

# Infrastructure Assessment Report

## Proposed Private Plan Change Northlake Special Zone

|               |                               |
|---------------|-------------------------------|
| Applicant     | Northlake Investments Limited |
| Patersons Ref | P252171                       |
| Date          | 17/06/2026                    |

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| 0       | Daniel Anderson | Alex Todd   | Initial Issue |
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# 1. Project Details

|                                                                                                                                                   |                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>Site Location</b>                                                                                                                              | <b>Northlake - Wanaka</b> |
| <b>Legal Description*</b>                                                                                                                         | Lot 2000 DP 613751        |
| <b>Record of Title*</b>                                                                                                                           | RT 1223108                |
| <b>Area*</b>                                                                                                                                      | 25.4781 ha                |
| *Note the above information is correct at the time of this application but will change on completion of subdivisions under RM250889 and RM250979. |                           |

## 2. Scope

This report has been prepared to support a private plan change request within the Northlake Special Zone (NSZ) in Wānaka to:

- (i) Standardise zoning of the existing NSZ Activity Areas that have been developed by Northlake Investments Limited (NIL) with the Queenstown Lakes Proposed District Plan (PDP) 'standard' zones to the extent possible, to meet the Queenstown Lakes District Council's policy intention to reduce/remove special zones from the PDP.
- (ii) Enable increased residential development by way of a residential extension area (REA) by redefining the land use of Activity Area E1 and C1 within the Urban Growth Boundary (UGB) and the NSZ, and;
- (iii) Identify the Outstanding Natural Landscape (ONL) boundary through the northern extents of NSZ to complete the definition of the boundary by connecting both the western (Sticky Forest) extent and the eastern Dublin Bay extent.

This report will only focus on the REA part of the private plan change request that seeks to expand the existing residential zone into activity Areas E1 and C1. This report covers the availability of the following infrastructure elements and how the amended activity area boundaries and resulting dwelling yields can be appropriately serviced as these areas are incorporated into the wider Northlake development:

- Stormwater
- Wastewater
- Water Supply (potable and firefighting)
- Network Utility Services (electricity and telecommunications)

A separate report prepared by Carriageway Consulting is included with this plan change request that assesses transportation provisions.

## 3. Proposed Infrastructure

## 3.1 Stormwater

CKL has prepared a Stormwater Management Plan for the plan change area, provided as **Appendix A** to this report. The Stormwater Management Plan demonstrates that the proposed REA can be effectively serviced for stormwater and integrated into the wider Northlake development. The approach builds on previous stormwater modelling, using agreed parameters.

The assessment confirms that the downstream infrastructure has sufficient capacity to accommodate the proposed development, with post-development stormwater flows to be managed through attenuation and treatment measures. Detailed design will be undertaken as the project progresses through the QLDC approvals process.

## 3.2 Wastewater

### 3.2.1 Design Overview

A wastewater connection can be provided to all proposed dwelling units (DU's) in the REA via the existing Ø150mm QLDC wastewater mains adjacent to the site located in Carrickmore Crescent, Stonehenge Road, or Craigroy Crescent.

Due to the ground levels within the REA, some DU's will need to be serviced by a pumped low-pressure wastewater system. Where required, it is expected that DU's serviced by a low-pressure system would have a boundary kit installed at the time of subdivision, with a pumping system to be installed by the lot owner at the time a dwelling is constructed. All DU's that can be serviced by gravity will be supplied with a Ø100mm gravity connection.

Approximately a third of the DU's will be serviced via the existing Ø150mm main in Stonehenge Road, with the remaining being serviced by the existing Ø150mm main in Carrickmore Crescent. Both Ø150mm mains drain to WWMH ID 333892 at the eastern intersection of Lammermoor St and Riverslea Road. Below this point the main size increases to Ø300mm.

### 3.2.2 Network Capacity

The proposed increased in density within the REA creates an additional demand of approximately 2.6l/s, split between Carrickmore Crescent and Stonehenge Road. Refer to **Appendix B** for details.

We have reviewed the capacity of the existing Ø150mm mains in Carrickmore Crescent/Riverslea Road and Stonehenge Road/Lammermoor Street and confirm both have sufficient capacity to accommodate the proposed increase in residential density. It should also be noted that DU's serviced by a low-pressure system are unlikely to simultaneously discharge at peak times, therefore the calculations attached as **Appendix B** represent a conservative approach.

Wastewater modelling of the downstream network to the Albert Town pump station was completed on behalf of QLDC as part of the Northlake Stage 18 consenting process. We have reviewed this modelling in the context of this proposed plan change and note that the downstream capacity, at the time of reporting, well exceeds the additional 2.6l/s of demand created by the proposed additional residential density. The modelling report is attached for reference as **Appendix C**.

In conclusion, the proposed increase in residential density within the REA can be serviced by either a gravity or low pressure pumped wastewater connection which will drain to the existing QLDC network. The existing downstream infrastructure has sufficient capacity to service the proposed increased density. Detailed design will be required as this project progresses through the QLDC approvals process.

### **3.3 Water Supply**

Water supply to the upper stages of the Northlake development is currently provided by a combination of gravity and pumped (pressure boosted) reticulation from the QLDC reservoir and pump station located at the northern end of Stonehenge Road, at approximately 404mRL.

The proposed REA sits between approximately 370m and 405mRL and therefore cannot achieve QLDC's required level of service by gravity alone. It is expected that both potable and firefighting water supplies will be provided by a pumped (boosted) network.

Potable water supply to the REA can be provided either by extending and upgrading the existing boosted network currently servicing Northlake Stage 18, or by installing a new booster pump station and establishing a standalone pressure zone to service the REA. These options will be assessed during detailed design to ensure reliability and compliance with QLDC level of service requirements.

Firefighting water supply will be provided via the boosted reticulation network, designed to meet FW2 firefighting requirements in accordance with SNZ PAS 4509:2008. Flow and pressure requirements will be confirmed through hydraulic modelling as part of detailed design.

Reservoir capacity will be reviewed at the time of detailed design. If additional storage is required it will be located within the land owned by Northlake Investments Limited – either adjacent to the existing tanks, or at a new location to be agreed with QLDC.

Detailed design will confirm the required storage (if any), network configuration, and pressure boosting requirements to support both domestic and firefighting flow and pressure requirements.

### **3.4 Network Utility Services**

#### **3.4.1 Electricity**

PowerNet have reviewed the proposed plan change and confirm that an electrical supply can be made available to service future development within the REA. A copy of this confirmation letter is included at **Appendix D**.

#### **3.4.2 Telecommunications**

Chorus NZ have reviewed the proposed plan change and confirm that a fibre connection can be made available to future development within the REA. A copy of this confirmation letter is included at **Appendix E**.

## 4. Conclusion

The proposed REA has been assessed in relation to the existing surrounding infrastructure from a serviceability perspective. This assessment has identified no infrastructure constraints or adverse effects arising from the proposed changes to the existing activity area zoning, therefore the proposal is considered appropriate and supportable from an infrastructure perspective.



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