

ŌRANGA STAGE 3 – ST16

Land Development and Infrastructure Report

Document Control

TITLE					
DATE	VERSION	DESCRIPTION	PREPARED BY	REVIEWED BY	AUTHORISED BY
19 th June 2020	DRAFT	Sales Pack Covering Report	Rebecca Coe	Scott Williams	
9 th July 2020	FINAL	ST16 Superlot specific report	Sebastian Hicks	Scott Williams	Rebecca Coe

Distribution

Kāinga Ora

1 PDF copy

Piritahi

1 PDF copy

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1.0 Introduction

Kāinga Ora has asked Piritahi to prepare a land development and due diligence report to support a due diligence pack for potential purchasers of superlots within Stage 3 of the Oranga Development.

This document refers specifically to the superlot ST16 (OR-026). Similar reports are available for each of the other Stage 3 superlots.

2.0 Urban Design

A masterplan has been prepared by Isthmus Group Ltd (Isthmus). A copy of the masterplan (revision N5) is included under **Appendix A**.

Anticipated yield for this superlot is detailed in the table below. Any changes to this yield by purchasers will require additional investigation and engineering assessments prior to building consent approval. These should be carried out accordingly by the purchaser if required.

Table 1: Maximum yield based on Oranga Precinct Neighbourhood Masterplan Rev N5 (Appendix A)

Superlot	Maximum Yield (Dwelling)	Zoning (Storeys)	Approx. Superlot Area (m ²)
ST16 (OR-026)	34	2-3	6,540

3.0 Resource Management Planning

The build partner will be responsible for obtaining all relevant resource consents for subsequent residential development on the site.

4.0 Geotechnical

A detailed geotechnical investigation has been undertaken for this superlot. Refer to the geotechnical report contained within **Appendix C**.

In order to understand the full geotechnical nature of the site, the specific geotechnical report must be read, and a determination made by the purchaser as to whether further investigation is required by the purchasers own geotechnical engineers.

5.0 Land Remediation

Kāinga Ora will be removing all existing dwellings and undertaking ground remediation to remove contamination that is identified during on-site testing.

A Site Validation Report (SVR) will be provided to the build partner at the handover of the superlot. This will confirm that both of the following standards are met, meaning that the remediated site does not pose a risk to human health or the environment, from a soil contamination perspective:

- the Ministry for the Environment (MfE) National Environmental Standard (NES) Human Health criteria for Residential Use
- the permitted activity standards of the Auckland Unitary Plan.

Should any further contaminants be discovered during building works, accidental discovery protocols apply for the house builder.

Kāinga Ora take the approach that if asbestos is present or there is any suspicion of asbestos being present, it is assumed to be present.

6.0 Survey

6.1 Summary

Below is a summary of survey works pertaining to this superlot ST16, for which compliance documentation will be lodged with the relevant authority prior to superlot handover.

Superlot	Remove all redundant interests	Subdivision required
ST16 (OR-026)	Yes	Yes

6.2 Survey Matters

The site is subject to party wall easements, pipeline certificates and other service easements suited to the current layout. These will be redundant upon development. Where a redundant easement requires council's consent, Kāinga Ora will apply for surrender and it will be removed from the title. This may apply to appurtenant easements over adjacent property. Where an easement does not require council consent it will be removed in bulk or on an on-demand basis throughout the development phase.

There are in some instances easements that benefit other properties or easements that benefit the land over other properties. Where possible these will be surrendered as well. This includes pipeline certificates benefitting private land where it is redundant.

Any underlying cross leases will be surrendered in full prior to handover.

Where subdivision is required the intention is to amalgamate all affected lots as part of the subdivision to hand over one parcel.

7.0 Bulk Infrastructure

Kāinga Ora is aware of three required infrastructure upgrades outside of the Oranga neighbourhood, which may impact or be impacted by the neighbourhood development. Possible impacts could include deterioration in serviceability from potable water supply and downstream surcharge of sewer network, both of which could contribute to difficulty in obtaining building consents.

For each of the following, Kāinga Ora is currently working with WSL to address these potential upgrade requirements. A full understanding of the proposed demand that will trigger these upgrades is expected in Quarter 3 2020.

1. **Captain Springs and Mays Road sewer (Watercare Services Limited).** This approximately 1km length of wastewater sewer downstream and south of the neighbourhood was previously deemed as requiring sections capacity and condition upgrade.
2. **Hoheria Road watermain (Watercare Services Limited).** A watermain in the vicinity of Hoheria Road, north-west of the neighbourhood, has been classed as requiring upgrade due to its condition.
3. **Mt Smart Road watermain upgrade (west of neighbourhood) (Watercare Services Limited).** This watermain has also been classed as requiring upgrade.

