



Urban Forest Tree Planting Mandeville Reserve

PROJECT NUMBER: **BM230857** Concept Design

PROJECT ADDRESS: 57 Riccarton Road,
Riccarton,
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CLIENT: Christchurch City Council

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REV	DATE	DESCRIPTION
A	05.03.24	Concept Design
B	12.04.24	Concept Design

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ORIGINAL IN COLOUR

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LEGEND

Existing Canopy Cover

Existing Lower Vegetation

Existing Pathways and Features

Vegetation cover mapped based on CCC aerial photography dated 17 November 2023, with site visit to verify existing conditions.

Existing Specimen Trees - 18

Existing Canopy Cover - 679.99 m²

51.7%

Canopy coverage to existing site

REV DATE

A 05.03.24

B 12.04.24

DESCRIPTION

Concept Design

Concept Design

APR

HCo

HCo

Urban Forest Tree Planting

Mandeville Reserve

Existing Site

Design HCo

Drawn ARo

Check GRO

Scale

1:150 @ A1

1:300 @ A3

Date

14.12.2023

REVISION

CONCEPT DESIGN

DRAWING NO.

BM230857_200

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ORIGINAL IN COLOUR

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LEGEND

20m+ Tree Height Area

10 - 20m Tree Height Area

5 - 10m Tree Height Area

The Tree Height Capacity model is derived from the following rules, supplied by CCC:

- No tree shall intrude through the recession plane at maturity
- No tree shall be planted closer than 3.0m from a pathway
- No tree shall be planted closer than 5.0m from a sports field and no tree canopy drip line shall extend above a sports field
- Tree spacings shall be a minimum of 5.0m apart to allow for easy lawn mowing
- Min. 2m offset for low voltage power
- Min. 3m offset for 11kv power
- Min. 5m offset for 33-66kv
- Min. of 1m offset for all other services and hard paving not mentioned above

