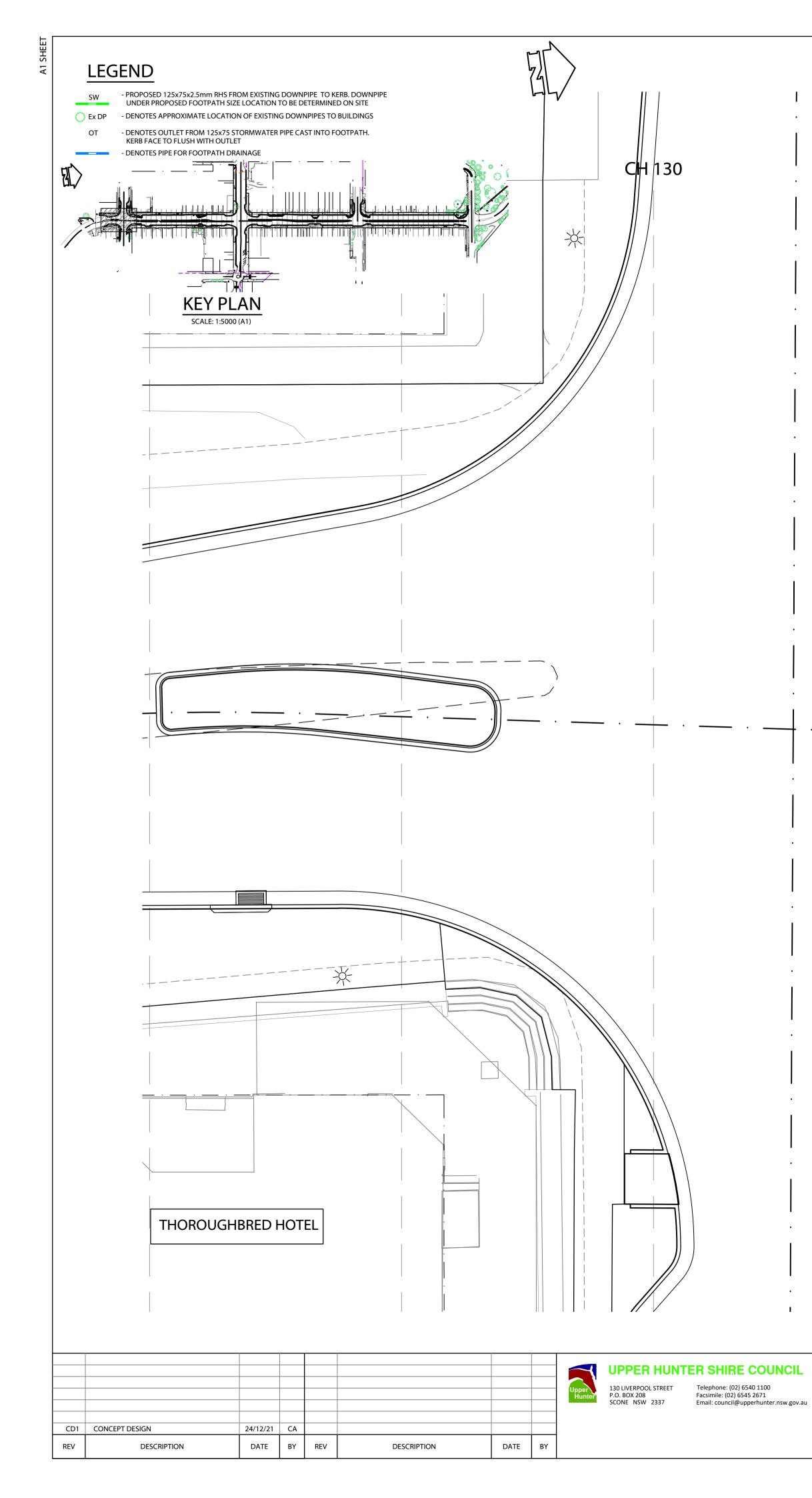


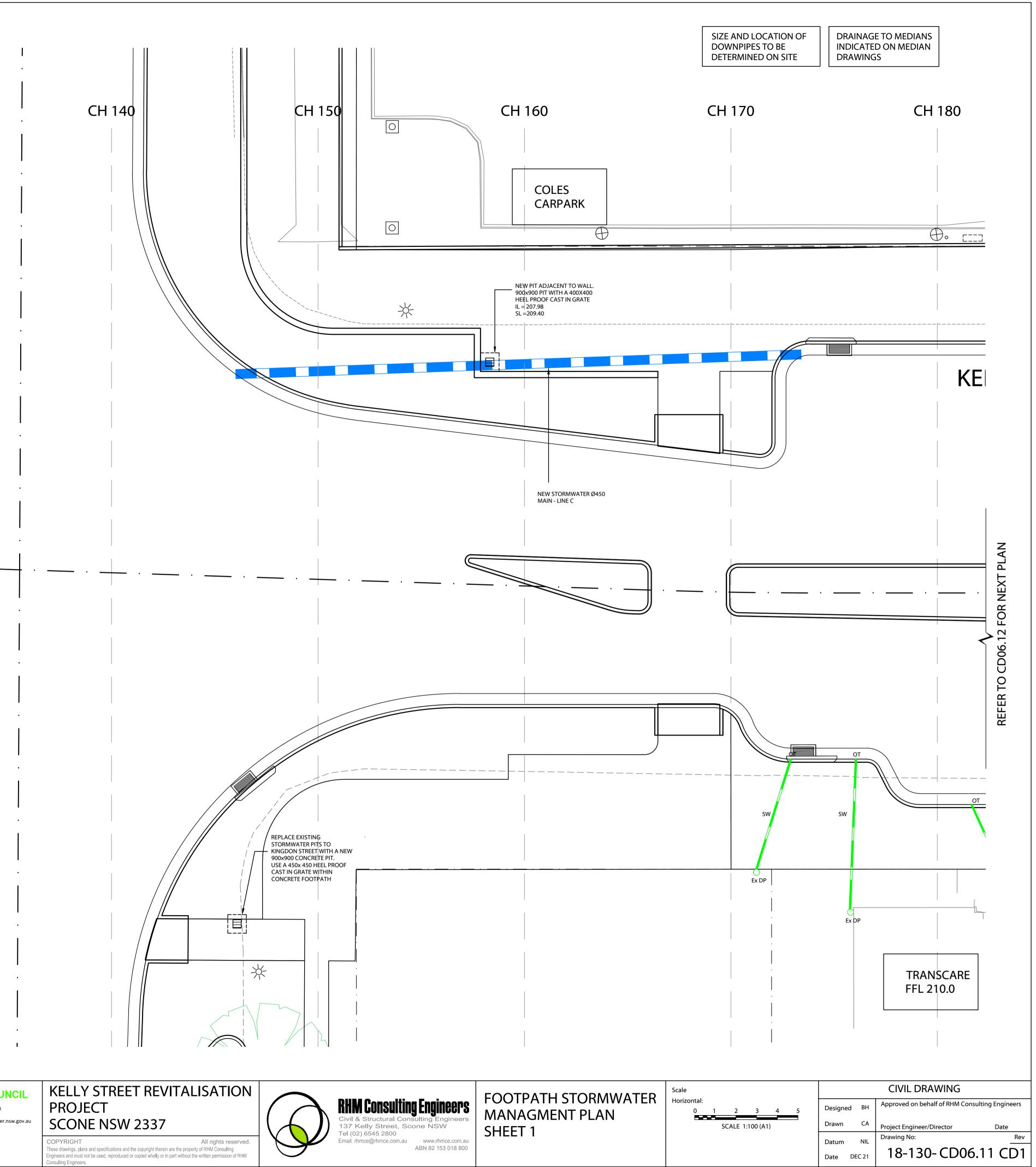
PIT SCHEDULE SHEET 2

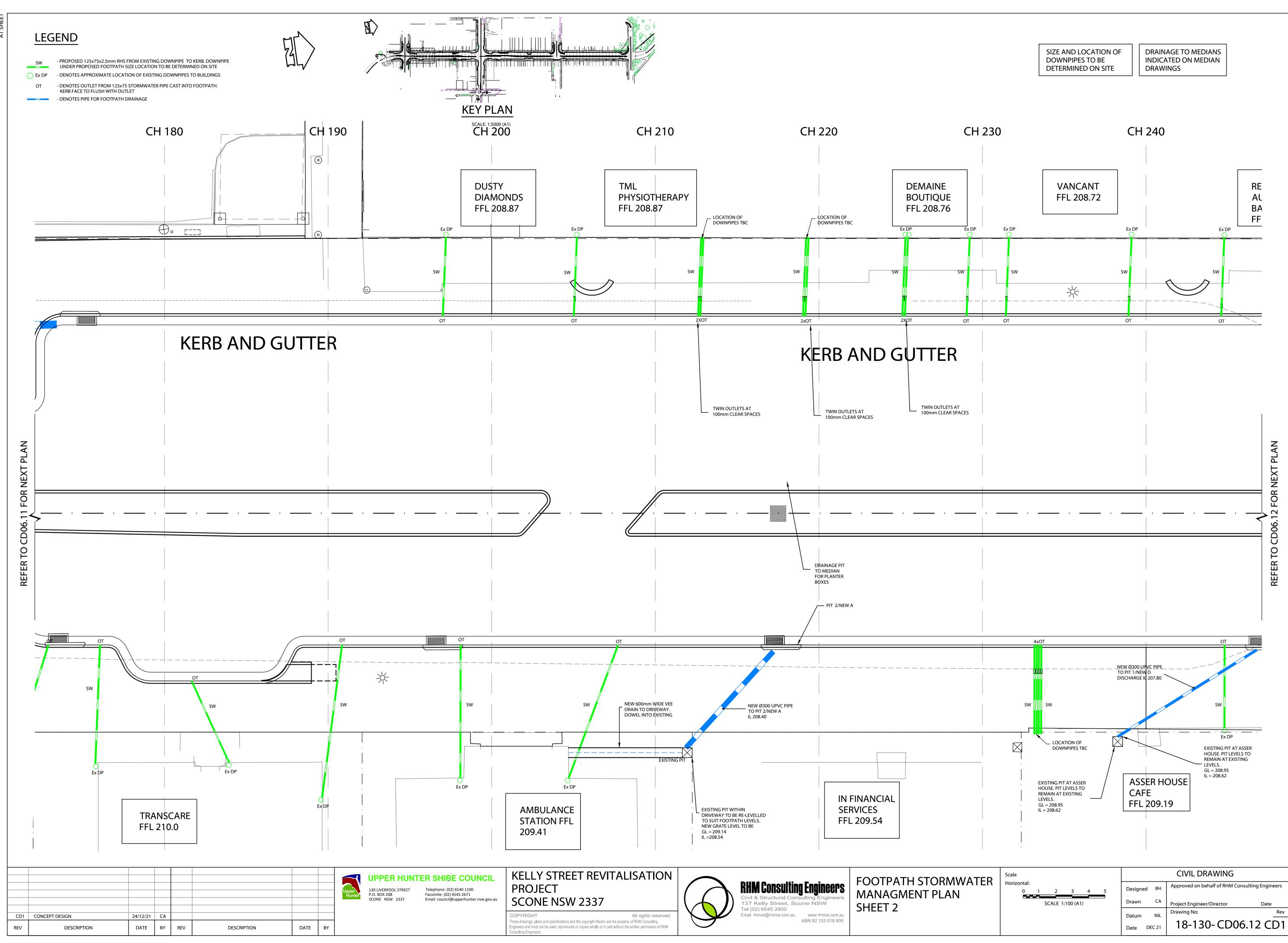
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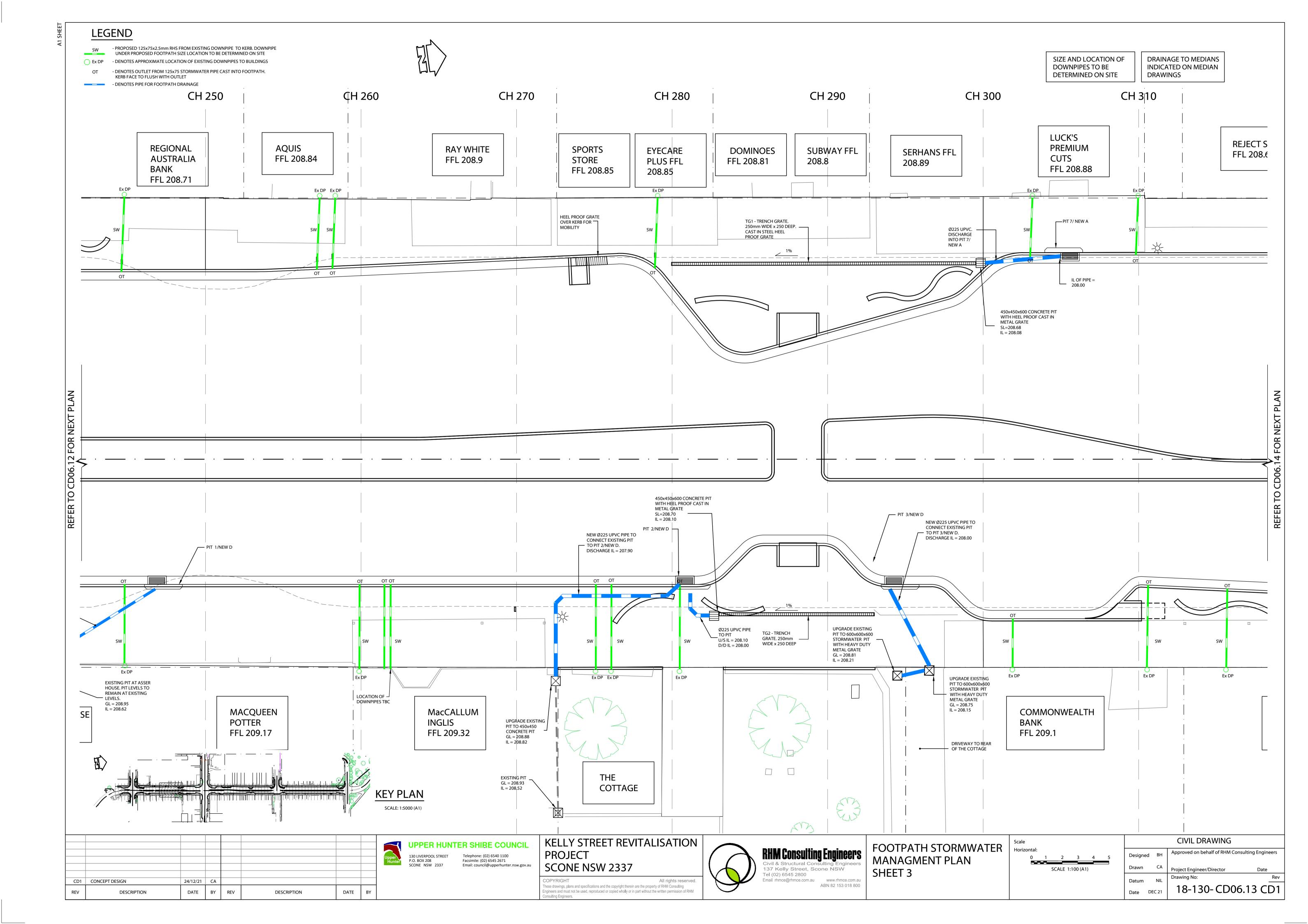
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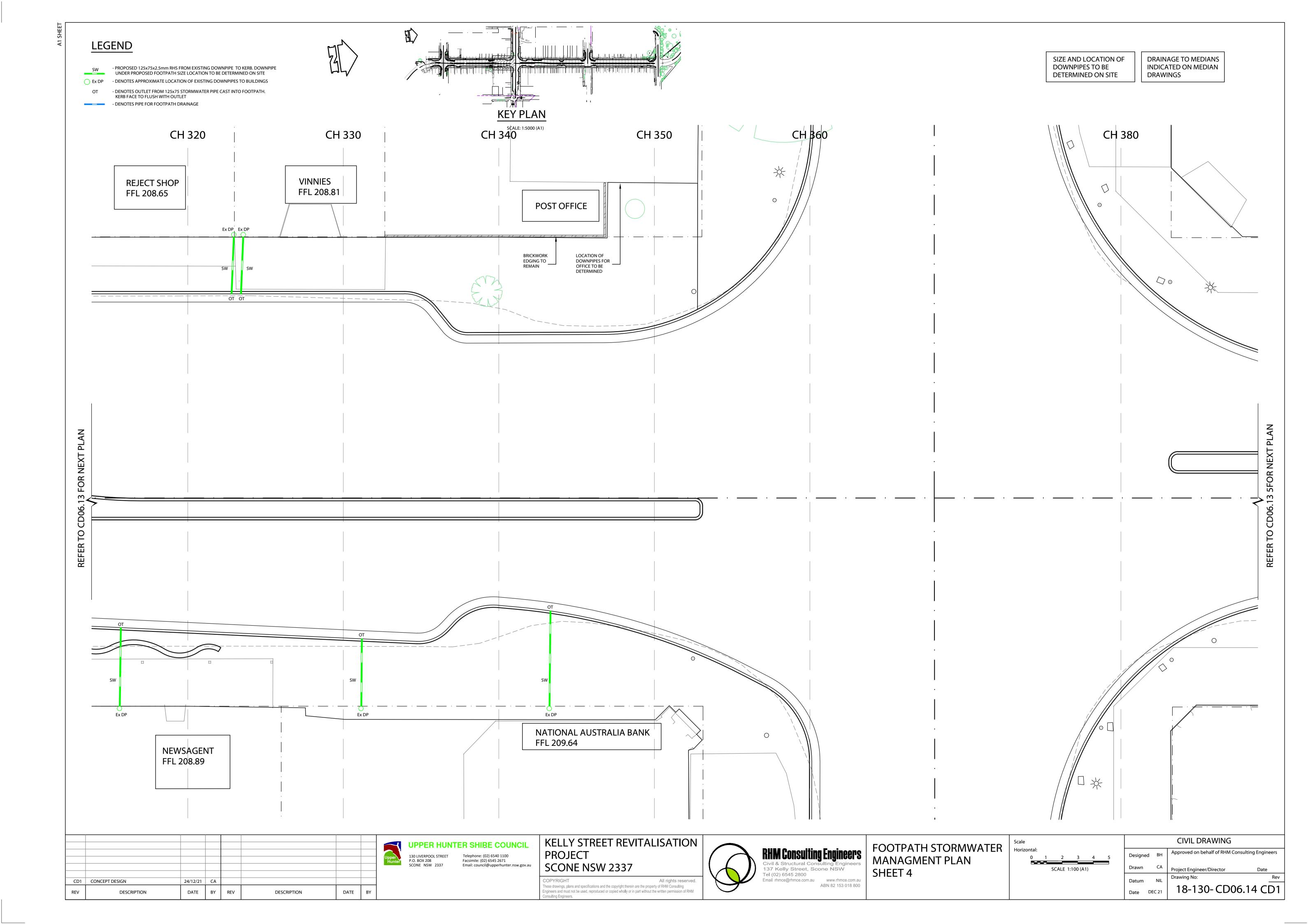
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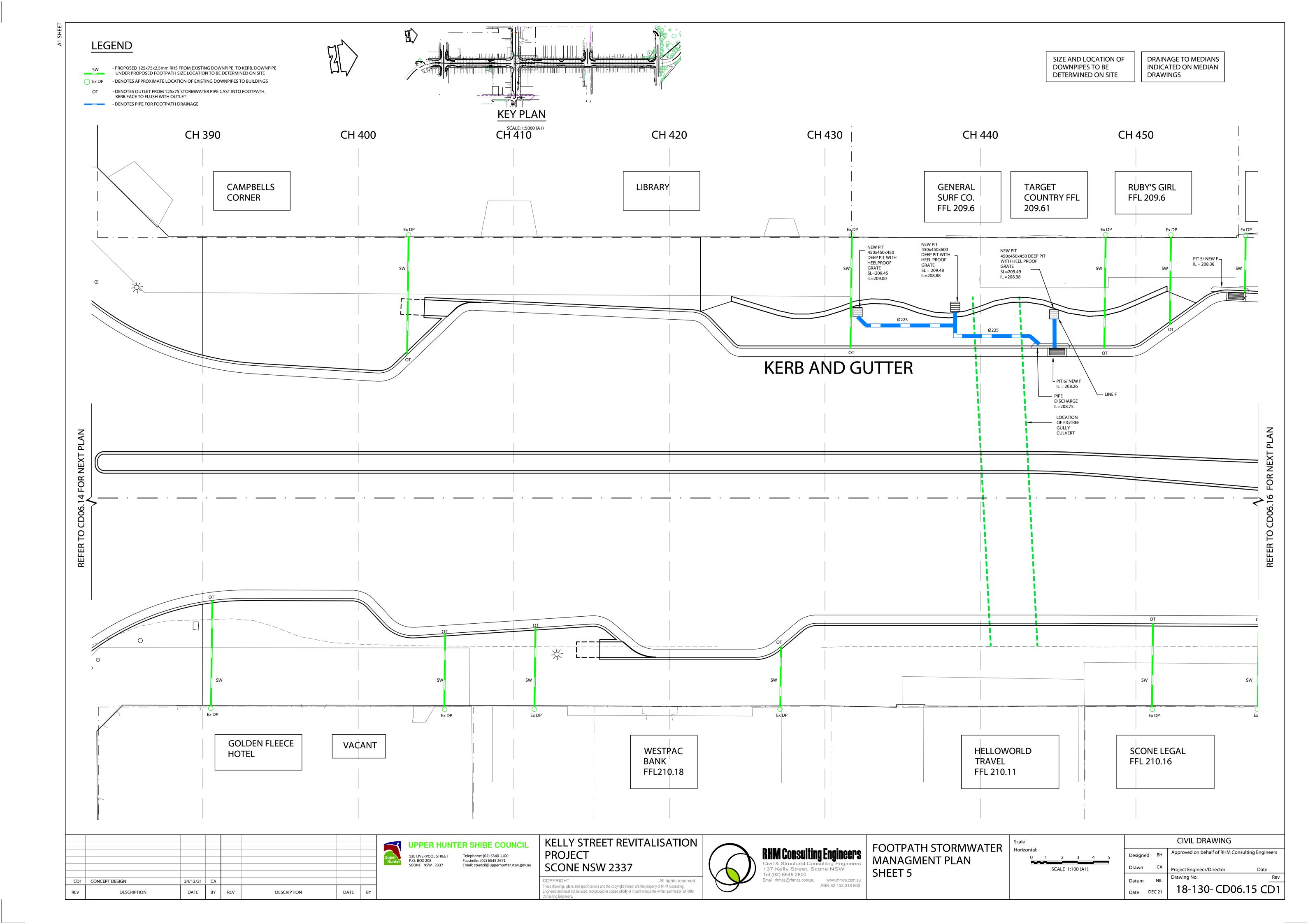


