

Attachment F - Powell Fenwick Servicing Design Advice Memo

DESIGN ADVICE MEMO



CIVIL

Memo No **C01**
Job Name **147 Levi Road Services provisions**
Job No **240795**
Date **19 August 2024**
To **Selwyn District Council**
Address **2 Norman Kirk Drive, Rolleston 7643**
Copies to **Foodstuffs - Rebecca Parish**
Savills - Euan Gutteridge
Issued By **Ruben Thielmann**

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147 LEVI ROAD SERVICES PROVISIONS

Servicing RFI 21 June 2024

In response to the RFI issued by Selwyn District Council on 21 June 2024 for the private plan change request to the Partially Operative Selwyn District Plan (V2) at 157 Levi Road, Rolleston (the Site), a memorandum has been prepared that outlines the indicative servicing arrangement for the Site to address the servicing query raised.

POWELL FENWICK RESPONSE

Site Description

The Site encompasses 7.3 ha of land located at the southeastern corner of the intersection of Lincoln-Rolleston Road and Levi Road, and approximately 500m south-east of the Rolleston Town Centre. The Site is legally described as Lot 1 DP 579376, as comprised in Record of Title 1076818. The Site is currently undeveloped farmland and is located on the south-eastern edge of the established urban area of Rolleston. There is an existing dwelling and several accessory buildings (sheds) situated in the northern portion of the Site, with shelterbelt plantings along its road frontages. The Site and its immediate surroundings are currently the subject of a shift in character as a consequence of the medium density zoning brought about by the resource management reform delivered through the district plan review, as well as the recent consent issued on the Site which authorises the new PAK'nSAVE supermarket development in the northern part of the Site.

Proposed Rezoning / future development / ODP

A private plan change request (PPC) has been lodged by Foodstuffs (South Island) Properties Limited (Foodstuffs) to re-zone the Site to reflect the consented and future use of the Site, being a PAK'nSAVE supermarket on the northern part of the Site and a complementary trade retail and trade supply activity on the southern part of the Site. This will rezone the existing Medium Density Residential Zone (MRZ) to Large Format Retail Zone (LFRZ) and result in changes to the LFRZ provisions, and introduce a new Outline Development Plan (ODP) to deliver an integrated development that engages with the existing and evolving urban area. The outcome of the PPC will be improved business development capacity through the provision of key retail services both now and into the future.

As part of this PPC, high level investigations into the feasibility of servicing the Site to meet the functional needs of the proposed ODP has been undertaken. This has reviewed the availability of existing services in the area, options for on-site servicing, and matters requiring further investigation or correspondence with Council.

Roading / Access

Existing - The Site fronts Lincoln-Rolleston Road which is an arterial road connecting to Selwyn Road and continuing towards the south-west of Christchurch. Adjacent to the Site the road has a rural formation on the eastern side and operates with a 60km/h speed limit. There is a shared cycle/footpath on the western side of the road.

Proposed - The new ODP shows one principal entrance along Levi Road and one along Lincoln Rolleston Road. Four secondary accesses are proposed along Lincoln Rolleston Road, with one provided along Levi Road with an additional site-specific service access along the eastern boundary to support the consented PAK'nSAVE and future

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trade retail and trade supply activity. A future primary road is proposed at the southern corner of the site to provide an extension to Broadlands Drive to connect to existing and future residential development to the east and west of Lincoln Rolleston Road. Internal and external pedestrian connections will also be provided as indicated in the ODP and as part of the consented PAK'nSAVE. The roading and access design has been developed by a transport engineer who has confirmed will achieve a safe, efficient, and effective integration with the existing transport network, with minimal impact on the functioning of the adjacent arterial road network. The roading and access will be delivered as the ODP is developed and design in accordance with the applicable standards.

Power / Communications

Existing - Power and telecommunications lines are located within the road reserve of Lincoln-Rolleston Road and, subject to Orion approval, may be capable of supporting the requirements of trade retail activities. Chorus, fibre and telecommunication lines run on both sides of the site's Lincoln Rolleston Road frontage, with an 11kV and low voltage power cables located on the opposite side of Lincoln Rolleston Road.