0m

1.5m

3m

6m

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Tree Height Capacities

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Scale

1:150 @ A1

1:300 @ A3

Date

14.12.2023

Concept Design

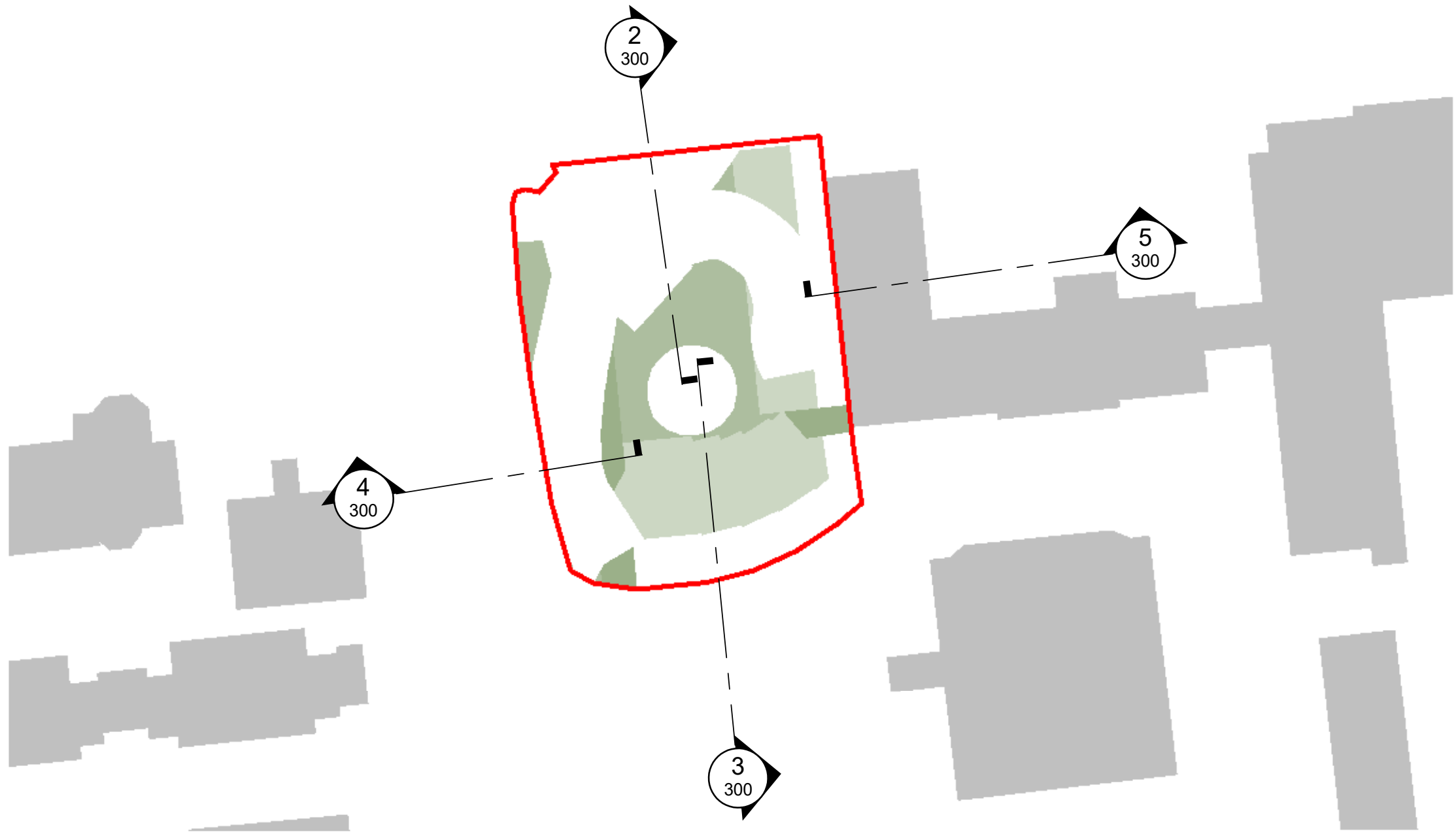
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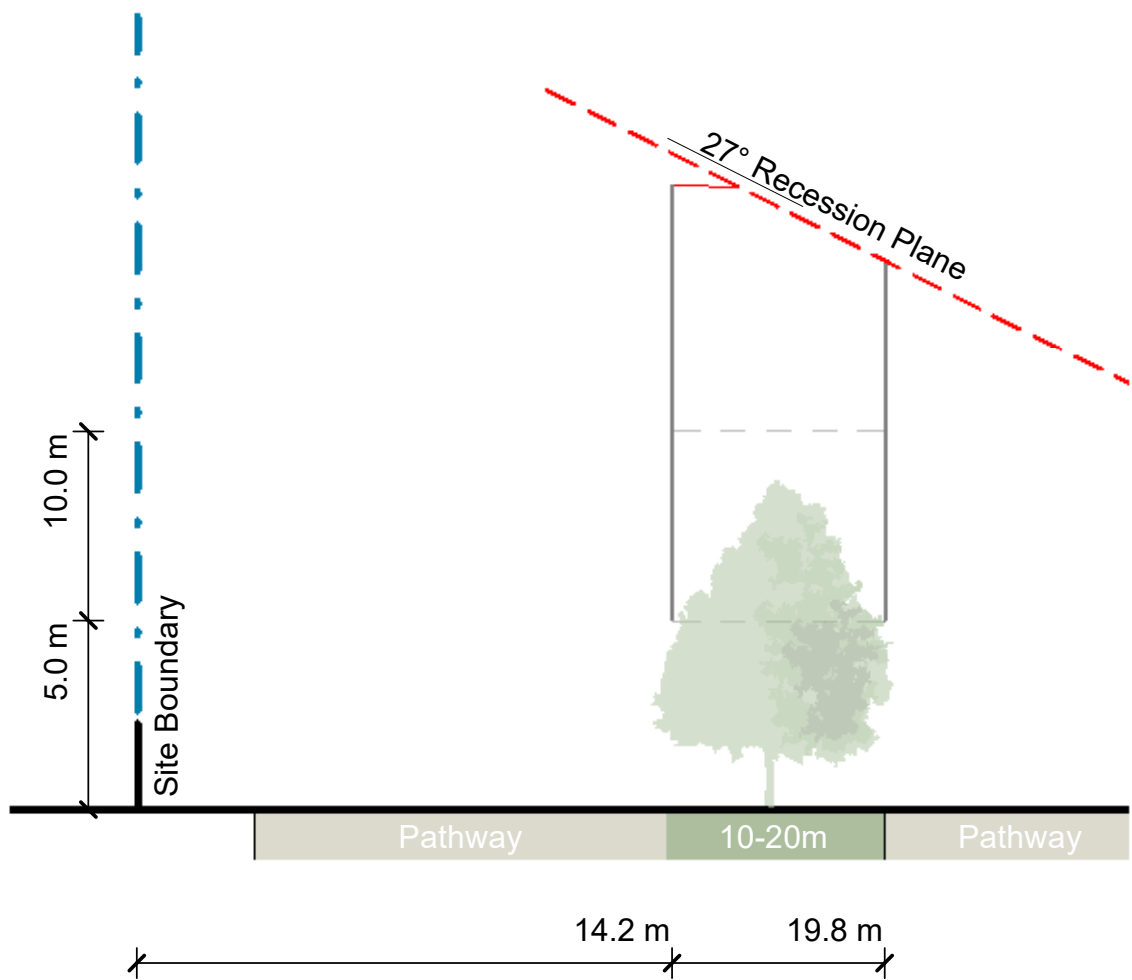
REVISION