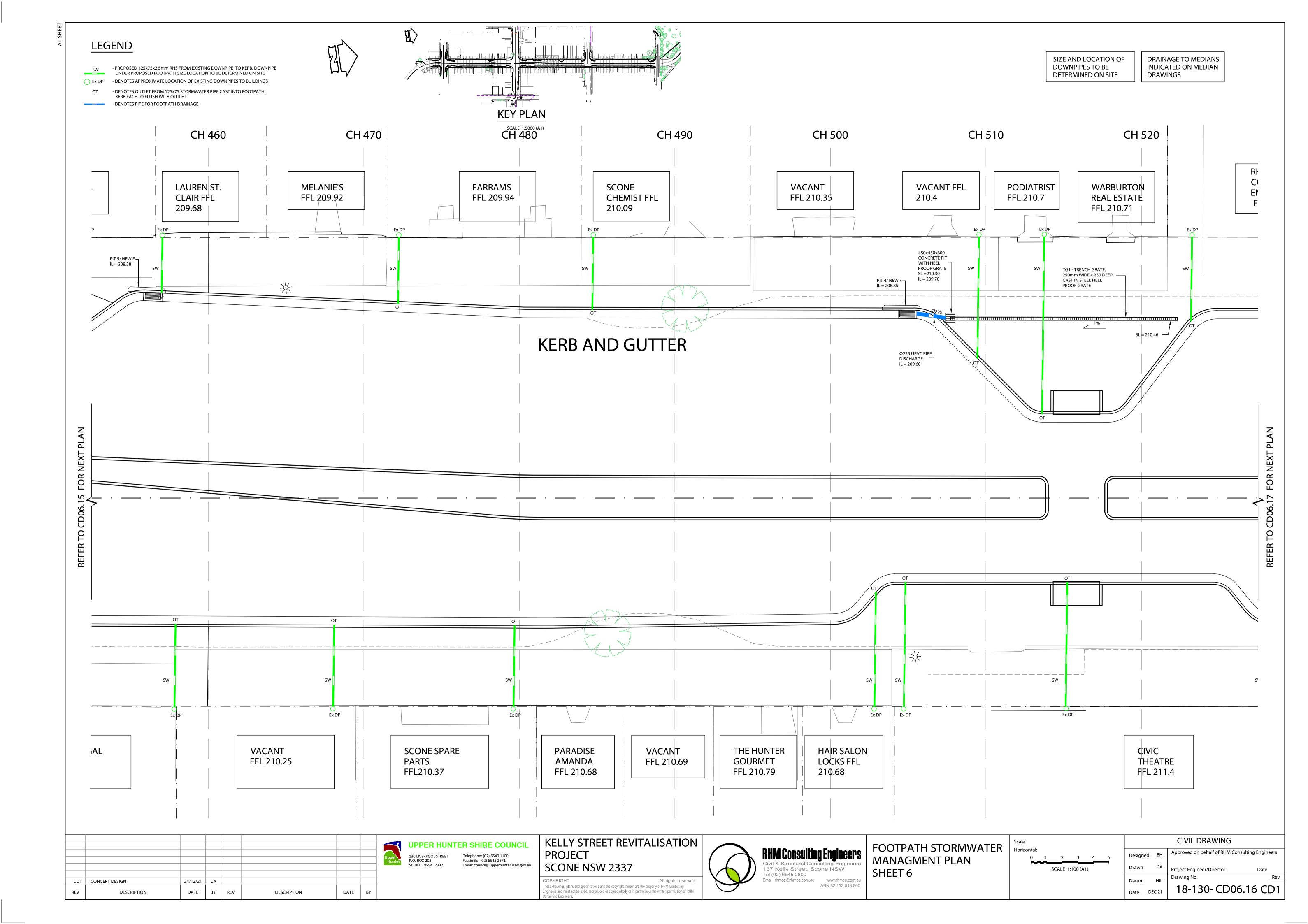


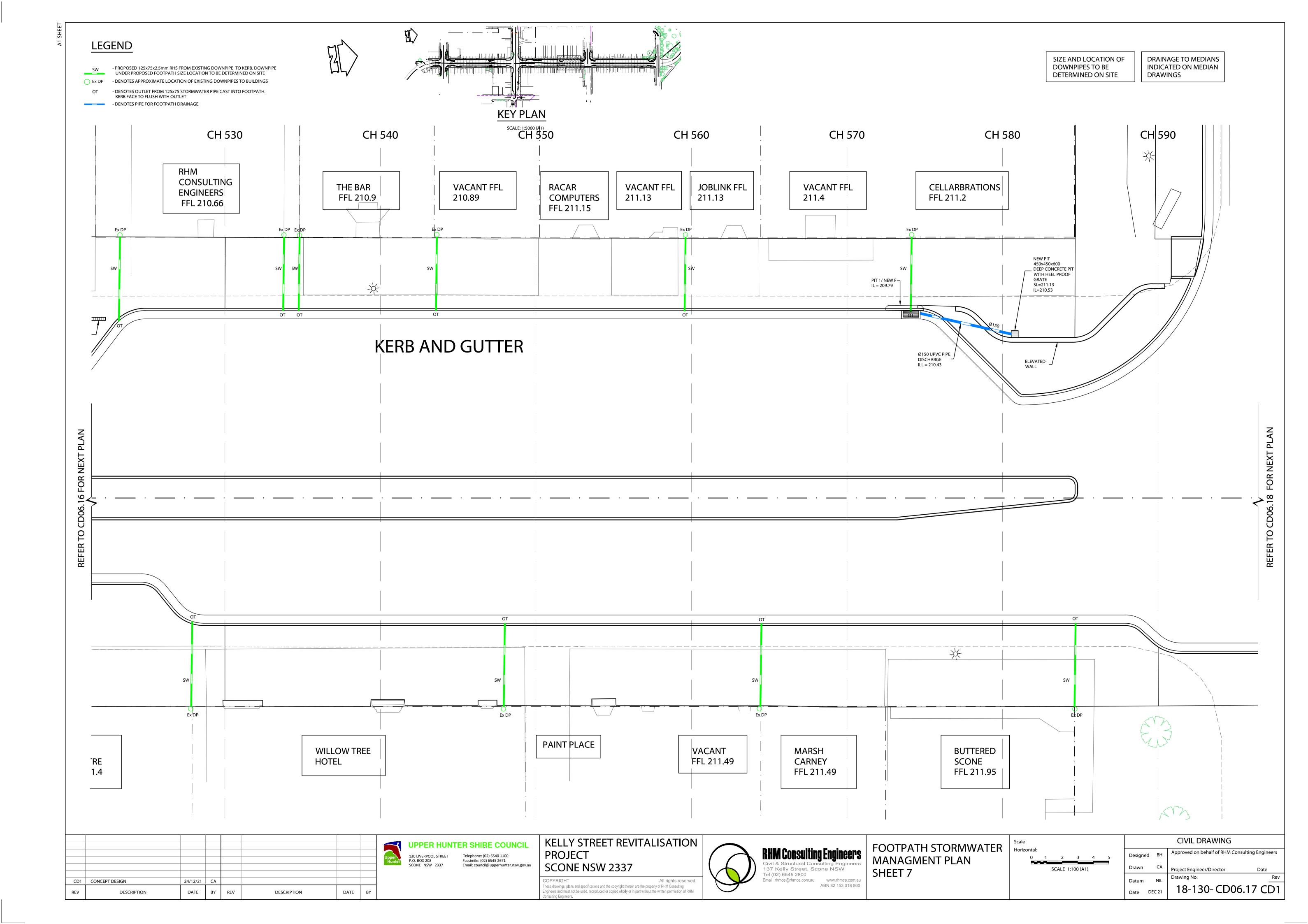


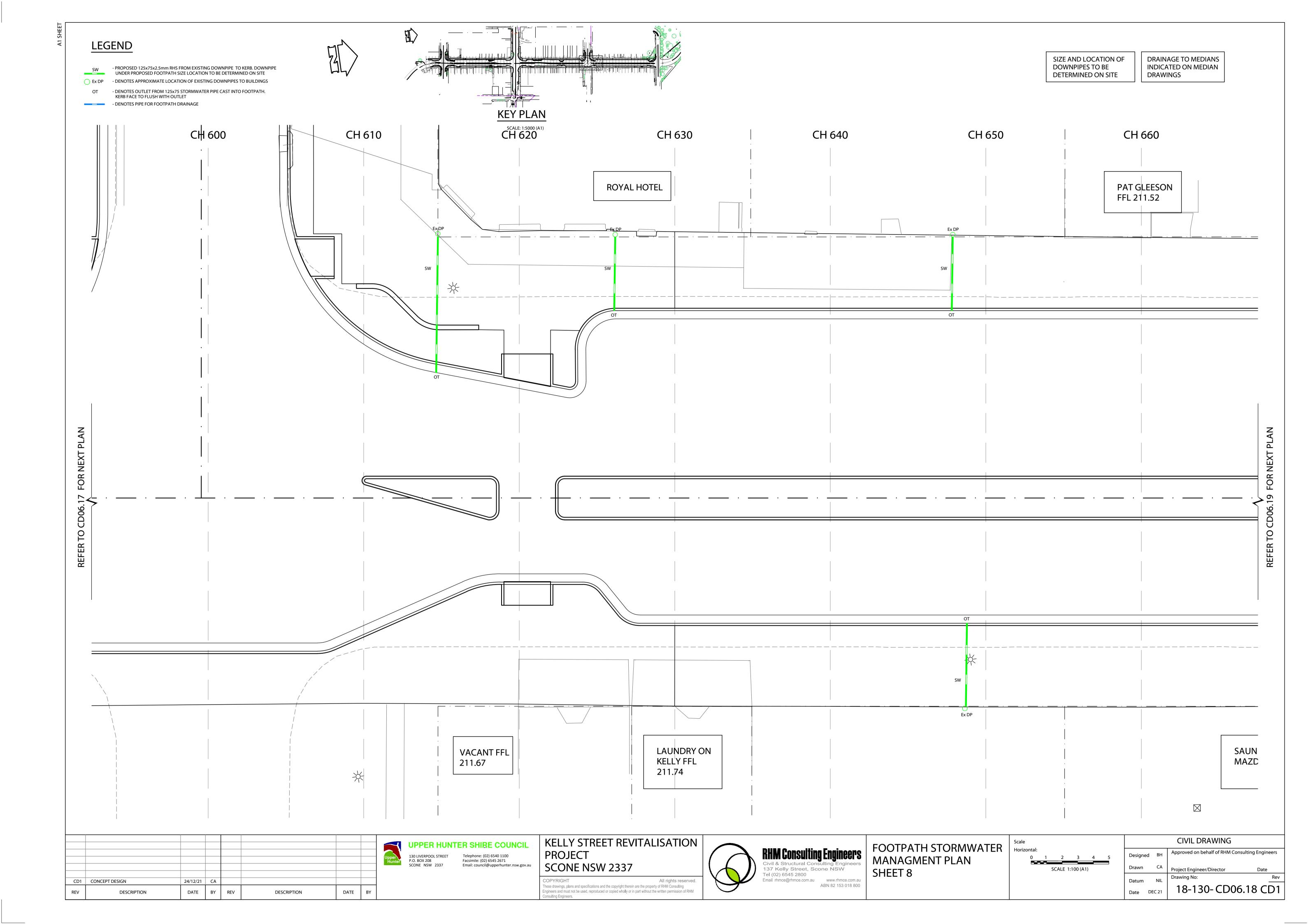


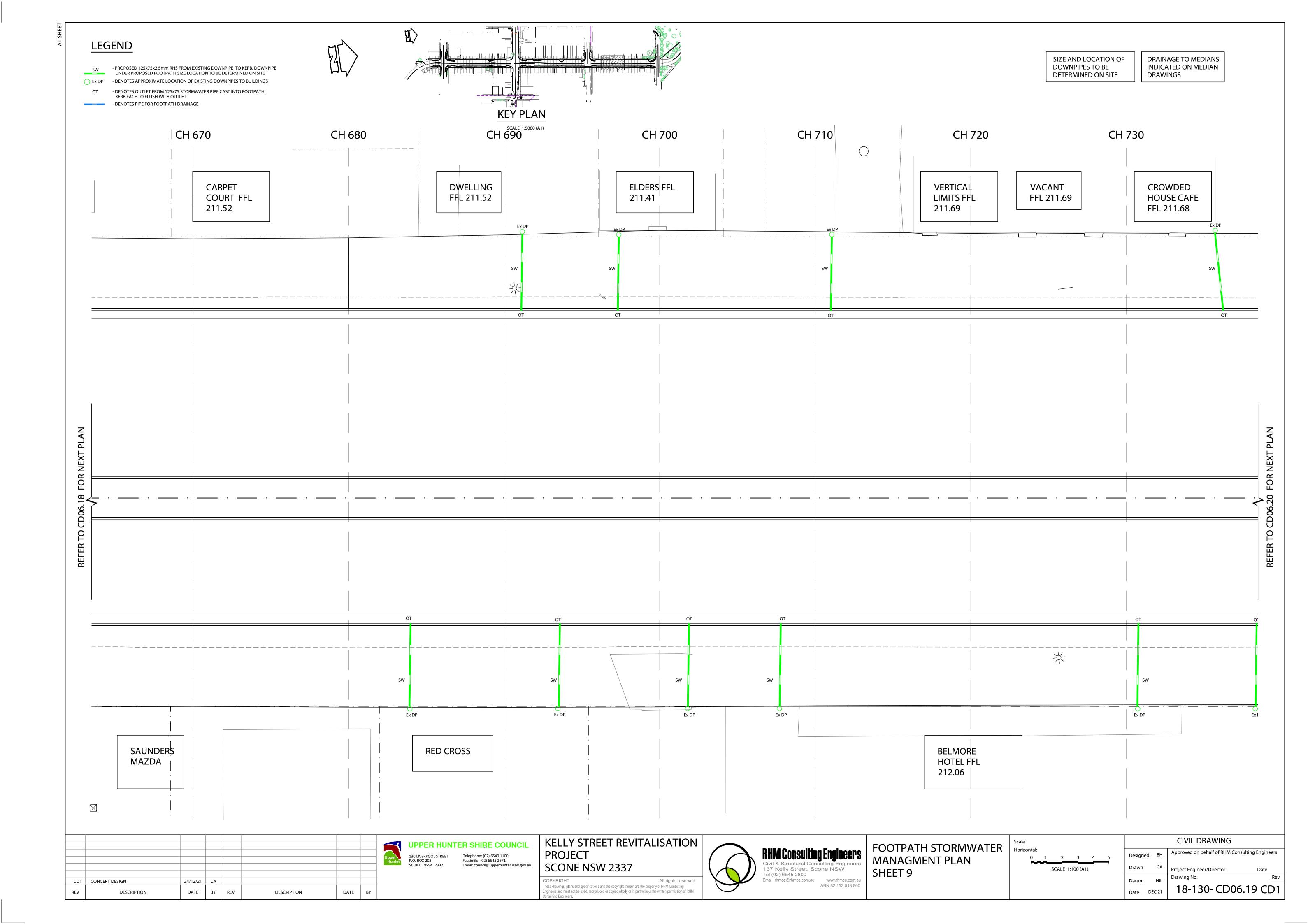


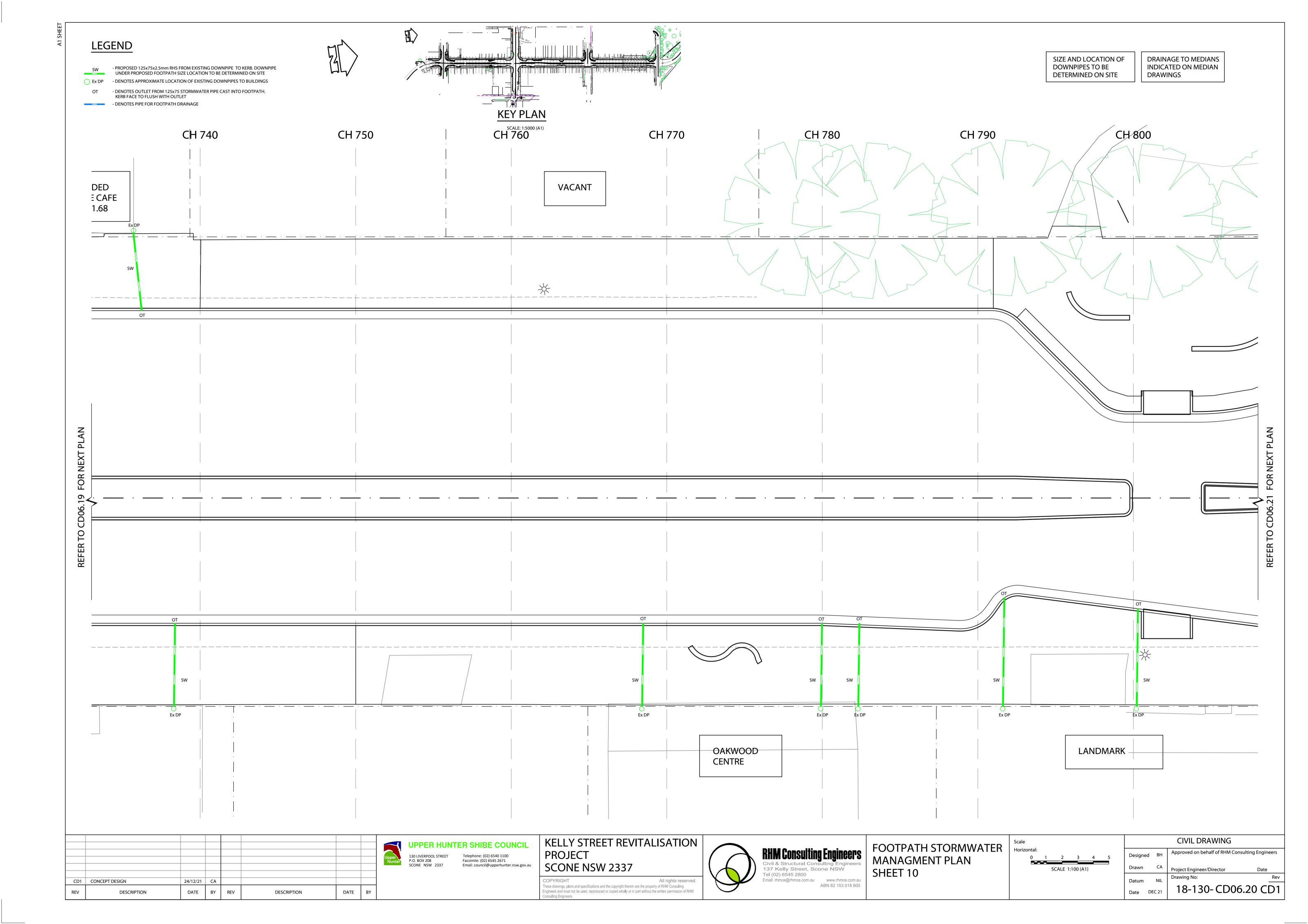


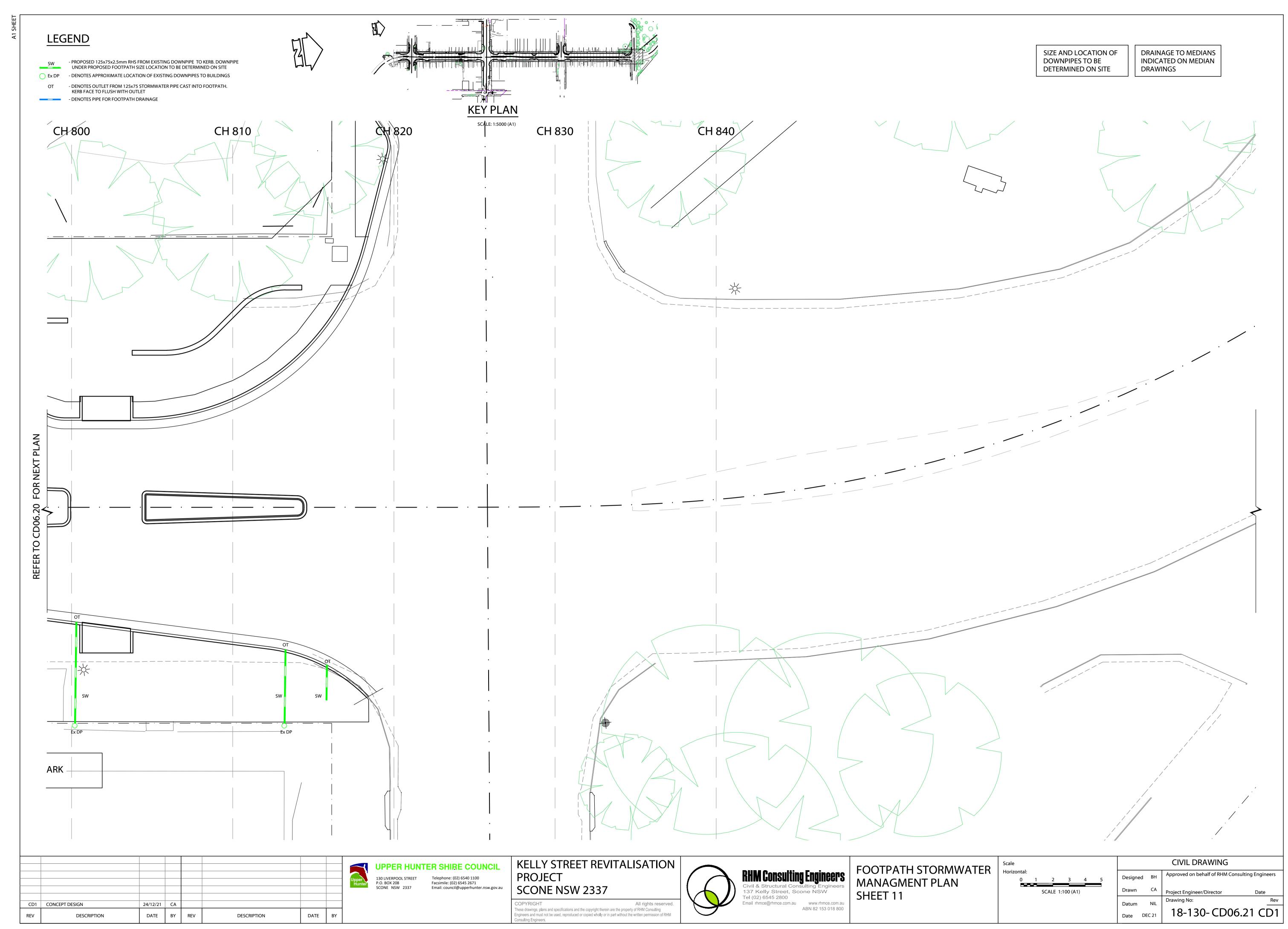


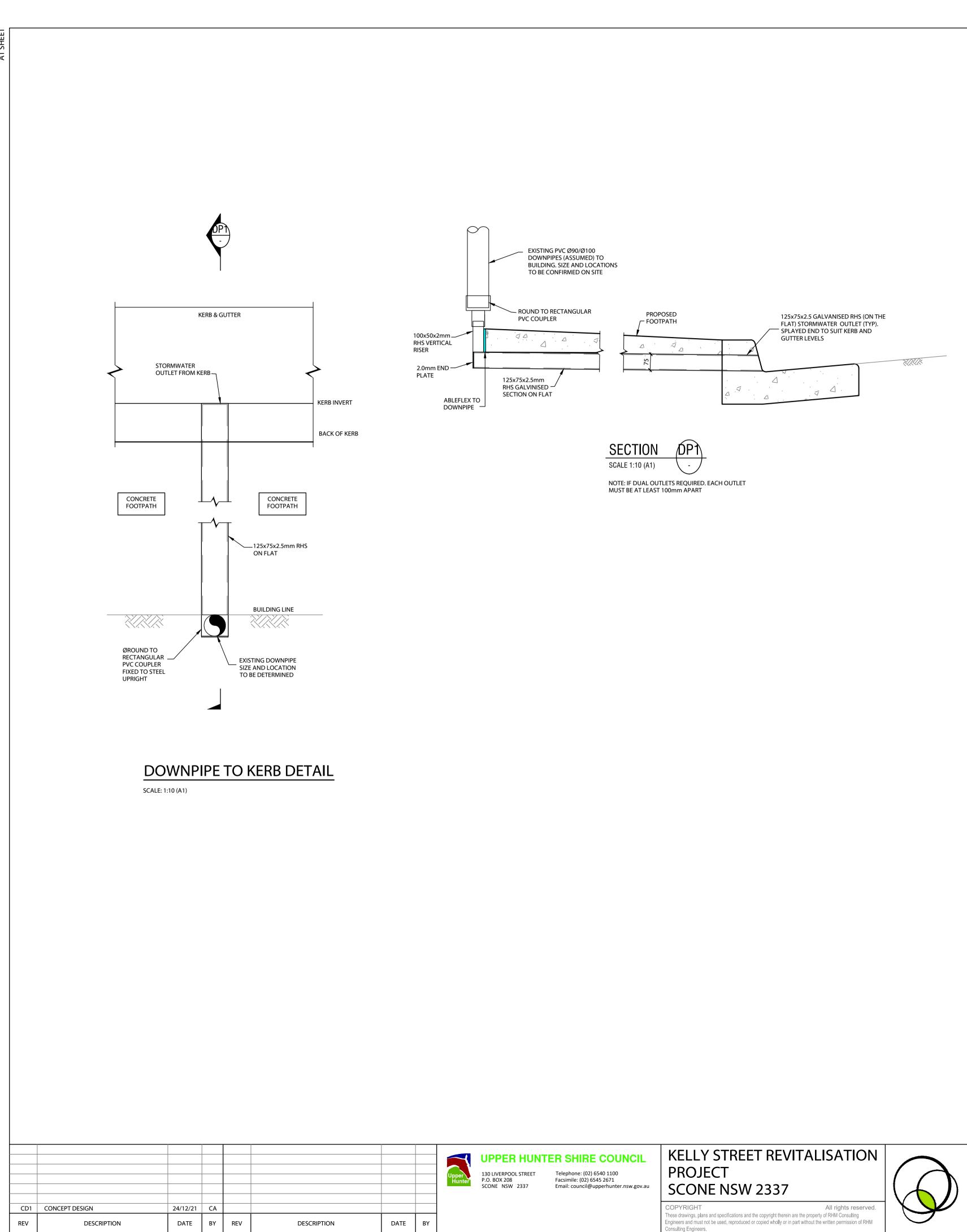








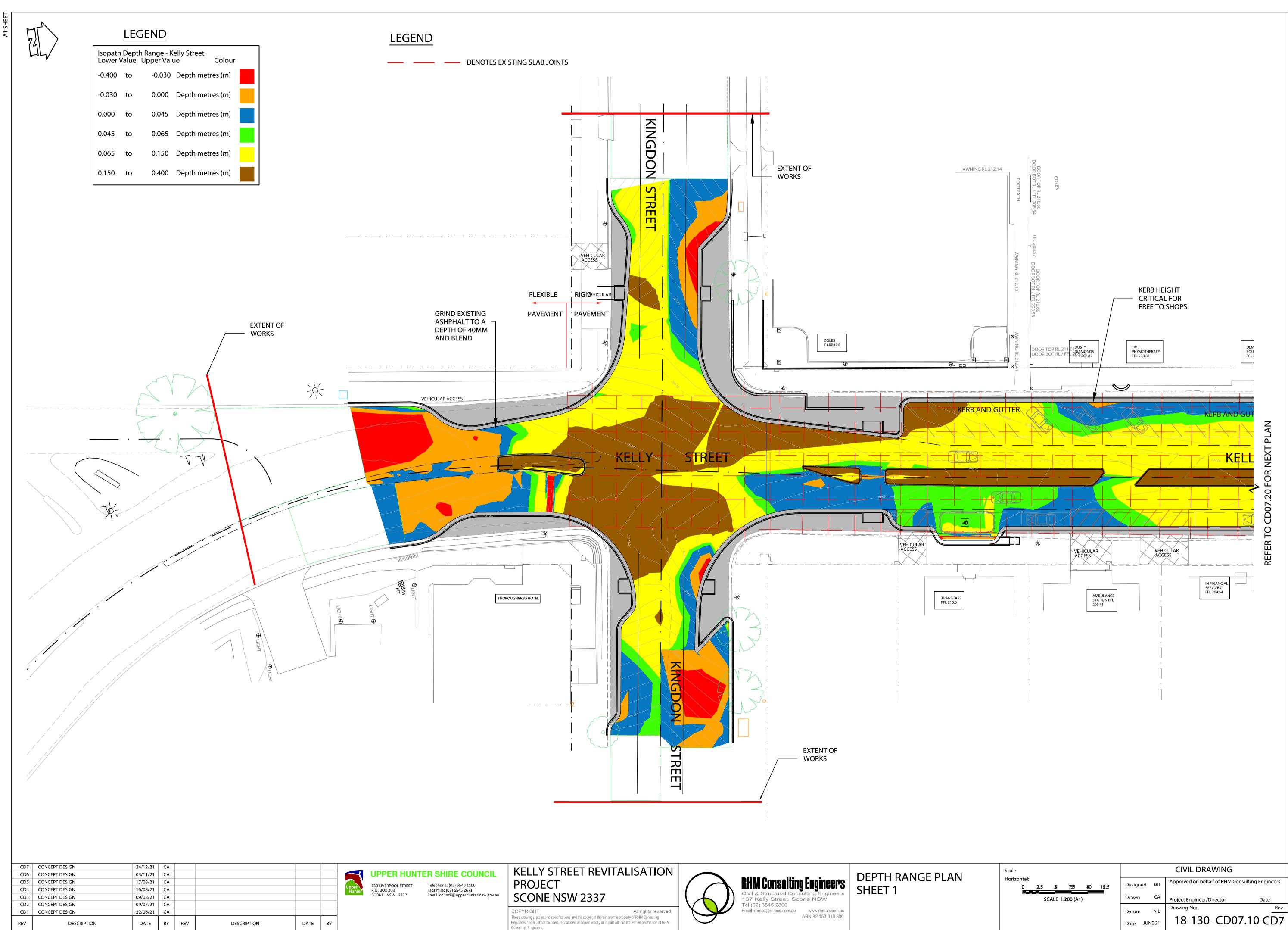


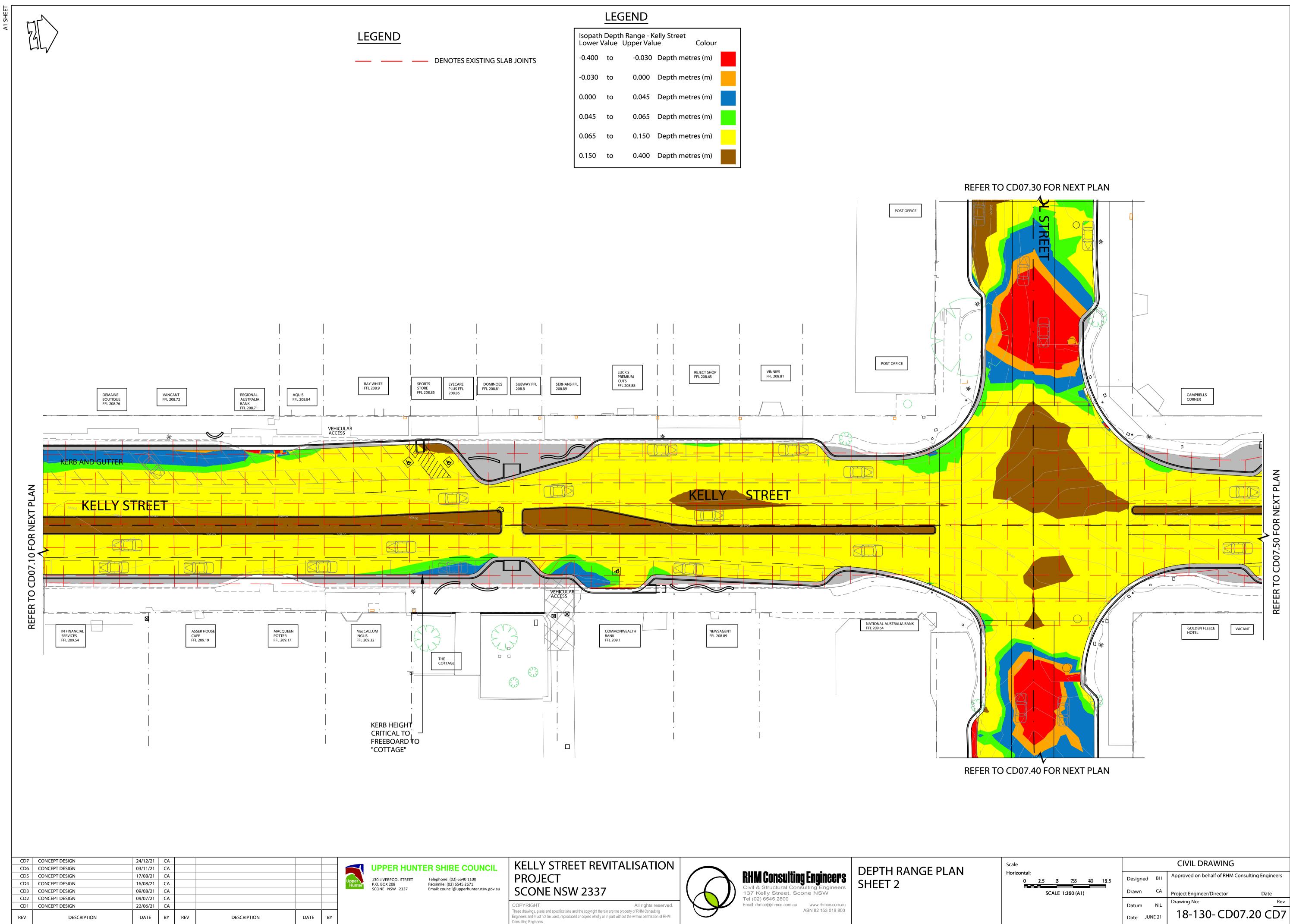


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FOOTPATH STORMWAT TYPICAL DETAILS SHEET 1

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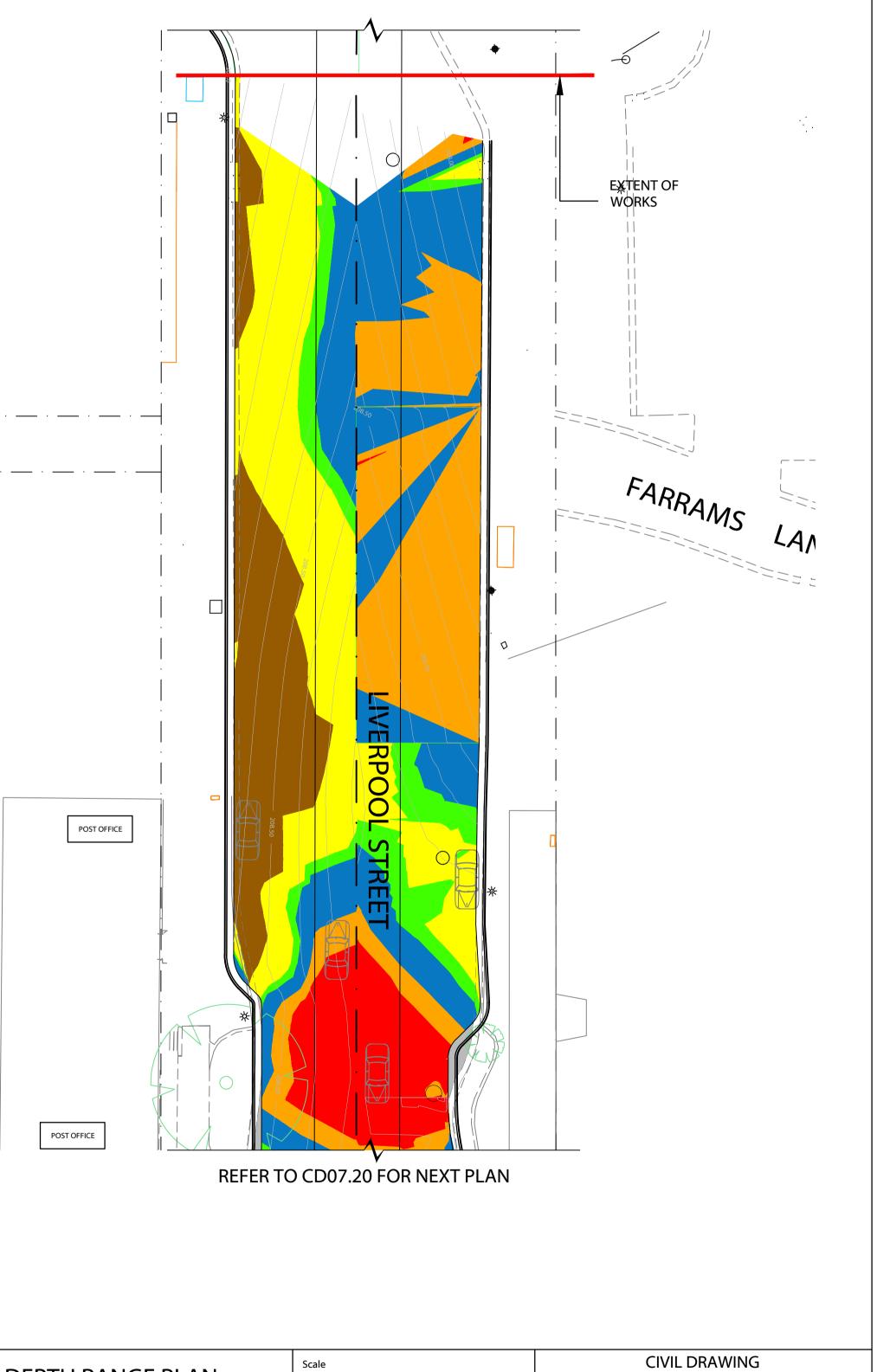
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DEPTH RANGE PLAN SHEET 3

Horizontal:

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Approved on behalf of RHM Consulting Engineers

Drawing No: Rev 18-130- CD07.30 CD7

Date

Project Engineer/Director

Drawing No:

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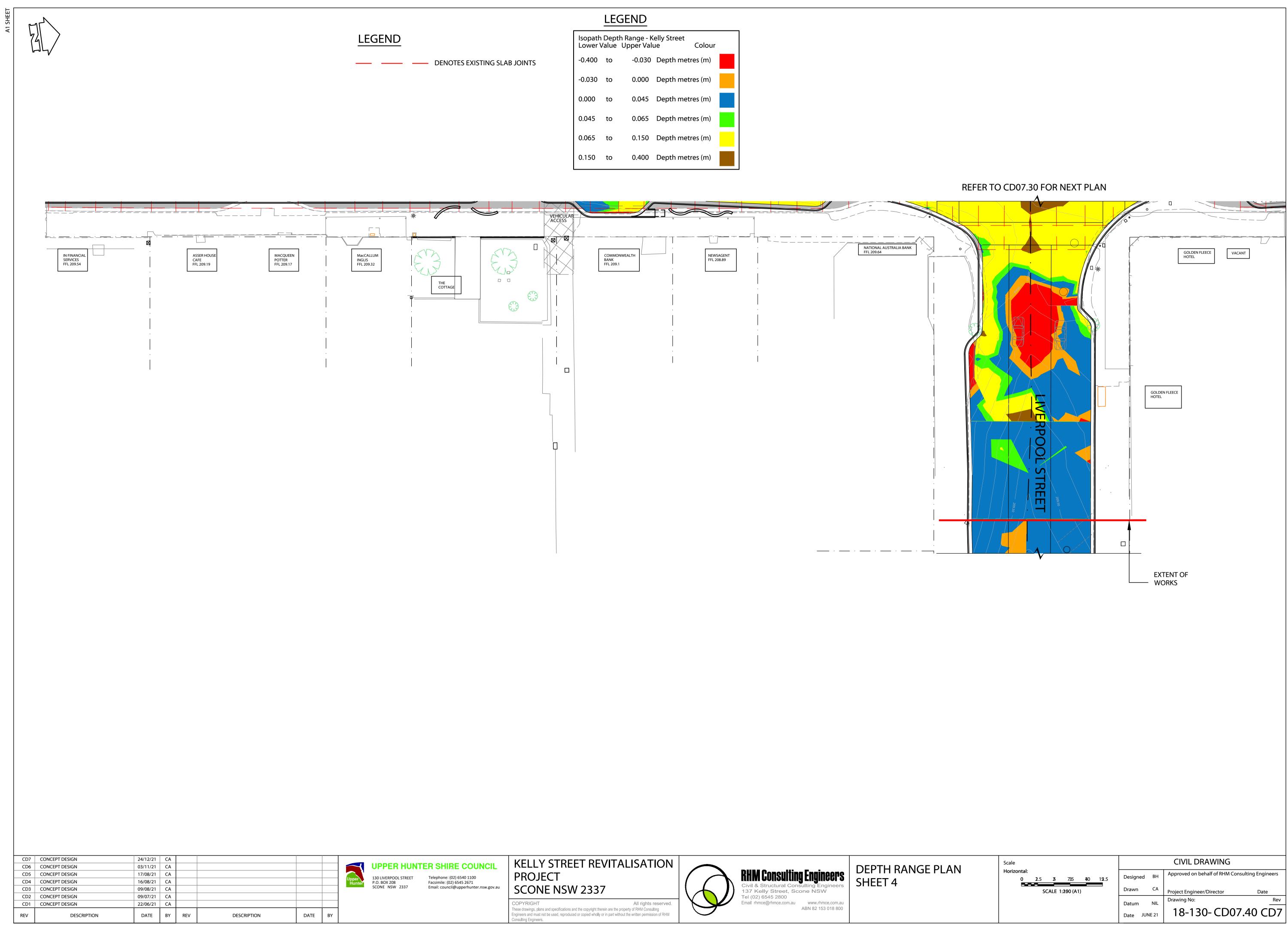
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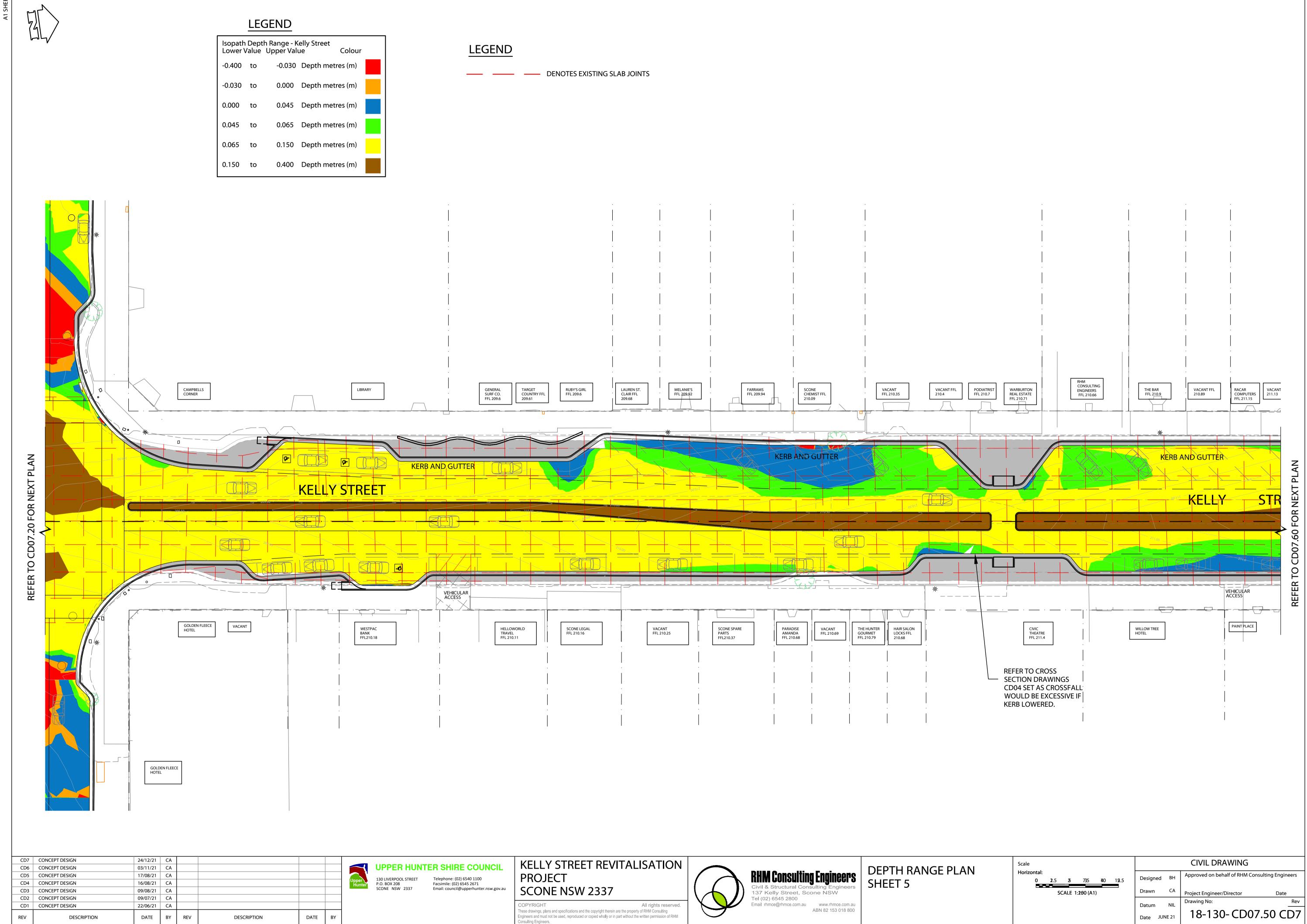
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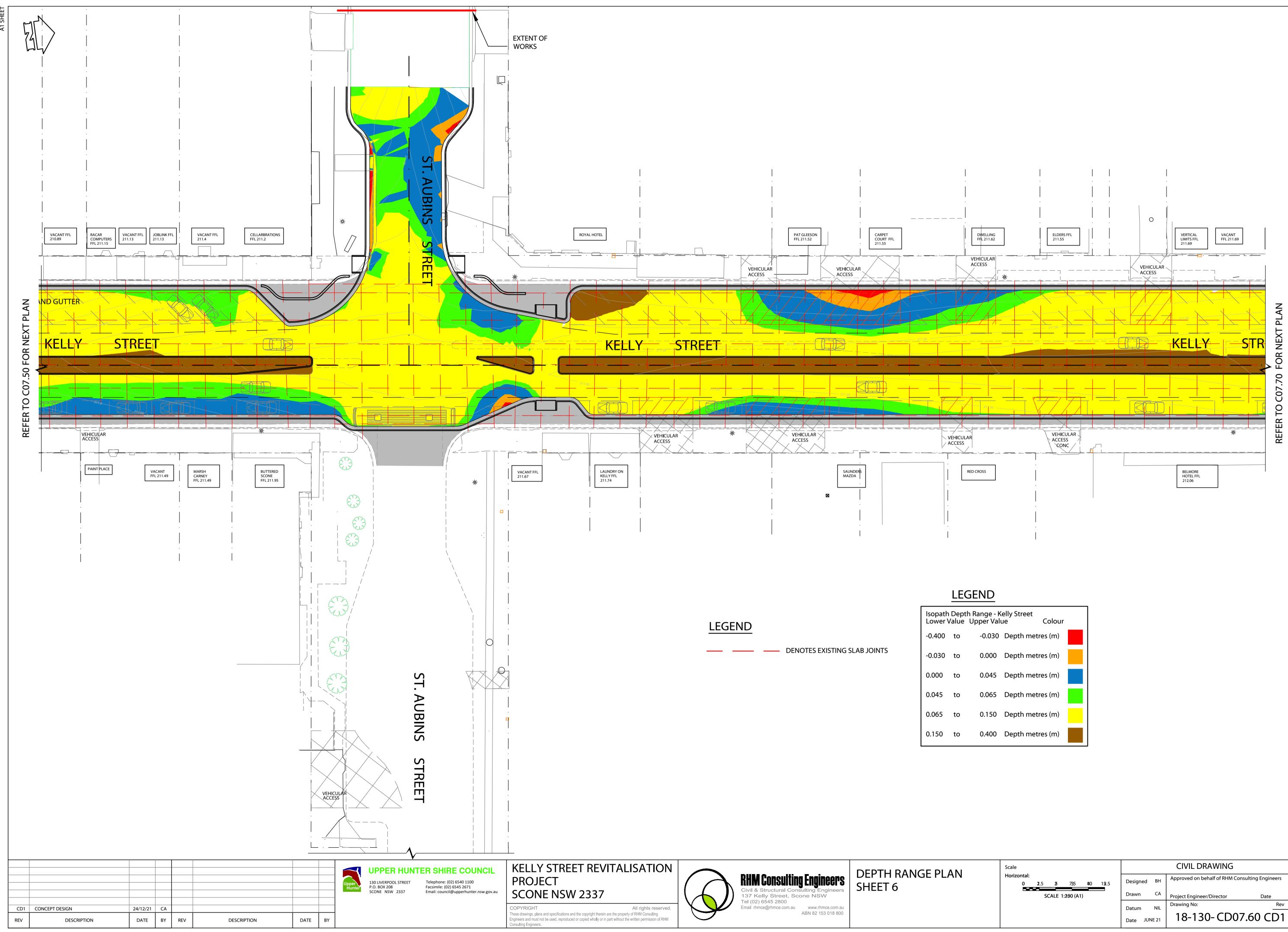


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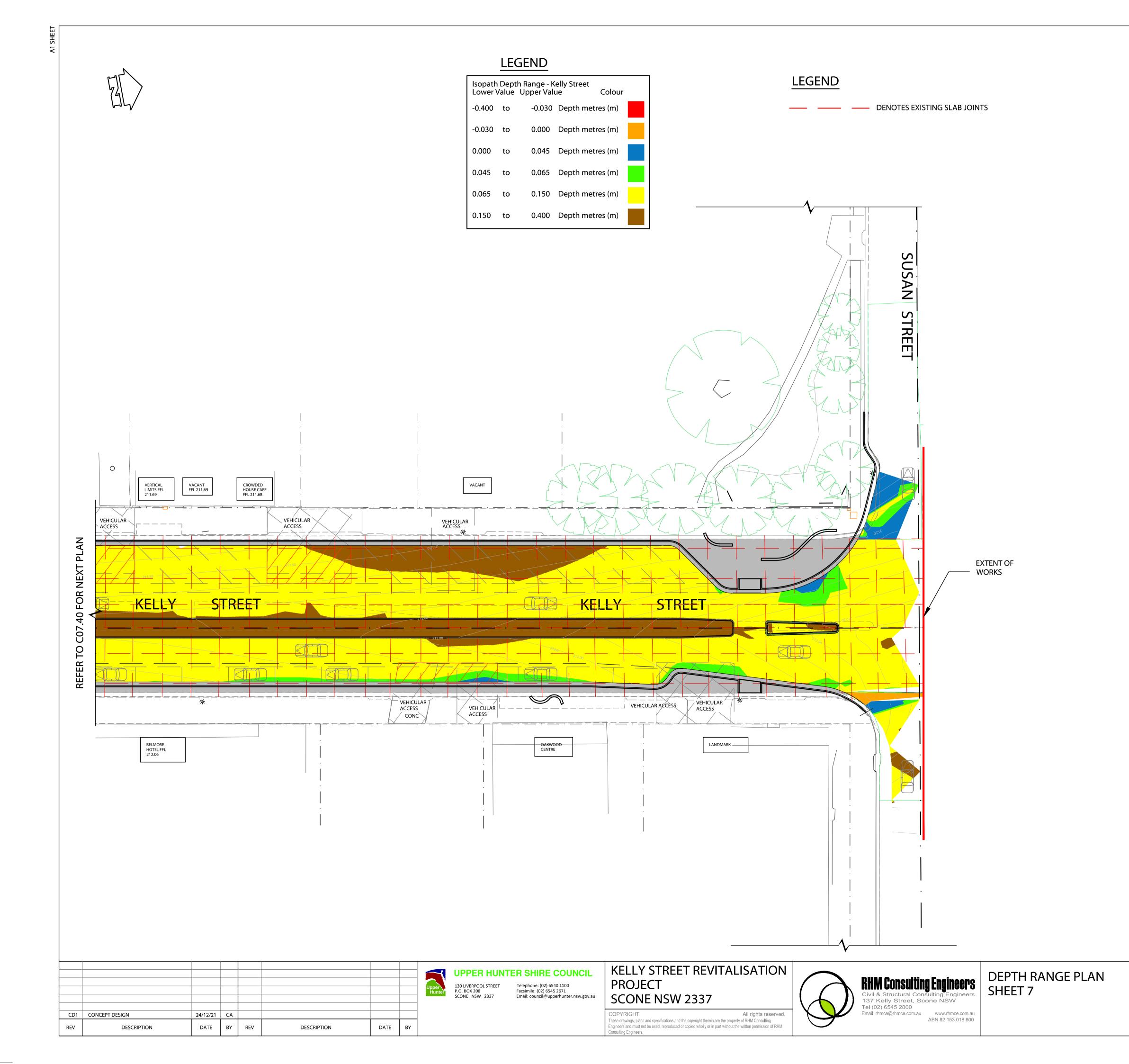


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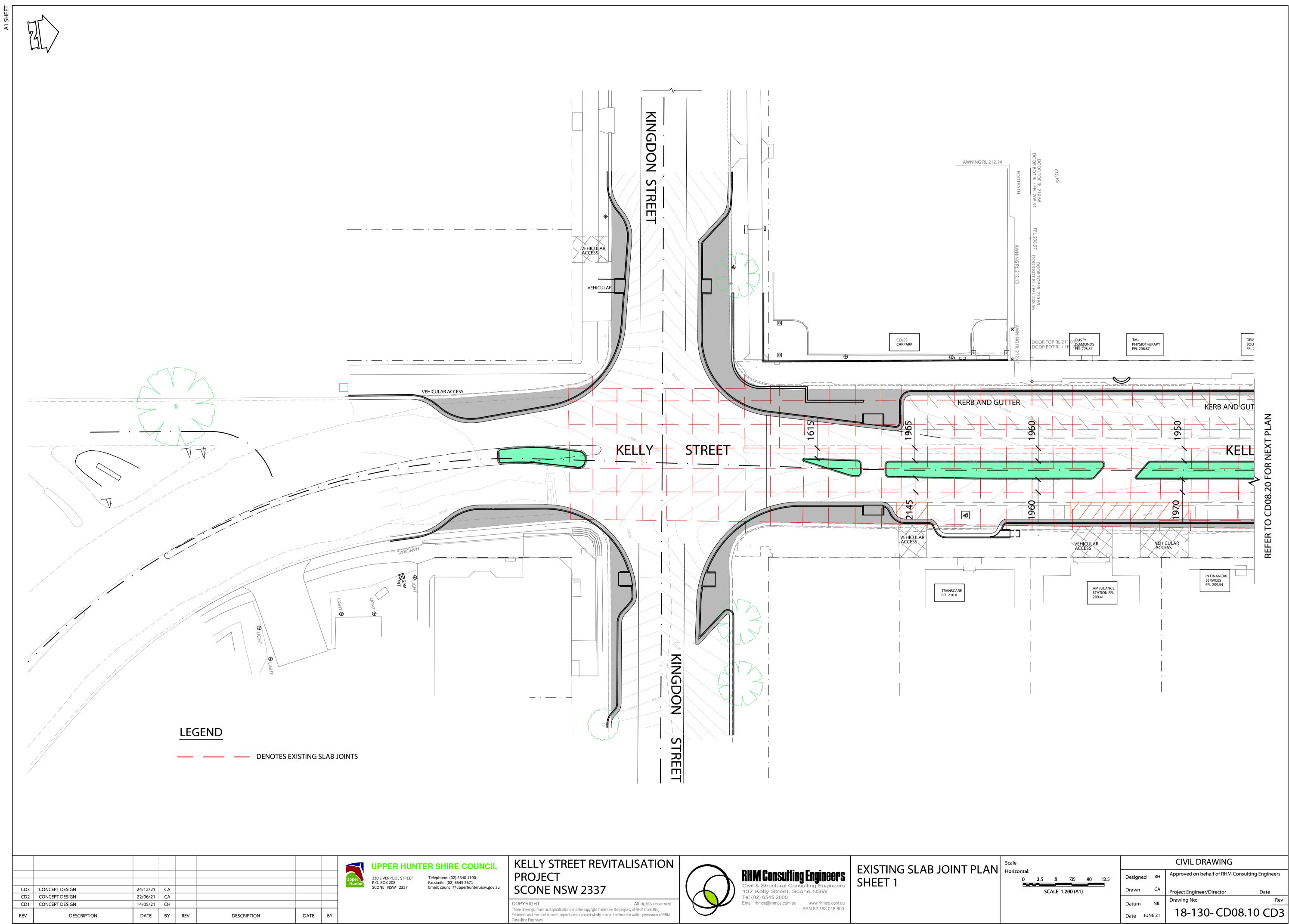


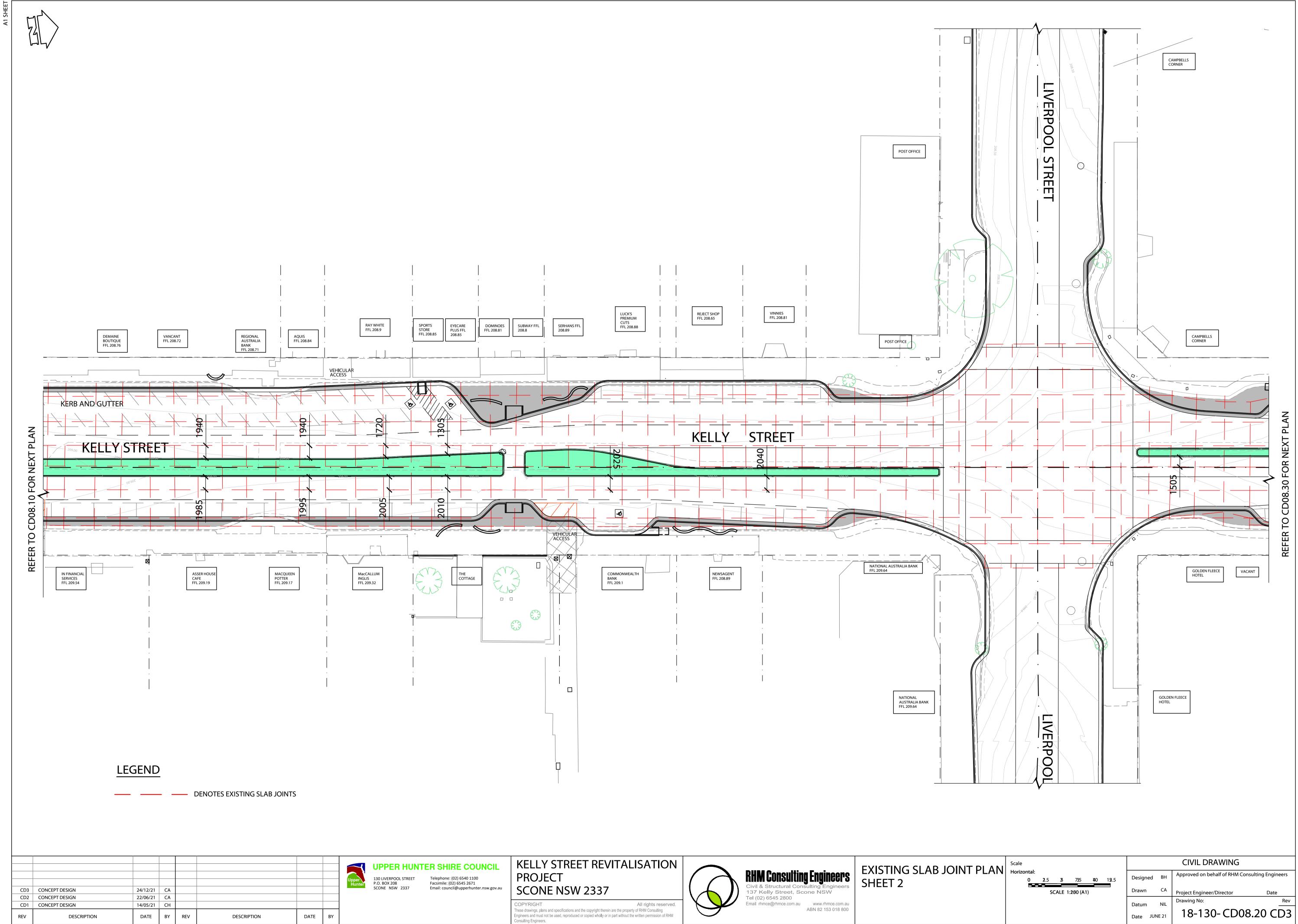
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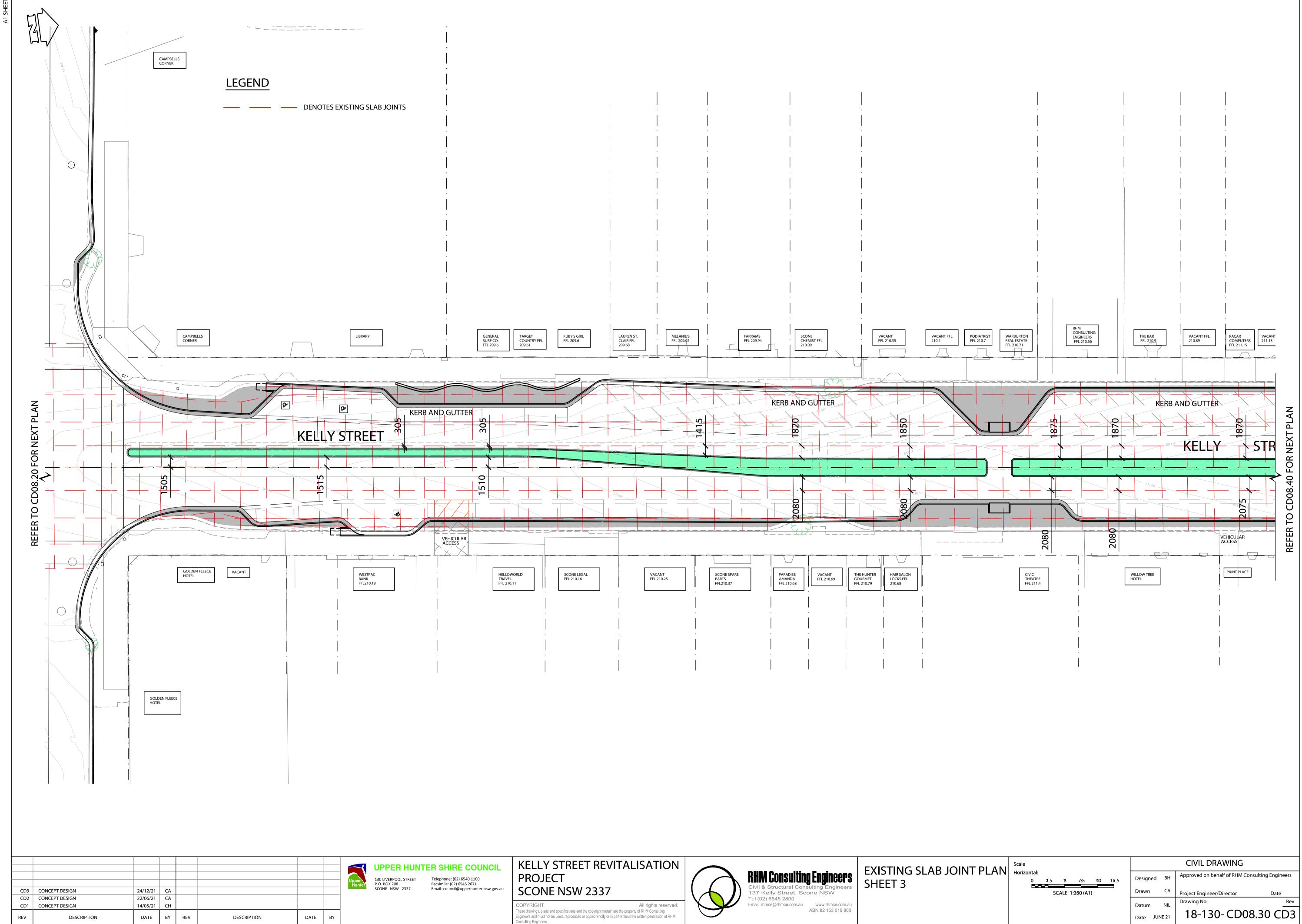


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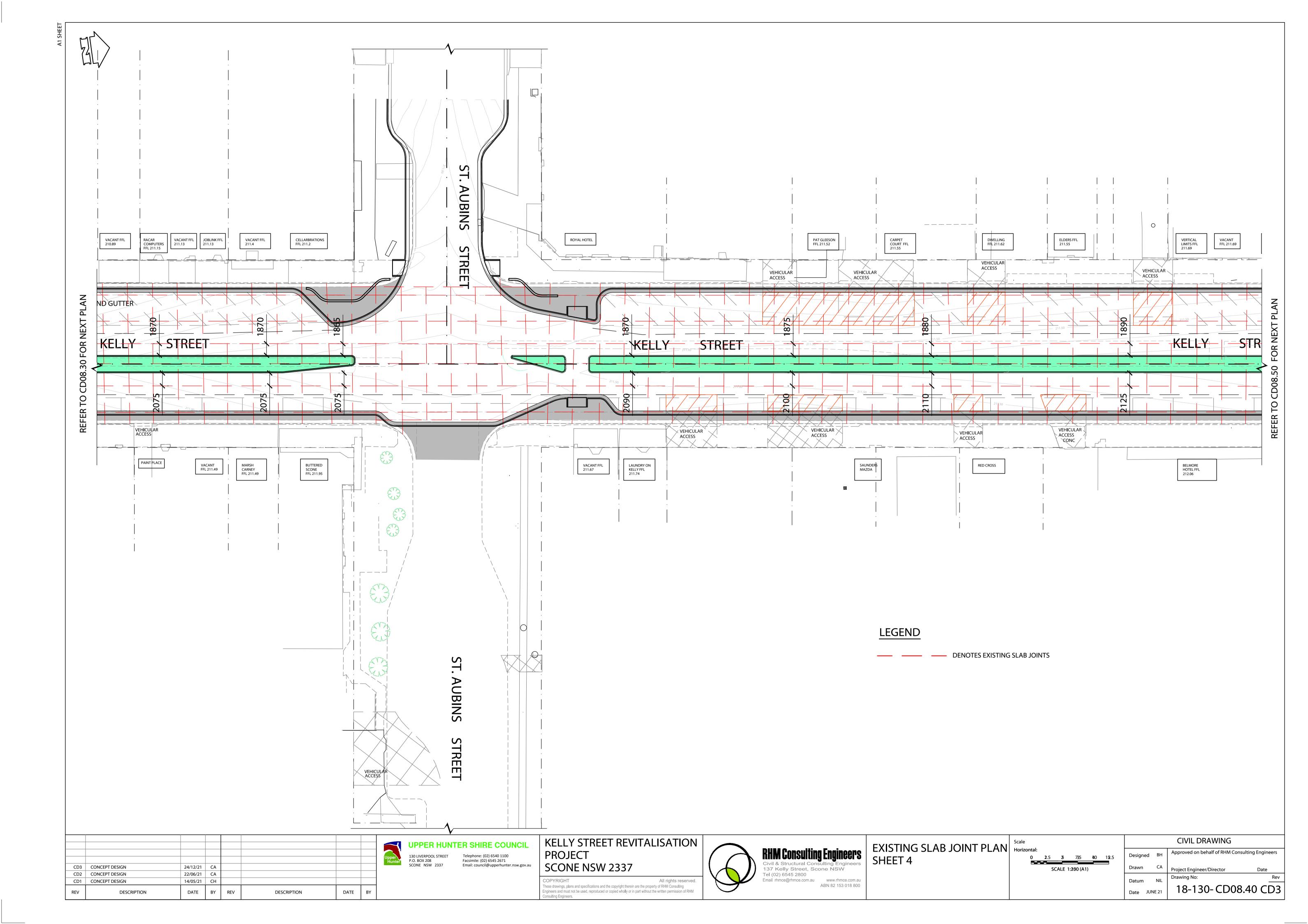


