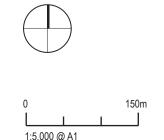




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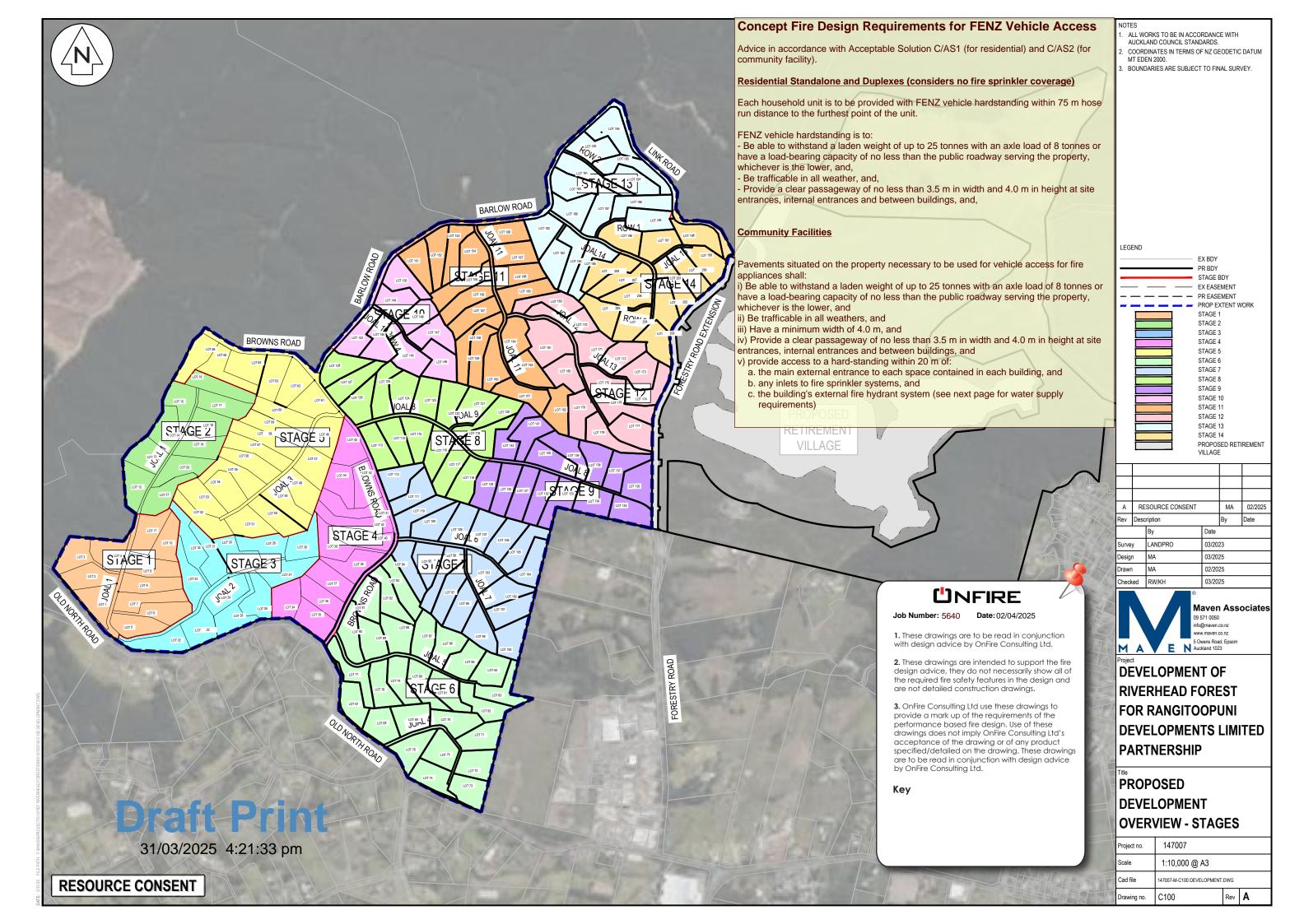
## RANGITOOPUNI MASTERPLAN

Date: 04 February 2025 | Revision: 0

Plan prepared for Avant Group Ltd by Boffa Miskell Limited

Project Manage

z | Drawn: MBe | Checked: PWh



# Concept Fire Design Requirements for Firefighting Water Supply

Advice in accordance with SNZPAS 4509:2008.

Both proposed Lots 1 and 2 are considered remote from public fire hydrants. All buildings on site are considered single storey

#### For Lot 2

# Residential Standalone and Duplexes Villas (considers no fire sprinkler coverage)

Fire Water Classification FW2

Consider reservoirs or tank supply (not reticulated external fire hydrant systems) are to be provided on site for residential villas

Each household unit shall have access to 45,000 litres of firefighting water within 90 m. We are currently in consultation with FENZ to reduce the required water throughout the subdivisions to:

20,000l of firefighting water for units of greater than 200m<sup>2,</sup> and

10,000l of firefighting water for units of up to than 200m<sup>2</sup>

### Garden Pavilion (considers fire sprinkler coverage)

Floor area 200 m<sup>2</sup>. Fire Water Classification FW2

Considers reservoir or tank supply (not reticulated external fire hydrant systems) are to be provided on site

Garden Pavilion shall have access to 45,000 litres of firefighting water within 90 m. If sprinkler protected the same requirement as Care Building below.

# Amenity Building (considers fire sprinkler coverage)

Floor area of largest firecell 1100 m<sup>2</sup>. Fire Water Classification FW2

Considers reservoir (not reticulated external fire hydrant systems) are to be provided on site Amenity Building shall have access to 45,000 litres of firefighting water within 90 m. If sprinkler protected the same requirement as Care Building below.