Proposed - Subject to utility provider approvals, existing power and telecommunications could be utilised to service the Site and its associated trade retail activities. These will be designed to meet applicable regulations and industry standards. The utility connections and designs will be formalised as the ODP is developed following the completion of the PPC with the relevant utility providers.

Sewer

Existing - As indicated on the council GIS, and as shown on sheet 0101, Lincoln Rolleston Road is serviced by a 150Ø sewer that terminates at SDC sewer manhole 671327. Sewer provisions connecting the site to the council infrastructure are not currently present on site. As such, new connections to the Council sewer infrastructure would need to be established.

Proposed - The proposed development could be serviced by a new 150Ø sewer connection to SDC sewer manhole 671327. This connection would be subject to site specific design requirements and Council approvals to establish a new connection.

Information relating to the capacity of the existing council infrastructure has not been requested at present. Liaising with council on infrastructure capacity would be carried out once the proposed development's demand has been established. Sewer attenuation systems could be included as part of the design if council's infrastructure does not have sufficient capacity to serve the proposed development.

Water Supply

Existing - As indicated on the council GIS, and as shown on sheet 0101, Lincoln-Rolleston Road is serviced by a 150Ø water supply sewer that runs within the footpath on the far side of Lincoln-Rolleston Road. Water supply provisions connecting the site to the council infrastructure are not currently present on site. As such, new connections to the Council water supply infrastructure would need to be established.

Proposed - The proposed development could be serviced by a new 63Ø water supply connection to the existing 150Ø SDC water supply in Lincoln-Rolleston Road. This connection would be subject to site specific design requirements and Council approvals prior to establishing a new connection.

Information relating to the capacity of the existing council infrastructure has not been requested at present. Liaising with council on infrastructure capacity would be carried out once the proposed development's demand has been established. Water storage systems could be included as part of the design if council's infrastructure does not have sufficient capacity to serve the proposed development.

Fire water supply provisions for the site may or may not be required as part of the development. Provisions and requirements for these would be confirmed once the site's demand is known and would be subject to council's approval. Fire fighting water supply provisions have not been included on sheet 0101, but could be run in conjunction with the proposed domestic water supply, or as otherwise required.

Stormwater

Existing - As indicated on the council GIS, and as shown on sheet 0101, Lincoln-Rolleston Road (other than the sumps at the Reuben Ave intersection) is not currently serviced by a reticulated stormwater network. As such there is not suitable stormwater infrastructure into which the proposed stormwater can be connected. No known water courses or soakpits suitable for the discharge of stormwater are present within the extents of the site.

Proposed - Similar to the adjacent PAK'nSAVE development, stormwater runoff from the proposed development would need to be discharged to ground by one or more soakpits. Soakpits would be sized and positioned to suit the proposed development, with treatment systems and all other elements of the stormwater system being designed to meet the requirements of CRC241876, or a part transfer thereof.