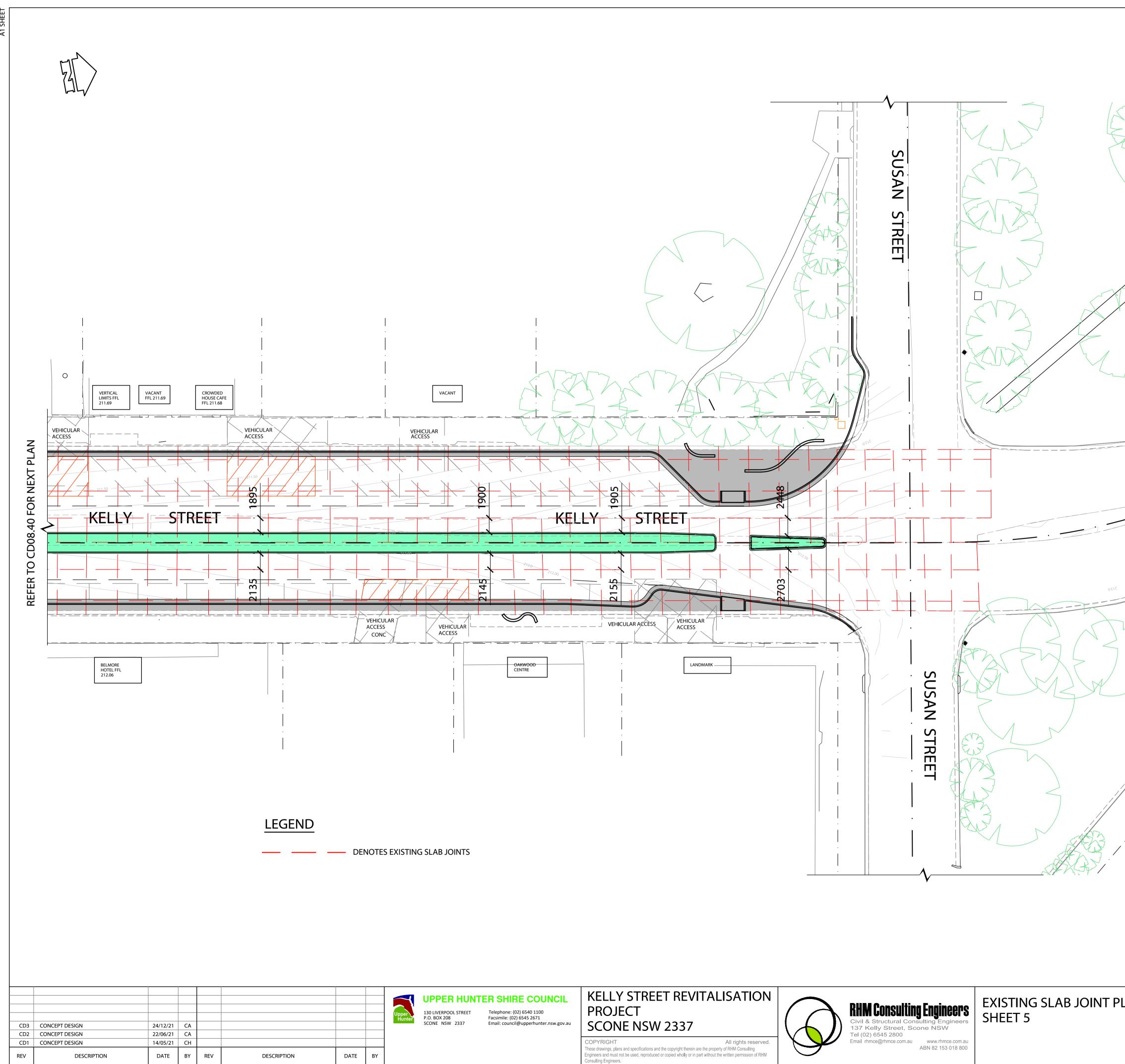


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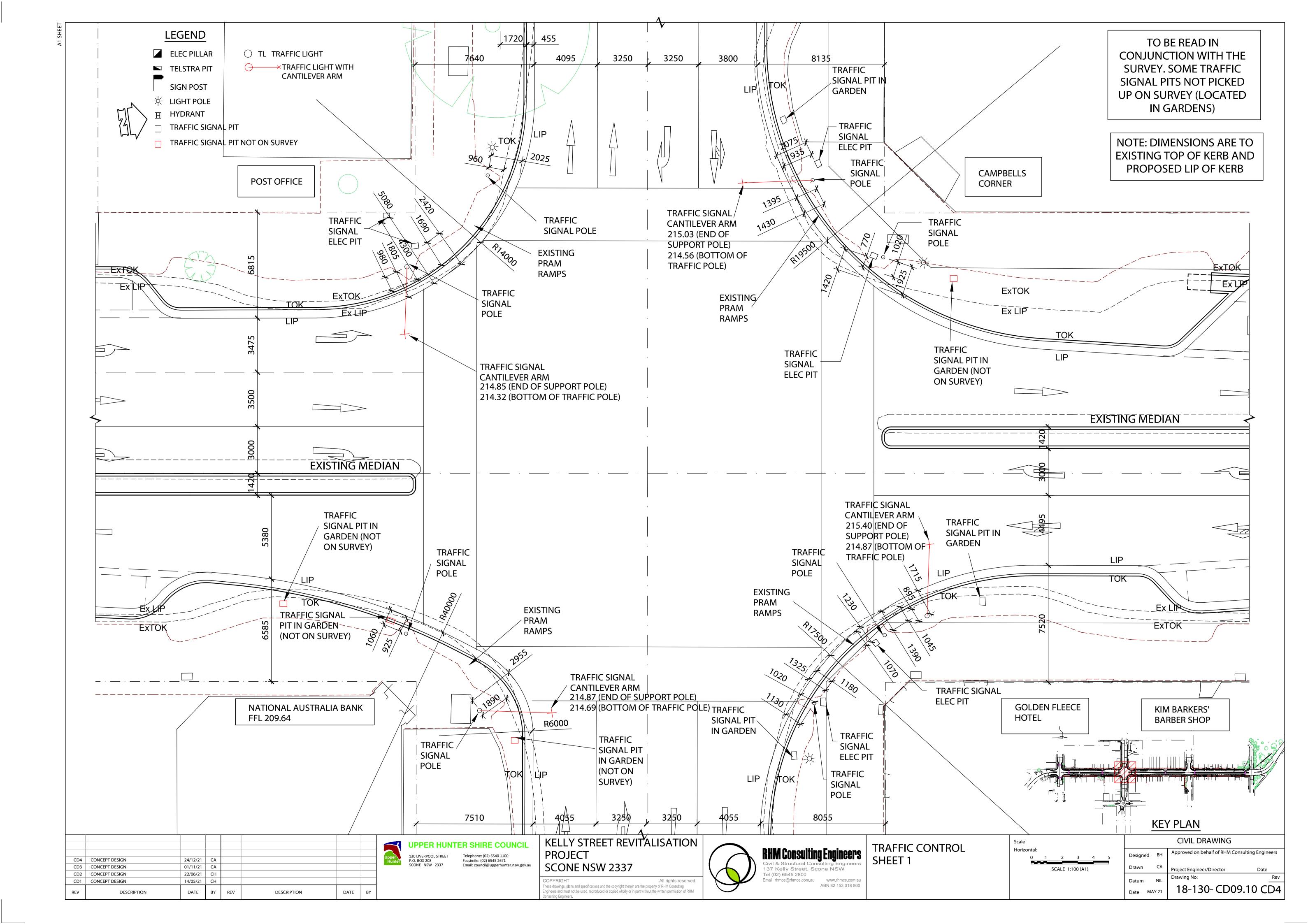


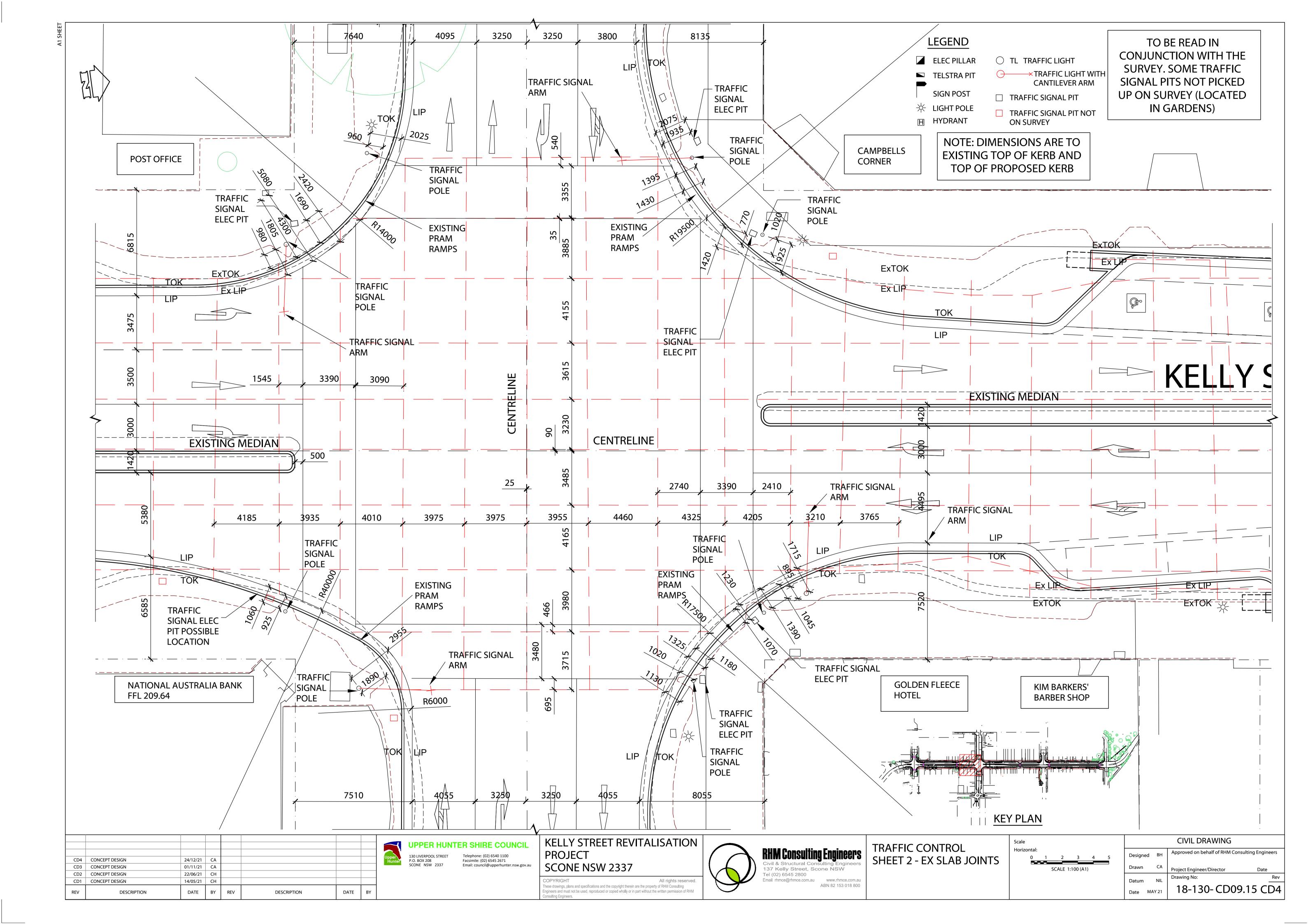
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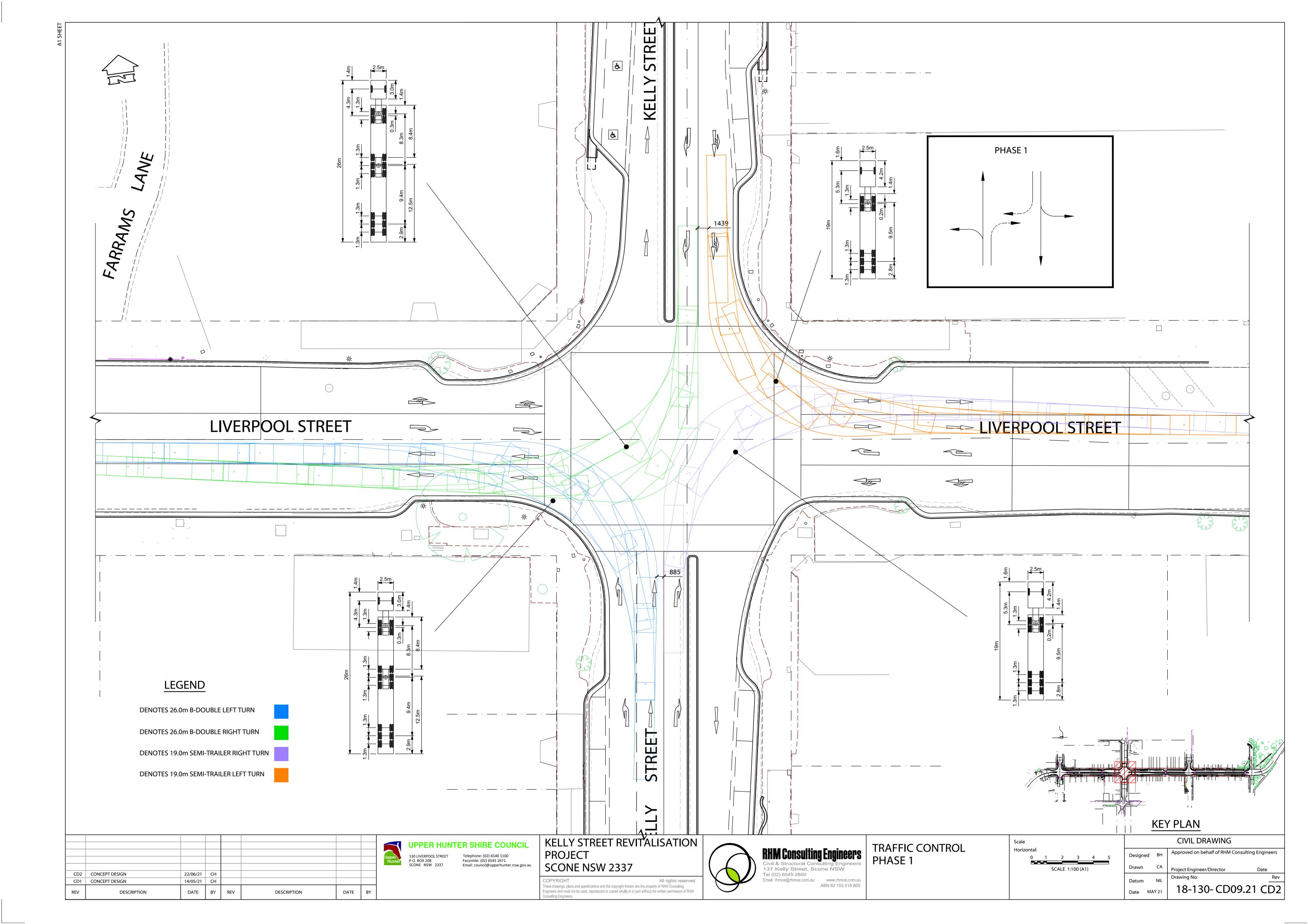


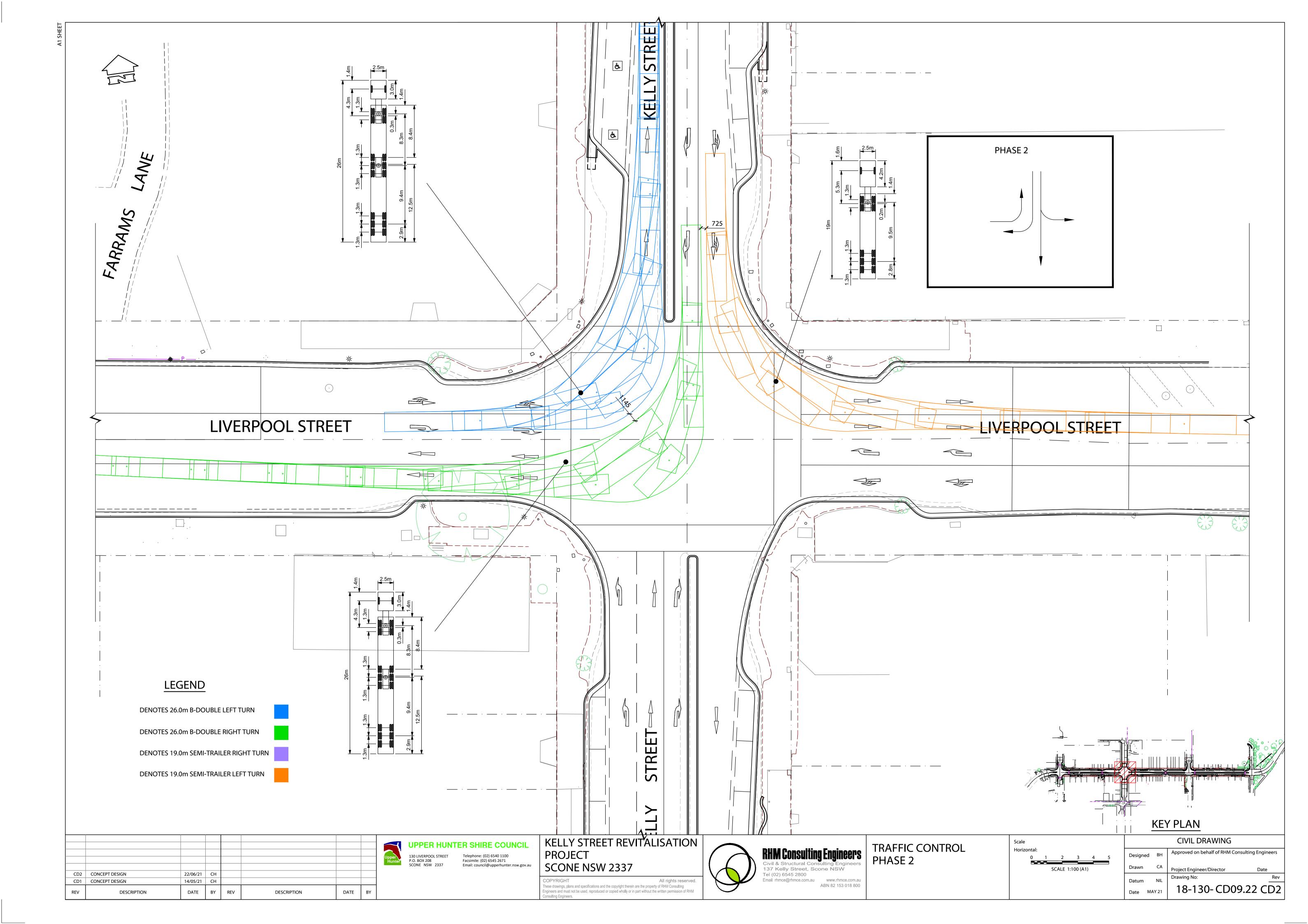


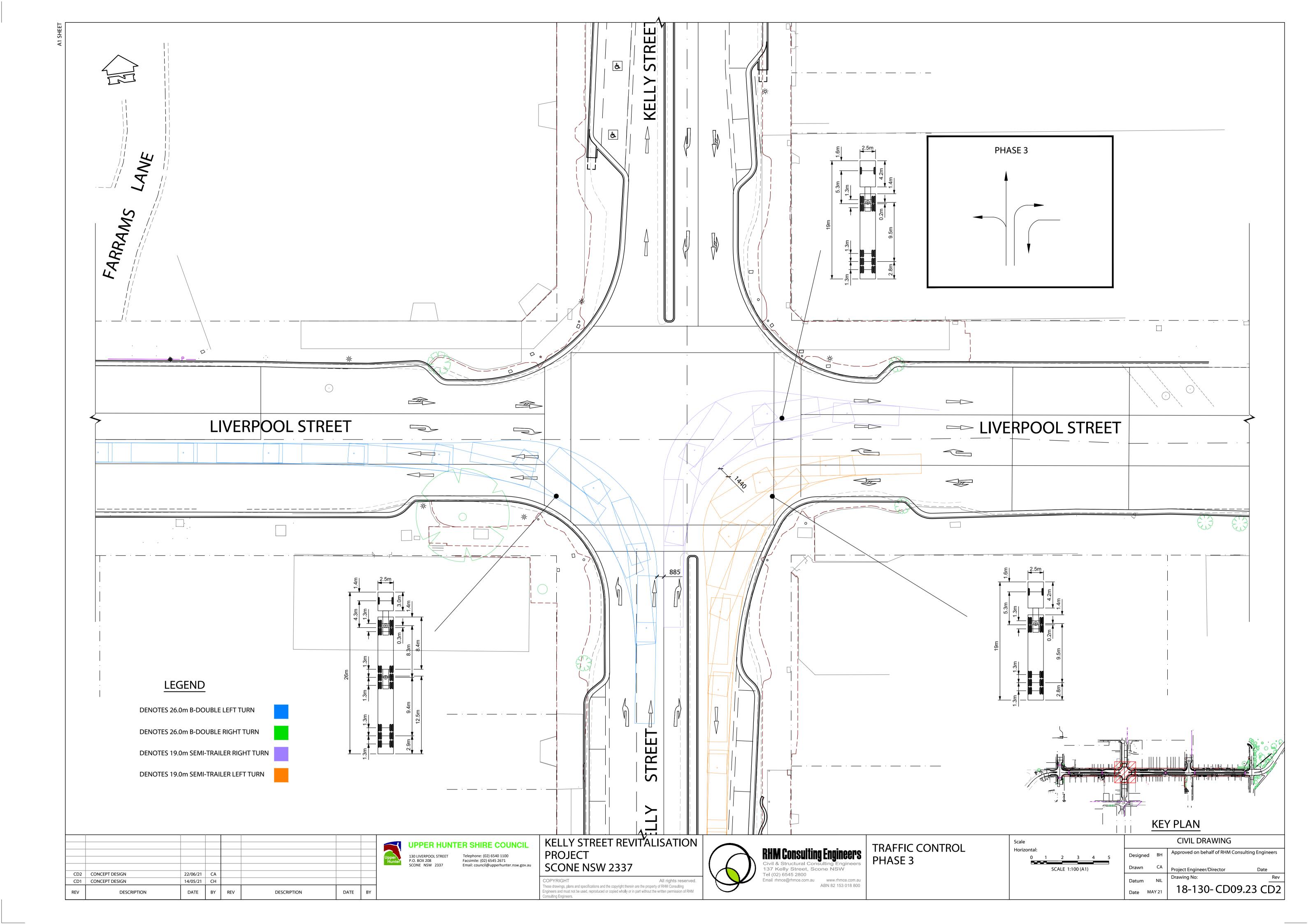
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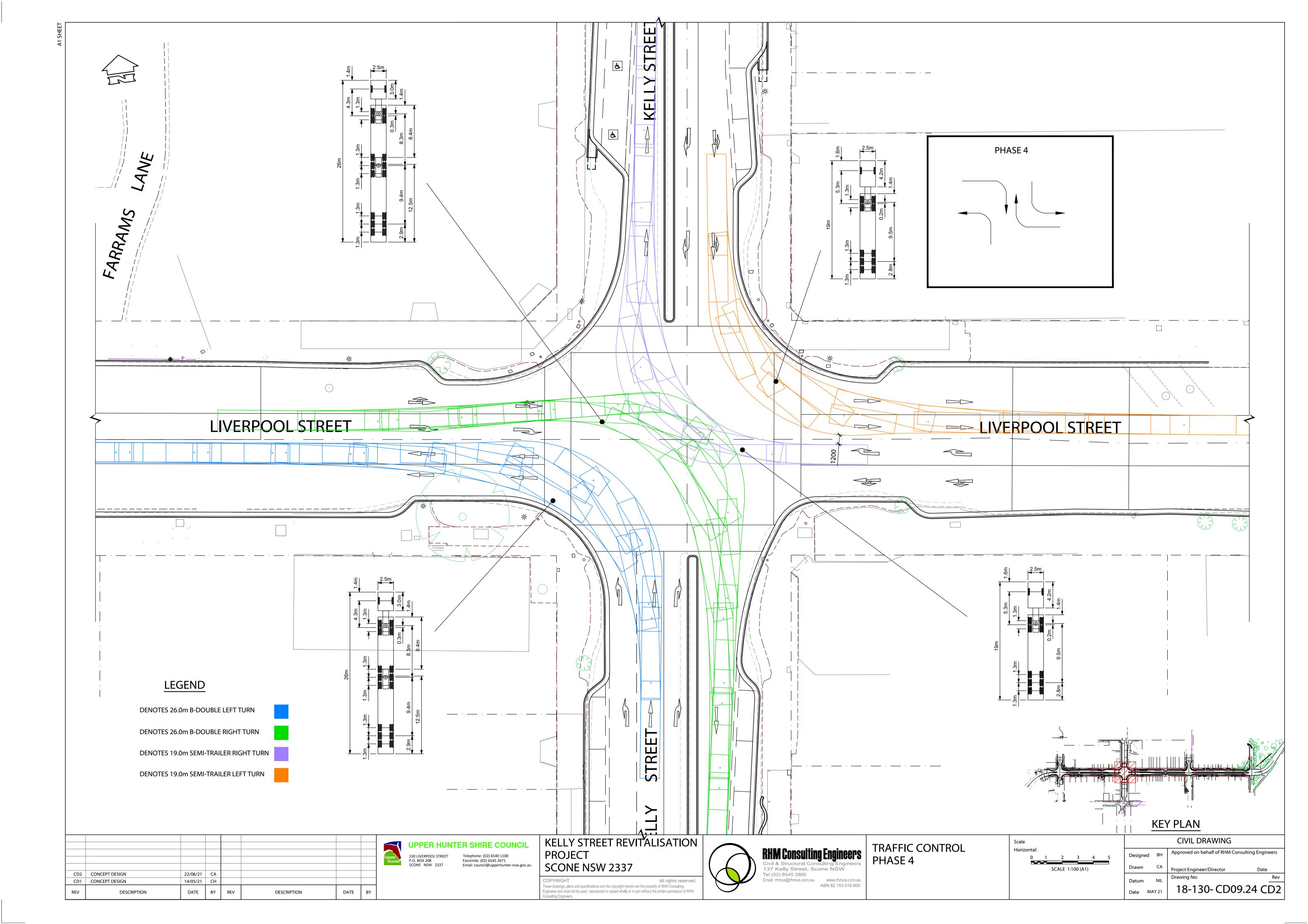