# Care Building (considered sprinklered as required by the NZBC) Fire Water Classification FW2

Considers reservoirs (not reticulated external fire hydrant systems) are to be provided on site Care Building shall have access to 45,000 litres of firefighting water within 90 m

Note that NZS4541:2020 will require additional stored water to provide the required supply for the sprinkler systems.

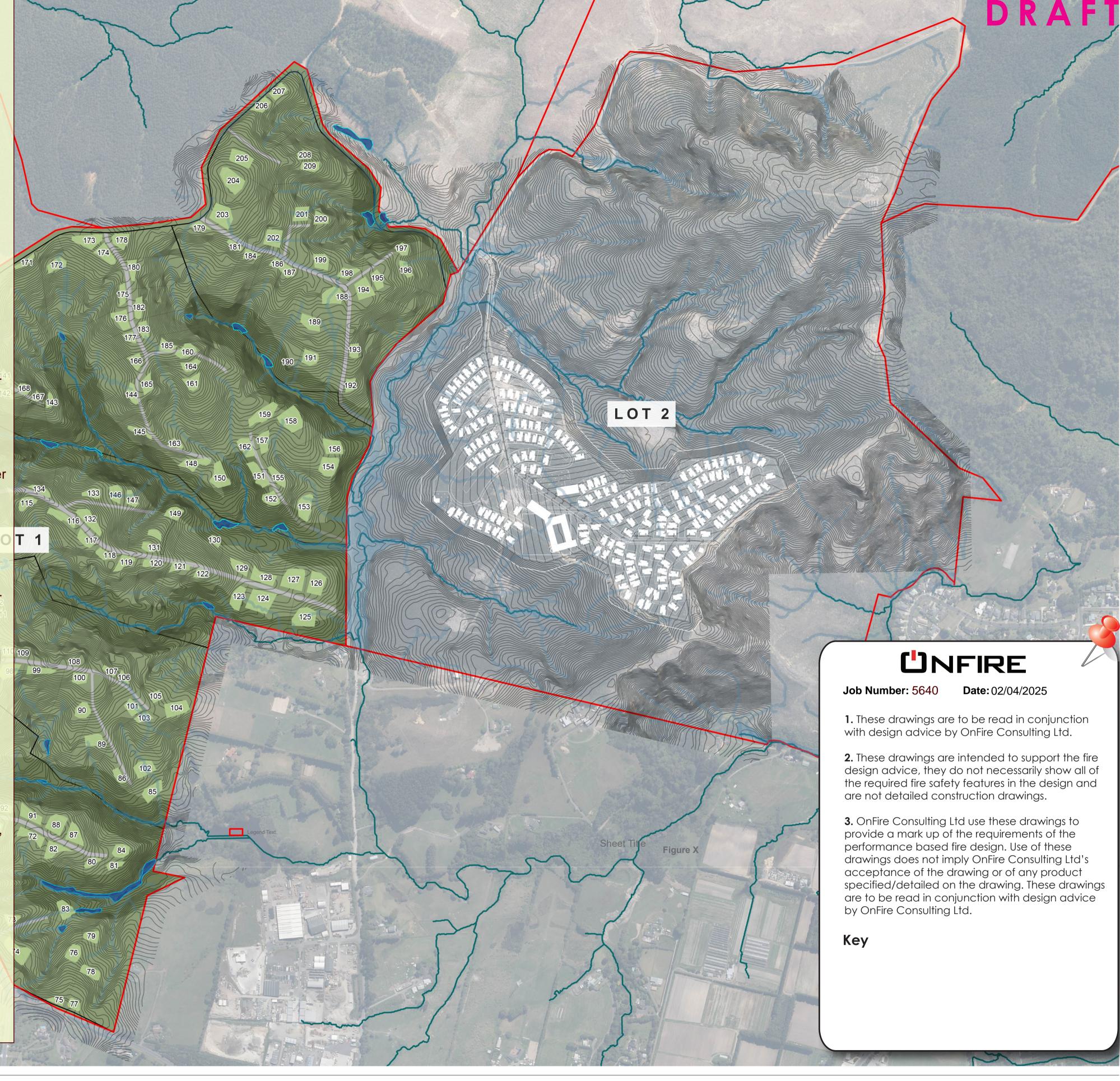
#### Wellbeing Centre (considers no fire sprinkler coverage)

Floor area 900 m<sup>2</sup>. Fire Water Classification FW4

Considers reservoir (not reticulated external fire hydrant systems) is to be provided on site Wellbeing Centre shall have access to 540,000 litres of firefighting water within 90 m. If sprinkler protected the same requirement as Care Building above.

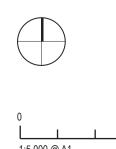
#### Notes:

- Reservoirs refers to any standing water supply (such as tanks, swimming pools, ponds) provided there is FENZ access in accordance with SNZPAS 4509 Reservoir volumes may account for serving the largest firecell/building only at any given time
- FENZ vehicle access to reservoirs are to meet the requirements on the previous page, except that 20 tonne loading (as opposed to 25 tonne) may be used.
- Hard standing is to be provided within 5 m of reservoir outlet when lower than hard standing, and within 25 m or reservoir when higher than hard standing
- Tank reservoirs must be automatically topped up, and be capable of manual refilling
- Reservoirs must be proven reliable and accessible at all times
- Maximum practicle lift of water to Fire Service Pumps is 7.5 m
- Static water pumps may be required for serving larger firecells/buildings to achieve required L/min water delivery
- Chemically and/or biologically contaminated sources are not acceptable





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