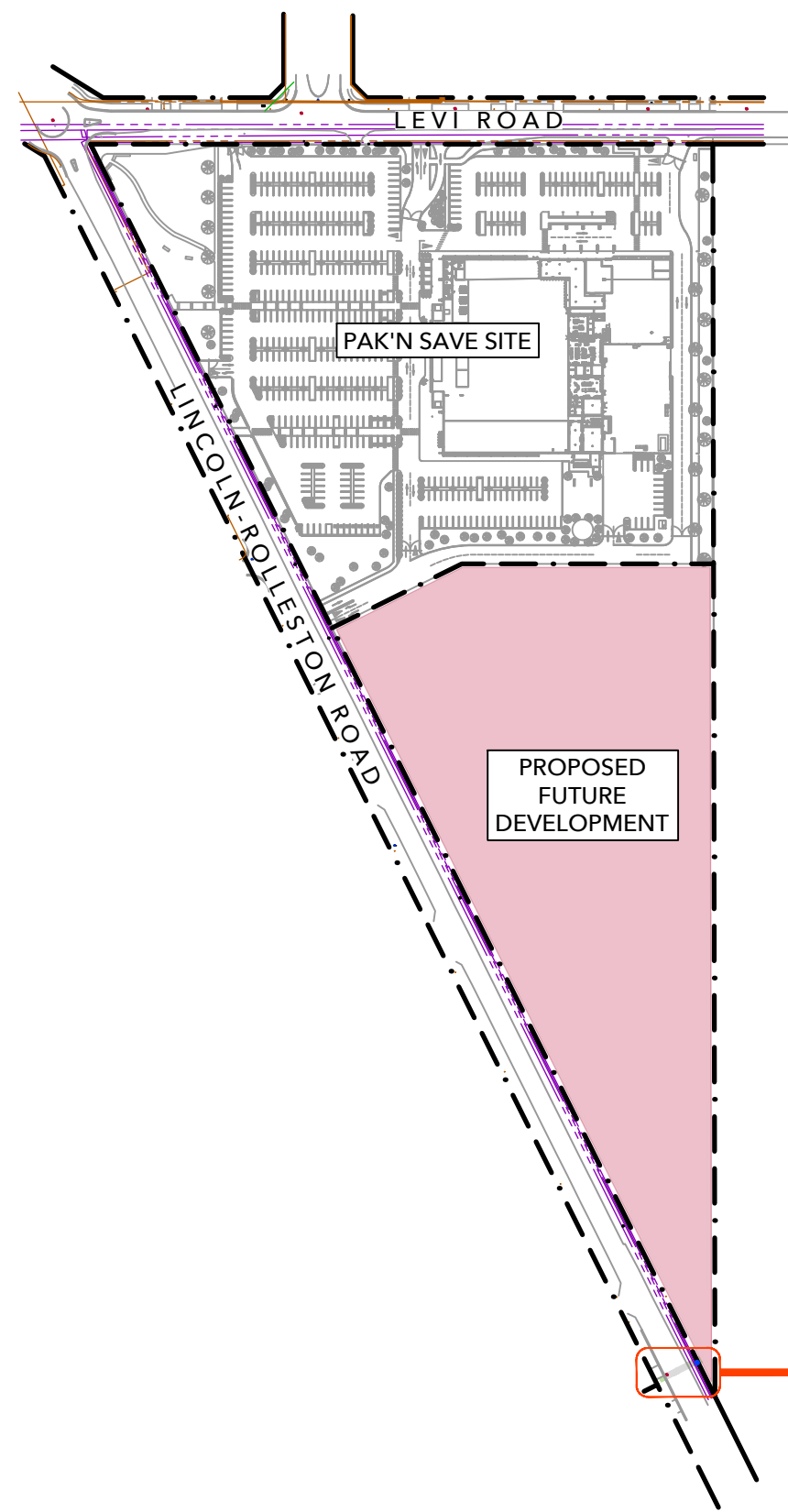
Servicing Capacity

Whilst the capacity of the three waters and power/communications will require further investigation with the Council and respective utility providers to service the ODP development, it should be highlighted that the proposed rezoning from residential to commercial land use will likely result in a significant reduction in demand for all of these services. On this basis, it is anticipated the Site can be managed so that sufficient capacity is available to meet the demand from the intended commercial activities without adverse effect on adjacent properties or the wider networks.