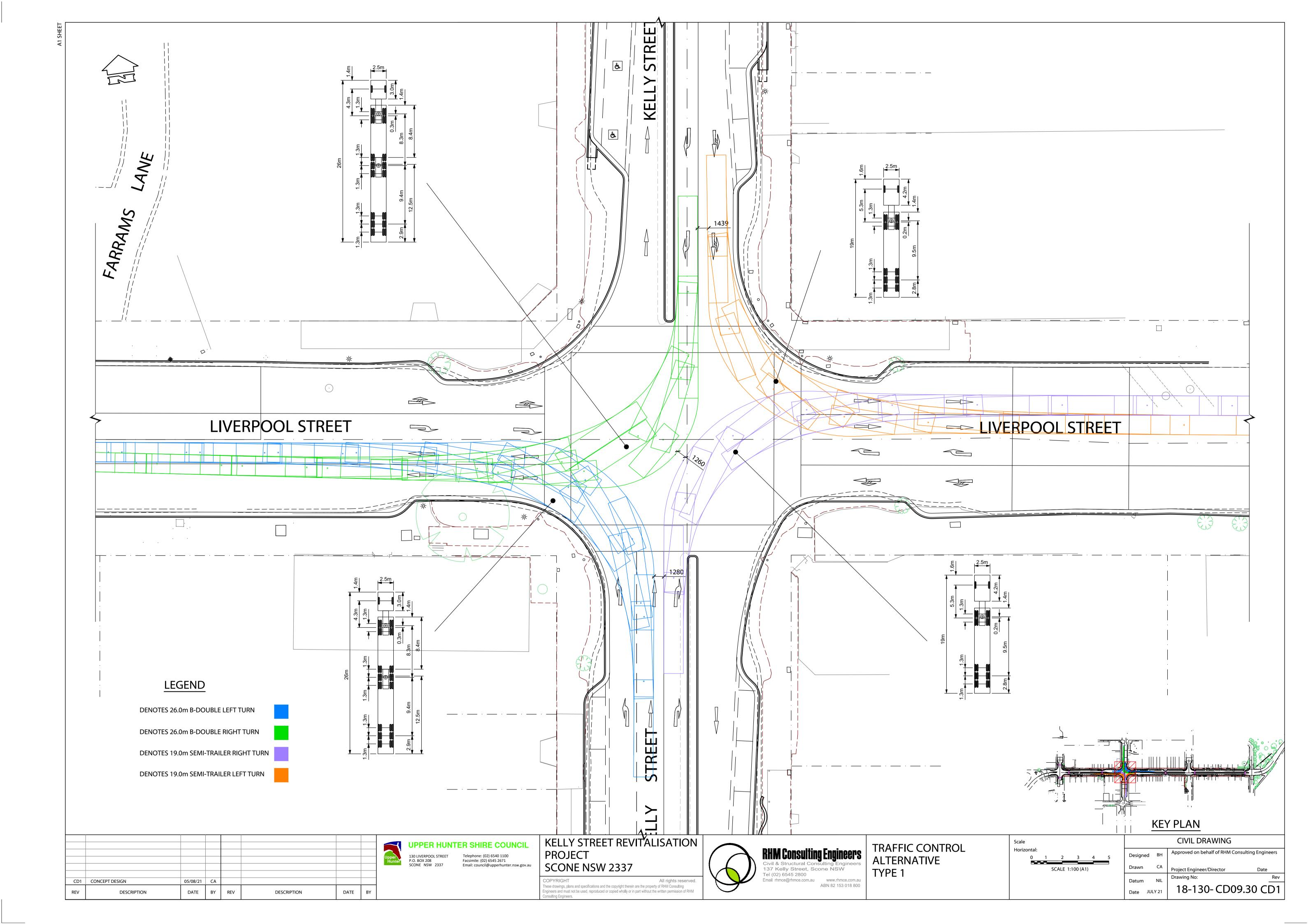


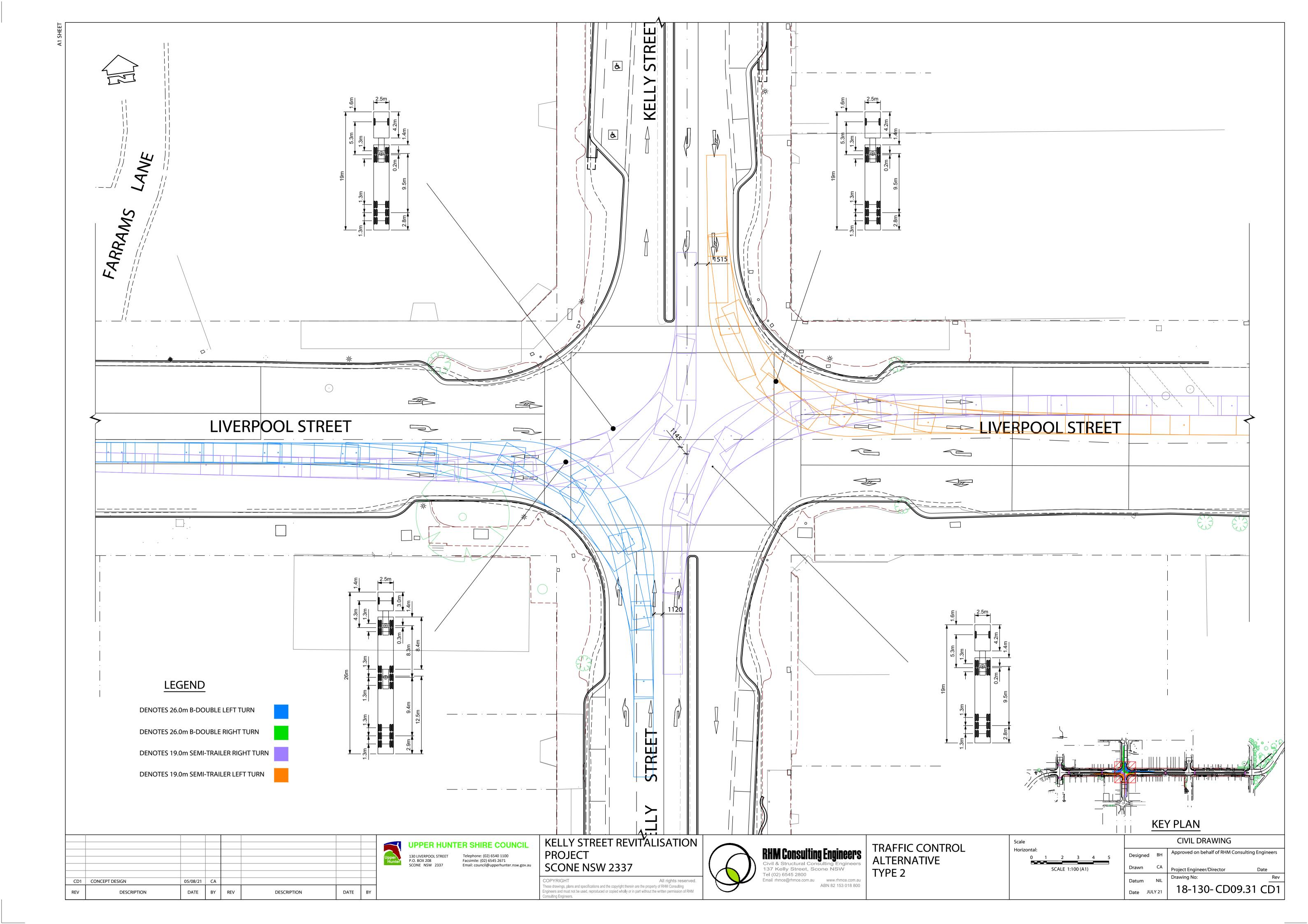


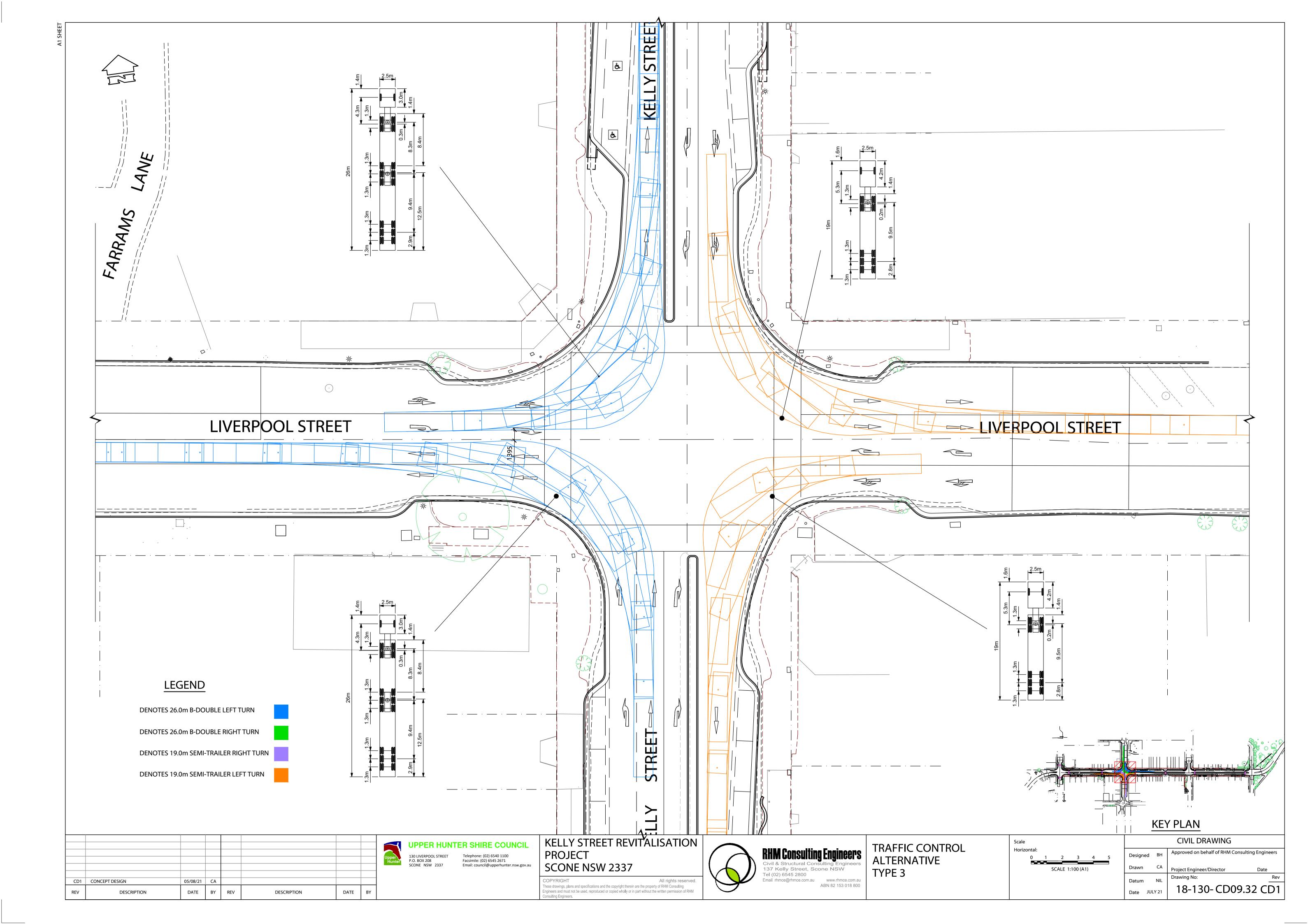


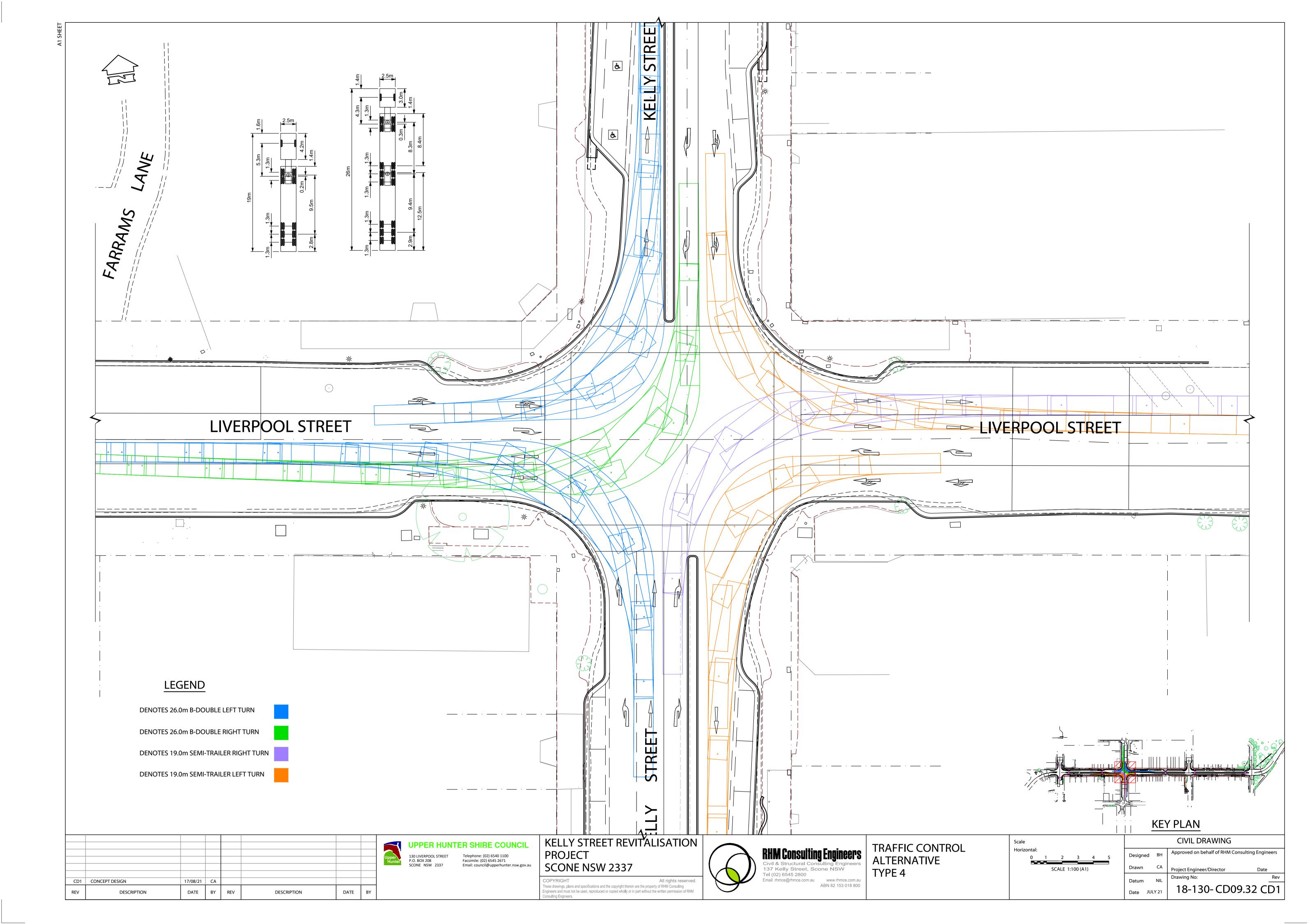


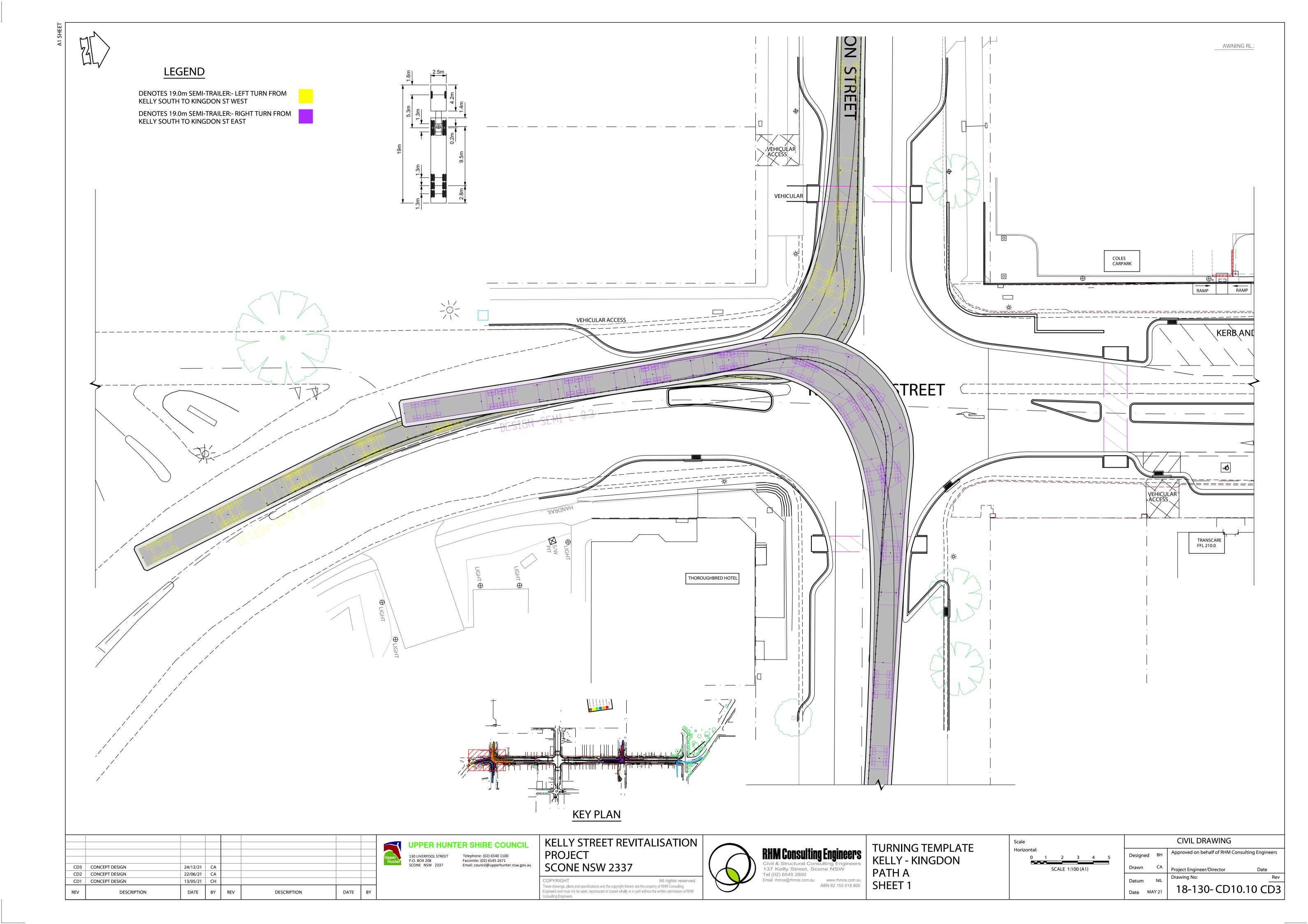


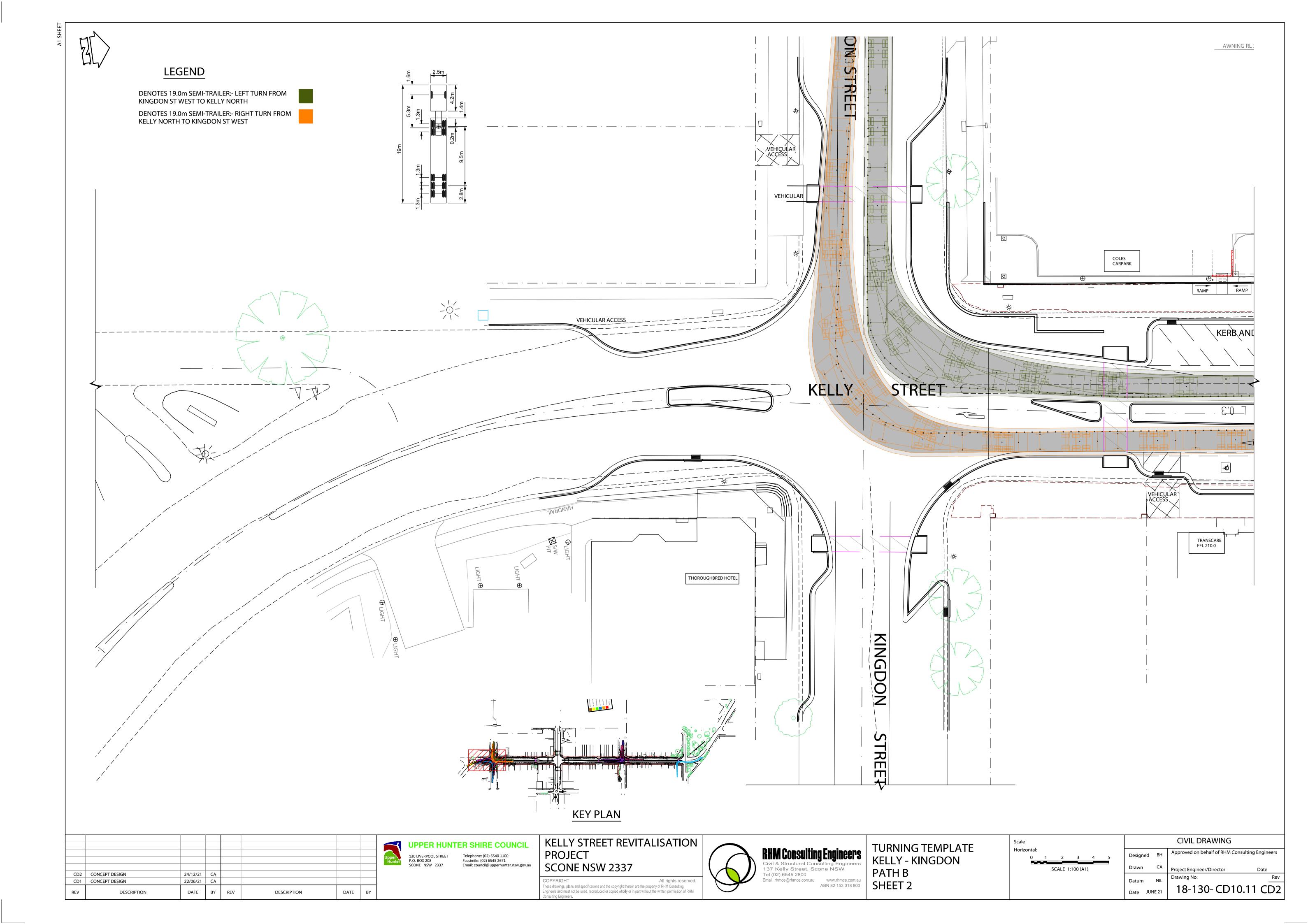


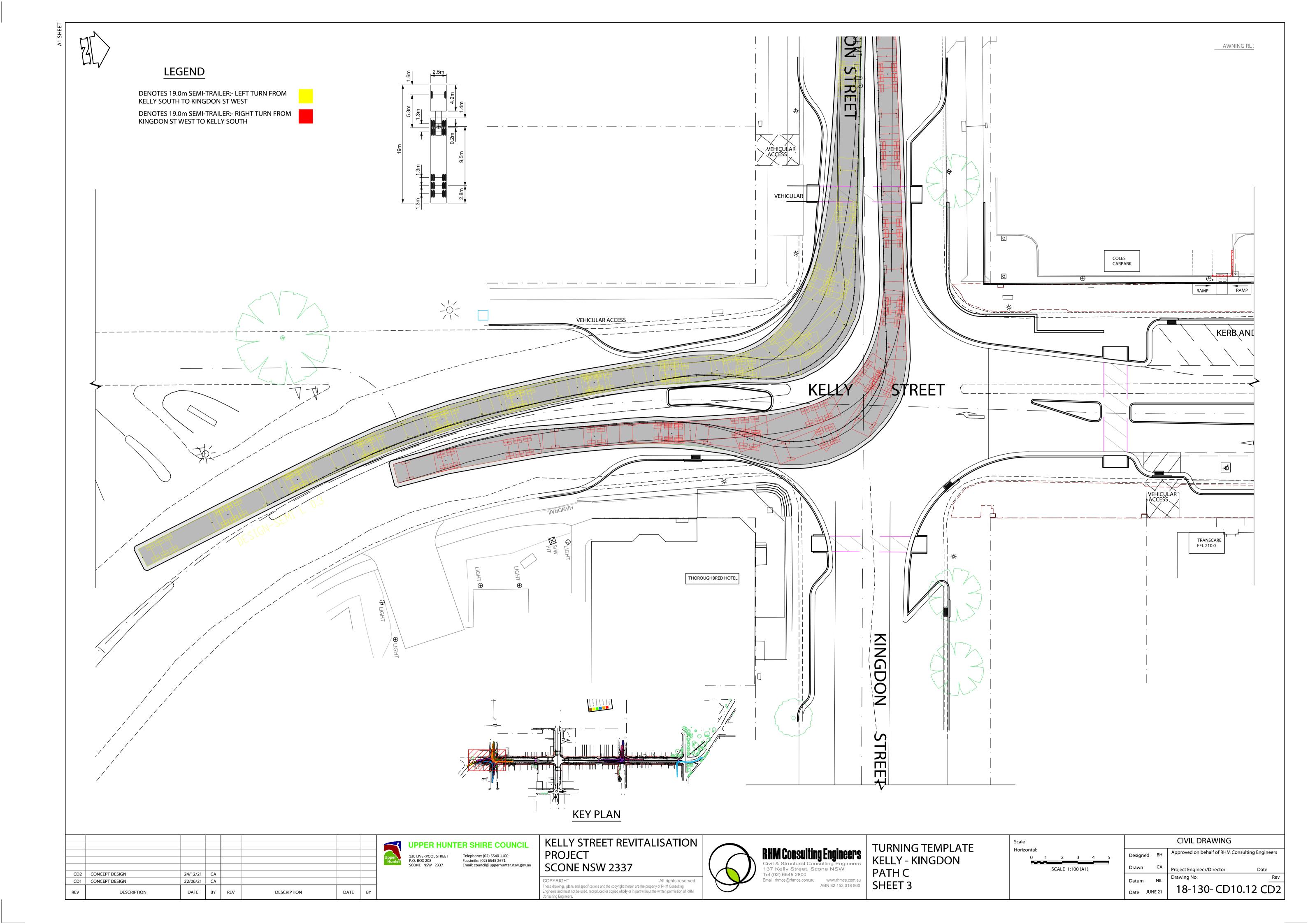


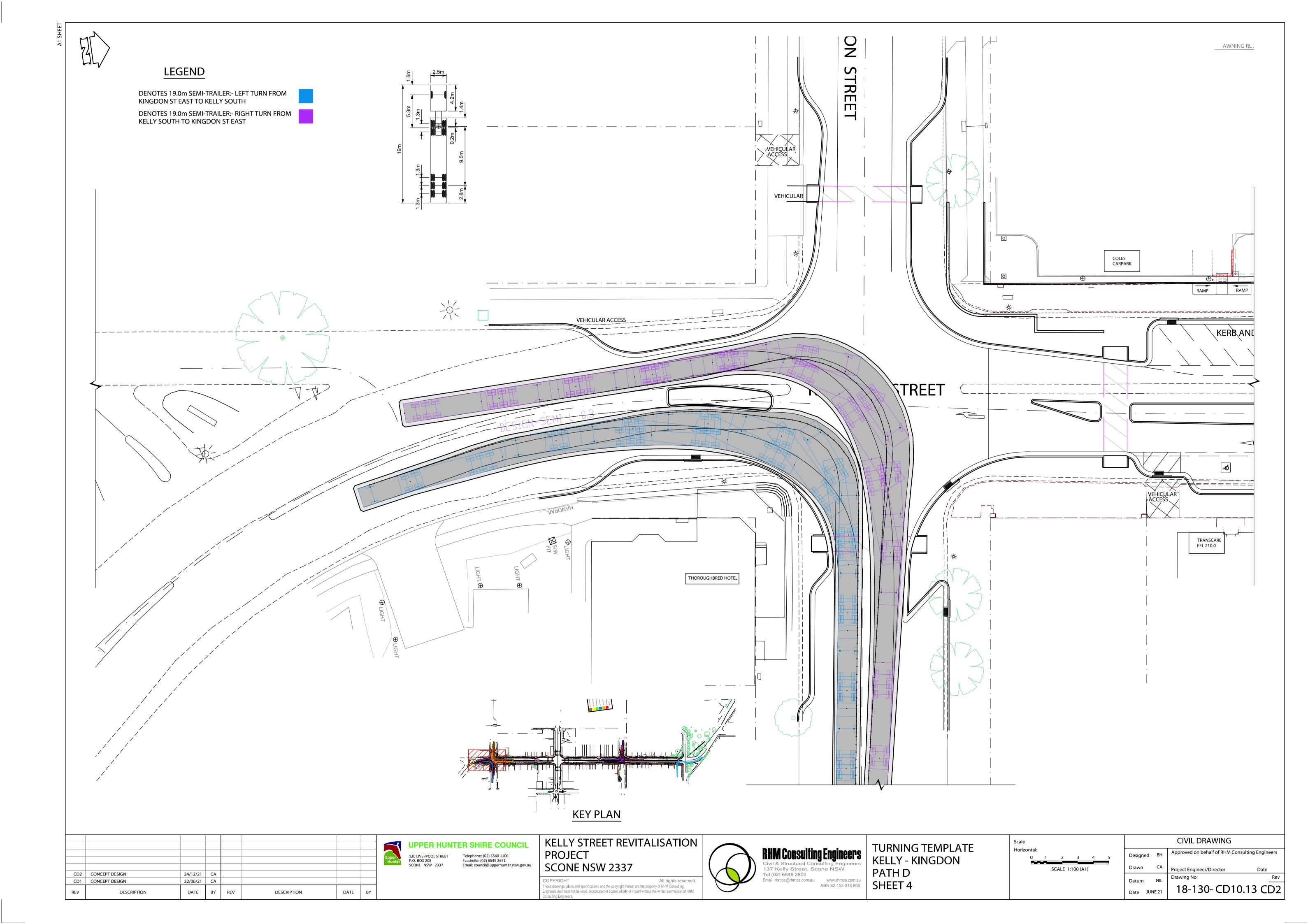


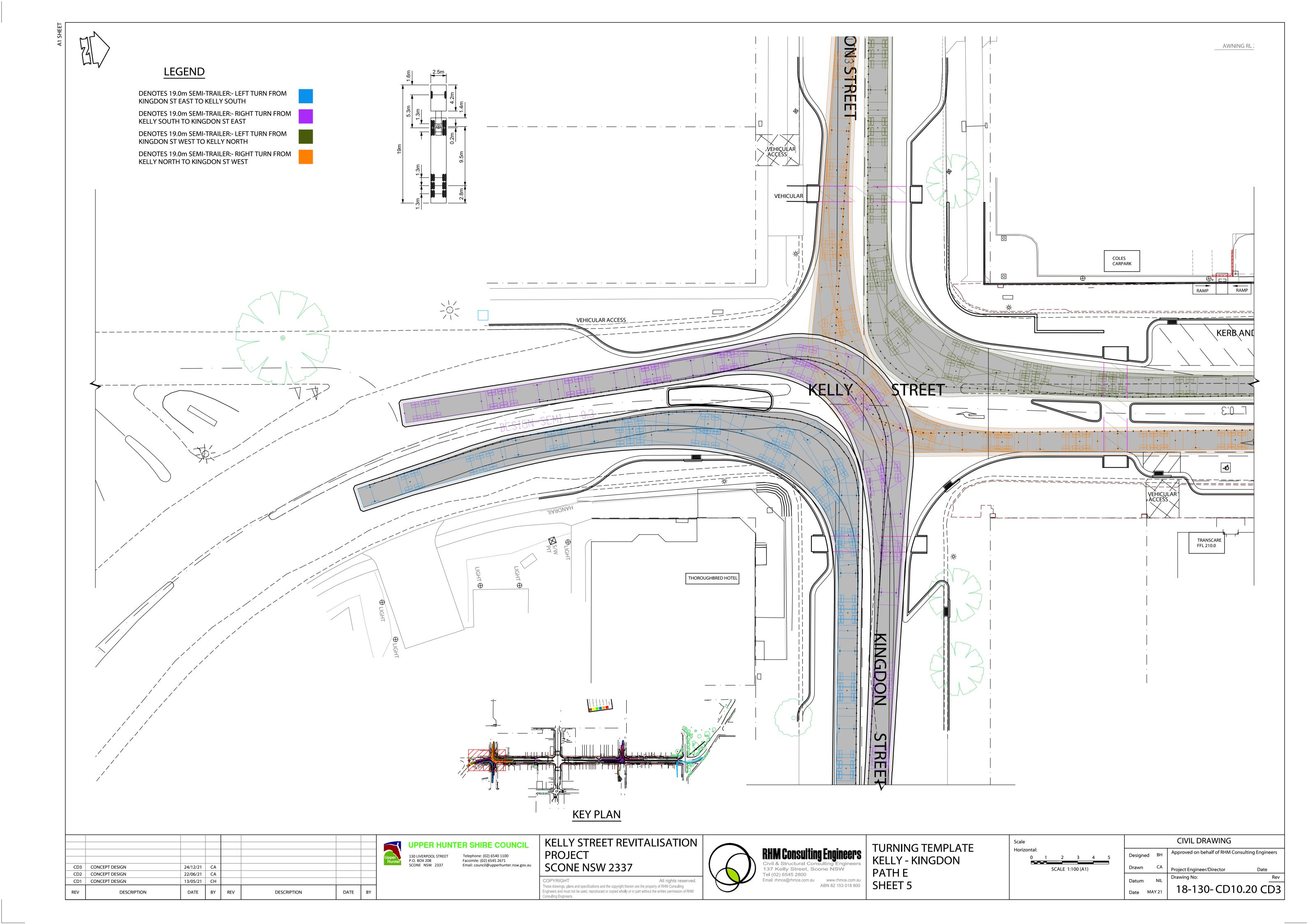


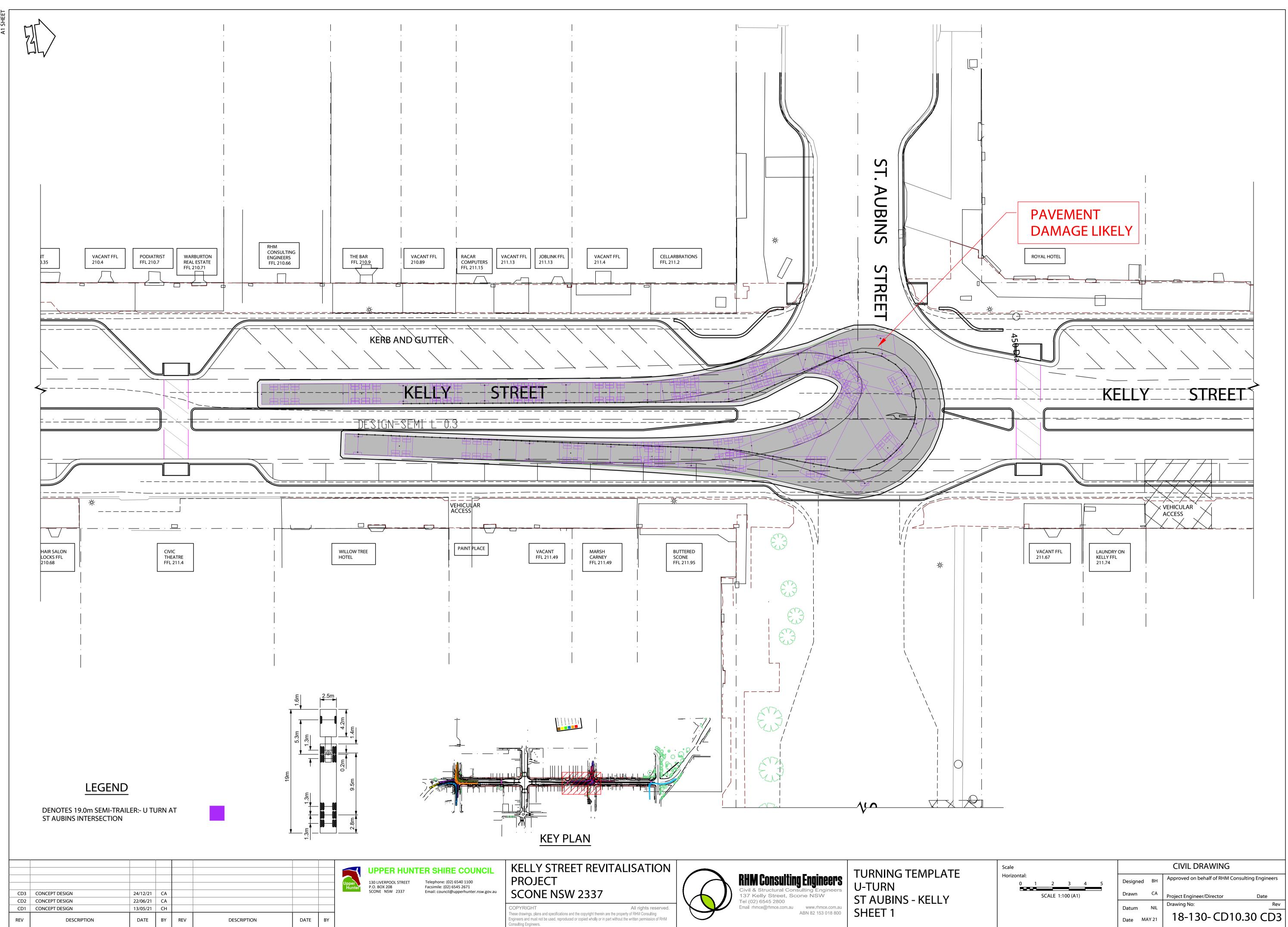


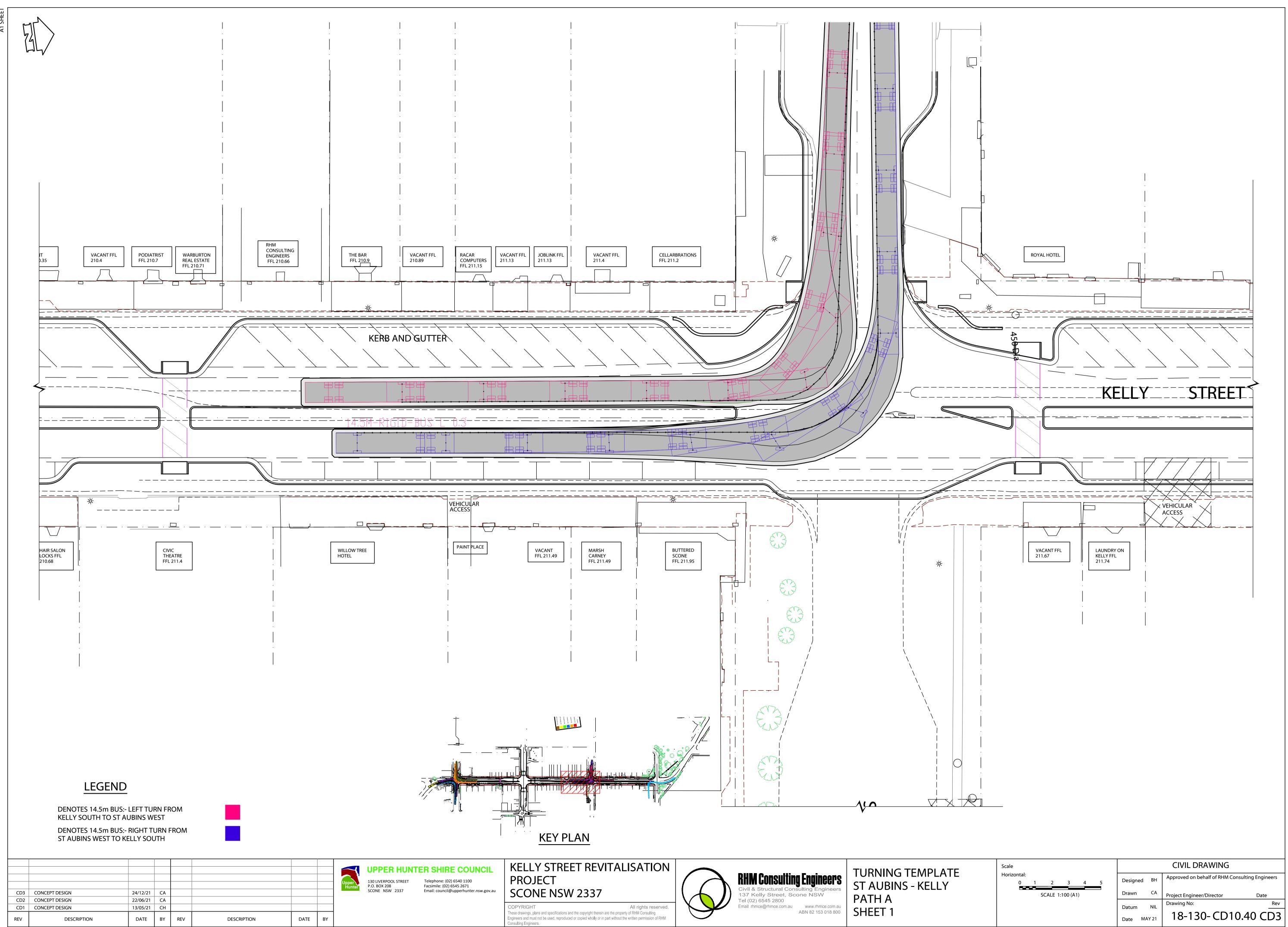


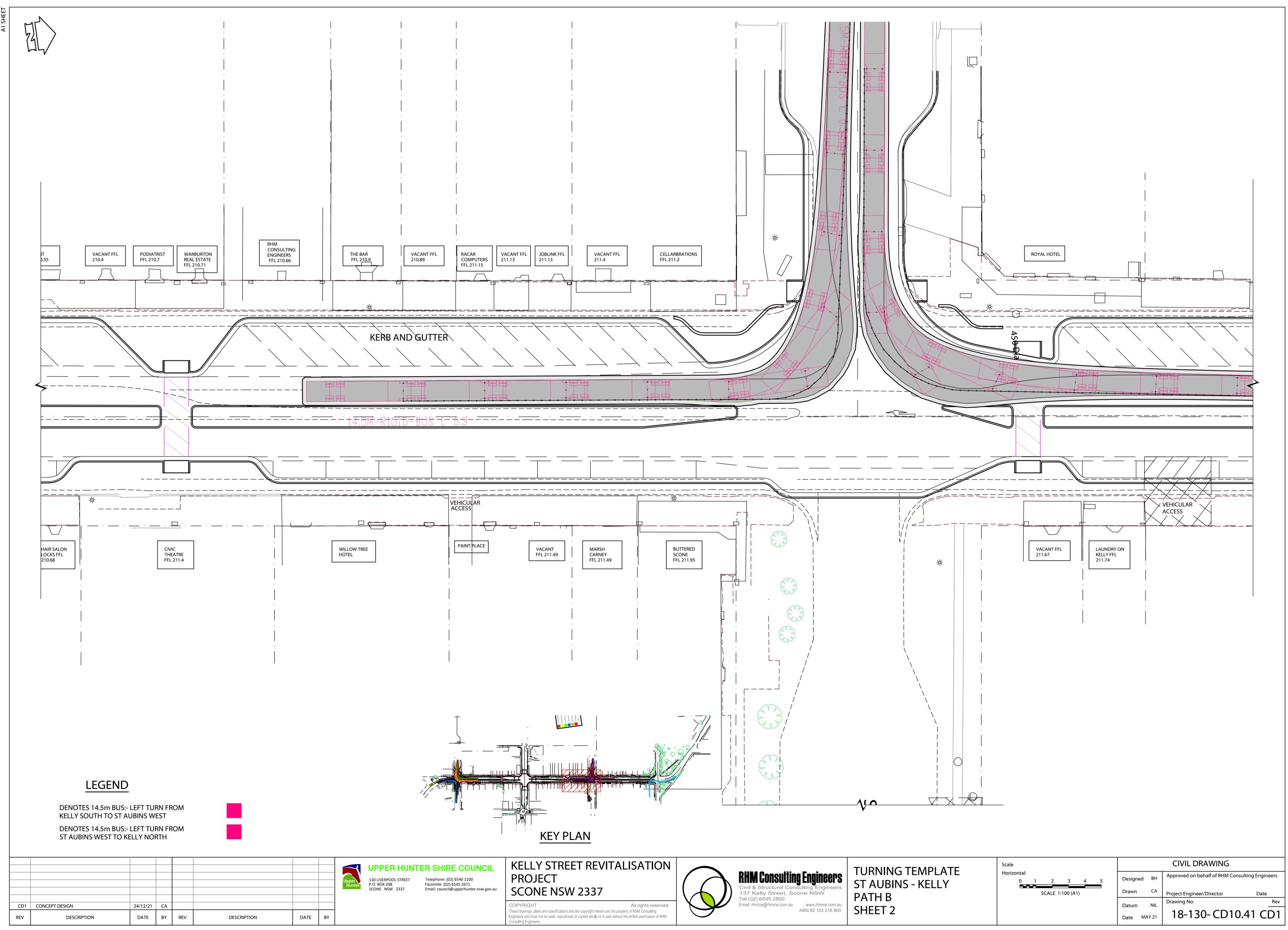




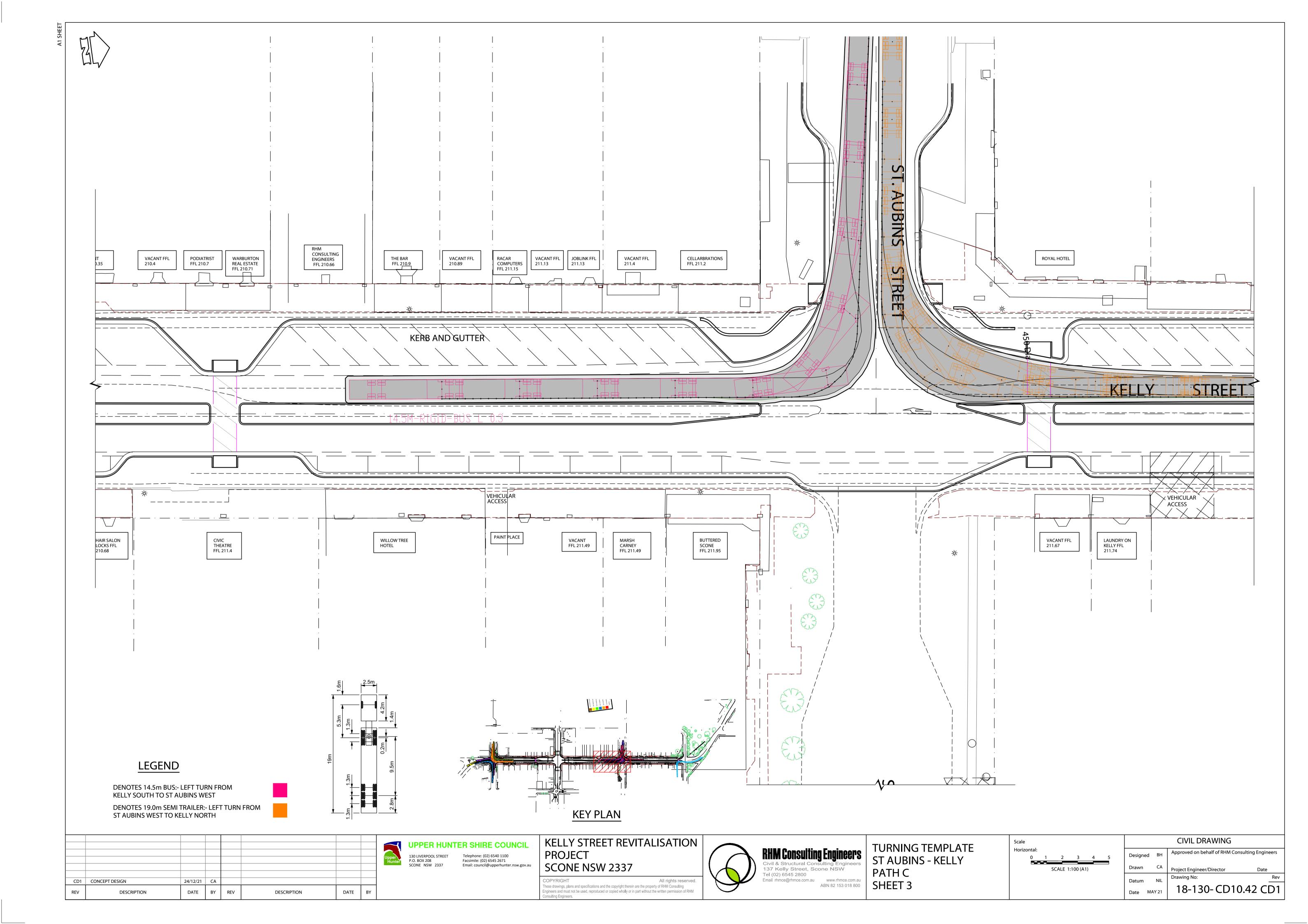


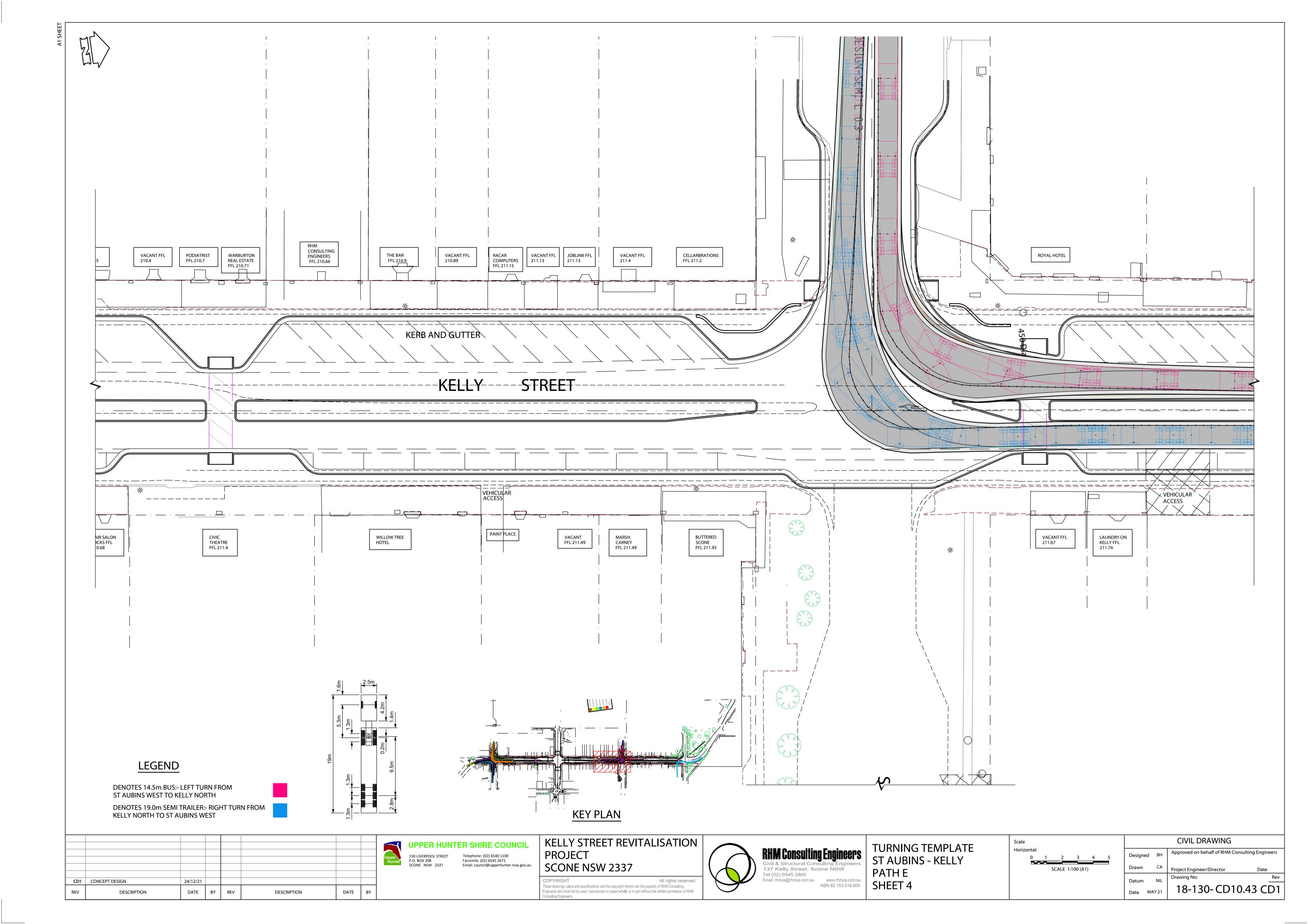


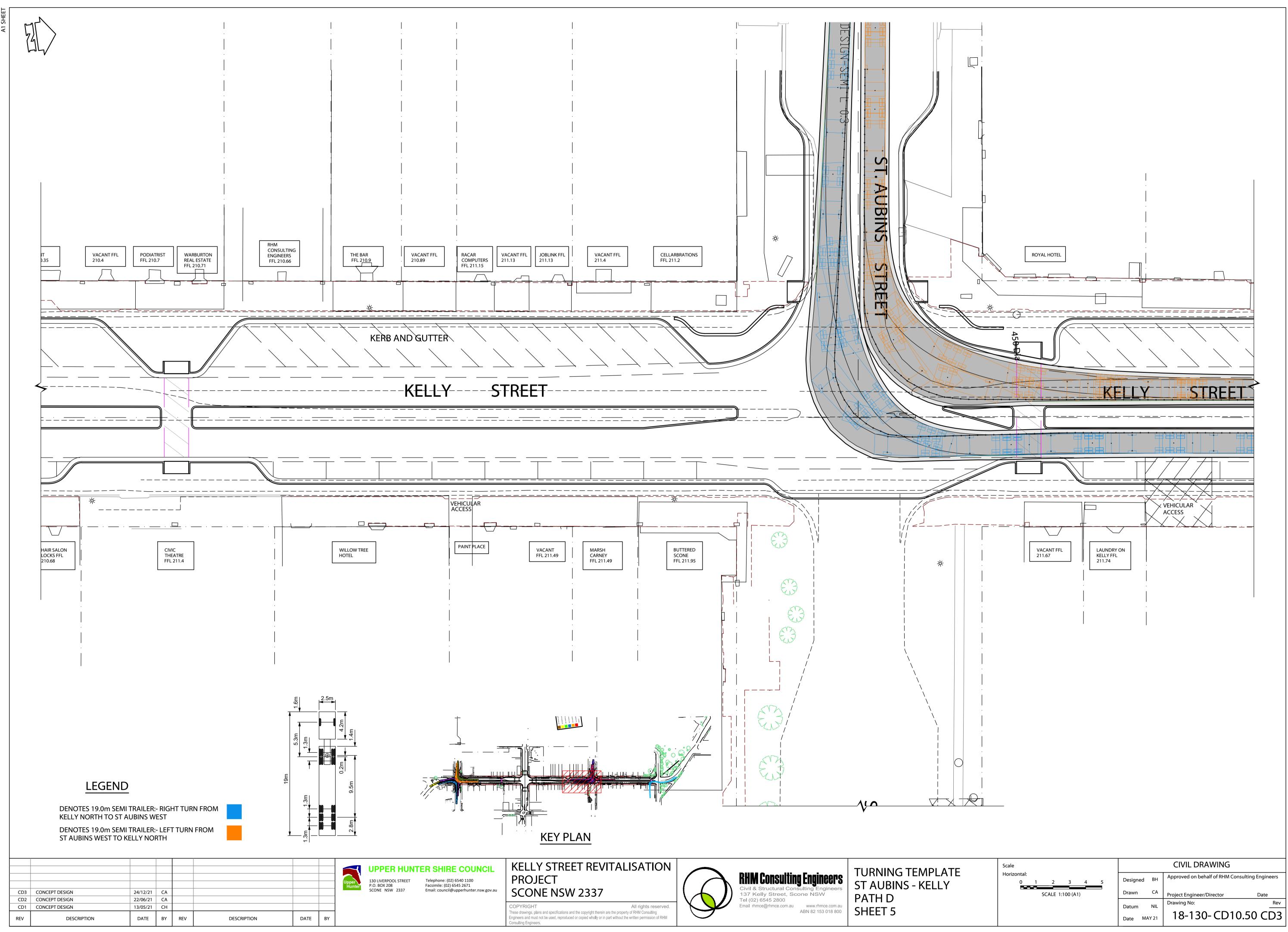


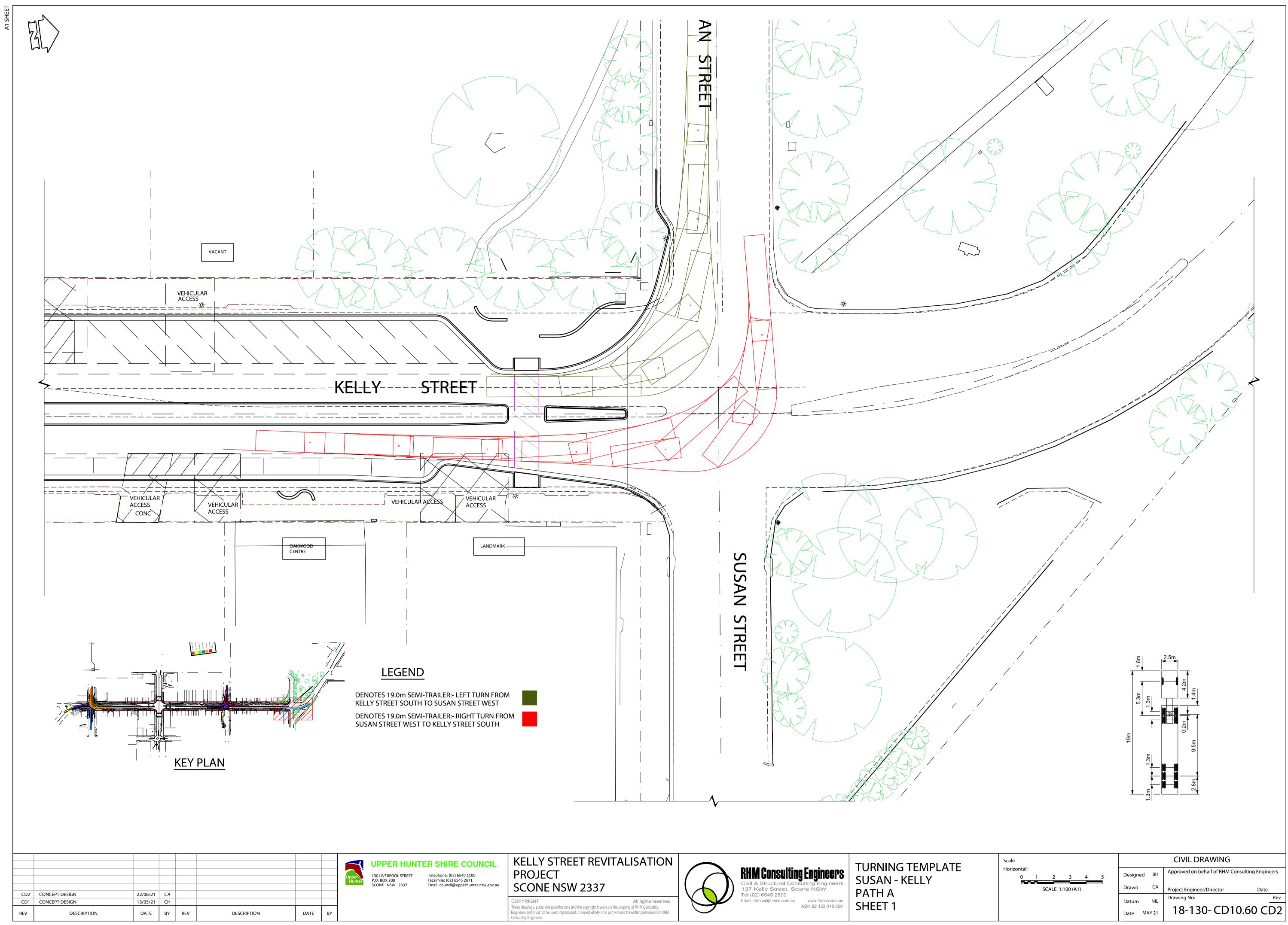


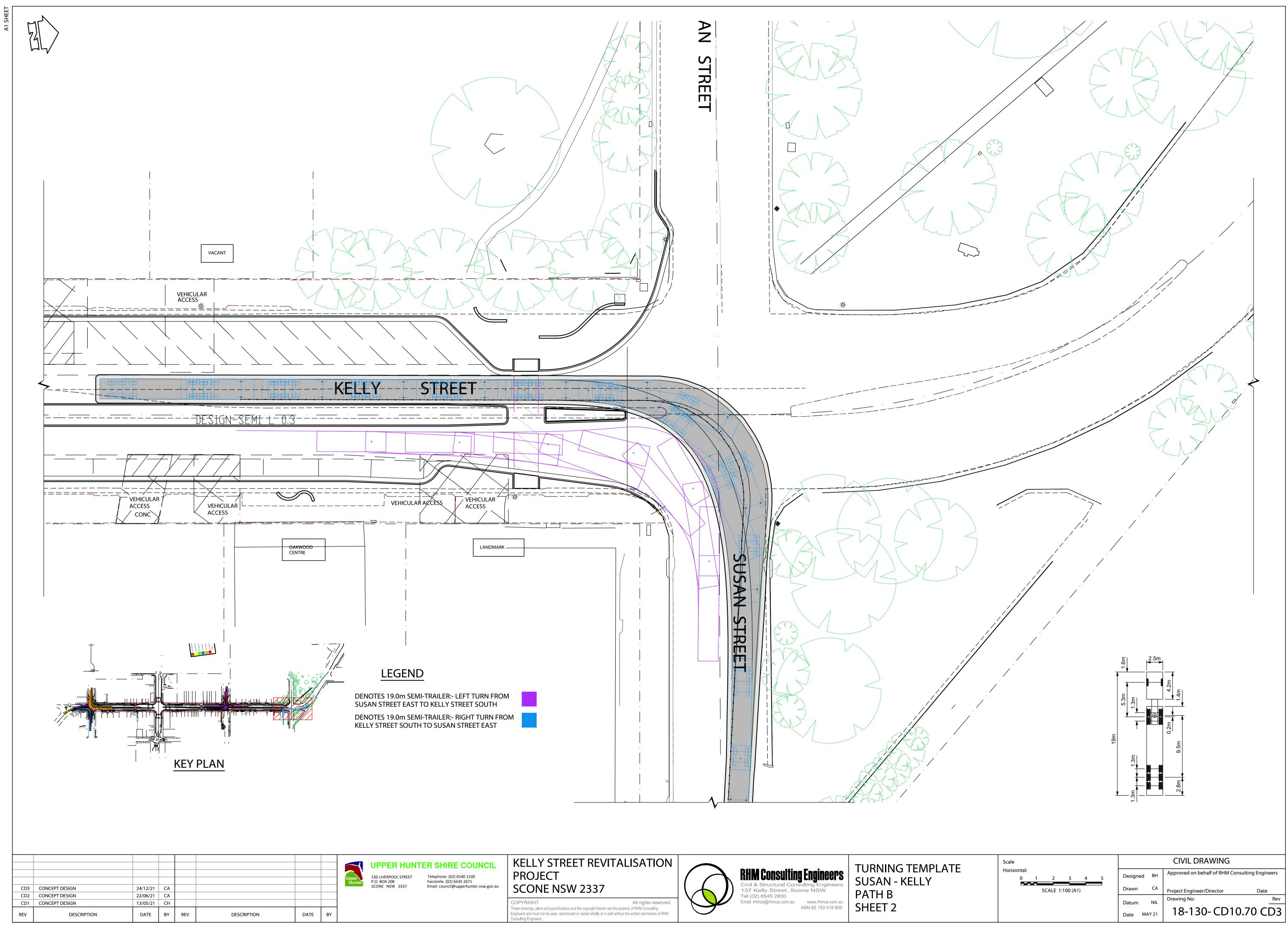
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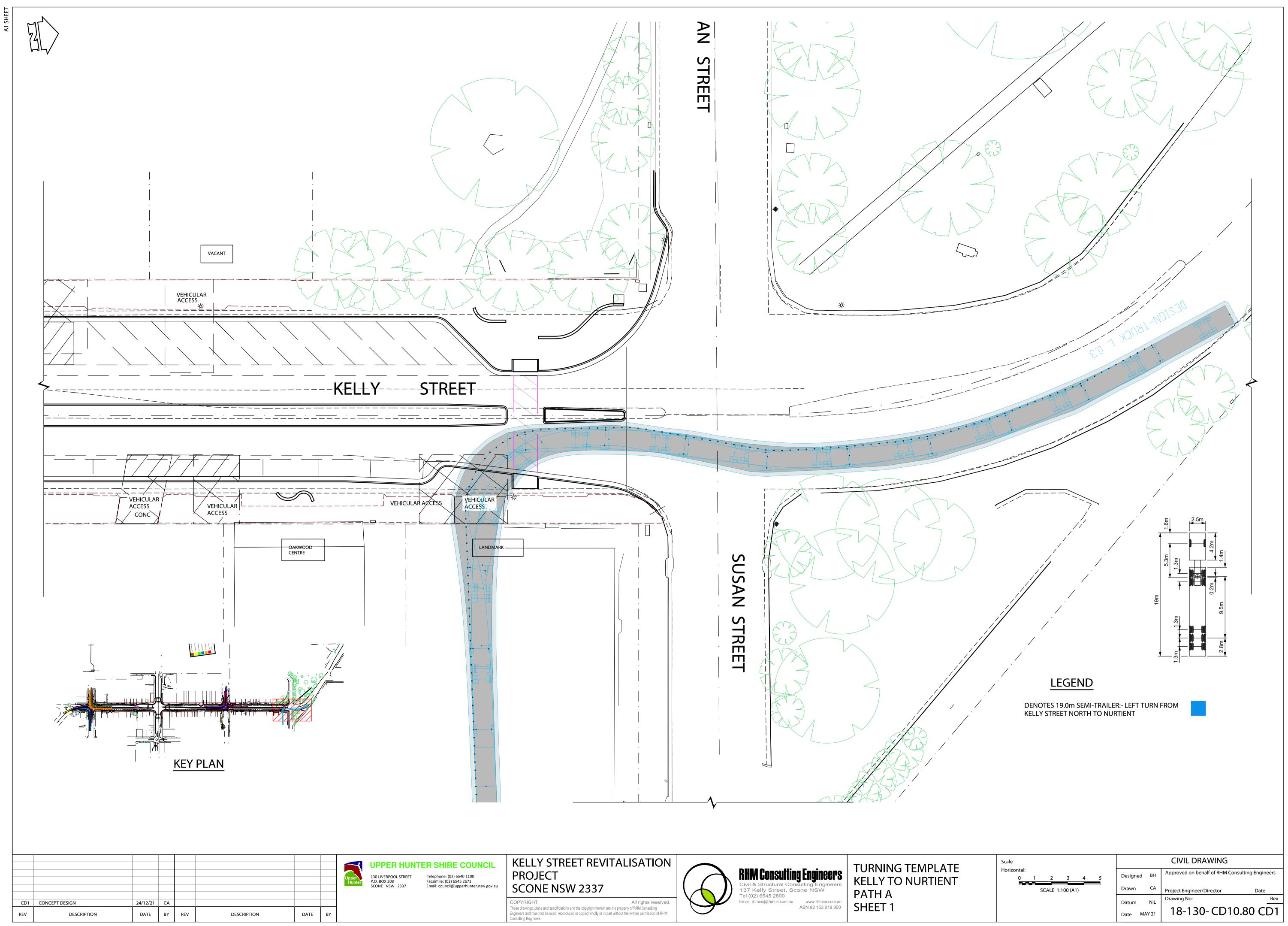