8.0 Stormwater

The Oranga Stormwater Management Plan (SMP) has been approved by Healthy Waters. It outlines the high-level stormwater management methodology for the Oranga catchment – refer **Appendix D**.

All development within the neighbourhood is to be in accordance with the SMP. It is the build partner's responsibility to read and understand the SMP, however; a few key notes are:

1. The Oranga catchment contributes to a water quality sensitive aquifer. The SMP contains recommendations on how to avoid negative impact to that aquifer.
2. Stormwater runoff up to the 10-year ARI event is to be dealt with entirely within each superlot. This can be via installation of soakage devices and associated infrastructure.
3. It is the build partner's responsibility to:
 - a. provide adequate freeboard to habitable floor levels,
 - b. provide at source water quality treatment for high contaminant generating exposed carparks servicing more than 30 vehicles, and
 - c. Provide gross pollutant traps (GPTs) for new impervious areas.
 - d. Determine and provide the necessary stormwater infrastructure to service the superlot in accordance with the SMP.

8.1 Soakholes

All existing private soakholes will be removed and backfilled as part of the superlot development by Kāinga Ora. The exception to this is where soakholes are feasibly located near a superlot boundary and are considered to be in good working order; in which case the soakhole will be retained – this will be decided on a case by case basis in liaison with Kāinga Ora and the potential buyer.

9.0 Wastewater

9.1 Wider Network

The neighbourhood-wide and downstream receiving network have been capacity checked by Candor3 for Kāinga Ora. The results are such that, with the exception of an isolated run of sewer in Mays Road and Captain Springs Road (mentioned above in 7.1), the wider network is confirmed as having sufficient capacity to service a yield in excess of the full neighbourhood build-out.

9.2 Internal Neighbourhood Network

The existing public sewer reticulation through the ST16 site has been reviewed relative to the currently proposed build footprint included in the Oranga Masterplan in **Appendix A**. This is to avoid clashes with the existing reticulation and to optimise development potential within the superlot. A diversion of the sewer was identified as necessary and feasible in this regard and will be implemented.

The proposed diversion works will be complete and with the relevant compliance documentation lodged at the time of superlot handover.

Engineering Plan Approvals (EPAs) are programmed for lodgement prior to September 2020.

9.3 Site Servicing

The superlot will be handed over with at least one serviceable private sewer connection, end capped approximately 1m from the superlot boundary. Given the size of this superlot, a second private sewer connection will be considered in liaison with the build partner.

10.0 Water

10.1 Neighbourhood-Wide Network

Watermain upgrades are proposed as part of a neighbourhood-wide bermworks upgrade planned for construction between Quarter 4 2020 and Quarter 4 2023.

At this early stage, watermain upgrades adjacent to the ST16 superlot are as follows (note this is subject to change as the bermworks project progresses):

Superlot	Approx. Date of Adjacent Watermain Upgrade*
ST16 (OR-026)	Waitangi Road = Quarter 1 2021 State Ave = Quarter 4 2020

10.2 Site Servicing

A minimum of one live water meter will be in place at the handover of each superlot. This will be reflected on as-built plans. Other existing water meters will be disconnected by WSL during superlot development.

11.0 Utility Services

11.1 Neighbourhood-Wide Network

Power and communications undergrounding are proposed as part of a neighbourhood-wide bermworks upgrade planned for construction between Quarter 4 2020 and Quarter 4 2023.

Power ducts will be installed in the road berms, in conjunction with watermain installation detailed in Section 10.0 Water. The programme for power installation itself has yet to be defined. More detail will be available Quarter 4 2020.

As part of these undergrounding works, private underground power and communications connections will be installed within the superlot. This may precede or follow superlot development.

11.2 Site Servicing

Existing power and communications connections will be disconnected prior to superlot handover.

12.0 Archaeology

Refer to Archaeological Assessment under **Appendix E**.

No archaeological features were identified during the desktop archaeological investigations prior to work beginning within the neighbourhood. During the course of Stage 1 and 2 works, two small middens have been discovered.

Any discoveries during superlot development will be detailed in an Archaeological Checklist, which will be issued to the build partner.

13.0 Arboriculture

Every tree within superlot boundaries has been inspected by an Arborist. Refer to the draft Arborist Report under **Appendix F** for further information on the assessments undertaken and an indication of trees to be retained or removed within the superlot.

A finalised report will be available prior to superlot development, and tree records will be captured at superlot handover to build partner.

14.0 Superlot Handover

At the completion of land development work within the superlot, a handover package will be prepared for the build partner. Evidence included in that package will include, but not be limited to:

- As-built plans (including capped service locations, erosion and sediment control features to be handed over, site fencing to be handed over with superlot, site contours, public infrastructure where applicable)
- Site Validation Reports
- Geotech Completion Reports
- Evidence of compliance lodgement, where applicable

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