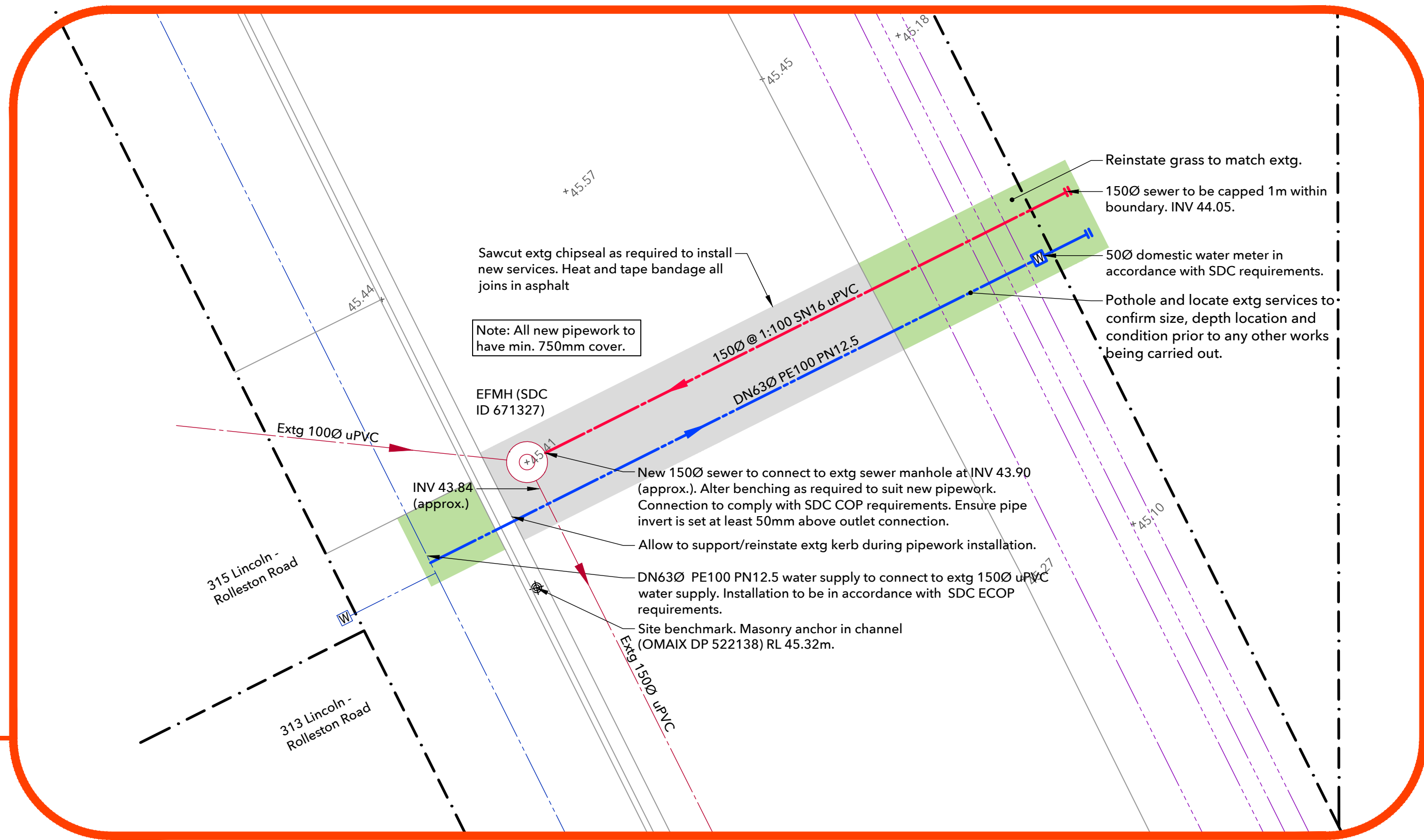
Summary

In light of the above considerations, it is anticipated that the proposed rezoning from MRZ to LFRZ is unlikely to have adverse impacts on the services shared with the surrounding developments. The demand on shared services will likely be less as a result of the proposed plan change when compared to a fully developed MRZ.

Any unforeseen adverse effects can be addressed as part of the site specific design for the proposed development, once council and network provider's requirements are known and as the design phases for the development progress.



LOCATION PLAN
1:3000



DRAINAGE PLAN
1:100

KEY

1:100 @ A1
1:200 @ A3

Approximate legal boundaries for information only

Extg foul sewer

New foul sewer

Extg water

New water

Extg power

Extg comms.

Extg water meter

New water meter

NOTES:

SDC COP - Refers to the Selwyn District Council's Code of practice.

It is a requirement that only SDC approved drainlayers are permitted to work within street or road boundaries.