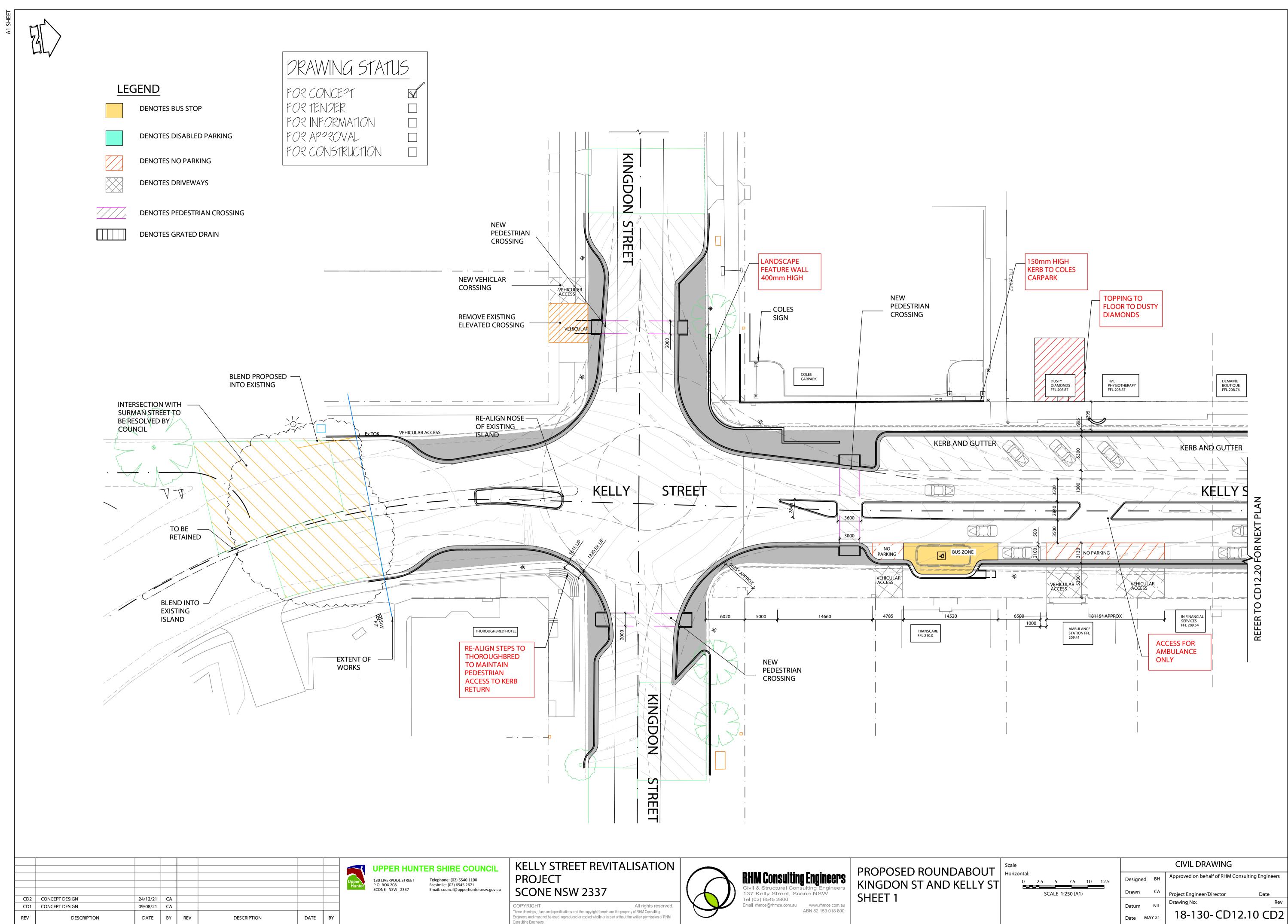


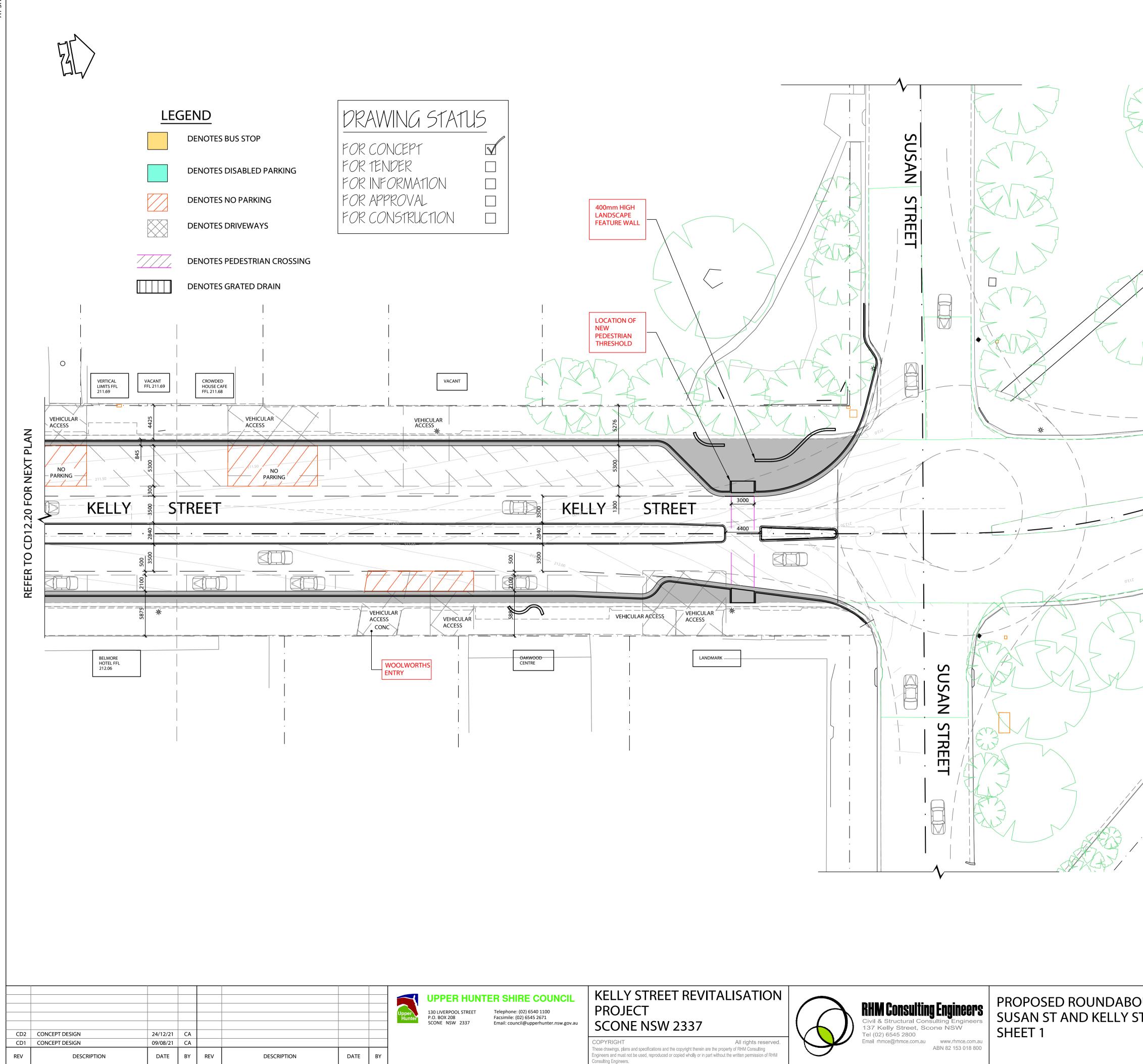




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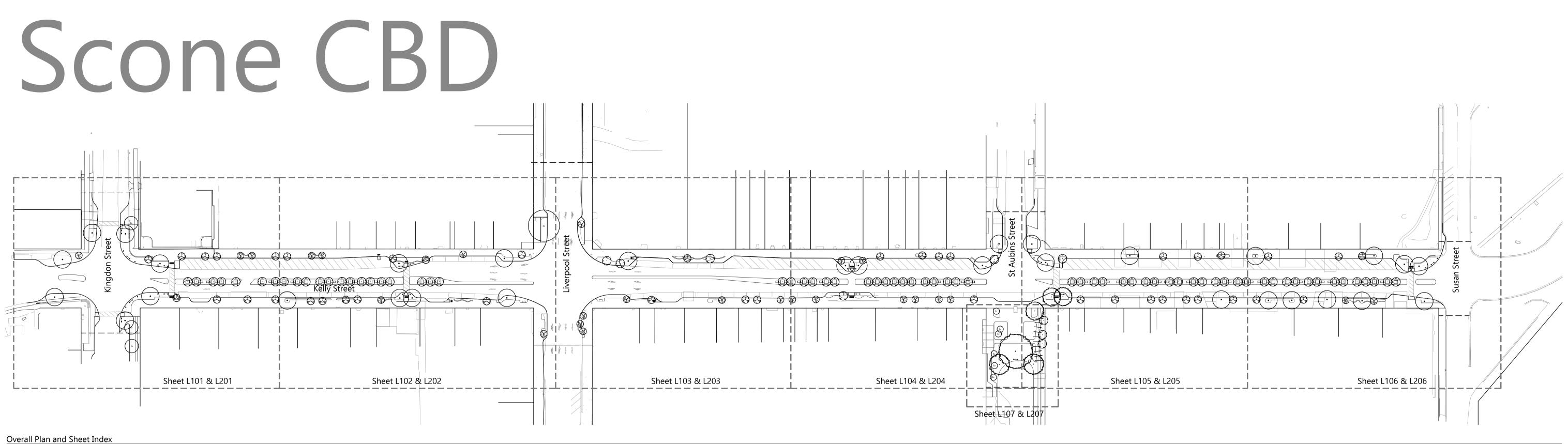






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Plan

Sheet Index

Sheet Title Overall Plan and Sheet Index L00 L101 Hardworks Plan L102 Hardworks Plan L103 Hardworks Plan L104 Hardworks Plan L105 Hardworks Plan L106 Hardworks Plan L107 Hardworks Plan St Aubins Park L201 Planting Plan L202 Planting Plan L203 Planting Plan L204 Planting Plan L205 Planting Plan L206 Planting Plan L207 Planting Plan St Aubins Park L301 Site Sections L401 Details L402 Planting Details L501 Landscape Schedules

HARDWORKS LEGEND

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Paving Type 1: Honed concrete with integral colour and paver banding
Paving Type 2: Honed concrete with integral colour - no paver banding
Existing level
Proposed level
Tactile strip per Australian Standards
Bin enclosures - refer to schedule, L501
Planting area
Bench seat - refer to schedule, L501
Bubbler - refer to schedule, L501
Bike parking
Inlaid 'Horse Walk of Fame' plaque
Tree grate - refer to schedule, L501
Tree planter - refer to schedule, L501
Shrub planter - refer to schedule, L501
Pedestrian lamp post
Sandstone block - 1200x400x400 mm
Thematic fence with logo sign
Containment fence - 900mm high

* Existing street light



MARA Consulting Pty Ltd

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PLANTING SCHEDULE:

Abbrev	Botanical Name	Common Name	Pot Size	Density	Qty
Trees					
BA	Brachychiton acerifolius	Flame Tree	75 Litre	As Shown	2
СК	Callistemon 'Kings Park Special	' Bottlebrush	75 Litre	As Shown	25
CS	Corymbia 'Summer Red'	Dwarf Corymbia	75 Litre	As Shown	7
FM	Ficus macrophylla	Moreton Bay Fig	200 Litre	As Shown	1
LI	Lagerstroemia indica	Crepe Myrtle	75 Litre	As Shown	67
LC	Lophostemon confertus	Brushbox	75 Litre	As Shown	29
PP	Pistacia chinensis	Chinese Pistache	75 Litre	As Shown	2
PC	<i>Pyrus</i> 'Capital'	Ornamental Pear	75 Litre	As Shown	42
Shrubs					
Aa	<i>Acmena</i> 'Allyn Magic'	Dwarf Lilly Pilly	5 Litre	0.7m	68
Cc	Camellia 'Chansonette'	Camellia	5 Litre	1.0m	2
Lc	Loropetalum chinense	Fringe Flower	5 Litre	1.0m	30
Mm	<i>Murraya</i> 'Min a Min'	Dwarf Murraya	5 Litre	0.7m	63
Pt	Pittosporum 'Miss Muffet'	Pittosporum	5 Litre	0.7m	8
Rc	Raphiolepsis 'Cosmic Pink'	Indian Hawthorn	5 Litre	1.0m	38
Wf	Westringia 'Jervis Gem'	Coastal Rosemary	5 Litre	1.0m	125
Accent P	ants				
De	Doryanthes excelsa	Minmi Lily	25 Litre	As Shown	108
Pf	Phormium 'Flamin'	NZ Flax	5 Litre	2m2	244
Groundco	overs and Grasses				
Ca	Carex appressa	Tussock Sedge	50mm tube	4m2	96
Gm	<i>Grevillea '</i> Mt Tamboritha'	Prostrate Grevillea	2.5 Litre	3m2	443
Hv	<i>Hardenbergia '</i> Meema'	Hardenbergia	2.5 Litre	1m2	90
Lr	<i>Liriope</i> 'Just Right'	Turf Lily	1.3 Litre	4m2	376
Lv	Liriope variegata	Variegated Turf Lily	50mm tube	4m2	181
Lk	Lomandra 'Katrinus'	Spiny Matt Rush	1.3 Litre	4m2	192
Ls	<i>Lomandra</i> 'Shara'	Dwarf Spiny Matt Rush	1.3 Litre	4m2	1021
Ra	<i>Rhagodia</i> 'Aussie Flat Bush'	Salt Bush	2.5 Litre	2m2	147
Mu	<i>Melaleuca</i> 'Ulladulla Beacon'	Ulladulla Beacon	2.5 Litre	3m2	201
Мр	Myoporum parvifolium	Creeping Boobialla	2.5 Litre	3m2	390
Climber a	long trellis structure				
Rb	Rosa banksiae lutea	Banksia Rose	5 Litre	As shown	20

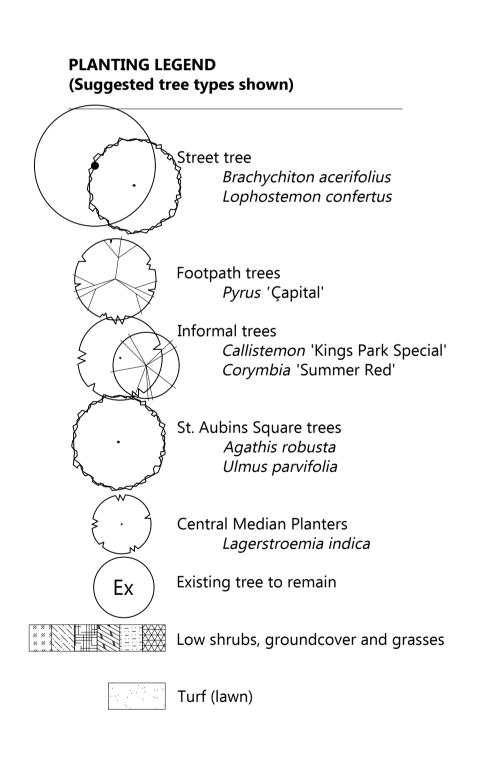
Notes:

All plants to be inspected and approved by the superintendent or clients representative prior to installation. 1.

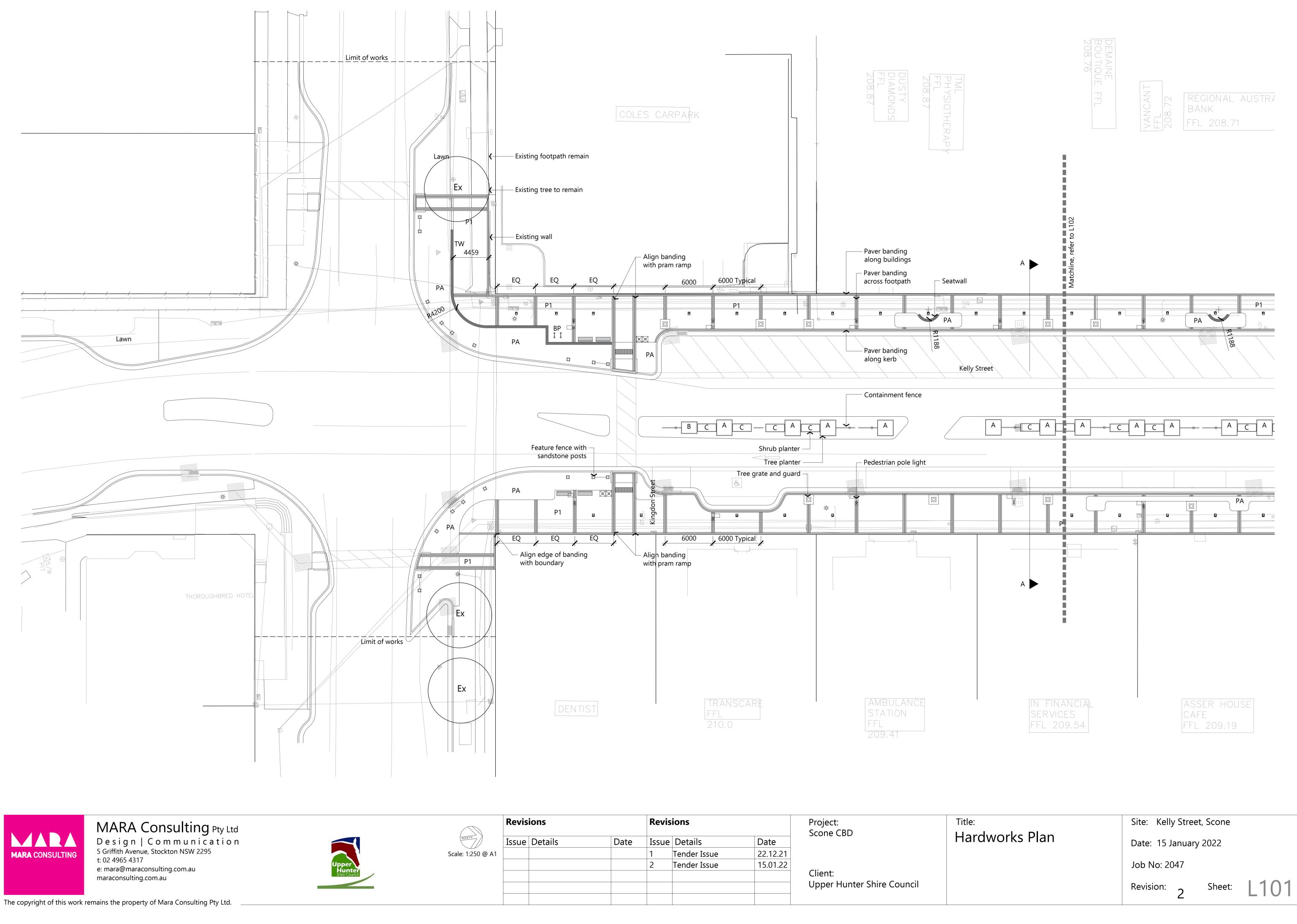
2. Plant numbers shown on drawings take preference over those shown on the plant schedule

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			2	Tender Issue	15.01.22		
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						Upper Hunter Shire Council	

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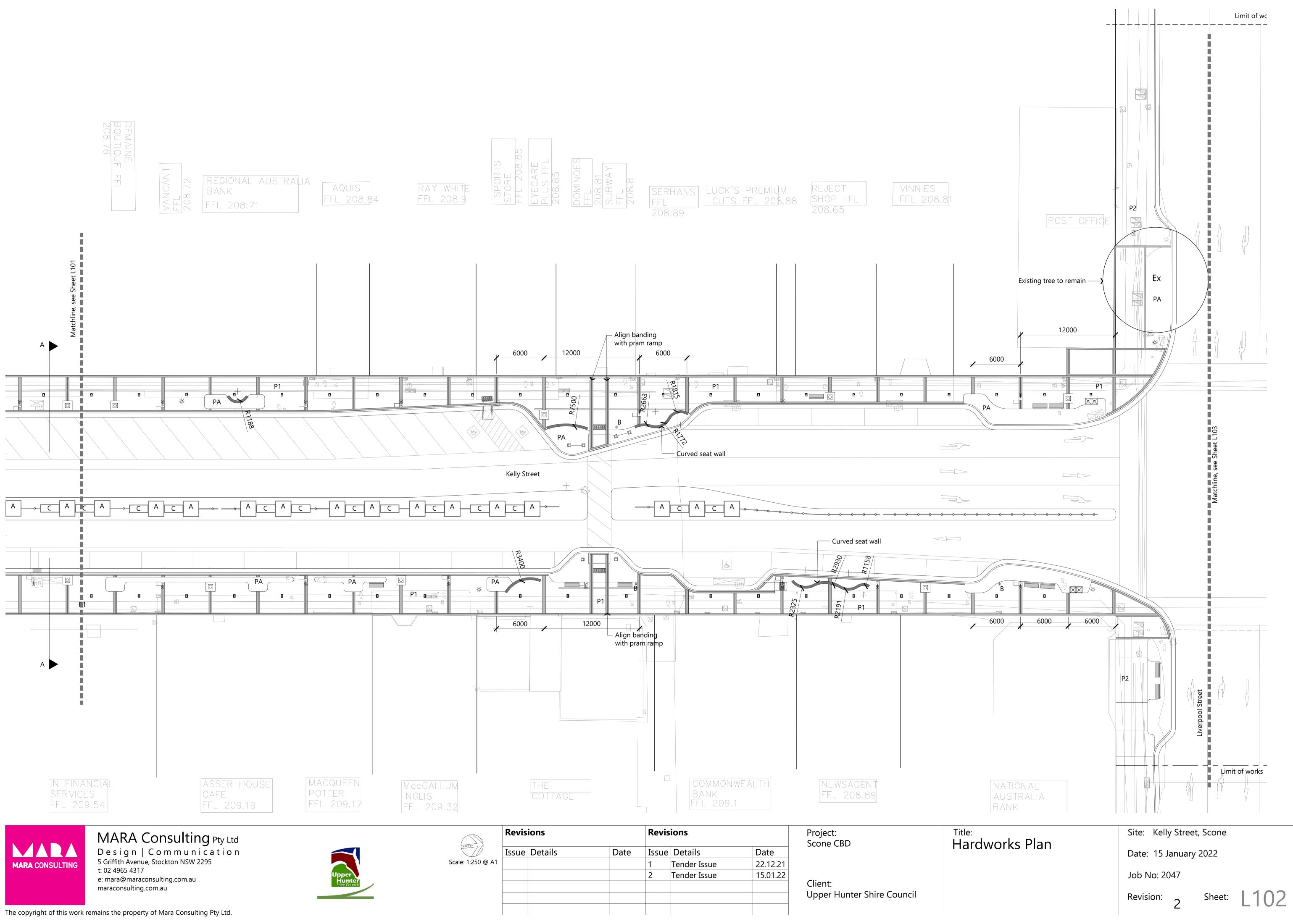


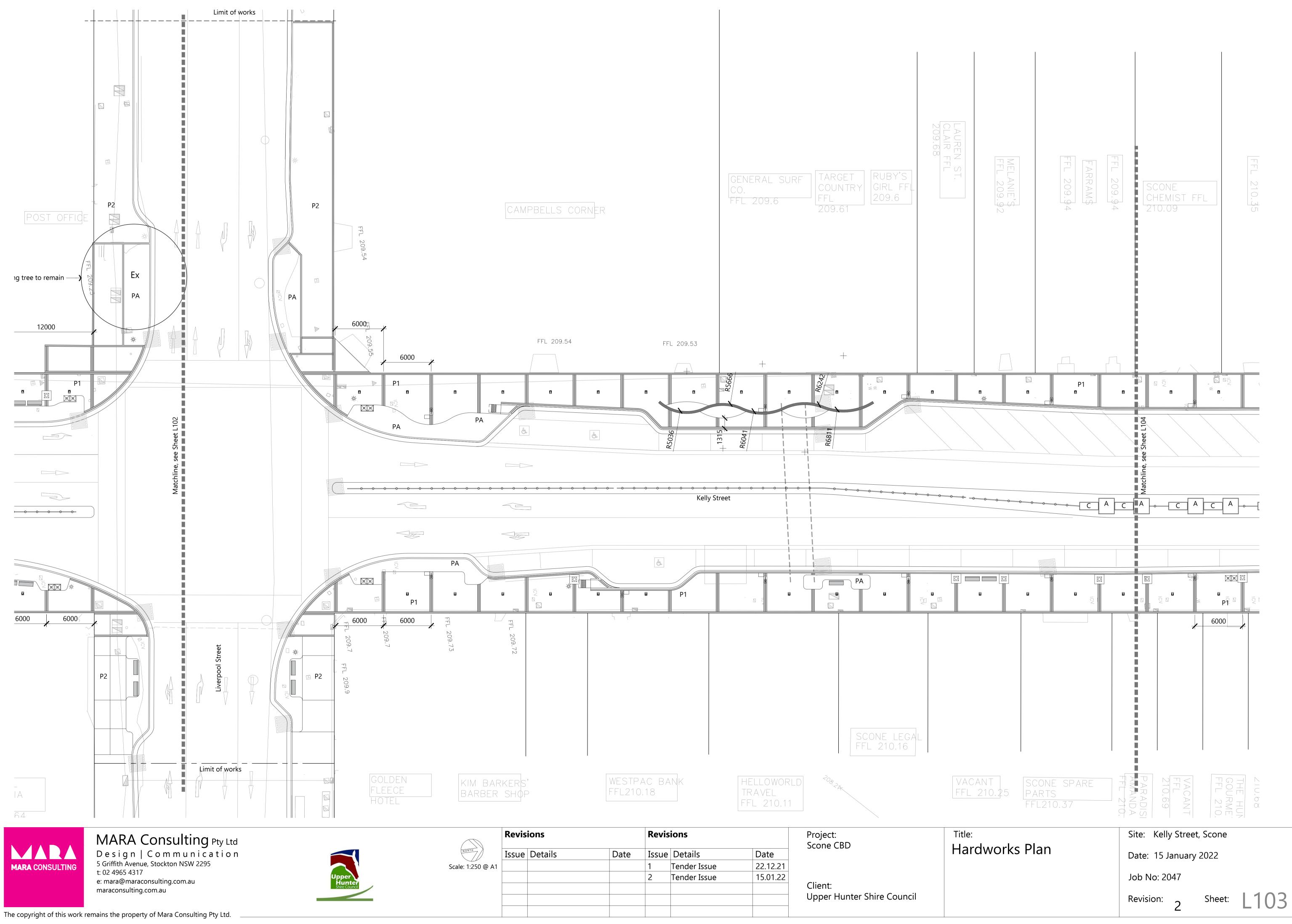


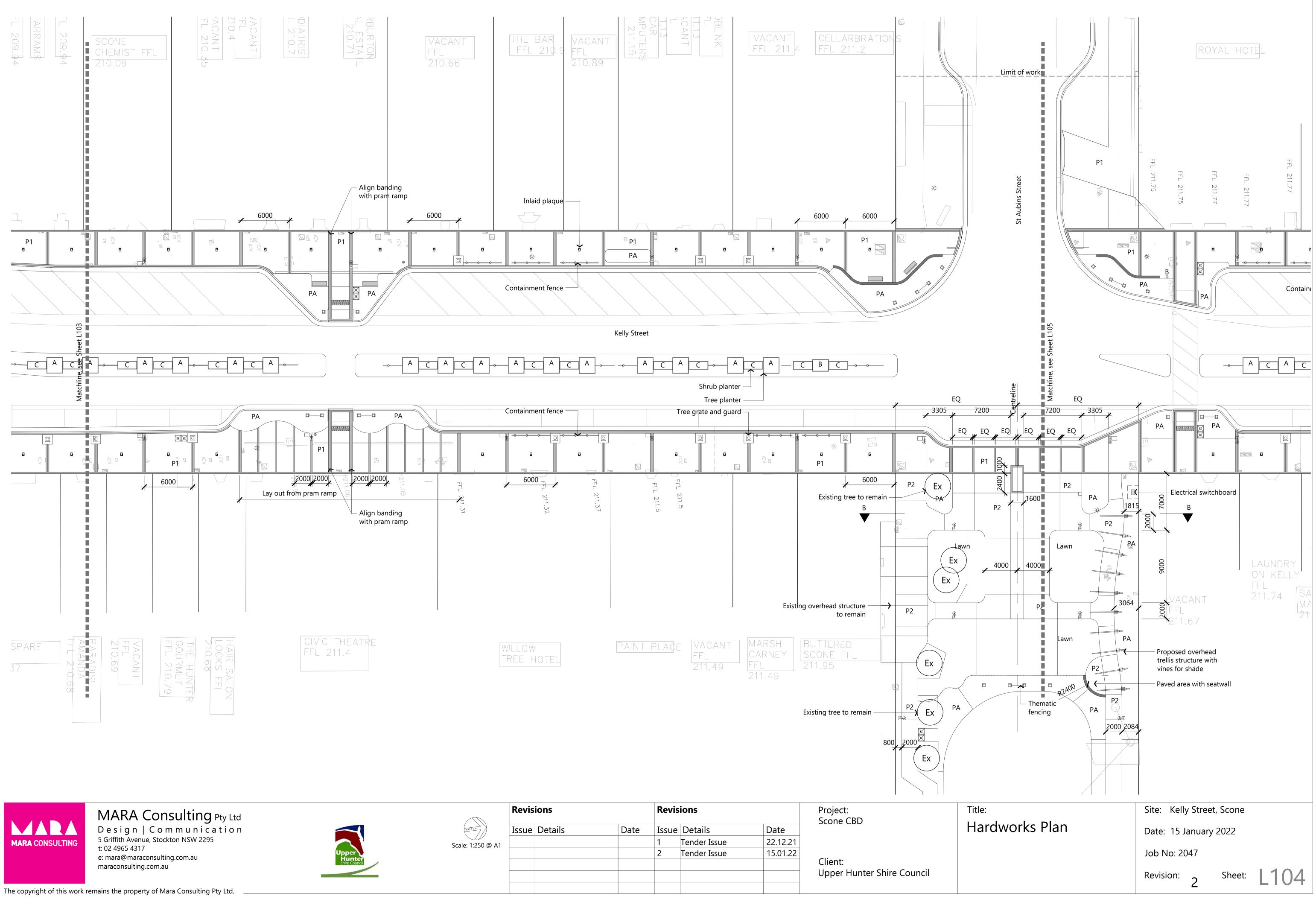




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							Upper Hunter Shire Council	



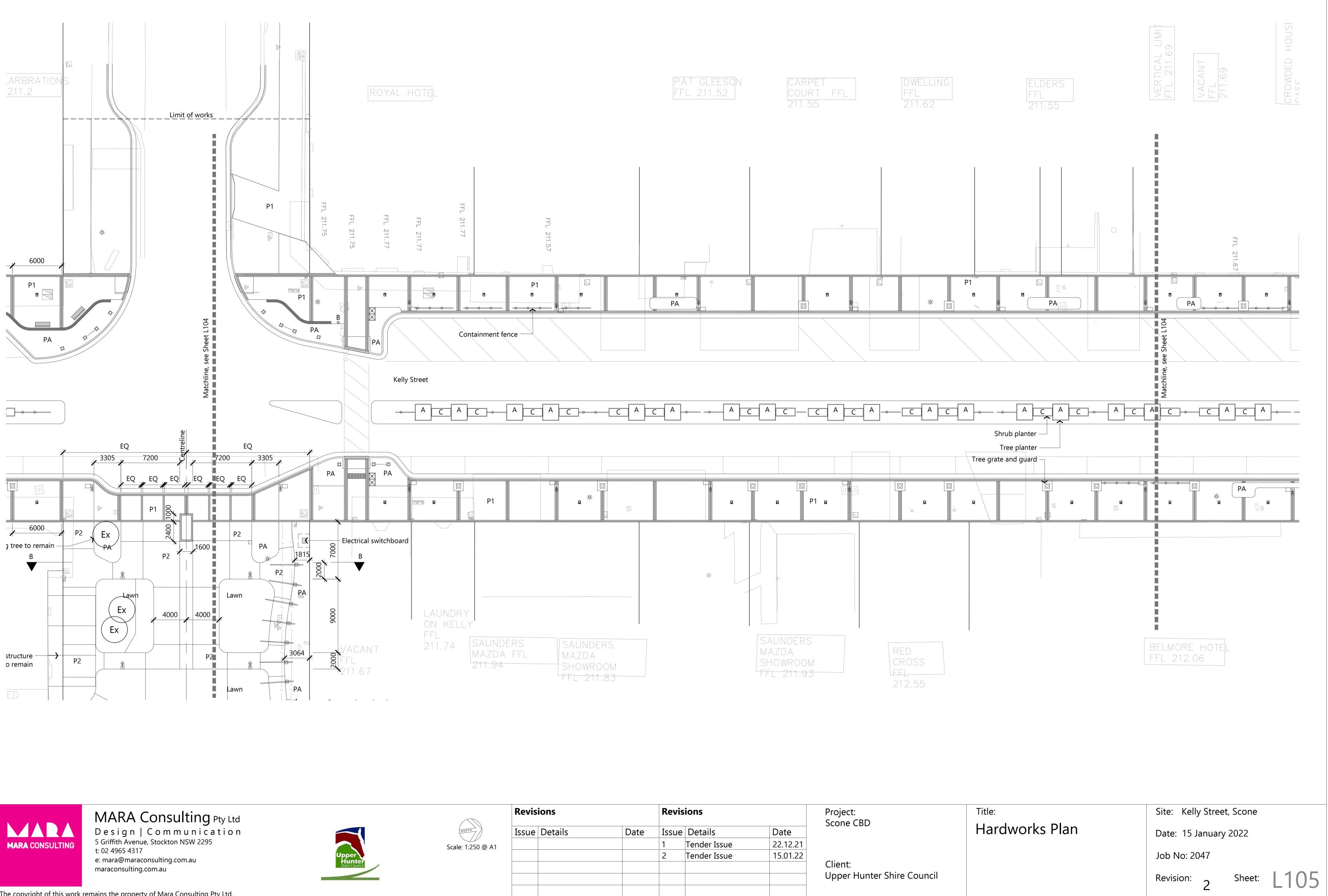












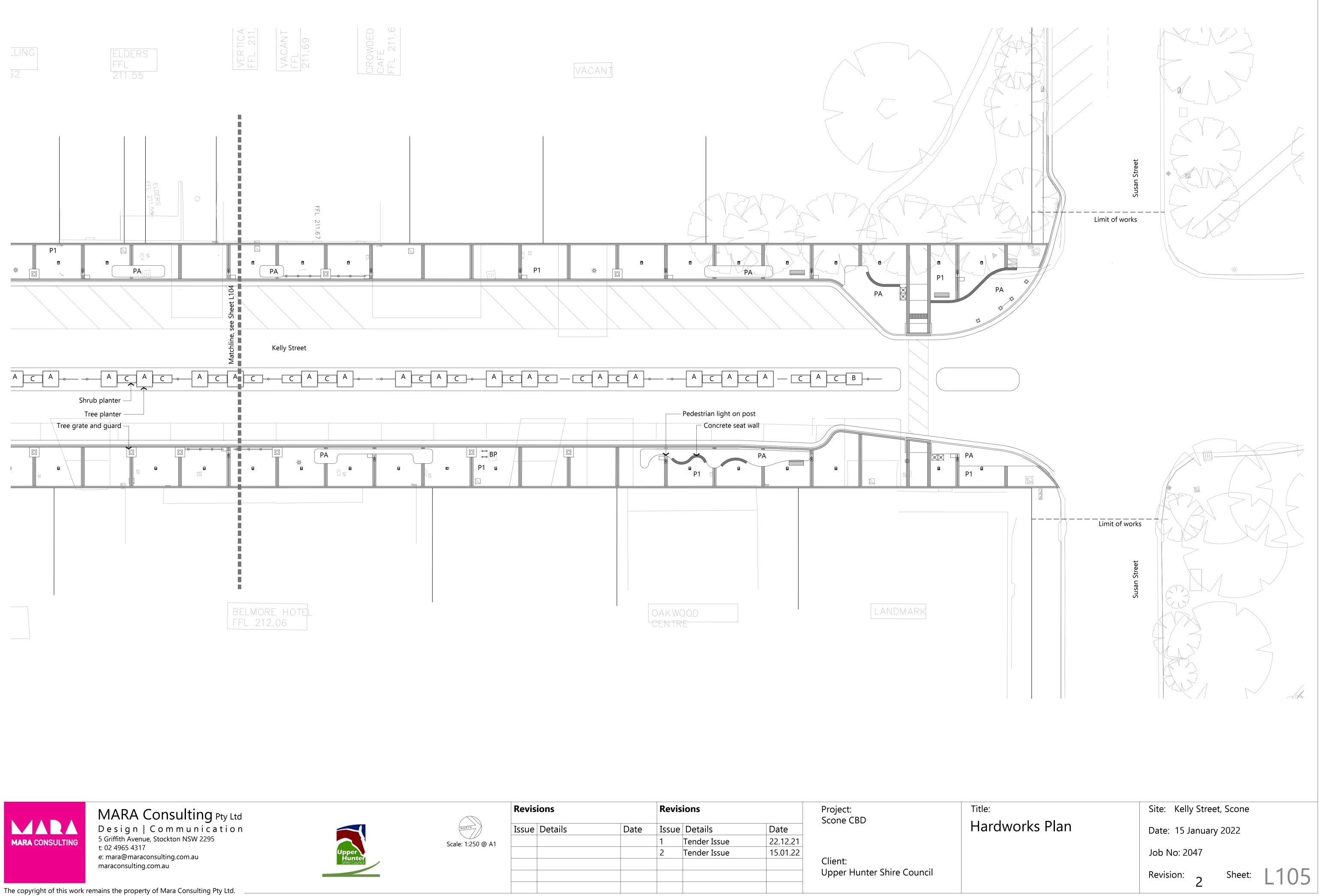






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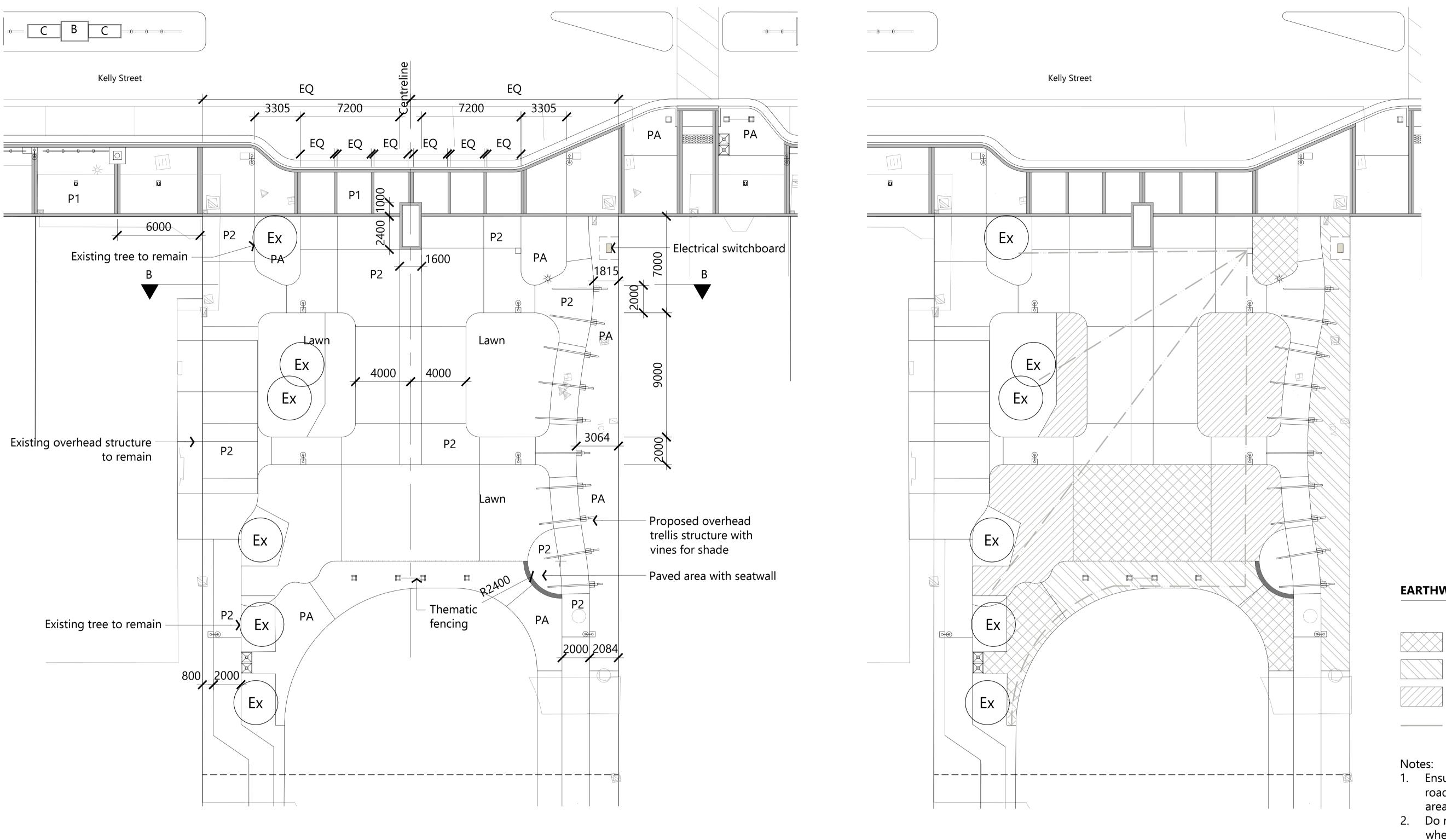








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							Upper Hunter Shire Council	





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Scale: 1:150

Earthworks Plan St Aubins Park Plan

Revisions		Revis	ions		Project: Scone CBD	Title:	
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EARTHWORKS LEGEND

Depth of soil removal and replacement

300mm deep

600mm deep

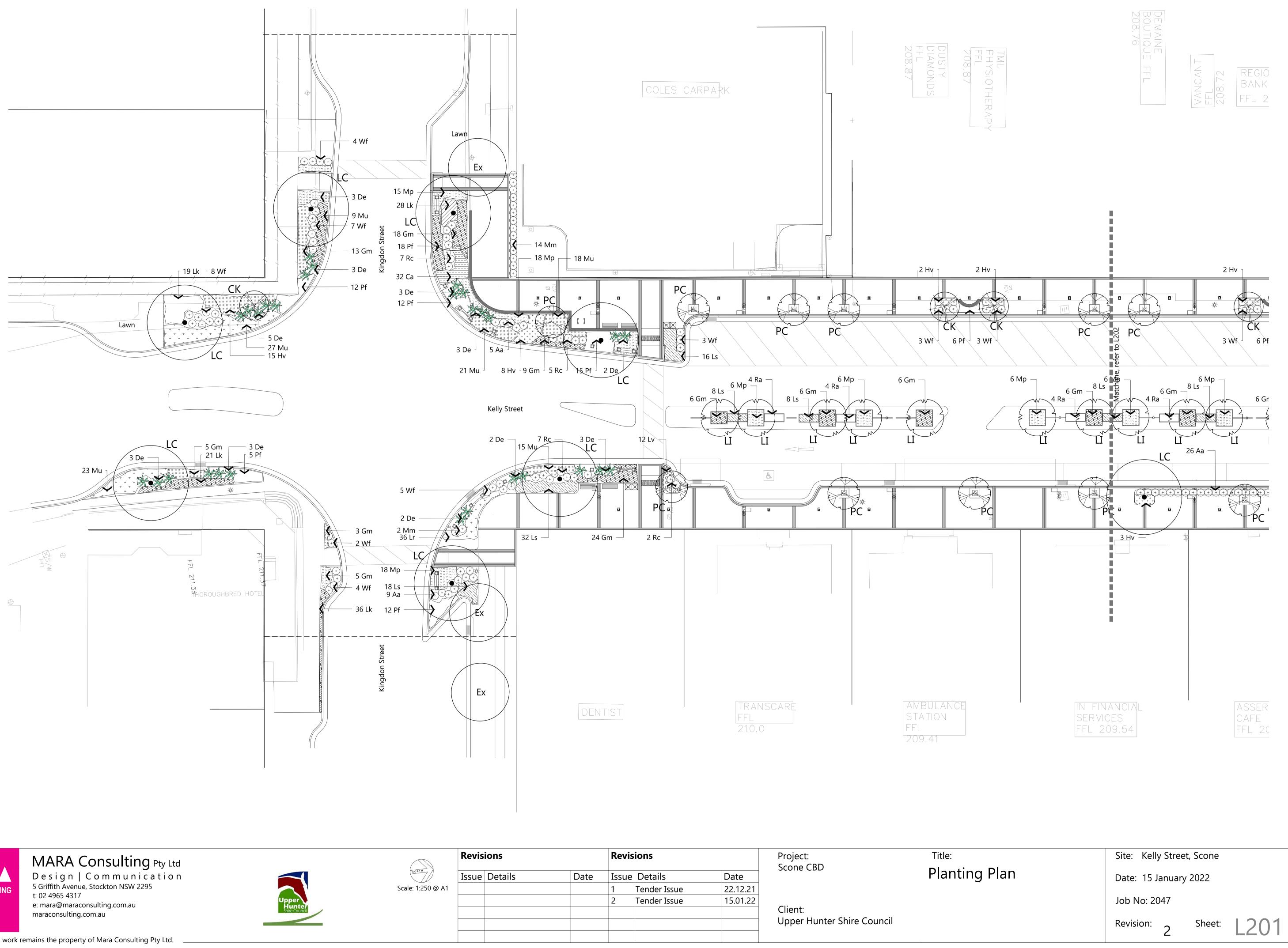
100mm deep

100mm dia. subsoil drain with 1% fall per engineer

- 1. Ensure road base material from existing road is removed from under all planting areas
- 2. Do not excavate around existing trees where roots occur, arborist to advise on excavation limits
- 3. Drainage is diagrammatic only, refer to engineer's drawings for final levels and all drainage.