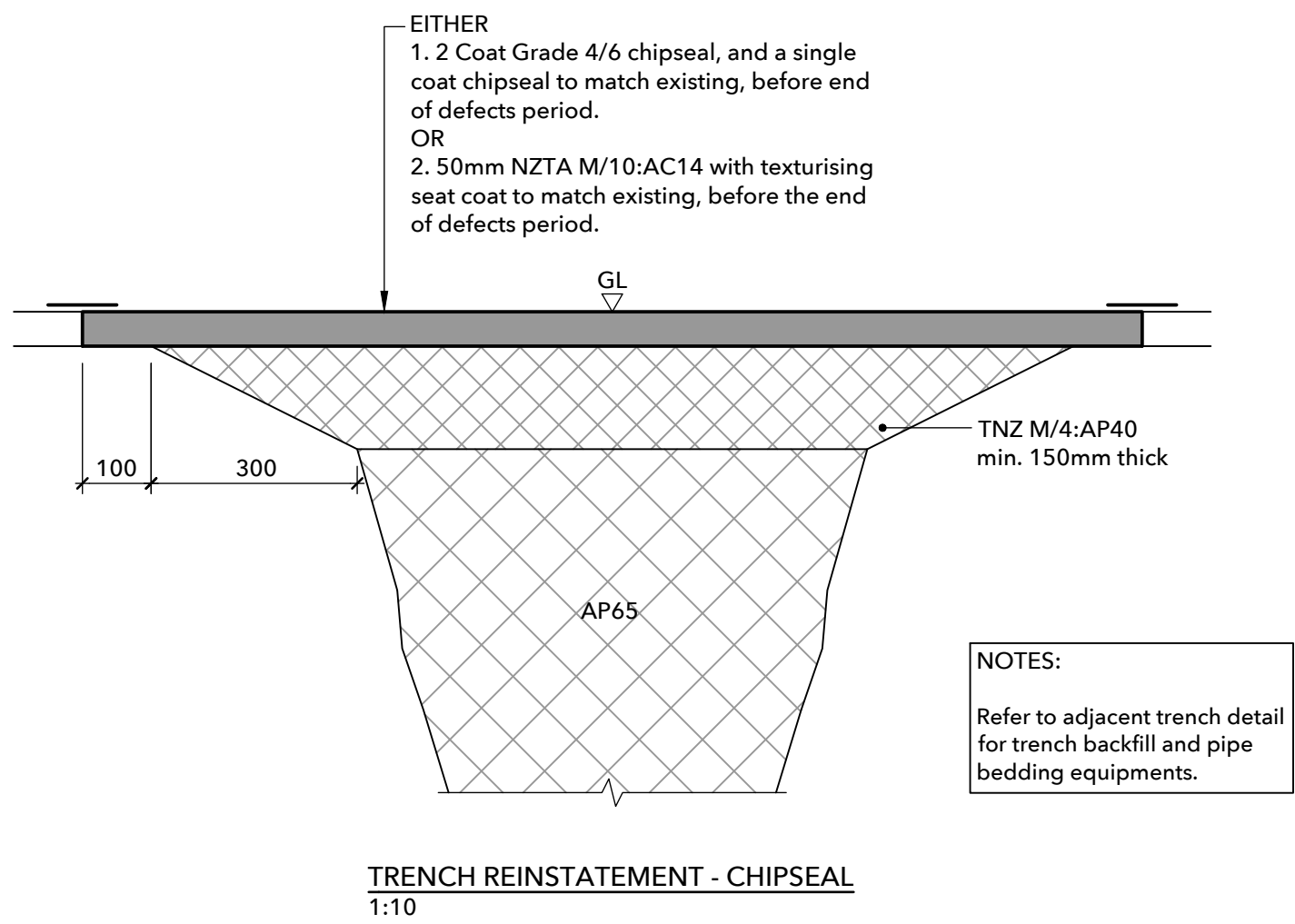
All works are to comply with the relevant sections of the SDC COP.

Refer to the Civil specification for all testing requirements.

The Contractor is to confirm the invert levels of the relevant existing stormwater and sewer pipes prior to commencing work on site.