Scale: 1:150



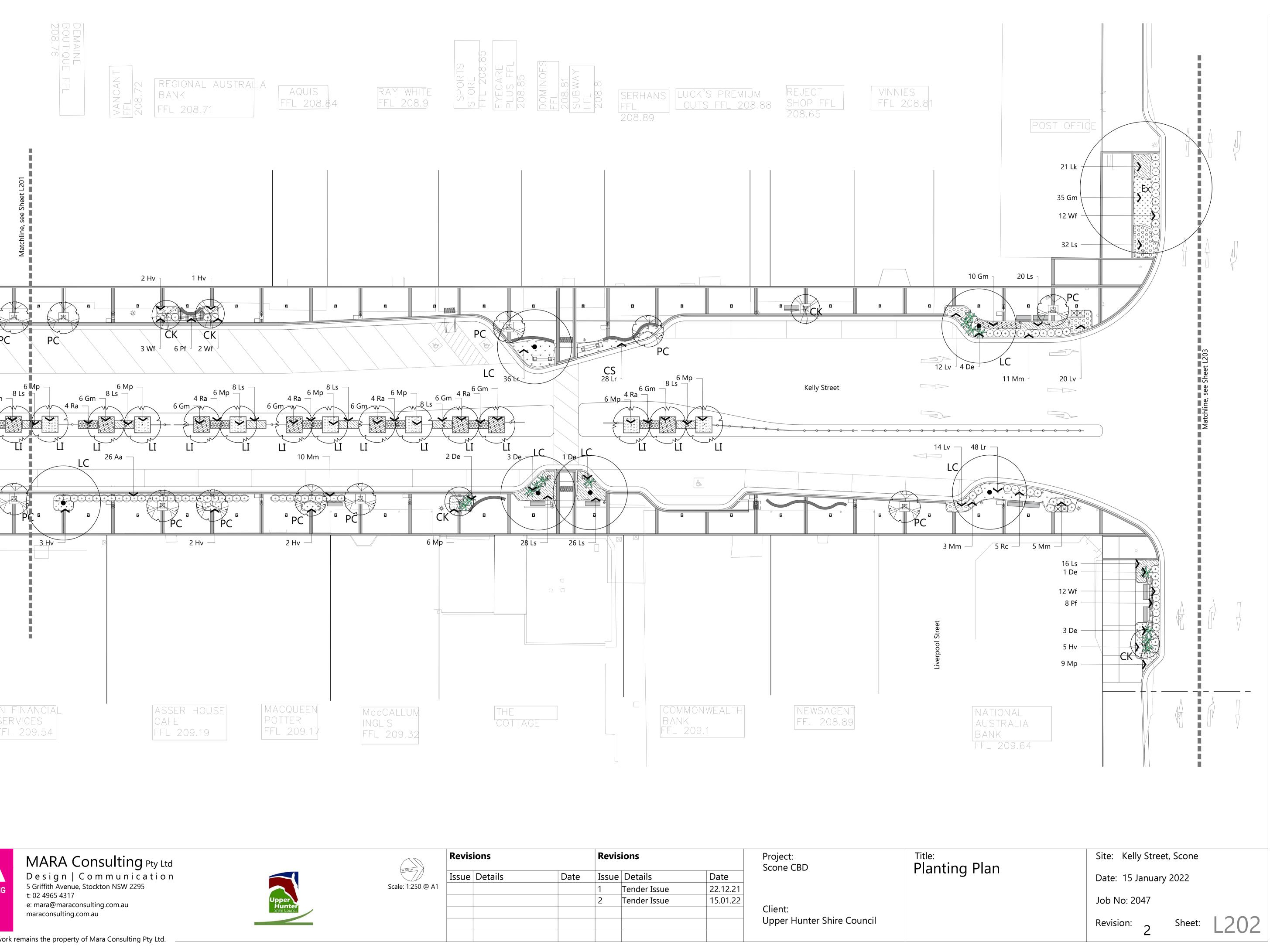


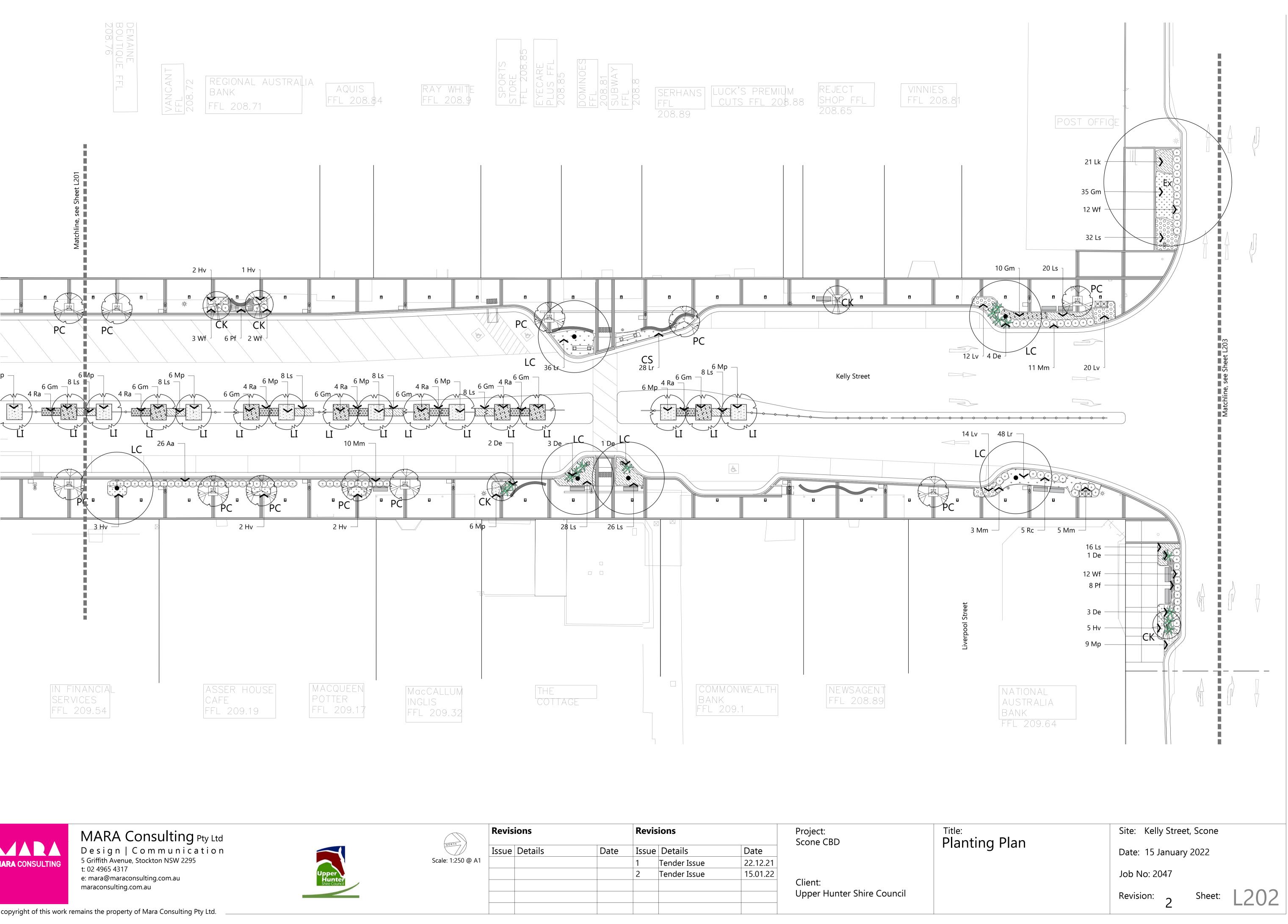


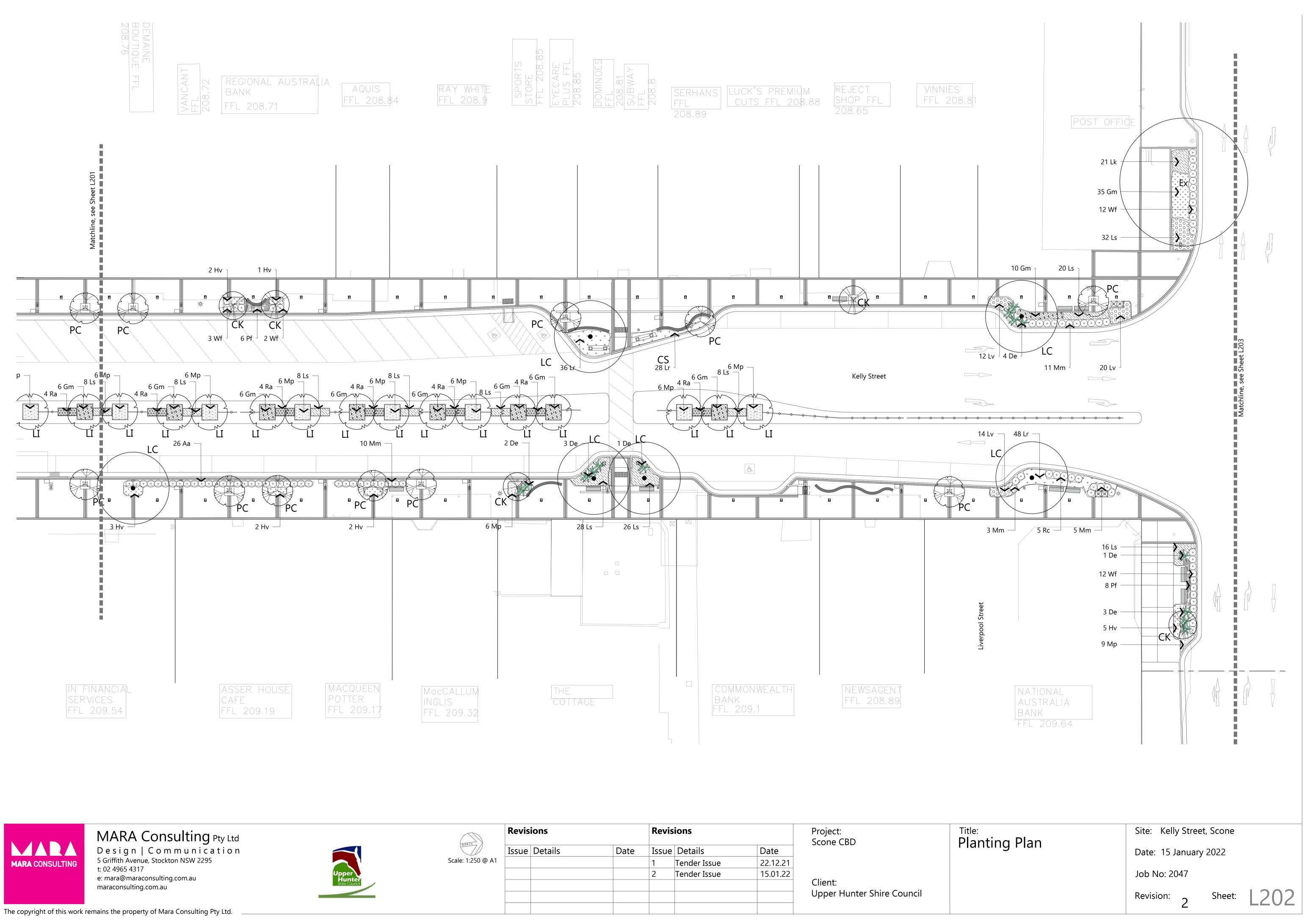




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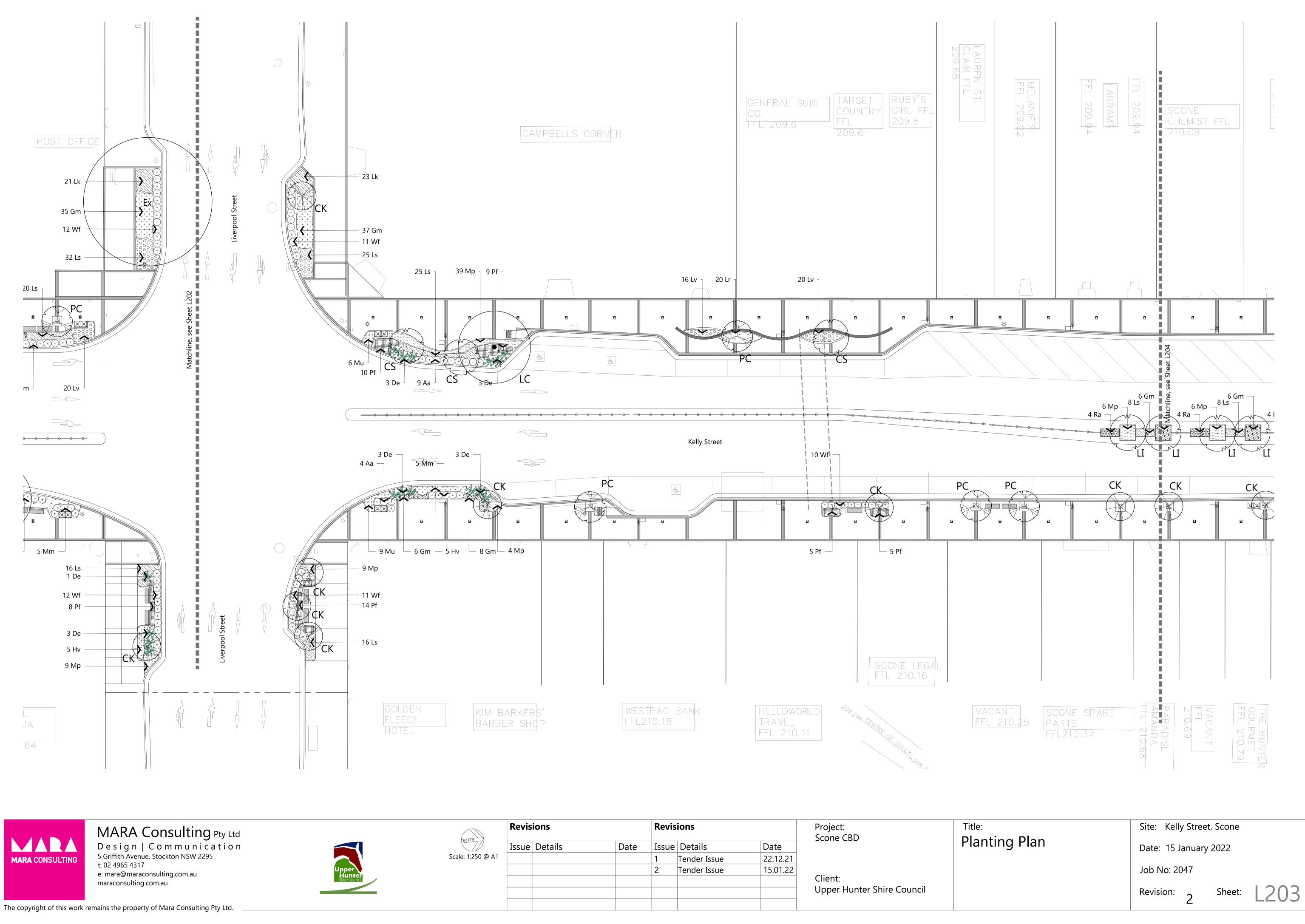








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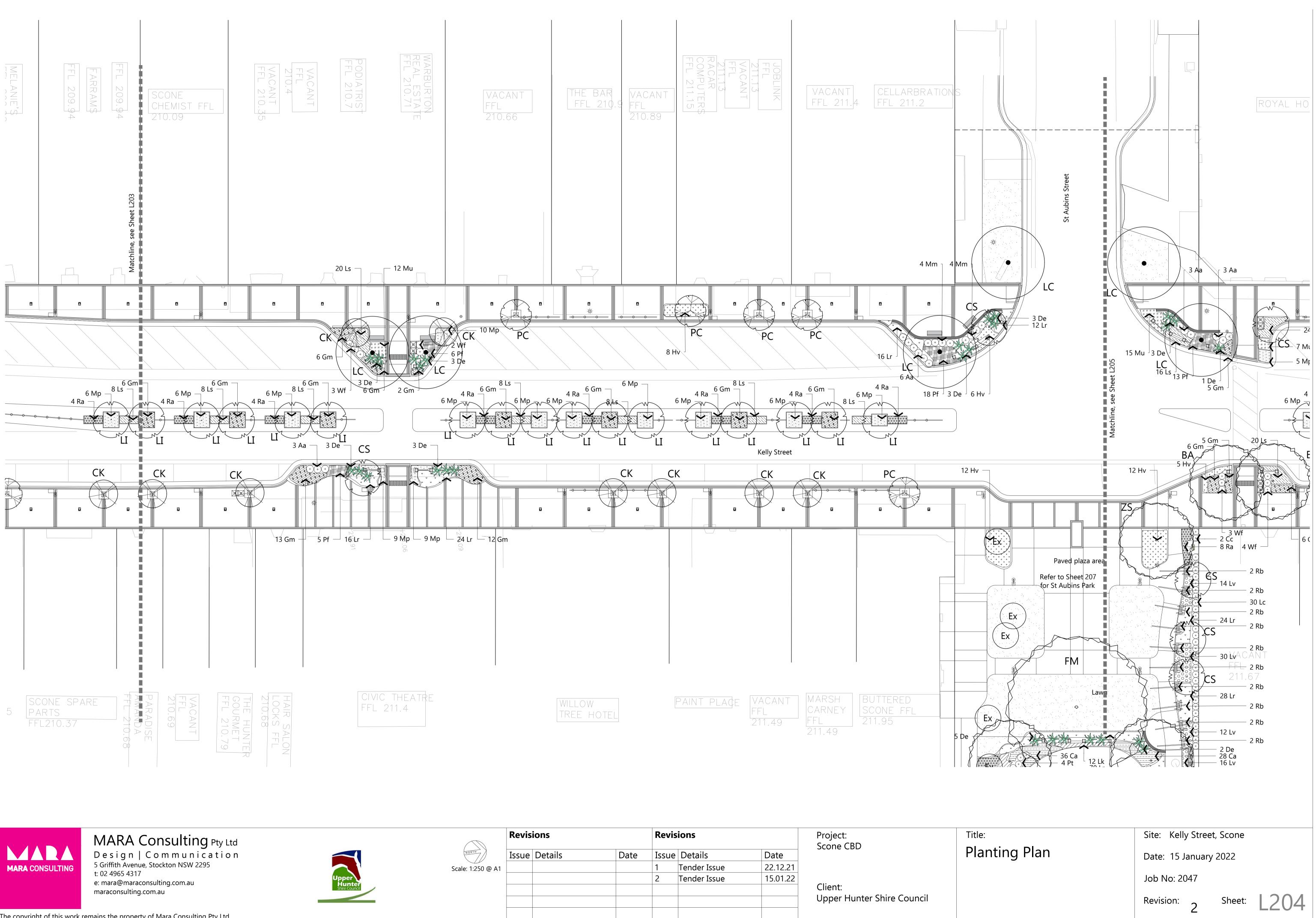








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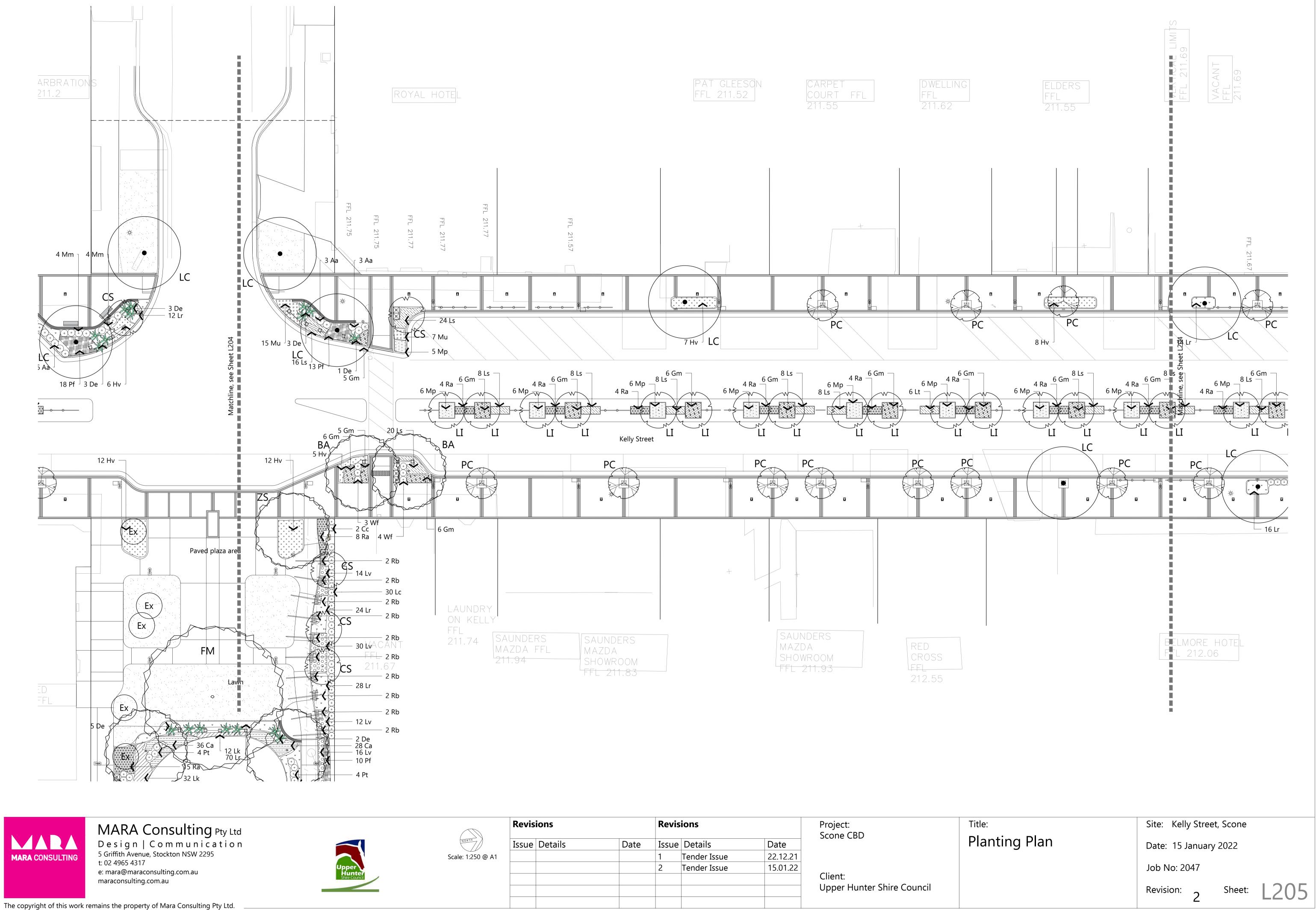








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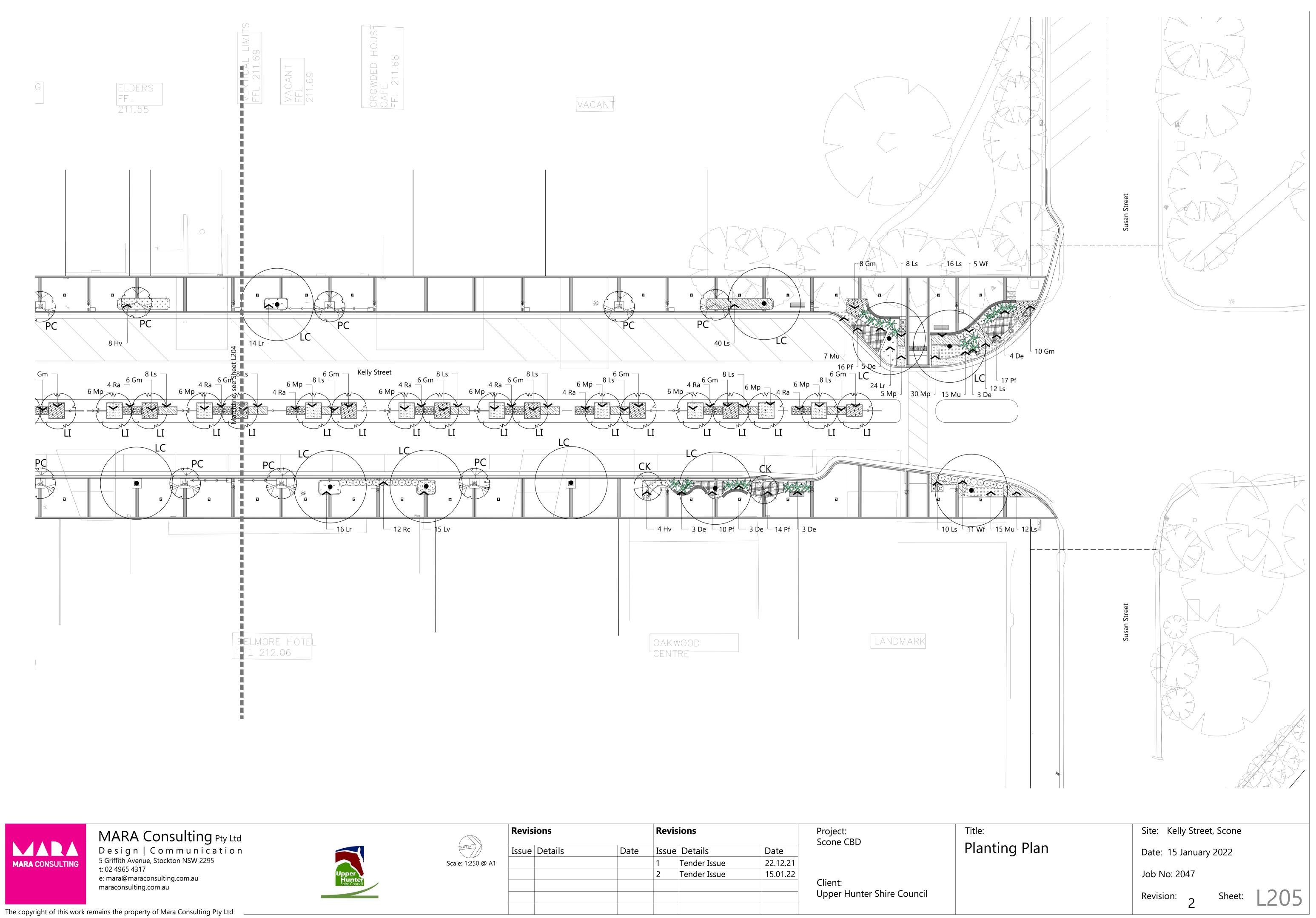








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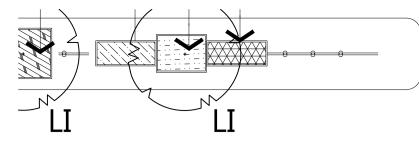




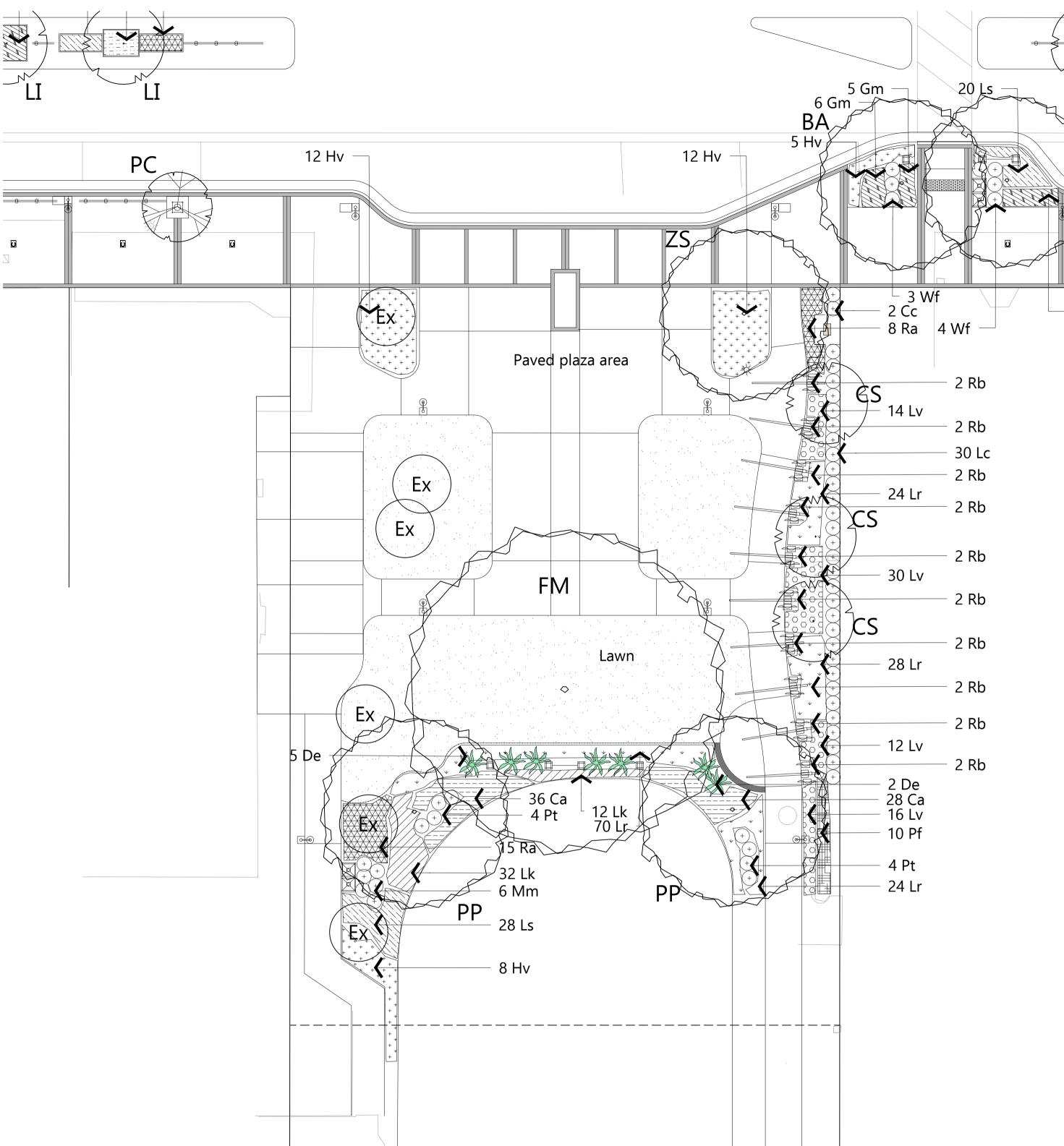




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0 @ A1				1	Tender Issue	22.12.21		
				2	Tender Issue	15.01.22		
							Client:	
							Upper Hunter Shire Council	



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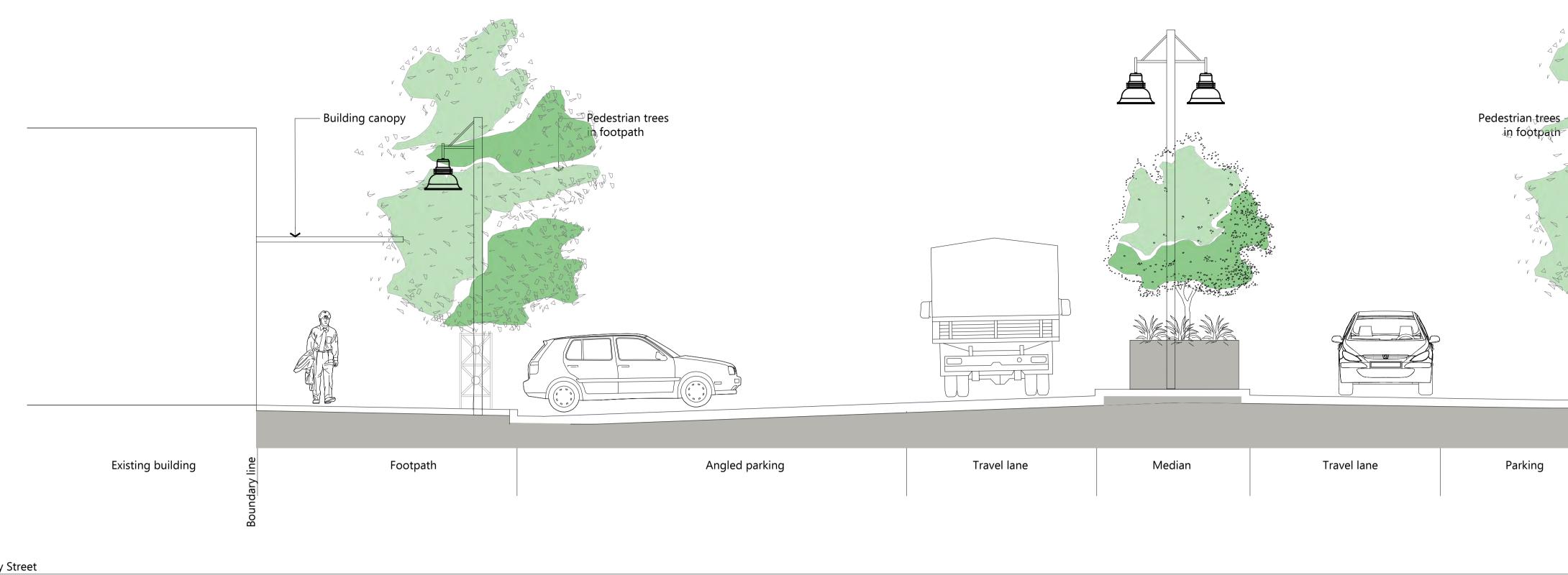




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	Revisions			Revis	ions		Project: Scone CBD	Title:
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00 @ A1				1	Tender Issue	22.12.21		St Au
				2	Tender Issue	15.01.22		
							Client: Upper Hunter Shire Council	

	Site: Kelly Street, Scone
ting Plan	Date: 15 January 2022
ubins Park	Job No: 2047
	Revision: 2 Sheet: L206



A: Section through Kelly Street Section



A: Section St Aubins Park Section



Perimeter planting

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Lawn area

Footpath

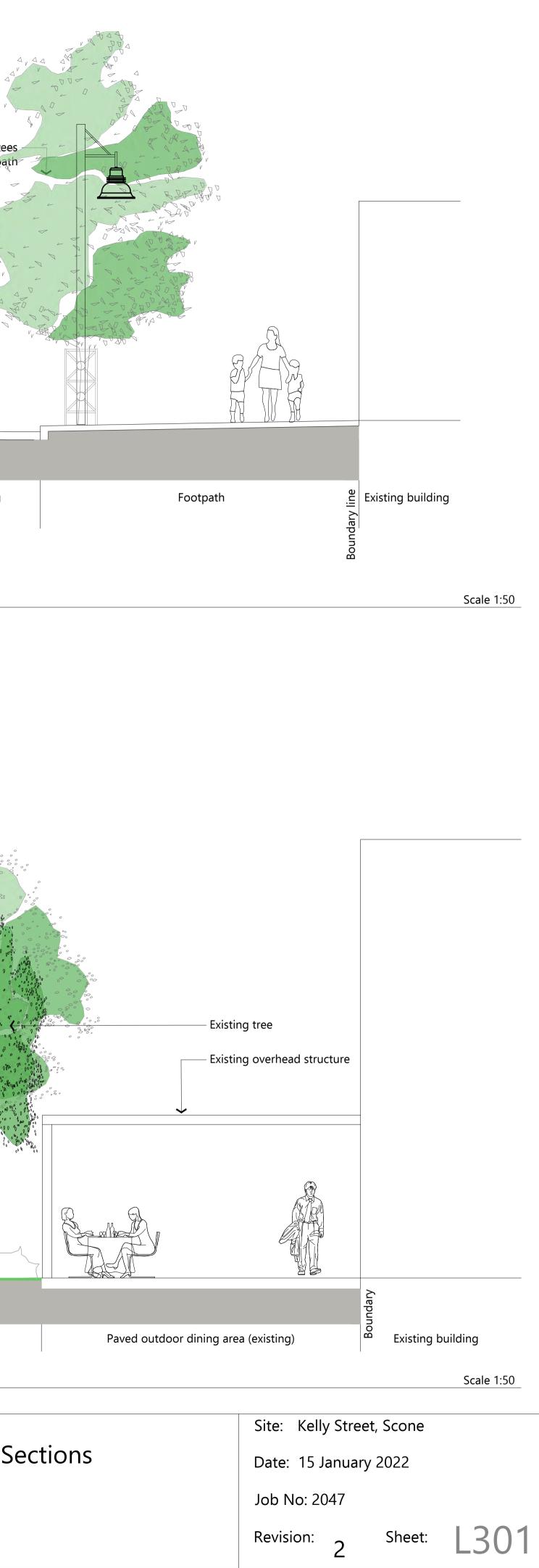
The copyright of this work remains the property of Mara Consulting Pty Ltd.

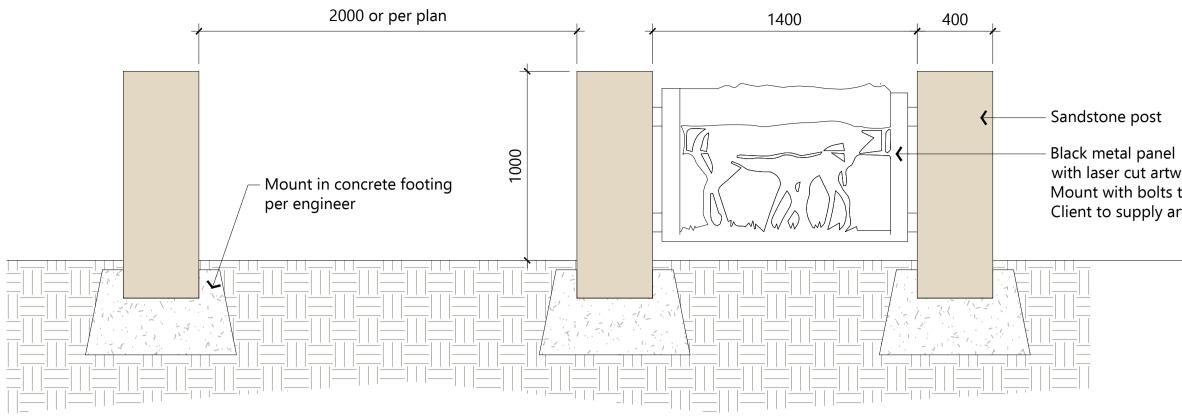
Angled parking	Travel lane	Median	Travel lane	Parking

Central paved plaza area with lawn beyond

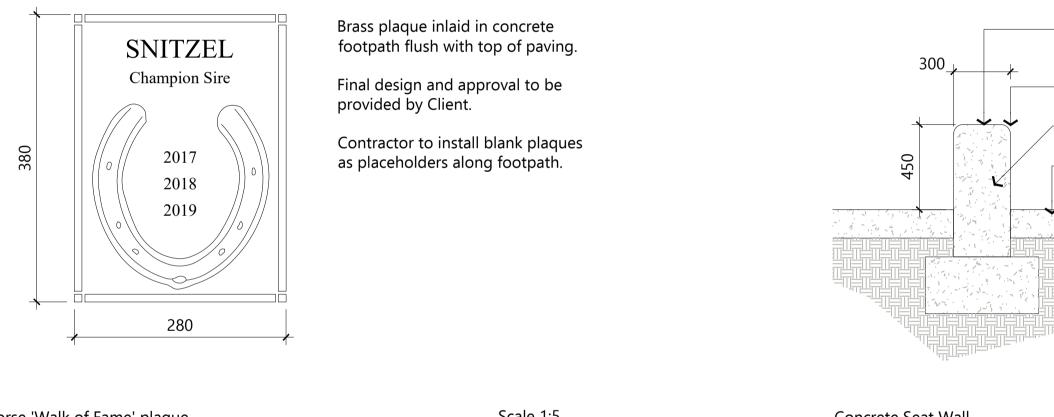
Lawn area

Revisions			Revisions			Project:	Title:	
Issue	Details	Date	Issue	Details	Date	Scone CBD	Site Se	
			1	Tender Issue	22.12.21			
			2	Tender Issue	15.01.22			
						Client:		
						Upper Hunter Shire Council		





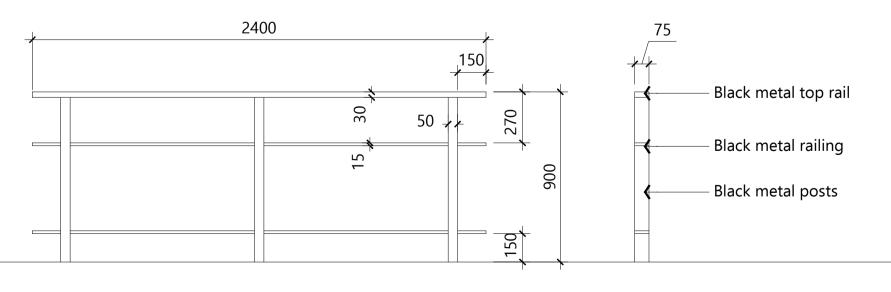
Thematic Fence - Stone Elevation



Horse 'Walk of Fame' plaque Plan

Scale 1:5

Concrete Seat Wall Detail



Black Metal Containment Fence Elevation



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Scale 1:20

 \checkmark Kelly Street with laser cut artwork. Mount with bolts to stone post. Kerb Client to supply artwork K ____ $^{
m L}$ 200x200 concrete paver single course along back of kerb

Scale 1:20

Footpath paving layout Plan

Cast concrete seatwall Refer to Sheet 501 for colour and finish

50mm radius

- Structural elements per engineer

- Footpath

Wall height to be 450mm from highest adjacent footpath, if levels of footpath differ.

Scale 1:20

3650



Trellis at St Aubins Park Concept design

Revis	Revisions		Revisions			Project: Scone CBD	Title:	
Issue	Details	Date	Issue	Details	Date		Detai	
			1	Tender Issue	22.12.21			
			2	Tender Issue	15.01.22			
						Client: Upper Hunter Shire Council		

– 200x400 concrete paver banding across footpath double course in stretcher pattern

200

– 200x200 concrete paver single course along buildings

- Honed concrete with integral colour and black aggregate per paving schedule

Scale 1:20

Finish al metal with powder coat finish, black colour.

Final design, footing, and structural design per engineer.

Scale: NTS

ils

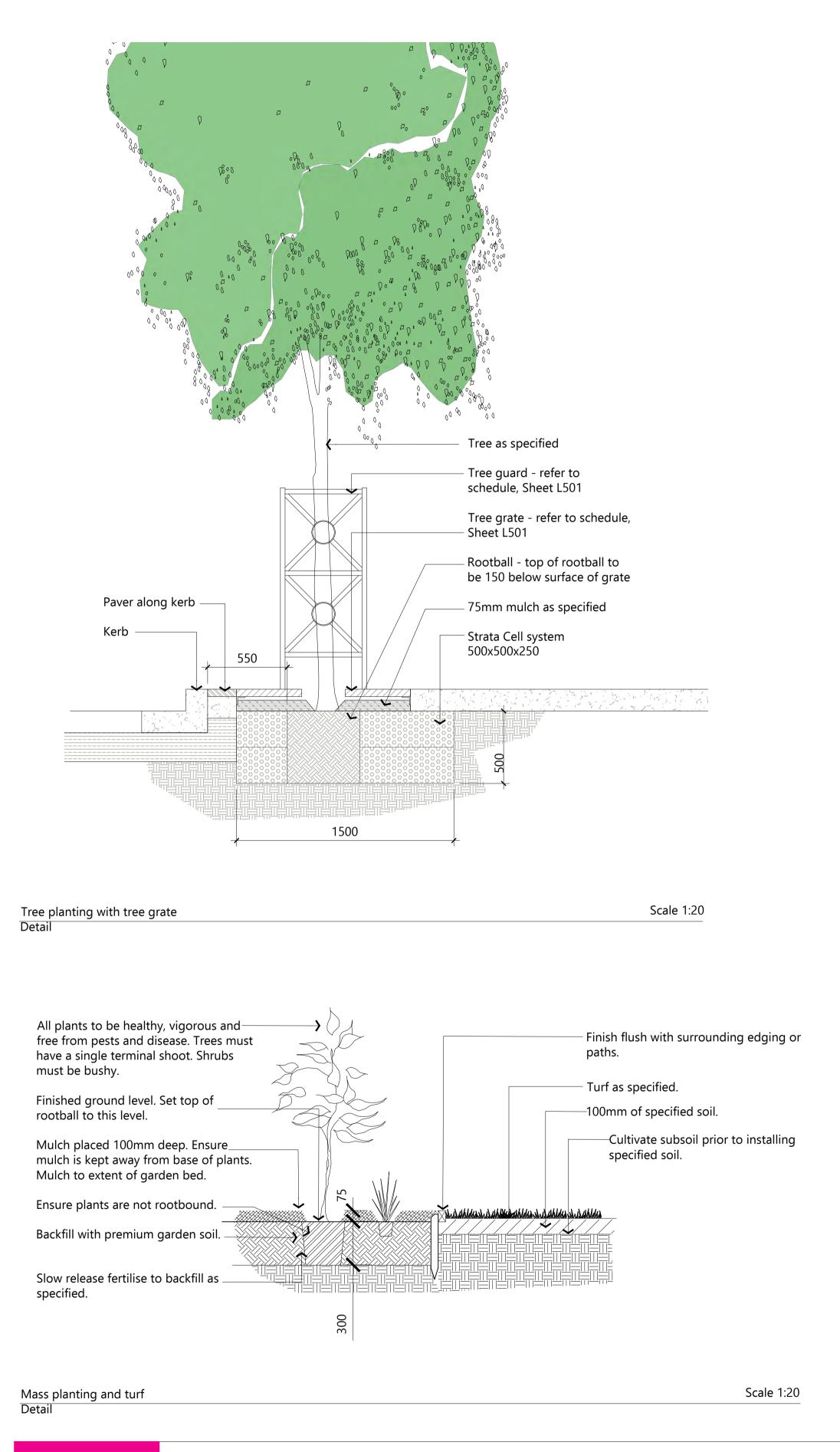
Site: Kelly Street, Scone

Date: 15 January 2022

Job No: 2047

Revision: 2

Sheet:

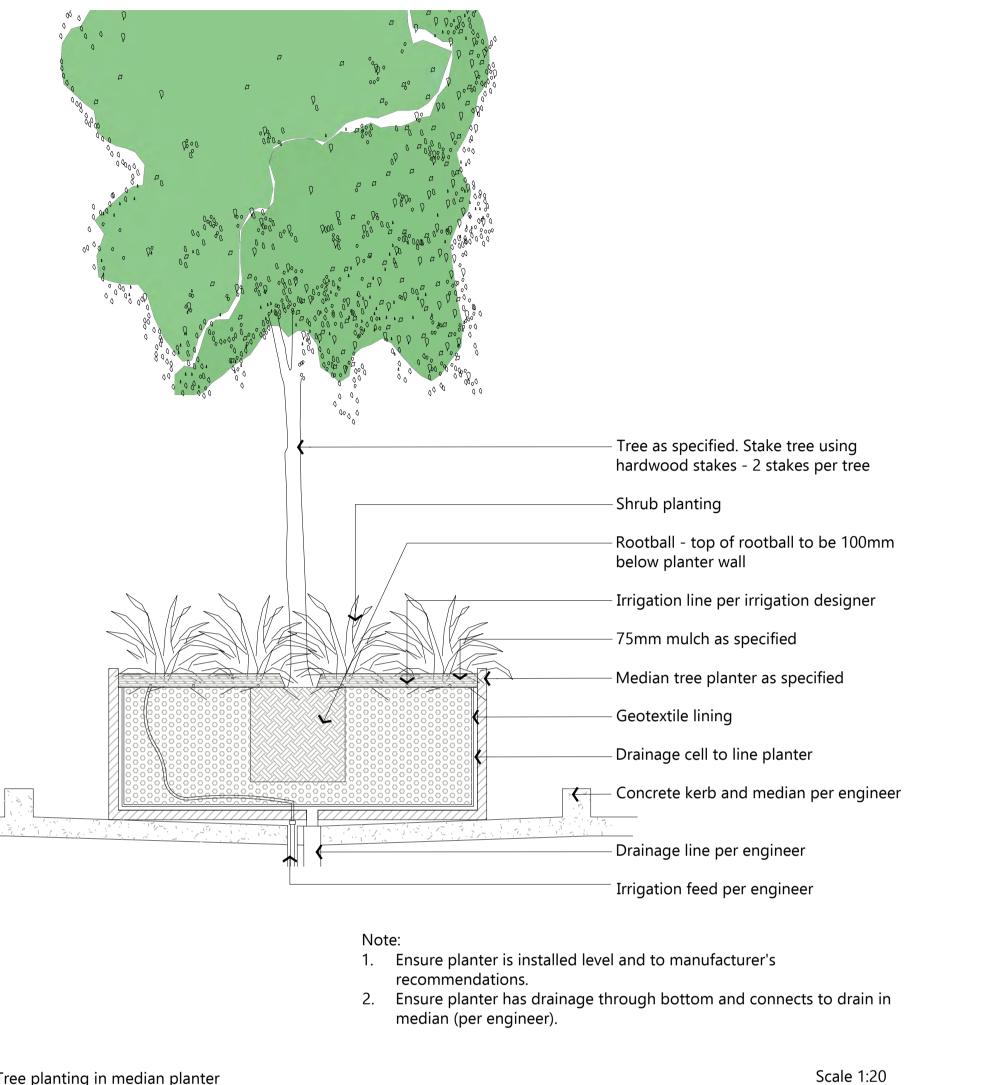


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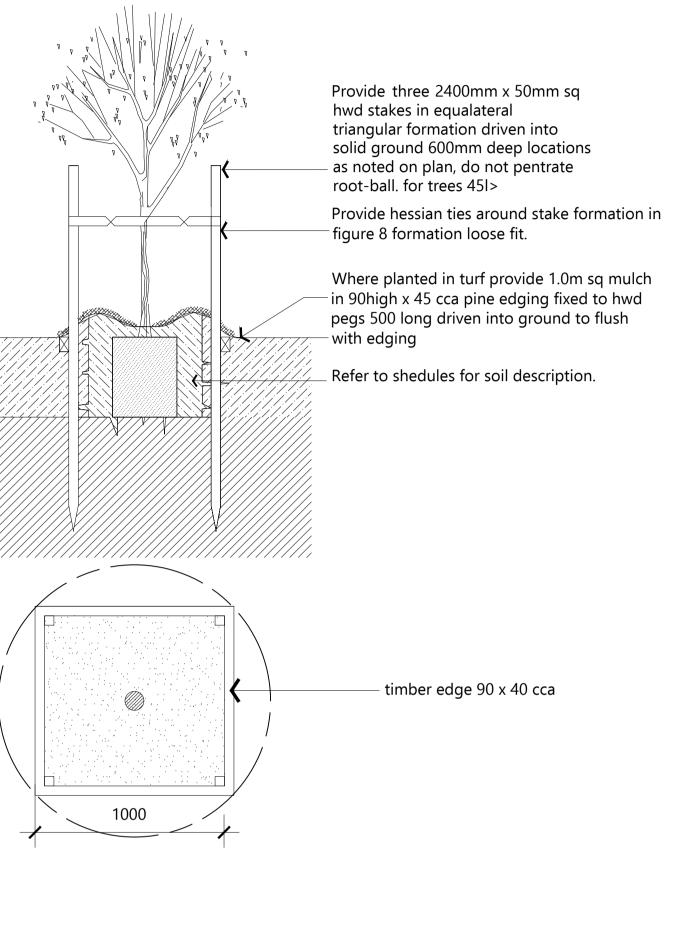
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Tree planting in median planter Detail

Revisions		Revisions			Project:	Title:	Site: Kelly Street, Scone	
Issue	Details	Date	Issue	Details	Date	Scone CBD	Planting Details	Date: 15 January 2022
			1	Tender Issue	22.12.21			
			2	Tender Issue	15.01.22			Job No: 2047
						Client: Upper Hunter Shire Council		Revision: 2 Sheet: L402



Tree planting in turf Detail and planview Scale 1:20

EXCAVATION SCH Excavation to allow for 2000 Cultivate subsoil to a furthe	mm soil depth and 100mm mulch depth. Mulch to finish level with a	adjacent surfaces.
LOCATION	TYPE	DEPTH (mm)
Mass planting		300
Turf	100mm or as required to meet design levels	100

SOIL SCHEDULE If requested by the Superintendent a basic soil test shall be carried out at the contractor's expense to ascertain the physical and chemical properties of the proposed imported soil where no certificate of soil type is provided. Imported soil certification to AS4419. Site soil designated for re-use shall be tested as noted in the specifications. LOCATION DEPTH TYPE (mm) Trees Тор 300 Туре В Trees Below 300 Type A Depth of Trees (soil vaults) Туре С root ball Median Planter Planter Planter box mix

MULCH SCHEDULE to AS4454.		Mulch certification
LOCATION	ТҮРЕ	DEPTH (mm)
Mass Planting and existing garden areas as shown on softworks drawing sheets.	Equal to ANL 'Forest Blend - No Fines'	100

Туре В

depth

Тор 300

FERTILISER / ADDITIVES SCHEDULE All fertilisers are to be applied at the manufacturer's recommended rate.LOCATIONTYPENPK RATIOTrees (during planting)Plant Establisher containing a mix of water crystals, wetting agent, inert and fertilisers. Gypsum in clay soilsTerracottem or TerraformTreesSeaweed based soil conditioner with plant growth regulators.SeasolMass Planting (Post-Planting)Seaweed based soil conditioner with plant growth regulators.SeasolMass Planting (Maintenance Period)6 month slow release soil conditioner with plant growth regulators.19 : 0.3 : 9DEFECTS SCHEDULEFERIOD S2 WeeksNOTESPeriodPlant establishment period. Street trees, turf and mass planting.S2 WeeksLife S2 Weeks					
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(Post-Planting)plant growth regulators.19:0.3:9Mass Planting (Maintenance Period)6 month slow release19:0.3:9DEFECTS SCHEDULETYPEPERIODNOTESPlant establishment period. Street trees, turf and mass52 Weeks19:0.3:10	Trees		Sea	sol	
(Maintenance Period)DEFECTS SCHEDULETYPEPERIODPlant establishment period. Street trees, turf and mass			Sea	sol	
TYPEPERIODNOTESPlant establishment period. Street trees, turf and mass52 Weeks	(Maintenance	6 month slow r	elease	19 :	0.3 : 9
Plant establishment 52 Weeks period. Street trees, turf and mass	DEFECTS SCHEDULE				
period. Street trees, turf and mass	ТҮРЕ	PERIOD	D NOTES		
	period. Street trees, turf and mass	52 Weeks			

PAVEMENT SCHEDULE Abbrev. Type Finish P1 Concrete Honed with integral colour and aggregate Concrete Paver Honed Unit Size 200x400x40mm Concrete Paver Honed Unit Size 200x200x40mm P2 Concrete Honed with integral colour and aggregate



Boxes

Mass planting

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Colour	Manufacturer
Canvas Aggregate: Black basaltic aggregate 10-14mm	Boral boral.com.au
Golden Gunmetal	UrbanStone urbanstone.com.au
Golden Gunmetal	UrbanStone urbanstone.com.au
Canvas Aggregate: Black basaltic aggregate 10-14mm	Boral boral.com.au

Item	Туре	Finish	Colour	Manufacturer
Bench seat	Yarra Seat EM039	Powder coated	Black	Emerdyn
Pedestrian light	Per electrical engineer	Powder coated	Black	
Drinking fountain	Heritage Drinking Fountain EM405 with pet bowl	Powder coated	Black	Emerdyn
Bin enclosure	Oxford Bin Enclosure EM206 with circle-star option	Powder coated	Black	Emerdyn
Tree guard	Squareline tree guard - bolt down FFSB007005	Powder coated	Black	Furphy Foundry
Tree grate	FFSA006003	Powder coated	Black	Furphy Foundry
Bicycle rack	As detailed	Powder coated	Black	
Sandstone post	As detailed	Hydrasplit	Brown	Gosford Quarries
Feature fence	As detailed	As detailed	Black	
Containment Fence	As detailed	Powder coated	Black	
Tree planter - Type A	2000 x 2000 x 800 Square Tall	Integral colour	Concrete grey	Quatro Design
Tree planter - Type B	2000 x 1500 x 800	Integral colour	Concrete grey	Quatro Design
Shrub planter - Type C	2400 x 1000 x 600 Trough	Integral colour	Concrete grey	Quatro Design
Concrete seat wall	Insitu with integral colour	Smooth, Off form with 50mm radius edge along top edges	Salt Dune	Boral

Revisions	R	evisions		Project:	Title:	Site: Kelly Street, Scone
Issue Details	Date Is	sue Details	Date	Scone CBD	Schedules	Date: 15 January 2022
	1	Tender Issue	22.12.21			
	2	Tender Issue	15.01.22			Job No: 2047
				Client:		
				Upper Hunter Shire Council		Revision: 2 Sheet: 501
						2 2001



Scone CBD Revitalisation

Review of Environmental Factors

Appendix C Statement of Heritage Impact

STATEMENT OF HERITAGE IMPACT

UPPER HUNTER SHIRE COUNCIL

REVITALISATION OF KELLY STREET SCONE



Prepared by: John Carr Heritage Design Final Report Rev B 24 January, 2022

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Cover: Kelly Street, Scone showing the State heritage listed Civic Theatre. (Google Streetview)

1.0 INTRODUCTION

1.1 Background:

This Statement of Heritage Impact (SoHI) has been prepared in accordance with the standard guidelines of the NSW Heritage Division to accompany a Review of Environmental Factors for proposed revitalisation of Kelly Street, Scone.

Following the recent opening of the Scone bypass the Upper Hunter Shire Council (in association with Transport for NSW) is proposing to undertake a package of works to revitalise the Central Business District (CBD) of Scone.

1.2 Site Location:

The proposed revitalisation works will take place within the section of Kelly Street between the intersection with Kingdon Street at the southern extent, and the Susan Street intersection at the northern extent.

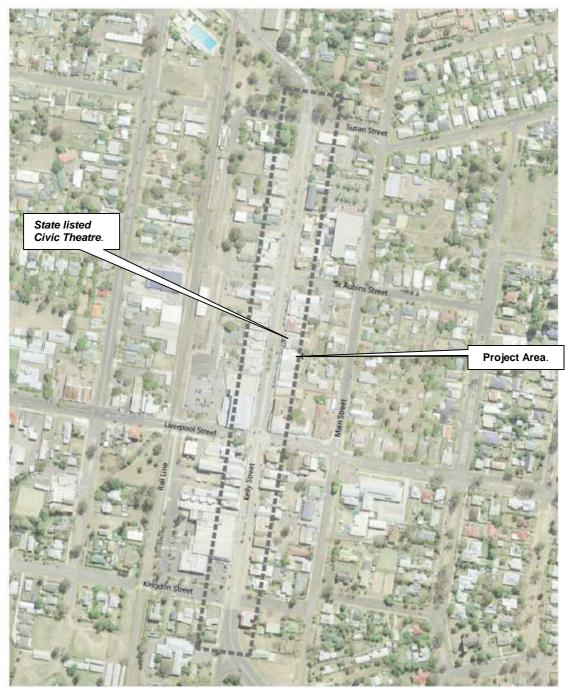


Plate 1: An aerial view of Kelly Street, Scone. (Source MARA Consulting)

1.3 Methodology:

This Heritage Impact Statement has been prepared in accordance with the guidelines published by the NSW Heritage Office (now the Heritage Division, Department of Premier and Cabinet) publication, the NSW Heritage Manual, and the guidelines set out in the Australia ICOMOS Charter for Places of Cultural Significance, 2013, known as The Burra Charter.

The Burra Charter provides definitions for terms used in heritage conservation and proposes conservation processes and principles for the conservation of an item. The terminology used, particularly the words *place, cultural significance, fabric, and conservation*, are as defined in Article 1 of The Burra Charter. The NSW Heritage Manual explains and promotes the standardisation of heritage investigation, assessment and management practices in NSW.

1.4 Statutory Requirements:

Environmental Assessment and Planning Act 1979

Kelly Street has *eighteen individually <u>listed</u>* heritage items, <u>seventeen</u> are of Local heritage significance on the Upper Hunter Shire Council's Local Environmental Plan (LEP) 2013 and <u>one</u>, the Civic Theatre, is <u>State</u> heritage listed. In addition the street is located within the Central Scone Conservation Area. All work to the street will be subject to the LEP and should be developed in accordance with the relevant policies of the Development Control Plan (DCP). Application may be required under the EP&A Act if the works do not fall within the exempt and complying provisions as defined by the Act and the Upper Hunter Shire Council's LEP.

1.5 Authorship:

This report was prepared by John Carr, Heritage Consultant using local historical information written about Scone.

1.6 Limitations:

John Carr Heritage Design is not qualified to offer structural opinions. This report is not intended to convey any opinion as to the structural adequacy or integrity of the subject building, nor should it in any way be construed as so doing. Similarly, the author's observations are limited to the fabric only and do not comment on the capacity, adequacy, or statutory compliance of any building services.

1.7 Documentation:

This Statement of Heritage Impact assesses the impact of the proposed revitalisation of Kelly Street, Scone, as described on the following Design drawings prepared by MARA Consulting Pty Ltd, Job No 1811 dated 15/01/2022:

L 00 Rev 2	L 101 Rev 2	L 102 Rev 2	L 103 Rev 2	L 104 Rev 2
L 105 Rev 2	L 106 Rev 2	L 107 Rev 2	L 201 Rev 2	L 202 Rev 2
L 203 Rev 2	L 204 Rev 2	L 205 Rev 2	L 206 Rev 2	L 207 Rev 2
L 301 Rev 2	L 401 Rev 2	L 402 Rev 2	L 501 Rev 2	

1.8 References:

- Statements of Heritage Impact Office of Environment & Heritage.
- Assessing Heritage Significance NSW Heritage Manual 2001.
- Upper Hunter Shire Council's LEP 2013
- Upper Hunter Shire Council's DCP 2015
- Identifying Australian Architecture Apperly Irving Reynolds
- Heritage NSW Kelly Street Inventory listings.

2.0 HISTORICAL CONTEXT

2.1 Development of Scone:

The inhabitants of the Scone region prior to European occupation were the Tullong and Murrain tribes, which were part of the Geawegal. Surveyor Henry Dangar was the first European to arrive in the area in 1824. Dangar's report attracted wealthy European settlers and areas of land surrounding Scone were quickly taken up. Francis Little set up Invermein Station, nearby the present-day town of Scone, in 1825. Other early large pastoral properties included Belltrees and Segenhoe. In 1826 the Governor of New South Wales, Ralph Darling, granted Richard Kelly a grant of 1,920 acres which encompassed land that became Scone's main street.¹ 1825 saw the village of Redbank established near Kingdon Ponds.

In 1837 the village was officially named Scone and by 1838 Aberdeen was proclaimed as a village. The following year saw the Segenhoe Inn opened which was originally called the Aberdeen Inn. 2

Murrurundi and Merriwa were proclaimed in 1840 as the upper Hunter area began to grow. Scone was growing as well with the 1840s and 1850s seeing the first Scone courthouse and Police Station built in Kingdon Street (1848) and the Post Office built in 1879.

In August 1863 an application for a schoolhouse was approved by the National School Board and a brick schoolhouse 40 feet by 20 feet was erected by patrons in Scone. This school opened in November 1863. National Schools preceded the Department of Education and by 1874 the demand for a new school on a new 2 acre site in Liverpool Street was tendered. The builder was J. Hudson for £1,265/-/- to accommodate 70 pupils. The buildings were completed and occupied by July 1876. A new timber residence was constructed in 1914 by A. Ede for £640. The school was extensively remodelled in 1922 with the original 1876 schoolhouse including its Date Stone in the gable, all encapsulated by the renovations and additions. This stone can only be seen above the ceiling line in the building. ³ Scone became a Municipality in 1888.

The following dates in the 1920s era highlights the growth of Scone:

- 1913: Scott Memorial Hospital officially opened. Scott Street and Stafford Street created.
- 1916: Aberdeen Bowling Club established.
- 1917: Scone Grammar School closed.
- 1919: An influenza epidemic reaches Scone.
- 1920: The first local electricity was generated.
- 1921: The town had electricity, which gradually went to nearby areas.
- 1924: The current catholic St Mary's Church in Park Street was built. White Park was created.
- 1925: A new Church of England rectory was built and the first Scouts Troop formed.
- 1926: An outbreak of dengue fever in Scone. St Andrew's Presbyterian Church on the corner of Kingdon and Main Street built.
- 1927: The Upper Hunter District Ambulance was formed and the Dartbrook Bushfire Brigade.
- 1928: The shops associated with the subject site were constructed.
- 1929: Campbell and Co built Campbell's Corner on Liverpool and Kelly Street, which still stands.

The above timeline shows that Scone was consistent in its growth from a village to a large town and a major centre for the wider area particularly with the arrival of the railway in 1871.

2.2 Development of Kelly Street:

In 1826 Governor Darling gave Richard Kelly, a sea captain, a grant of 1,920 acres. The track through the land eventually became Scone's main street as well as the New England Highway.⁴

The original layout of Scone centred on Kelly and Kingdon Streets with Kelly Street running parallel with the railway line and Kingdon creating a perpendicular street to the Goal, Police Station and Court House.

Other cross streets such as Liverpool and St Aubins fostered growth in the town, particularly the 1874 new Scone Public School. Kelly Street was planned as a wide street as was

¹ History of Scone - AMAC Archaeological Assessment Report Sept 2019

² Scone & Upper Hunter Historical Society Timeline

³ Study of Hunter Valley schools by John Carr in 1976 (unpublished)

⁴ https://www.aussietowns.com.au/town/scone-nsw

Liverpool and Guernsey Streets. Guernsey was sited on the western side of the railway corridor.



Plate 2: A view of Kelly Street in the late nineteenth century. (Old Large Historic Photos Scone)



Plate 3: A similar view of the nearby buildings today taken from the south looking north. (Google Maps)

Increases in traffic flow through the town in the twentieth century resulted in the road reserve being converted to four lanes plus a parking lane, with a narrow dividing strip between the south and northbound lanes.



Plate 4: Plan of the Scone Township in 1894 (ADFAS)

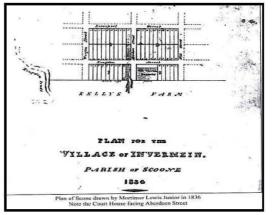


Plate 5: An 1836 plan by Mortimer Lewis Jnr. (ADFAS)

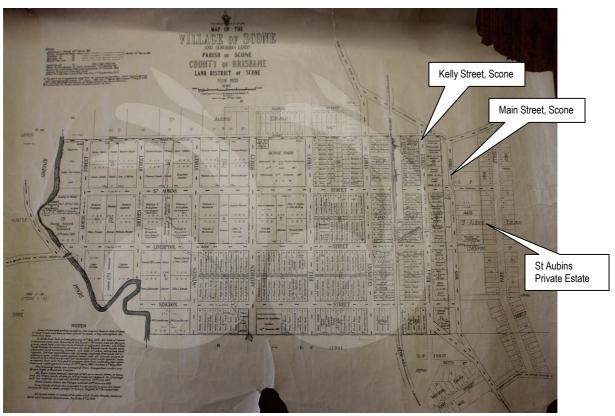


Plate 6: A 1933 map of Scone showing the older subdivisions west of the railway corridor. (Scone Historical Society)

This map of Scone in 1933 shows the delineation between Scone – the public town and St Aubins, the private town. The eastern boarder was in the middle of the block between Kelly Street and Main Street. On St Aubins Street there is an old tin building facing Kelly Street, where the curb and guttering at the front of the building is indented, this was the borderline that separated the public and private town. You can also still notice that several streets don't align including, Kingdon, Liverpool, St Aubins and Susan Street, with the deviations being where the streets crossed between the private and public town.

By 1933 the new streets developed in the private town included Joan, Main, Park, Parker, Short and Smith streets. Landowners in 1933 were included on this map



Plate 7: The Scone Post & Telegraph Office built in 1879. (Uni of Newcastle Cultural Collections)

7

3.0 PHYSICAL EVIDENCE

3.1 Site Context:

The site is the length of Kelly Street between Kingdon and Susan Streets which are within the heritage conservation area. The street contains a number of listed heritage items as well as buildings that contribute to the heritage significance of the area. Despite another road called Main Street, Kelly Street has always been the dominant shopping street and business area.



Plate 8: Kelly Street looking south noting the shop facade & four traffic lanes. (Google Maps)

3.2 Description of the Street:

The above photograph confirms that Kelly Street is the business and retail area of Scone and its generous width allows for four lanes of traffic, a lane each side for parallel parking and a wide median strip which includes turning bays.

The street has been sealed, kerbed and guttered in this configuration for over fifty years including various changes undertaken within that time as required to maintain and improve the function of the street, such as the inclusion of traffic lights signage changes and median strip changes.

The buildings on either side of the street are a mixture of shops and specific businesses such as the Post Office, hotels and the Civic Theatre many of which are important from a heritage and aesthetic aspect. Other buildings are of less importance and in many cases have been substantially altered from their original configuration.

The footpath and gutters are concrete and these elements have been changed from time to time due to maintenance of services or minor alterations to the road intersections with the introduction of 'blisters' on the minor roads where they intersect with Kelly Street.



Plate 9: Kelly Street looking south At St Aubins Street. (Google Maps)



Plate 10: Kelly Street looking north At St Aubins Street. (Google Maps)

4.0 ESTABLISHED HERITAGE SIGNIFICANCE

4.1 Heritage Status & Significance of the Conservation Area:

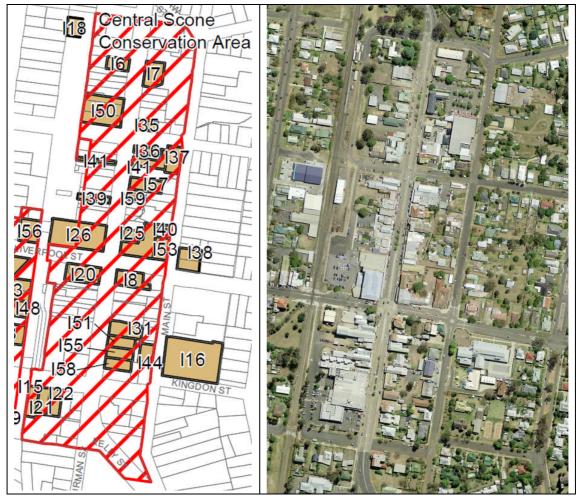
Kelly Street is sited within the Central Scone Heritage Conservation Area which contains twenty items of local heritage significance and one item of State heritage significance.

The Central Scone Heritage Conservation Area is significant as it contains a number of important buildings from different eras of the development of the town.

The significance of both listed heritage items and the various contributing buildings that are not individually listed but nonetheless are well known to the community as an overall group of buildings associated with the development of Scone in the nineteenth and twentieth centuries. Their design style and material selection and colours all play a role in contributing to the importance of Kelly Street to the Scone CBD.

4.2 Significance of items in the Street:

The following maps describe the setting and relationship to nearby heritage items.



Item name	Address	Property description	Significance	Item no
Shops	95–97 Kelly Street	Lot B, DP 158596	Local	16
Belmore Hotel	98 Kelly Street	Lot 100, DP 1008166	Local	17
Royal Hotel	109-119 Kelly Street	Lots 1 and 2, DP 741827; Lot 32, DP 539874	Local	150
2 Shops (adjacent to Mazda showroom)	116 and 118 Kelly Street	Lot 1, DP 998395; Lot 1, DP 708825	Local	135
Cafe (former Energy Australia building)	122 Kelly Street	Lot 1, DP 534209	Local	136
Shops	127–133 Kelly Street	Lot 1, DP 718295; Lot 2, DP 222497	Local	I41
Willow Tree Hotel	140 Kelly Street	Lot 4, DP 1115231	Local	I57
Scone Civic Theatre	144 Kelly Street	Lots 1-3, DP 214848	State	159
Campbell's Corner	177–181 Kelly Street	SP 32887; Lot 1, DP 161339	Local	126
Farams Store	157 Kelly Street	Lot 1, DP 950304	Local	139
Bank of New South Wales	170 Kelly Street	Lot A, DP 332685	Local	125

Post office	187 Kelly Street and 117 Liverpool Street	Lot 3, DP 700953; Lot 10, DP 703172	Local	120
National Australia Bank (former CBC Bank) Asser House car park and outbuildings	182 Liverpool Street and Kelly Street 202 Kelly Street	Lot 30, DP 580699 Lot 2, DP 151514	Local Local	I8 I31
Scone Advocate Building	206 Kelly Street	Lot 21, DP 788031	Local	151
Upper Hunter Ambulance Station	210 Kelly Street	Lot 1, DP 196911	Local	155
Former Library Building and WW1 Memorial	212 Kelly Street	Lot 214, DP 1086129	Local	158
House	95 Kingdon Street	Lot 10, DP 834781	Local	122



Plate 12: The original entry to Kelly St looking south towards the Thoroughbred Hotel. (Google Streetview)



Plate 13: Item 58 former Librarybuilding and WW2 Memorial. (Google Streetview)



Plate 14: Item 55, Upper Hunter Ambulance Station at Scone. (Google Streetview)



Plate 15: Item 51, The Scone Advocate Building. (Google Streetview)



Plate 16: Item 31 Asser House, Scone. (Google Streetview)



Plate 17: Item 8 National Australia Bank (former CBC). (Google Streetview)



Plate 18: Item 20 Post Office on Liverpool St. (Google Streetview)



Plate 19: Item 26 Campbell's Cnr on Liverpool & Kelly Streets. (Google Streetview)



Plate 20: Item 25 Bank of NSW & Item 40 Golden Fleece Hotel. (Google Streetview)



Plate 21: Item 59 the State listed Civic Theatre. (Google Streetview)



Plate 22: Item 39 Farrams Store. (Google Streetview)



Plate 23: Item 57 Willow Tree Hotel. (Google Streetview)



Plate 24: Item 41 four Shops. (Google Streetview)



Plate 25: Item 36 Cafe (former Energy Aust Building). (Google Streetview)



Plate 26: Item 35 Two Shops. (Google Streetview)



Plate 27: Item 50 Royal Hotel. (Google Streetview)



Plate 28: Item 6 Shops. (Google Streetview)



Plate 29: Item 7 Belmore Hotel. (Google Streetview)

Discussion:

The roadwork's upgrade to Kelly Street Scone concentrates substantially on changing the use of the street from a four lane highway thoroughfare to a shopping centre, providing additional parking to shops by changing from parallel to angle parking.

The potential to impact on the heritage significance of the Central Scone Heritage Conservation Area and the nearby individually listed heritage items by the rearrangement of the Kelly Street layout is minimised by the majority of hard siteworks changes being at ground level.

The affect of the proposed landscaping while changing the existing aesthetic of the street, will provide additional softening of the hard areas as can be seen by recent plantings over the last two decades. Scone has supported tree planting in and around Kelly Street since early development as shown by the historic photos of the town taken in the late nineteenth century.

5.0 THE PROPOSED DEVELOPMENT

It is proposed to re-arrange the entire street from the Kingdon/Kelly Street intersection for the entire length of Kelly Street to the intersection with Susan Street including parking arrangements and reduction of lanes from four to two. This work follows the recent completion of the Scone By-pass extracting highway through traffic away from the town centre, providing an opportunity to design a people and vehicle friendly town centre beautified with the introduction of hard and soft landscaping.

5.1 Evaluation of the Proposed Works:

Kelly Street Scone formed part of the New England Highway and due to its early planning as a country town centre, was wide enough to be gradually turned into four lanes of traffic with parallel parking on either side of the road.



Plate 30: Looking south on the Kelly/Liverpool Street intersection. (Google Streetview)

The above photograph at the Liverpool Street intersection demonstrates the width of the road dominating the town centre, required to keep the highway traffic moving at a safe speed through the town.

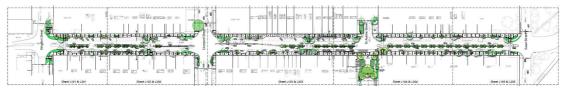


Plate 31: Key Plan of the overall landscape works on Kelly Street. (MARA Consulting P/L)

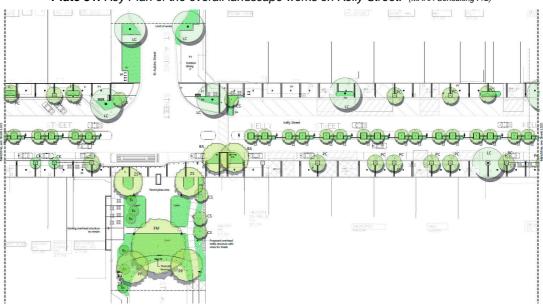


Plate 32: Detail Plan of the St Aubins St landscape works on Kelly Street. (MARA Consulting P/L)

The proposed works involve the upgrading of underground services in the street, re-alignment and re-location of the existing concrete kerb and guttering to incorporate landscaping "blisters", the widening of footpath areas, narrowing of the roadway from four lanes to two lanes, the upgrading of the median strip to include turning lanes at intersections and landscaping, the introduction of round-a-bouts at main at Kingdon and Liverpool Streets.

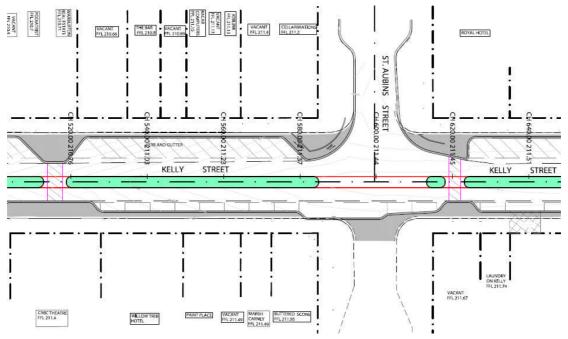


Plate 33: Detail Plan of the St Aubins St civil works on Kelly Street. (RHM Consulting Engineers)

The above plan shows the typical adjustments made to the intersections and median strip as well as the parallel and angled parking.



Plate 34: Looking south on the Kelly St from the St Aubins St intersection. (Google Streetview)

The Civic Theatre in the above photograph is State heritage listed and has been for the majority of its existence on this site, free of landscaping. The large directional sign has been the main intrusive element on the building and its setting in a busy streetscape.

The original landscape designs included the planting of two large trees towards the outer edge of the building's awning which in time could potentially cause problems with leaf litter and screening of the facade of this important and iconic building in Scone. The redesign of the landscaping to the footpath area within the curtilage of the theatre building has resulted in a more acceptable solution. The plantings are now dominated by low bushes and when combined by a wider footpath to support a pedestrian crossing, the dominance of the Civic Theatre in Kelly Street remains in tact.



Plate 35: Looking south on the Kelly St from the St Aubins St intersection. (Google Streetview)

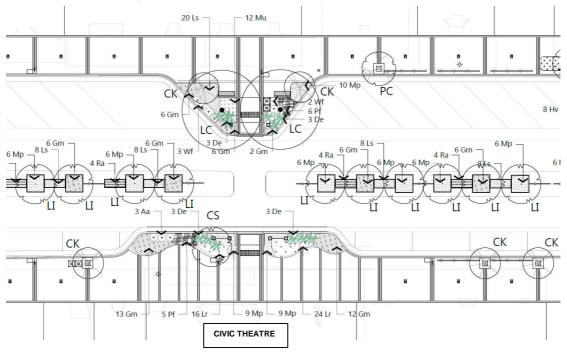


Plate 36: Detail Plan of the Civic Theatre Canopy & proposed trees. (MARA Consulting P/L)

18

6.0 ASSESSMENT OF HERITAGE IMPACT

This section examines the proposed development for any perceived impact on the heritage significance of the item, the conservation area and nearby heritage items.

6.1 Heritage Objectives of the Upper Hunter Shire Council's LEP 2013:

Under the provisions of the Upper Hunter LEP, clause **5.10 Heritage Conservation** has the following Objectives:

(a) to conserve the environmental heritage of the Upper Hunter,

(b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,

(c) to conserve archaeological sites,

(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

The proposed works address the Objectives as follows:

- The environmental heritage of the area is protected by the upgrading of existing underground services including upgrading as required for the proposed roadwork and landscaping;
- The heritage significance of the heritage items have been conserved by careful planning of both the civil works and the landscaping design to preserve both the aesthetics of the items and views to and from each item;
- The heritage significance of the conservation area has been preserved by the design of the landscape works to maintain and enhance the setting of the town by providing groups of plantings to create highlights in the street as well as occasional larger trees to highlight particular locations.
- No archaeological sites are known within Kelly Street, however in the unlikely event that historical archaeological remains are exposed during proposed works, work must cease, an appropriately qualified archaeologist consulted and if appropriate the Heritage Council notified in accordance with Section 146 of the Heritage Act.
- No Aboriginal objects and Aboriginal places of heritage significance are known within Kelly Street. Any Aboriginal sites which are found during development will need to be assessed by an Archaeologist in consultation with the Aboriginal Land Council. Wherever practical all Aboriginal sites and relics are to be preserved but if not practical an application for Consent to Destroy will need to be made to the National Parks and Wildlife Service. All work shall stop pending determination of the application for Consent to Destroy.

The proposal is, therefore, consistent with the relevant heritage objectives of the Upper Hunter Shire Council's LEP 2013, clause **5.10 Heritage conservation**.

6.2 Heritage Guidelines of the Upper Hunter Shire Council's DCP 2015:

The UHSC's DCP 2015 supports the UHSC's LEP 2013 by providing additional objectives and development standards for the conservation of heritage in Scone. Heritage provisions relevant to the subject site are contained in the following sections of the DCP in Part 9 Heritage Conservation. The DCP is written to guide new development as well as alterations and additions. Road design or alterations is not directly addressed in the DCP, however the documentation does not show any of the works interfering with or damaging the heritage fabric of the heritage items or the conservation area. Note, Kelly Street has undergone a number of different upgrades to this commercial area over the decades as through traffic increased on the New England Highway through Scone.

6.3 Measures to Minimise Impact on Heritage Significance:

The primary measure to minimise impact on heritage significance is to plan for landscaping that beautifies the street without overtaking or dominating the area thereby reducing views to and from important heritage items.

The current planning appears to achieve this objective including the landscaping of the Civic Theatre where planned large trees are now proposed to be replaced with smaller low bushes and shrubs.

7.0 STATEMENT OF HERITAGE IMPACT

Statement of Heritage Impact for:	The revitalisation of Kelly Street, Scone which contains buildings of Local heritage significance and one, the former Civic Theatre of State significance within a heritage conservation area.
Date:	This Report was completed on 24 th January 2022.
Reference:	The street and buildings form part of the Scone Central Conservation Area with buildings listed on the UHSC's LEP 2013, and the former Civic Theatre (item 59) being State significant.
Address & Property Description	The site is Kelly Street, Scone NSW 2303. ➤ Located between Kingdon St and Susan St.
Prepared by:	John Carr is a Heritage Consultant, trading as John Carr Heritage Design, compiled this report.
For:	The report has been prepared for the Upper Hunter Shire Council.

7.1 Introduction:

Following the recent opening of the Scone bypass the Upper Hunter Shire Council in association with Transport for NSW is proposing to undertake a package of works to revitalise the Central Business District (CBD) of Scone. The majority of the works apply specifically to Kelly Street, which until recently was part of the New England Highway. The bypass allows this main street and commercial centre of Scone to be reduced from four lanes to two and landscaped to create a people friendly shopping and business area.

7.2 Assessment of Heritage Impact:

The following aspects of the proposal respect or enhance the heritage significance of the items and conservation area in Kelly Street for the following reasons:

- The landscape works have been designed to compliment the eighteen individual heritage items on Kelly Street;
- The State listed Scone Civic Theatre has been landscaped to retain views to the building from both a north and south approach on Kelly Street.
- The central road dividing strip has been adjusted to suit the new road "blisters" created for pedestrian crossings and intersection corners and suitably landscaped.
- Vehicle parking has been increased by the use of angled parking combined with landscaping to create shade and some screening of the parking areas.
- Footpaths have been widened and street furniture introduced for pedestrian comfort.
- Aging services have been upgraded and planting boxes included to retain tree roots.

The following aspects of the proposal could detrimentally impact on the heritage significance of the items and conservation area in Kelly St. for the following reasons:

• The original concept included two large trees to frame the Scone Civic Theatre. This concept was abandoned and replaced with smaller bushes as the trees had the potential to dominate and screen the building from view. Additionally once these trees were mature, the resultant leaf litter on the footpath awning would create a requirement for constant cleaning of the awning and gutters.

There are no other aspects of the proposed works to Kelly Street that would have a detrimental impact on the heritage significance of individually listed items or the Scone Central Heritage Conservation Area.

The following sympathetic design solutions were considered and discounted for the following reasons:

• No other design solutions were considered as the project was to alter the former highway to support a quiet town centre with increased parking, new underground services and provision of street amenities.

7.3 **Statement of Heritage Impact:**

The revitalisation of the Scone Central Business District will have minimal impact on the heritage significance of the individual listed items in Kelly Street as well as the Scone Central Heritage Conservation Area for the following reasons:

- 1. The works are confined to immediately above and below ground in the existing street;
- 2. Underground services are all checked, upgraded or replaced for the future;
- 3. The section of Kelly St. between Kingdon and Susan Streets is the subject site for these works:
- 4. The narrowing of the road lanes from four to two improves the town's amenity;
- 5. The widening of footpaths assist businesses without compromising the heritage significance of the buildings or the area;
- 6. The design of the landscaping softens the street by provision of shading;
- 7. The design of the landscaping enhances the heritage buildings in the street;8. The combination of landscaping at the road edge and median strip enhances the
- overall setting of the CBD in Scone in Kelly Street.

3.0 CONCLUSION & RECOMMENDATIONS

The township of Scone has supported tree planting on its footpaths, roadways, parks and gardens since it was first developed. While this is a major project for hard and soft landscaping and engineering works, it is undoubtedly in the spirit of the past landscaping of Scone.

This Statement of Heritage Impact has examined the proposed works and required only one change to be made with the removal of two large trees in front of the former Civic Theatre replacing them with small bushes. This was based on the building being State listed and the proposed trees having the potential to screen this building from views in either direction in Kelly Street, recognising that the building has never had trees in front of it since it was built.

All other works compliment the street, the heritage conservation area and the objective to provide a safe and attractive shopping area in Scone.

Recommendations:

The following recommendations should be considered for this project:

• Monitor the landscaping works over the next five or more years and prune any tree canopies that overhang all footpath awnings. *Reason - leaf litter build-up in awning gutters can result in rusted roof materials if not checked and cleaned on a bi-annual basis.*

Yours faithfully,



John Carr Heritage Consultant B. Sc. (Arch), B. Arch. Date Rev Description B Issue for DA lodgement. A Draft for comment.

(End of Report)



Scone CBD Revitalisation

Review of Environmental Factors

Appendix D Database Searches

considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria : Public Report of all Valid Records of Threatened (listed on BC Act 2016) or Commonwealth listed Entities in selected area [North: -32.00 West: 150.82 East: 150.92 South: -32.10] returned a total of 25 records of 9 species.

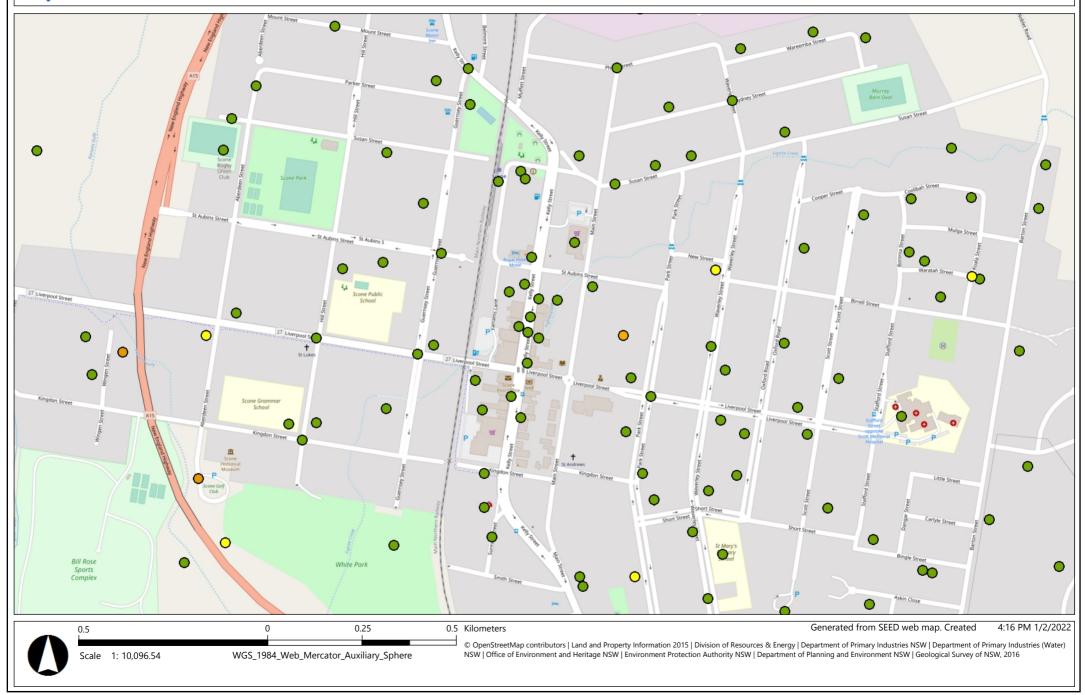
Report generated on 1/02/2022 4:10 PM

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Com m. status	Record s	Inf o
Animalia	Aves	Psittacidae	0309	^^Lathamus discolor		Swift Parrot	E1,P,3	CE	2	i
Animalia	Aves	Tytonidae	0250	^^Tyto novaehollandiae		Masked Owl	V,P,3		1	i
Animalia	Aves	Pomatostom idae	8388	Pomatostomus temporalis temporalis		Grey-crowned Babbler (eastern subspecies)	V,P		2	i
Animalia	Aves	Artamidae	8519	Artamus cyanopterus cyanopterus		Dusky Woodswallow	V,P		1	i
Animalia	Mammalia	Dasyuridae	1008	Dasyurus maculatus		Spotted-tailed Quoll	V,P	E	3	i
Animalia	Mammalia	Pteropodida e	1280	Pteropus poliocephalus		Grey-headed Flying-fox	V <i>,</i> P	V	6	i
Animalia	Mammalia	Vespertilioni dae	1353	Chalinolobus dwyeri		Large-eared Pied Bat	V,P	V	1	i
Plantae	Flora	Fabaceae (Mimosoidea e)	3848	Acacia pendula		Acacia pendula population in the Hunter catchment	E2		1	i
Plantae	Flora	Myrtaceae	6360	Eucalyptus camaldulensis		Eucalyptus camaldulensis population in the Hunter catchment	E2		8	i



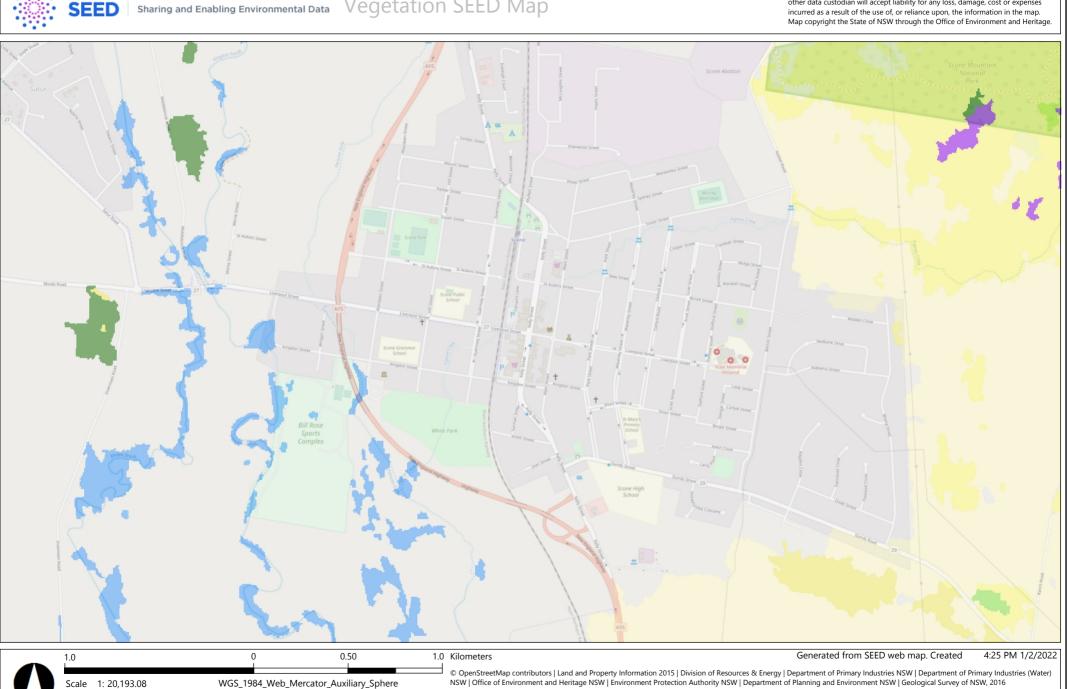
sharing and Enabling Environmental Data Bionet Species Sightings SEED Map

Map may contain errors and omissions. Neither the NSW Government nor any other data custodian will accept liability for any loss, damage, cost or expenses incurred as a result of the use of, or reliance upon, the information in the map. Map copyright the State of NSW through the Office of Environment and Heritage.