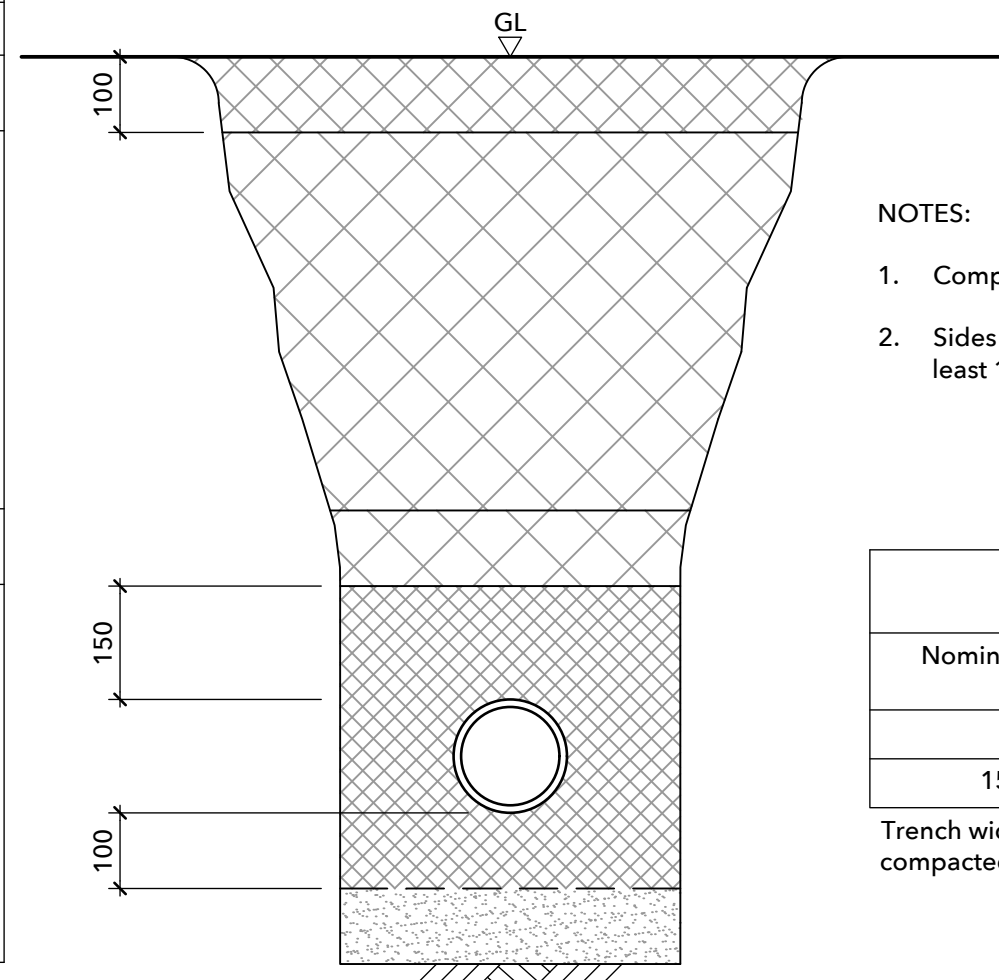
The sewer system has been designed to NZS/AS3500.

All joints against existing asphalt shall be bandaged and sealed on the completion of the works.



TRENCH REINSTATEMENT - CHIPSEAL
1:10

Zone	Material
Base course	AP40
Sub-base	AP65 thickness to match existing or specified sub - base thickness as detailed on pavement section.
Trench Fill	AP65
Bedding	AP20
Over-excavation	

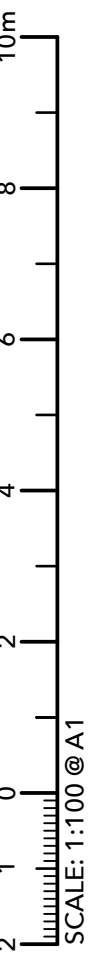
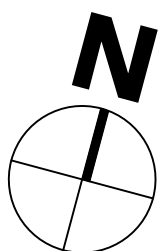


STANDARD TRENCH DETAIL - HARDSTAND AREAS
1:10

- NOTES:**
1. Compact and evenly grade finish trench floor.
 2. Sides of excavation to be kept vertical to at least 150 above the pipe.

TRENCH CLEARANCE	
Nominal Diameter	Minimum Clearance
100	100
150-300	150

Trench width to enable pipe to be safely laid and compacted around the side support zone.



ORIGINAL DRAWING IN COLOUR

This drawing is copyright © Contractor must verify all dimensions on site
Powell Fenwick Consultants Limited trading as Powell Fenwick
03 366 1777 www.pfc.co.nz Christchurch Queenstown
7/12/2024 10:24:13 am

147 LEVI ROAD REZONING ROLLESTON

SERVICES PROVISIONS

2	12.07.24	For Information
1	05.07.24	For Information
ISSUE	DATE	AMENDMENT



CIVIL

DESIGNED RT
DRAWN RT
CHECKED
REFERENCE

SCALE AT A1
AS SHOWN

DISCIPLINE
ZONE
SHEET

ISSUE
2
LEVEL

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