Legend

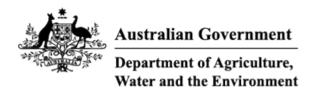
- Terrestrial Biodiversity BionetSpeciesSightings
- Critically Endangered
- Endangered
- Endangered Population
- Endangered Population, Vulnerable
- O Vulnerable
- Presumed Extinct
- Not Listed as Threatened



Sharing and Enabling Environmental Data Vegetation SEED Map

Map may contain errors and omissions. Neither the NSW Government nor any other data custodian will accept liability for any loss, damage, cost or expenses

Legend 492 848 1,532 Terrestrial Biodiversity 1,533 Plant Community Type 494 883 1,534 922 496 0 1,535 507 931 42 1,539 78 511 934 1,540 525 965 79 1,541 526 970 84 1,543 540 973 85 541 983 1,546 116 1,547 554 1,103 201 563 1,118 1,548 202 1,549 574 1,142 266 274 582 1,176 1,550 277 586 1,194 1,551 599 1,207 1,552 281 1,553 606 1,213 317 607 1,223 1,554 324 611 1,248 1,555 326 612 1,249 1,556 393 1,558 613 1,258 398 614 1,262 1,559 433 1,560 615 1,310 434 1,330 1,561 616 438 1,562 618 1,380 440 621 1,386 1,563 476 624 1,396 1,565 477 625 1,504 1,566 478 626 1,567 1,519 479 1,520 1,569 654 480 1,570 680 1,521 481 1,571 732 1,522 482 741 1,523 1,572 483 1,573 756 1,525 484 759 1,526 1,574 485 1,527 762 1,575 486 1,528 1,576 796 487 797 1,529 1,577 488 800 1,530 1,578 490 805 1.531 1.580 491



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 01-Feb-2022

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	7
Listed Threatened Species:	26
Listed Migratory Species:	12

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	2
Commonwealth Heritage Places:	1
Listed Marine Species:	19
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	1
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)		[Resource Information]
Ramsar Site Name	Proximity	Buffer Status
Hunter estuary wetlands	100 - 150km upstream from Ramsar site	In feature area

Listed Threatened Ecological Communities

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text Buffer Status
Central Hunter Valley eucalypt forest and woodland	Critically Endangered	Community may occurIn feature area within area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community may occurIn feature area within area
<u>Hunter Valley Weeping Myall (Acacia</u> pendula) Woodland	Critically Endangered	Community may occurIn feature area within area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occurIn feature area within area
Natural grasslands on basalt and fine- textured alluvial plains of northern New South Wales and southern Queensland	Critically Endangered	Community may occurIn feature area within area
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community may occurIn feature area within area
<u>White Box-Yellow Box-Blakely's Red</u> <u>Gum Grassy Woodland and Derived</u> <u>Native Grassland</u>	Critically Endangered	Community likely to In feature area occur within area



[Resource Information]

[Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
<u>Calidris ferruginea</u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Polytelis swainsonii Superb Parrot [738]	Vulnerable	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Litoria booroolongensis</u> Booroolong Frog [1844]	Endangered	Species or species habitat may occur within area	In buffer area only
MAMMAL			
<u>Chalinolobus dwyeri</u> Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Dasyurus maculatus maculatus (SE mair	land population)		
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area
Nyctophilus corbeni			
Corben's Long-eared Bat, South-eastern Long-eared Bat [83395]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petauroides volans			
Greater Glider [254]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Detrogale popiaillata			
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Phascolarctos cinereus (combined popul	ations of Old_NSW and th		
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In feature area

PLANT Androcalva procumbens

[87153]

Vulnerable

Species or species habitat may occur In feature area within area

Dichanthium setosum bluegrass [14159]

Vulnerable

Species or species In feature area habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Euphrasia arguta			
[4325]	Critically Endangered	Species or species habitat may occur within area	In feature area
Prasophyllum sp. Wybong (C.Phelps OR	<u>G 5269)</u>		
a leek-orchid [81964]	Critically Endangered	Species or species habitat may occur within area	In feature area
Thesium australe			
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area	In feature area
REPTILE			
Aprasia parapulchella			
Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat may occur within area	In feature area
Delma impar			
Striped Legless Lizard, Striped Snake- lizard [1649]	Vulnerable	Species or species habitat may occur within area	In feature area
Listed Migratory Species		[Res	source Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Monarcha melanopsis			
Black-faced Monarch [609]		Species or species habitat may occur	In feature area

within area

Motacilla flava Yellow Wagtail [644]

Myiagra cyanoleuca Satin Flycatcher [612] Species or species In feature area habitat may occur within area

Species or species In feature area habitat known to occur within area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Rhipidura rufifrons</u> Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
<u>Actitis hypoleucos</u> Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
<u>Calidris ferruginea</u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Calidris melanotos</u> Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land

[Resource Information]

Commonwealth Land Name	State	Buffer Status		
Communications, Information Technology and the Arts - Australian Postal	Corporation			
Commonwealth Land - Australian Postal Commission [12529]	NSW	In feature area		
Communications, Information Technology and the Arts - Telstra Corporation Limited				

Commonwealth Land - Australian Telecommunications Commission [12528]NSW In feature area

Commonwealth Heritage Places			[Resource Information]
Name	State	Status	Buffer Status
Historic			

Name	State	Status	Buffer Status
Scone Post Office	NSW	Listed place	In feature area

Listed Marine Species		[<u>Re</u>	source Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
<u>Actitis hypoleucos</u> Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos			
Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osc	<u>culans</u>		
Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly	In feature area

marine area

Gallinago hardwickii

Latham's Snipe, Japanese Snipe [863]

Species or species In feature area habitat likely to occur within area overfly marine area

<u>Haliaeetus leucogaster</u> White-bellied Sea-Eagle [943]

Species or species In feature area habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Lathamus discolor			
Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In buffer area only
Merops ornatus			
Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis			
Black-faced Monarch [609]		Species or species habitat may occur within area overfly marine area	In feature area
Matacilla flavo			
<u>Motacilla flava</u> Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca			
Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma			
Blue-winged Parrot [726]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

within area

<u>Rhipidura rufifrons</u> Rufous Fantail [592]

Species or species In feature area habitat known to occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rostratula australis as Rostratula bengh	<u>alensis (sensu lato)</u>		
Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Scone Mountain	National Park	NSW	In buffer area only

Regional Forest Agreements	[<u>R</u>	esource Information]
Note that all areas with completed RFAs have been included.		
RFA Name	State	Buffer Status
North East NSW RFA	New South Wales	In feature area

EPBC Act Referrals			[Resou	rce Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Kyoto Alternative Energy Farm	2008/3979	Not Controlled Action	Completed	In feature area
Not controlled action (particular manne	er)			
Aerial baiting for wild dog control	2006/2713	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Bioregional Assessments			
SubRegion	BioRegion	Website	Buffer Status
L have the m	Newtheren Original Design		La faistaire anns a



Northern Sydney Basin <u>BA website</u>



Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales -Department of Environment and Primary Industries, Victoria -Department of Primary Industries, Parks, Water and Environment, Tasmania -Department of Environment, Water and Natural Resources, South Australia -Department of Land and Resource Management, Northern Territory -Department of Environmental and Heritage Protection, Queensland -Department of Parks and Wildlife, Western Australia -Environment and Planning Directorate, ACT -Birdlife Australia -Australian Bird and Bat Banding Scheme -Australian National Wildlife Collection -Natural history museums of Australia -Museum Victoria -Australian Museum -South Australian Museum -Queensland Museum -Online Zoological Collections of Australian Museums -Queensland Herbarium -National Herbarium of NSW -Royal Botanic Gardens and National Herbarium of Victoria -Tasmanian Herbarium -State Herbarium of South Australia -Northern Territory Herbarium -Western Australian Herbarium -Australian National Herbarium, Canberra -University of New England -Ocean Biogeographic Information System -Australian Government, Department of Defence Forestry Corporation, NSW -Geoscience Australia -CSIRO -Australian Tropical Herbarium, Cairns -eBird Australia -Australian Government – Australian Antarctic Data Centre -Museum and Art Gallery of the Northern Territory -Australian Government National Environmental Science Program

-Australian Institute of Marine Science

-Reef Life Survey Australia

-American Museum of Natural History

-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania

-Tasmanian Museum and Art Gallery, Hobart, Tasmania

-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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Department of Agriculture Water and the Environment GPO Box 858 Canberra City ACT 2601 Australia +61 2 6274 1111



Your Ref/PO Number : SCBD Client Service ID : 655761

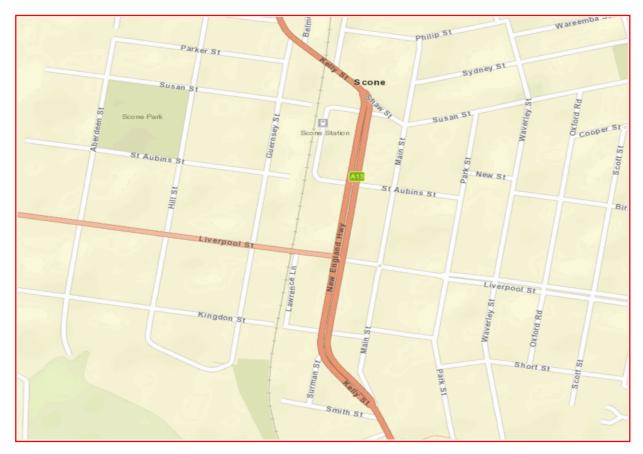
Public Works Advisory 66 Harrington Street Sydney New South Wales 2000 Attention: Kristen Parmeter

Email:

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -32.05, 150.86 - Lat, Long To : -32.05, 150.87, conducted by Kristen Parmeter on 01 February 2022.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0 Aboriginal sites are recorded in or near the above location.
0 Aboriginal places have been declared in or near the above location. *

Date: 01 February 2022

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the NSW Government Gazette (https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

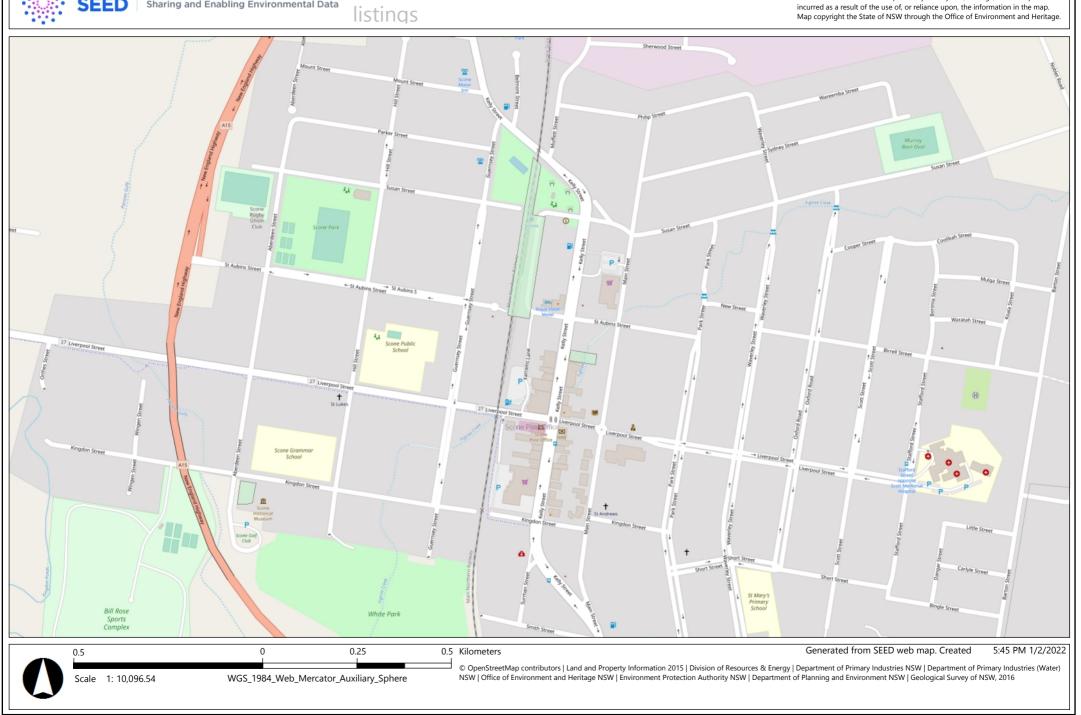
Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



SEED IVIAP commonwealth and national

Map may contain errors and omissions. Neither the NSW Government nor any other data custodian will accept liability for any loss, damage, cost or expenses incurred as a result of the use of, or reliance upon, the information in the map. Map copyright the State of NSW through the Office of Environment and Heritage.



Legend

State Heritage Register Curtilage
 World_Heritage_Areas_Australia
 World Heritage Area Australia
 National Heritage List Australia

National_Heritage_List_Australia

Listed place Area under assessment

Commonwealth_Heritage_List_Au

Listed place Area under assessment

Search Results

11 results found.

<u>Barrington Tops Wilderness Area</u> Salisbury Rd	Dungog, NSW, Australia	(<u>Indicative Place</u>) Register of the National Estate (Non-statutory archive)
<u>Belltrees House</u> Gundy Moonan Flat Rd	Belltrees via Scone, NSW, Australia	(<u>Registered</u>) Register of the National Estate (Non-statutory archive)
<u>Cedar Brush Nature Reserve</u> Sparkes Creek Rd	Scone, NSW, Australia	(<u>Registered</u>) Register of the National Estate (Non-statutory archive)
Invermein Moonbi Rd	Scone, NSW, Australia	(<u>Registered</u>) Register of the National Estate (Non-statutory archive)
Railway Station Susan St	Scone, NSW, Australia	(<u>Registered</u>) Register of the National Estate (Non-statutory archive)
<u>Scone Courthouse (former) & Theatre</u> 41 Kingdon St	Scone, NSW, Australia	(<u>Registered</u>) Register of the National Estate (Non-statutory archive)
<u>Scone Grammar School</u> Kingdon St	Scone, NSW, Australia	(<u>Indicative Place</u>) Register of the National Estate (Non-statutory archive)
Scone Post Office 117 Liverpool St	Scone, NSW, Australia	(<u>Listed place</u>) Commonwealth Heritage List
Segenhoe Homestead and Outbuildings Segenhoe Rd	Scone, NSW, Australia	(<u>Registered</u>) Register of the National Estate (Non-statutory archive)
<u>St Aubins Arms</u> 245 Kelly St	Scone, NSW, Australia	(<u>Indicative Place</u>) Register of the National Estate (Non-statutory archive)

St Aubins House St Aubins Rd

Australian Heritage Database

Scone, NSW, Australia (<u>Registered</u>)

Register of the National Estate (Non-statutory archive)

Report Produced: Tue Feb 1 17:35:57 2022

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Upper Hunter Local Environmental Plan 2013

Current version for 1 December 2021 to date (accessed 1 February 2022 at 18:06)

Schedule 5

Schedule 5 Environmental heritage

Part 1 Heritage Items

(Clause 5.10)

Locality	Item name	Address	Property description	Significance	ltem no
Aberdeen	Aberdeen Beef Co Pty Ltd (former F.J. Walkers Meatworks)	Macqueen Street	Lot 53, DP 739487; Lot 21, DP 556401	Local	I215
Aberdeen	Segenhoe Inn	56 Macqueen Street and New England Highway	Lots 9 and 10, DP 828540	Local	194
Aberdeen	Commercial hotel (bottom pub)	65 Macqueen Street and New England Highway	Lot 1, DP 710882	Local	186
Aberdeen	Aberdeen Hotel (top pub)	129 Macqueen Street and New England Highway	Lot 3, DP 1079718; Lot 1, DP 214804	Local	195
Aberdeen	Fitzgerald Bridge (Hunter River)	New England Highway	Road reserve adjacent to Lot 11, DP 1136908	Local	191
Aberdeen	The Grange	New England Highway	Lot 2, DP 628897	Local	189
Aberdeen	Commercial premises	48–52 New England Highway	Lot A, DP 370715; Lot 1, DP 1017830; Lot 6, DP 7036; Lot 13, DP 1167547; Lot 32, DP 1139049	Local	188
Aberdeen	Former M. Campbell & Co. Store, including sandstone kerb, guttering and paving to front and south footpath	70 New England Highway	Lot 70, DP 1131139; Lot 212, DP 536124	Local	187
Aberdeen	"Kelvinside" and outbuildings, including Kelvinside private cemetery monument on river bank between homestead and river	Rouchel Road	Lot 1, DP 220425; Lot 32, DP 587897; Lot 81, DP 624789; Lot 120, DP 827738; Lot 131, DP 1083917	Local	162
Aberdeen	Former butter factory and meatworks pump house, two pumps and well	5 Rouchel Road	Lot 100, DP 849475	Local	193
Aberdeen	Former butter factory and meatworks water supply	5 Rouchel Road	Lot 101, DP 849475	Local	192

01/02/2022, 18:07

12/2	2022, 18:07		Upper Hunter Local Env	rironmental Plan 2013 - NS	SW Legislation	
	Aberdeen	Dwelling	13 Rouchel Road	Lot 12, DP 9033	Local	198
	Aberdeen	Dwelling	15 Rouchel Road	Lot 11, DP 9033	Local	199
	Aberdeen	Dwelling	17 Rouchel Road	Lot 10, DP 9033	Local	I100
	Aberdeen	Dwelling	19 Rouchel Road	Lot 9, DP 9033	Local	I101
	Aberdeen	Dwelling	21 Rouchel Road	Lot 8, DP 9033	Local	I102
	Aberdeen	Dwelling	23 Rouchel Road	Lot 7, DP 9033	Local	I103
	Aberdeen	Dwelling	29 Rouchel Road	Lot 4, DP 9033	Local	I104
	Aberdeen	Dwelling	31 Rouchel Road	Lot 3, DP 9033	Local	I105
	Aberdeen	Dwelling	33 Rouchel Road	Lot 2, DP 9033	Local	I106
	Aberdeen	Dwelling	35 Rouchel Road	Lot 1, DP 9033	Local	I107
	Aberdeen	Dwelling	37 Rouchel Road	Lot 13, DP 9432	Local	I108
	Aberdeen	Dwelling	39 Rouchel Road	Lot 14, DP 9432	Local	I109
	Aberdeen	Segenhoe Mill Ruins	69 Rouchel Road	Lot 45, DP 771145; Lots 88 and 89, DP 843531	Local	190
	Aberdeen	Former bank building	1 Segenhoe Street and New England Highway	Lot 156, DP 703766	Local	197
	Aberdeen	St Mark's Anglican Church, rectory and hall	7 Segenhoe Street (hall), 11 Segenhoe Street (church) and 2 Moray Street (rectory)	Lots 13 and 14, Section 2, DP 758003; Lot 21, DP 583843; Lot 112, DP 1102399	Local	I112
	Aberdeen	Russley and garden	13 Segenhoe Street and Moray Street	Lots 198–200, DP 551975	Local	I110
	Ardglen	Ardglen Tunnel	Main Northern Railway	SE approach from Murrurundi adjacent to Lot 7001, DP 1024818	State	I199
	Blandford	Barsham	Haydons Lane	Lot 1, DP 131943	Local	1205
	Blandford	Bloomfield Homestead	Haydons Lane and New England Highway	Lot 19, DP 13557	Local	I207
	Blandford	Harben Vale Group	Haydons Woolshed Road	Lot 1, DP 131943	Local	I206
	Blandford	Bickham Homestead group, including woolshed and shearer's quarters	Off New England Highway	Lot 2, DP 1042278	Local	1208
	Blandford	St Luke's Church	Salisbury Street and New England Highway	Lots 17–20, DP 192646	Local	1204
	Bunnan	Bundarraga	Kars Springs Road	Lot 201, DP 827078	Local	179
	Bunnan	Milgarra Station	Kars Springs Road	Lot 1, DP 224163	Local	I78
	Bunnan	Grampian Hills	Ridgelands Road	Lots 1 and 4, DP 586303	Local	I77
	Bunnan	St Jude's Anglican churchyard	Scone Merriwa Road	Lot 122, DP 750957	Local	I216
	Cassilis	Courthouse	Branksome Street	Lot 1, DP 195256	Local	I134
	Cassilis	Dwelling (former Chinese emporium)	Branksome Street	Lots 15 and 52, Section 2, DP 939778	Local	1139
	Cassilis	Former store	Branksome Street	Lot 2, DP 130366	Local	I137

01/02/2022, 18:07		Upper Hunter Local Env	rironmental Plan 2013 - NS	SW Legislation	
Cassilis	Police residence	Branksome Street	Lot 1, DP 198550	Local	I136
Cassilis	Police station	Branksome Street	Lot 46, DP 1044358	Local	I135
Cassilis	Royal Hotel Cassilis	Buccleugh Street	Lots 1 and 2, DP; 998169; Lot 22, DP 1053973	Local	1133
Cassilis	Munmurra Road woolshed	Kuloo Road	Lot 5, DP 1138181	Local	I147
Cassilis	Dalkeith	Llangollen Road	Lot 1, DP 549174; Lot 1, DP 706361; Lot 4, DP 706362	Local	I141
Cassilis	Llangollen	Llangollen Road	Lot 4, DP 750741	Local	I138
Cassilis	Cassilis Station homestead and grave site	Merriwa Road	Lots 1 and 2, DP 1158964	Local	I145
Cassilis	Farmhouse/stone cottage (former Anglican parsonage)	Merriwa Road	Lot 4, DP 534129	Local	I142
Cassilis	Anglican church—St Columba of Iona	Merriwa Road and 99–101 Coolah Road	Lot 2, DP 534129	Local	I144
Cassilis	Yarrawonga	Rotherwood Road	Portion 4, Parish Bulga	Local	I140
Cassilis	Cemetery including headstones and graves	Scott Street	Lots 17 and 18, DP 1094719	Local	I143
Cassilis	Quindalup School House group—Cassilis Primary School	Scott Street	Lot 1, DP 442439; Lot 2, DP 706361	Local	I151
Cassilis	St Joseph's Roman Catholic Church	Corner Scott and Llangollen Streets	Lot 18, DP 1094719	Local	I154
Collaroy	Collaroy Homestead group, including church, lockup, shearing shed and quarters and Soldiers Settlement Hall	Merriwa Road (900 Mudgee Road)	Lot 237, DP 750934; Lot 10, DP 585330	Local	I146
East Gungal	Catholic church—St Anthony of Padua	Golden Highway	Lot 11, DP 879997	Local	I149
East Gungal	Grave of Peter George	209 Main Road and Golden Highway	Lot 1, Section 24, DP 758491	Local	I148
Gundy	Presbyterian Cemetery	Church Street	Lot 102, DP 1112183	Local	I217
Gundy	St Matthew's Anglican Cemetery	Corner Miller, Duke and Church Streets	Lots 1–3, Section 9, DP 758490	Local	I218
Gundy	Bellevue and Barn	Gundy Road	Lot 9, DP 1109256	Local	I64
Kars Springs	The "Cuan" Station	Merriwa Road	Lots 72 and 74, DP 750914; Lot 193, DP 750957	Local	180
Merriwa	Campbells Store	Bettington Street	Lot 1, DP 746053; Lot 2, DP 153198; Lot 11, DP 626103	Local	I128
Merriwa	Home Hardware (former Astros Theatre)	Bettington Street	Lot 1, DP 1016929; Lot 172, DP 554911	Local	I115
Merriwa	Bed and breakfast guesthouse (former CBC Bank)	Bettington Street	Lot 1, DP 7108	Local	I126

Bank)

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	Merriwa	Royal Hotel	Corner Bettington and Vennacher Streets	Lot 1, DP 153198	Local	I114
	Merriwa	Anglican Church	Bow Street	Lot 2, Section 10, DP 758672	Local	I118
	Merriwa	Cottage Museum	Bow Street	Part Lot C, DP 418098	State	I116
	Merriwa	Youth centre (former School of Arts)	Bow Street	Lot 1, DP 832898	Local	I120
	Merriwa	Fitzroy Hotel	Corner Bow and Bettington Streets	Lot 1, DP 730567; Lot 1, DP 159394	Local	I113
	Merriwa	Anglican Cemetery	Corner Bow and MacKenzie Streets	Lot 1, Section 10,DP 758672	Local	I117
	Merriwa	Cullingral group, including shearing shed on Wendouree property	Cullingral Road	Lot 2, DP 1005099	Local	I124
	Merriwa	"Volcano" (Wendouree property)	Cullingral Road	Lots 127, 130 and 133, DP 750959	Local	I157
	Merriwa	Wyndham	Golden Highway (3km east of Merriwa)	Lot 1, DP 857522; Lots 108 and 109, DP 750942	Local	I158
	Merriwa	Anglican rectory	Gooch Street	Lot 310, DP 619556	Local	I119
	Merriwa	Catholic Church	McCartney Street	Lots 15–18 and 20, DP 758672; Lot 19, DP 62158	Local	I123
	Merriwa	St Anne's Convent	McCartney Street	Lots 3–10, Section 4, DP 758672	Local	I122
	Merriwa	Headmaster's residence	MacKenzie Street	Lot 1, DP 794672; Lot 1, DP 170295	Local	I125
	Merriwa	Bow Palaeontological site	Merriwa- Cassilis Road (at road cutting)	Road reserve adjacent to Lot 180, DP 750913	Local	I152
	Merriwa	Redwell Cemetery	Redwell Road	Lot 1, DP 946025	Local	I131
	Merriwa	Catholic Presbytery	Vennacher Street	Lots 3 and 4, Section 4, DP 758672	Local	I121
	Merriwa	Council Building and Chambers	Vennacher Street	Lot 3, Section 7, DP 758672; Lots A and B, DP 155110	Local	I132
	Merriwa	Courthouse, police station and former lockup	Vennacher Street	Lot 43, DP 1112924	Local	I127
	Merriwa	Brindley Park homestead	Willow Tree Road	Lots 6 and 7, DP 30953	Local	I129
	Merriwa	Terragong Homestead	Willow Tree Road	Lot 1, DP 596909; Lot 3, DP 30953	Local	I130
	Moonan Brook	General Cemetery	Hunter Road	Lot 1, DP 194109	Local	I219
	Murrurundi	Rosebank	13 Adelaide Street	Lot 1, DP 781031	Local	I159
	Murrurundi	Temple Court Station and Railway Cottage	143 Boyd Street	Lot 10, DP 1121130	Local	I160
	Murrurundi	Murrurundi Oil Shale Refinery and Temi Shale Mine	Off Doughboy Street	Lot 1, DP 1123657	Local	1162
	Murrurundi	The Ranch	Off Doughboy Street	Lot 11, DP 835696	Local	I161

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2/2022, 18:07		Opper Hunter Local En	vironmental Plan 2013 - No	SVV Legislation	
Murrurundi	Former Tattersalls Hotel	46 Haydon Street	Lot 1, DP 75638	Local	I163
Murrurundi	Railway Hotel	48 Haydon Street	Lot 80, DP 705831	Local	I164
Murrurundi	Residence—Ethelston	68 Haydon Street	Lots 14 and 15, Section 8, DP 984201	Local	1165
Murrurundi	Rosedale Cottage	Little Street	Lot 4, DP 708542	State	I166
Murrurundi	Museum (former Literary Institute)	Mayne Street	Lot 1, DP 238204	Local	I170
Murrurundi	Museum (former Presbyterian Church)	Mayne Street	Lot 2, DP 238204	Local	I169
Murrurundi	Residence (former "Haydonton Inn")	2 Mayne Street	Lot 1, Section 1, DP 984201	Local	I174
Murrurundi	White Hart Hotel	46 Mayne Street	Lot 1, DP 741042	Local	I175
Murrurundi	Council Building and Chambers	47–53 Mayne Street	Lot 18, DP 59108; Lot 19, DP 89559	Local	1167
Murrurundi	J. Dooley General Store	60 Mayne Street	Lot 1, DP 67139	Local	I176
Murrurundi	Gallery and restaurant (former CBC Bank)	66 Mayne Street	Lot 1, DP 335078	Local	I180
Murrurundi	Bridge House	70 Mayne Street	Lot 23, Section 2, DP 984201	Local	I177
Murrurundi	Post office	89 Mayne Street	Lot 1, DP 700713	Local	I168
Murrurundi	Pink cottage	109 Mayne Street	Lot 1, Section 15A, DP 758738	Local	I172
Murrurundi	RSL Hall (former Manchester Unity Hall)	116 Mayne Street	Lot 92, DP 600649	Local	I178
Murrurundi	Methodist Church	126 Mayne Street	Lots 201–203, DP 1107358	Local	I179
Murrurundi	Public School	135 Mayne Street	Lot 1, Section 19, DP 194564; Lots 2 and 3, DP 758738	Local	I171
Murrurundi	Royal Hotel	144 Mayne Street	Lots 11 and 12, Section 7, DP 758738	Local	I181
Murrurundi	Royal Hotel Stables	144 Mayne Street	Lots 11 and 12, Section 7, DP 758738	Local	I182
Murrurundi	Cafe (former Telegraph Office)	155 Mayne Street	Lot 1, DP 797034	Local	I173
Murrurundi	Rose Cottage	160 Mayne Street	Lot 13, Section 6, DP 758738	Local	I183
Murrurundi	Bobadil House	Corner Mayne and Boyd Streets	Lots 16–19, Section 5, DP 758738	Local	I184
Murrurundi	St Paul's Church of England	33–41 Mount Street	Lots 2 and 3, DP 1147319	Local	I185
Murrurundi	St Paul's Rectory	33–41 Mount Street	Lot 1, DP 632080; Lot 1, DP 1147319; Lot 213, DP 44391; Lot 217, DP 263278	Local	I186

01/02/2022, 18:07		Upper Hunter Local Env	/ironmental Plan 2013 - NS	W Legislation	
Murrurundi	Courthouse and police station	Murulla Street	Lots 8 and 9, Section 2, DP 758738	Local	I189
Murrurundi	Footbridge suspension bridge	Murulla Street	Road reserve adjacent to Lot 1, DP 995479	Local	I190
Murrurundi	Gaol and police residence	Murulla Street	Lot 7, Section 2, DP 758738	State	I188
Murrurundi	Police Sergeant's residence	Murulla Street	Lot 6, Section 2, DP 758738	Local	I187
Murrurundi	Glenalvon group	New England Highway	Lot 1, DP 1003054; Lot 26, DP 227683	Local	1200
Murrurundi	Glenalvon homestead	New England Highway	Lot 1, DP 1003054; Lot 26, DP 227683	Local	I201
Murrurundi	Glenalvon Old Cottage	New England Highway	Lot 1, DP 1003054; Lot 26, DP 227683	Local	1202
Murrurundi	Glenalvon Stables	New England Highway	Lot 1, DP 1003054; Lots 26 and 27, DP 227683	Local	I203
Murrurundi	Old cemetery	New England Highway	Portions 80/86	Local	I212
Murrurundi	Roman Catholic Presbytery	O'Connell Street	Lot 18, DP 1098258	Local	I191
Murrurundi	St Joseph's Catholic Church	Polding Street	Lot 17, DP 1098258; Lot 56, DP 871906	Local	I193
Murrurundi	Murrurundi House (former Sisters of Mercy Convent)	Polding Street	Lot 57, DP 871906	Local	I192
Murrurundi	Murrurundi Railway Station group	8–30 Polding Street and Victoria Street	Lot 4, DP 808501	State	I198
Murrurundi	Railway Guard's Cottage	8 Polding Street (east of Railway Station)	Lot 1, DP 808501	Local	I194
Murrurundi	Station Master's Cottage	30 Polding Street	Lot 2, DP 808501	Local	I195
Murrurundi	Greenhayes	Sunshine Street and 20 Murulla Street	Lots 11–13, Section 14, DP 758738	Local	I197
Parkville	Cressfield Station	New England Highway	Lot 9, DP 1008618	Local	I81
Rouchel	Rosevale (Roseville)	Rouchel Road	Lot 1, DP 157303; Lot 101, DP 634590	Local	183
Rouchel	Timber house	Rouchel Road	Lot 100, DP 1136872	Local	I82
Rouchel Brook	Allen Bridge	Allen Bridge Road	Road reserve adjacent to Lot 20, DP 10329	Local	167
Rouchel Brook	Kennedy Family Cemetery (or Dalvey Private Cemetery)	Rouchel Road (13.5km east of Aberdeen at Rockhill)	Lot 46, DP 752483	Local	1220

02	/2022, 18:07		Upper Hunter Local Env	vironmental Plan 2013 - NS	SW Legislation	
	Scone	Barry Station	Barry Road via Nundle	Lots 1, 3, 4–6, 10, 16, 21– 24, 28, 37, 38, 41, 42, 47– 49, 54–56, 58, 67, 69 and 70, DP 753685; Lot 401, DP 228369; Lots 110 and 111, DP 750925; Lots 29 and 30, DP 753712; Lots 172 and 173, DP 750958; Lot 1, DP, 225222; Lot 1, DP 431001; Lot 511, DP 228426; Lots 72 and 73, DP 722267; Lots 1–4, DP 1040880	Local	175
	Scone	Invermein	Clifflands Road	Lot 2101, DP 1152426	Local	I24
	Scone	Former Harpers Boot Factory	39 Guernsey Street and St Aubins Street	Lot 1, DP 58116	Local	I1
	Scone	Scone RSL Former Boorers Mill	67–71 Guernsey Street	Lot 1, DP 368876; Lot B, DP 394354	Local	I2
	Scone	Residence-stone cottage	68 Guernsey Street	Lots A and C, DP 152433	Local	I48
	Scone	Baptist Church	72-74 Guernsey Street	Lot 74, DP 1150759	Local	I33
	Scone	Mill Cottage	73 Guernsey Street	Lot 1, DP 1090169	Local	13
	Scone	Shop (former Willow Tree Hotel and former butcher shop)	-	Lot A, DP 394354; Lot 6, DP 733567; Lots 21 and 22, DP 558794	Local	I28
	Scone	Elmswood	Gundy Road	Lot 1, DP 421243; Lot 144, DP 622028	Local	165
	Scone	Belltrees homestead and outbuildings	Hunter Road	Lot 5, DP 726256; Lot 222, DP 1009169	Local	160
	Scone	Shops	95–97 Kelly Street	Lot B, DP 158596	Local	I6
	Scone	Belmore Hotel	98 Kelly Street	Lot 100, DP 1008166	Local	I7
	Scone	Royal Hotel	109–119 Kelly Street	Lots 1 and 2, DP 741827; Lot 32, DP 539874	Local	150
	Scone	2 Shops (adjacent to Mazda showroom)	116 and 118 Kelly Street	Lot 1, DP 998395; Lot 1, DP 708825	Local	135
	Scone	Cafe (former Energy Australia building)	122 Kelly Street	Lot 1, DP 534209	Local	136
	Scone	Shops	127–133 Kelly Street	Lot 1, DP 718295; Lot 2, DP 222497	Local	I41
	Scone	Willow Tree Hotel	140 Kelly Street	Lot 4, DP 1115231	Local	157
	Scone	Scone Civic Theatre	144 Kelly Street	Lots 1–3, DP 214848	State	159
	Scone	Farams Store	157 Kelly Street	Lot 1, DP 950304	Local	139
	Scone	Bank of New South Wales	170 Kelly Street	Lot A, DP 332685	Local	125
	Scone	Golden Fleece Hotel	174 Kelly Street	Lot 80, DP 601823	Local	I40
	Scone	Campbell's Corner	177–181 Kelly Street	SP 32887; Lot 1, DP 161339	Local	126
	Scone	Post office	187 Kelly Street and 117 Liverpool Street	Lot 3, DP 700953; Lot 10, DP 703172	Local	120

2/2022, 10.07		Opper Humer Local Link		W Legislation	
Scone	Asser House car park and outbuildings	202 Kelly Street	Lot 2, DP 151514	Local	I31
Scone	Scone Advocate Building	206 Kelly Street	Lot 21, DP 788031	Local	I51
Scone	Upper Hunter Ambulance Station	210 Kelly Street	Lot 1, DP 196911	Local	155
Scone	Former Library Building and WW1 Memorial	212 Kelly Street	Lot 214, DP 1086129	Local	158
Scone	St Aubin's Arms (former Wool Pack Inn)	245 Kelly Street	Lot 1, DP 881852	Local	19
Scone	Old Court Theatre	41 Kingdon Street	Lot 6, Section 2, DP 758898	State	I19
Scone	Historical Museum (former constable quarters and lockup)	45 Kingdon Street	Lot 94, DP 39640; Lot 7011, DP 96892	Local	I14
Scone	Grammar School (former St Luke's Anglican School House)	60 Kingdon Street (corner Hill Street)	Lots 3–6, DP 758898; Lots 21–25, DP 239808; Lots 71 and 72, DP 623368	Local	I13
Scone	Former Convent of Sisters of Mercy	61 Kingdon Street	Lot 201, DP 883254	Local	I12
Scone	Scone Arts and Crafts (former Catholic church)	63 Kingdon Street	Lot 33, DP 562934	Local	I4
Scone	St Mary's Roman Catholic Cemetery (rear of former Church)	65 Kingdon Street	Lot 34, DP 562934	Local	I54
Scone	Site of Railway Gatekeeper's Cottage	87 Kingdon Street	Lot 1, DP 745929	Local	I29
Scone	Bed and breakfast (former School of Arts)	91 Kingdon Street	Lot 110, DP 1059967	Local	115
Scone	Masonic Temple (former Presbyterian church)	93 Kingdon Street	Lot 1, DP 819422	Local	I21
Scone	House	95 Kingdon Street	Lot 10, DP 834781	Local	I22
Scone	St Luke's Church and rectory	75 Liverpool Street and Hill Street	Lot 101, DP 618228	Local	15
Scone	Public School	82–94 Liverpool Street	Lots 1 and 2, DP 798200; Lots 1– 4, DP 798231; Lot 1, DP 798745; Lot 1, DP 349170; Lot 1, DP 349673; Lot 5, DP 37700; Lot 1, DP 431666; Lot 1, DP 349216; Lot 1, DP 349171; Lot 1, DP 798815; Lot 1, DP 349217		I42
Scone	Mower Shop (former Campbells Store Garage)	98–100 Liverpool Street and 53 Guernsey Street	Lots 91–94, DP 591291	Local	I34
Scone	Veterinary clinic (former Campbells Chambers)	106 Liverpool Street	Lot B, DP 411573	Local	156
Scone	Commercial premises	109 Liverpool Street	Lots 12–14, DP 1125438	Local	I43

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Scone	Former Scone Shire Council Building and Chambers	130 Liverpool Street	Lot 1, DP 185377	Local	153
Scone	National Australia Bank (former CBC Bank)	182 Liverpool Street and Kelly Street	Lot 30, DP 580699	Local	18
Scone	Scone Courthouse	Main Street and 62 Liverpool Street	Lot 1, DP 814761	Local	I38
Scone	Scone Railway Station	Main Northern Railway	Adjacent to Lot 2, DP 1153650	State	I18
Scone	Presbyterian Manse	Main Street	Lot 1, DP 194688	Local	I16
Scone	Residence (former inn)	Main Street	Lot 1, DP 1100096	Local	I44
Scone	Yarrandi homestead	Off Merriwa Road	Lot 10, DP 831346; Lot 100, DP 809538	Local	I72
Scone	Petrified stump	Moobi Road	Adjacent to Lot 20, DP 246413	Local	I30
Scone	Roman Catholic cemetery	New England Highway	Lot 1, DP 366916; Lot 58, DP 1096974; Lot 90, DP 1130892	Local	I49
Scone	St Aubin's House	New England Highway (1.6km south of Scone)	Lot 2, DP 635388; Lot 104, DP 1093507; Lot 1420, DP 816817	Local	123
Scone	Turanville homestead and outbuildings	New England Highway	Lots D, E and F, DP 38812	Local	I68
Scone	St. Mary's Roman Catholic Church	70–72 Park Street and Short Street	Lots 11 and 12, Section 5, DP 2958	Local	I27
Scone	Monuments—Thomas Cook Memorial, Alan Cunningham Memorial and John Graham Memorial	Gundy Road (Rotary Park)	Lot 1, DP 667072	Local	I10
Scone	Satur (rear of Sledmore Horse Stud)	Satur and Middlebrook Roads	Lot 91, DP 808298	Local	185
Scone	Segenhoe homestead and outbuildings	Segenhoe Road (8km east of Scone on Pages River)	Lot 1, DP 301424; Lot 1, DP 725790; Lot 2, DP 1109425; Lot 130, DP 1083917	Local	161
Scone	Residence—Geraldton (former Belmore House)	2 Shaw Street	Lot 1, DP 152428	Local	I11
Scone	Nandowra	7 Smith Street	Lot 2, DP 578106	Local	I74
Scone	Residence (former hospital)	11 Smith Street	Lots 12 and 13, DP 864059	Local	I17
Scone	Dry cleaners (former Blooms Nursery)	113 St Aubins Street	Lot 1, DP 718296	Local	I37
Scone	Scone Hospital	2 Stafford Street	Lots 3 and 4, DP 583487	Local	I52

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	Scone	Thornwaite, outbuildings and cemetery	Upper Dartbrook Road	Lots 15 and 175, DP 750964; Lot 1, DP 1064712; Lot 1, DP 1155503; Lot 1, DP 1155496; Lot 161, DP 998206; Lot 7301, DP 1142105	Local	173
	Scone	Residence	95 Waverley Street	Lot 167, DP 521459	Local	I47
	Scone (Cliffdale)	Wyoming Stud	New England Highway	Lot 1, DP 170692; Lot 2, DP 221277; Lot 52, DP 598815	Local	I66
	Scone (Glenrock)	Glenrock Station		Lot 19, DP 753687	Local	176
	Sparkes Creek	The Hawthornes, including outbuildings		Lots 26 and 51, DP 750964; Lot 1, DP 724395; Lot 4, DP 1089857; Lot 251, DP 802268	Local	I69
	Timor	Timor Station and outbuildings	Crawney Road	Lot 4, DP 367436	Local	I210
	Timor	Whissonet Station	Off Edmonds Road	Lot 103, DP 1126099	Local	I211
	Timor	Timor Caves and geological site	Sargeants Gap Road	Lot 35, DP 856514; Lot 160, DP 750922; Lot 161, DP 786649; Lot 214, DP 44391; Lot 220, DP 263278	Local	I214
	Timor	St. Peter's Anglican Church	Waverley Road	Lot 1, DP 203271	Local	I213
	Wingen	Abbotsford (former Coach House)		Lot 211, DP 1129822	Local	170
	Wingen	Murulla Station		Lots 22 and 2, DP 857355; Lots 54, 92, 134 and 135, DP 750944; Lots 84, 134 and 365, DP 750965; Lot 21, DP 860837; Lot 1, DP 828571; Lot 137, DP 750944; Lot 761, DP 847816; Lot 7018, DP 1001439	Local	I71
	Wingen	Petwyn Vale	Corner Abbott and Gladstone Streets	Lot 237, DP 750965	Local	1222
	Wingen	Mountain House (former public school)	Corner Raglan and Petwynn Streets (NEH)	Lot 4, Section 14, DP 759098	State	I45
	Wingen	Antiques Shop (former post office)	New England Highway	Lots 6 and 7, Section 10, DP 759098	Local	I223
	Wingen	Myee, Residence Timber House	1 Vernon Street	Lot 10, Section 15, DP 759098	Local	I224

Part 2 Heritage conservation areas

Name of heritage conservation area	Identification on <u>Heritage Map</u>	Significance
Cassilis Conservation Area	Shown by red hatching and labelled	Local
	"Cassilis Conservation Area—C1"	

01/02/2022, 18:07	Upper Hunter Local Environmental Plan 2013 - NSW Legislation			
Central Scone Conservation Area	Shown by red hatching and labelled "Central Scone Conservation Area—C2"	Local		
Merriwa Conservation Area	Shown by red hatching and labelled "Merriwa Conservation Area—C3"	Local		
Murrurundi Conservation Area	Shown by red hatching and labelled "Murrurundi Conservation Area—C4"	Local		
West Scone Conservation Area	Shown by red hatching and labelled "West Scone Conservation Area—C5"	Local		

Part 3 Archaeological sites

Locality	Item name	Address	Property description	Significance Item no	
Murrurundi	Railway Gatekeeper's Cottage	Polding Street (opposite Albert Street)	Lot 4, DP 808501	Local	A1



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