B

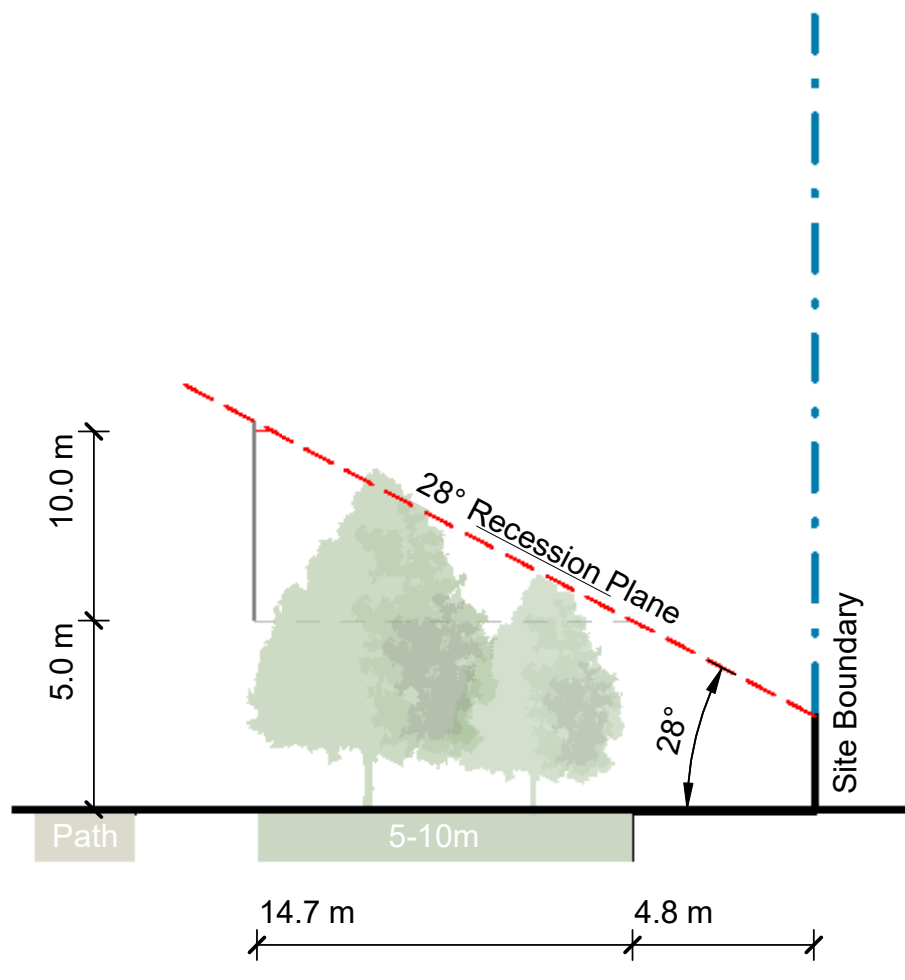
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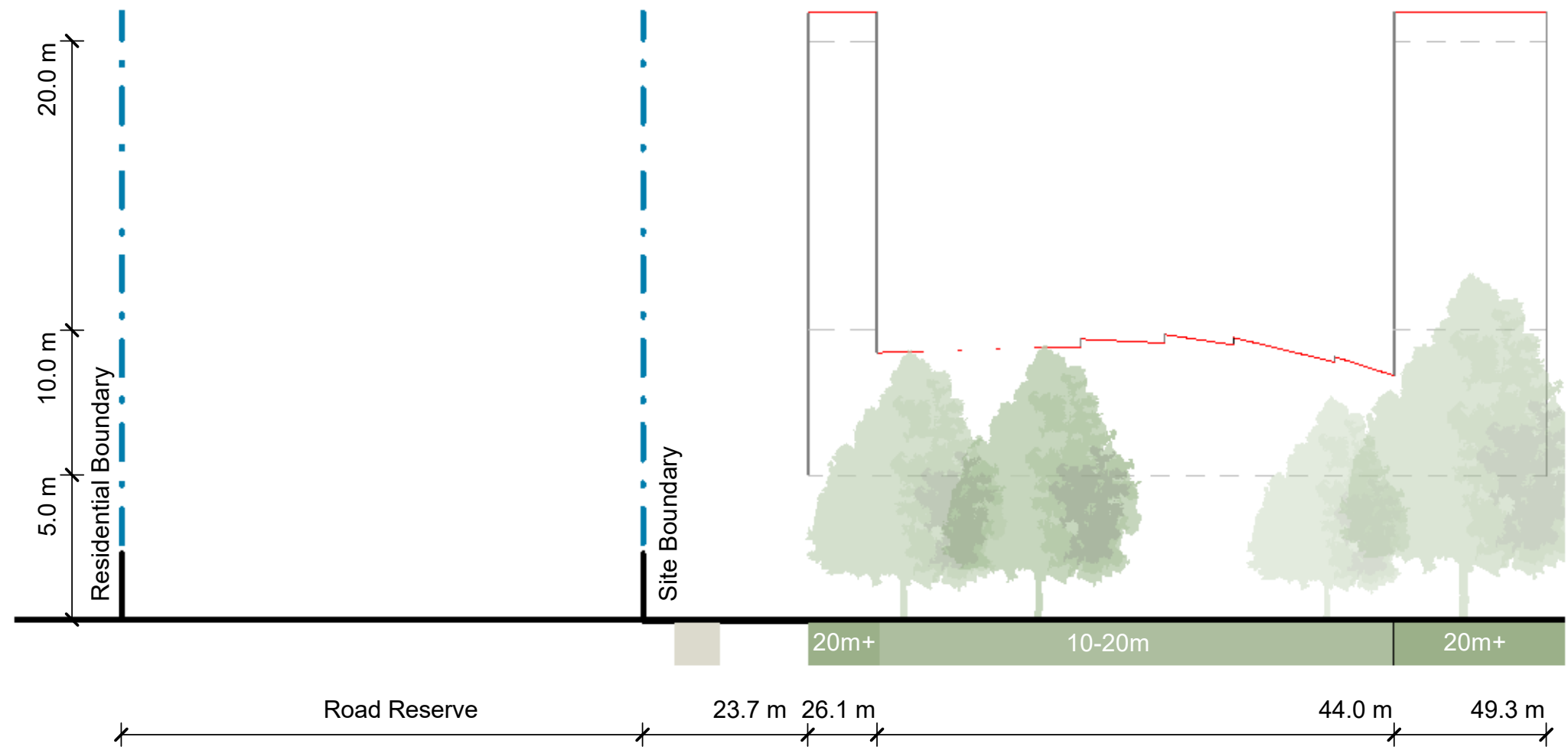
1 Sections - Boundary Plan
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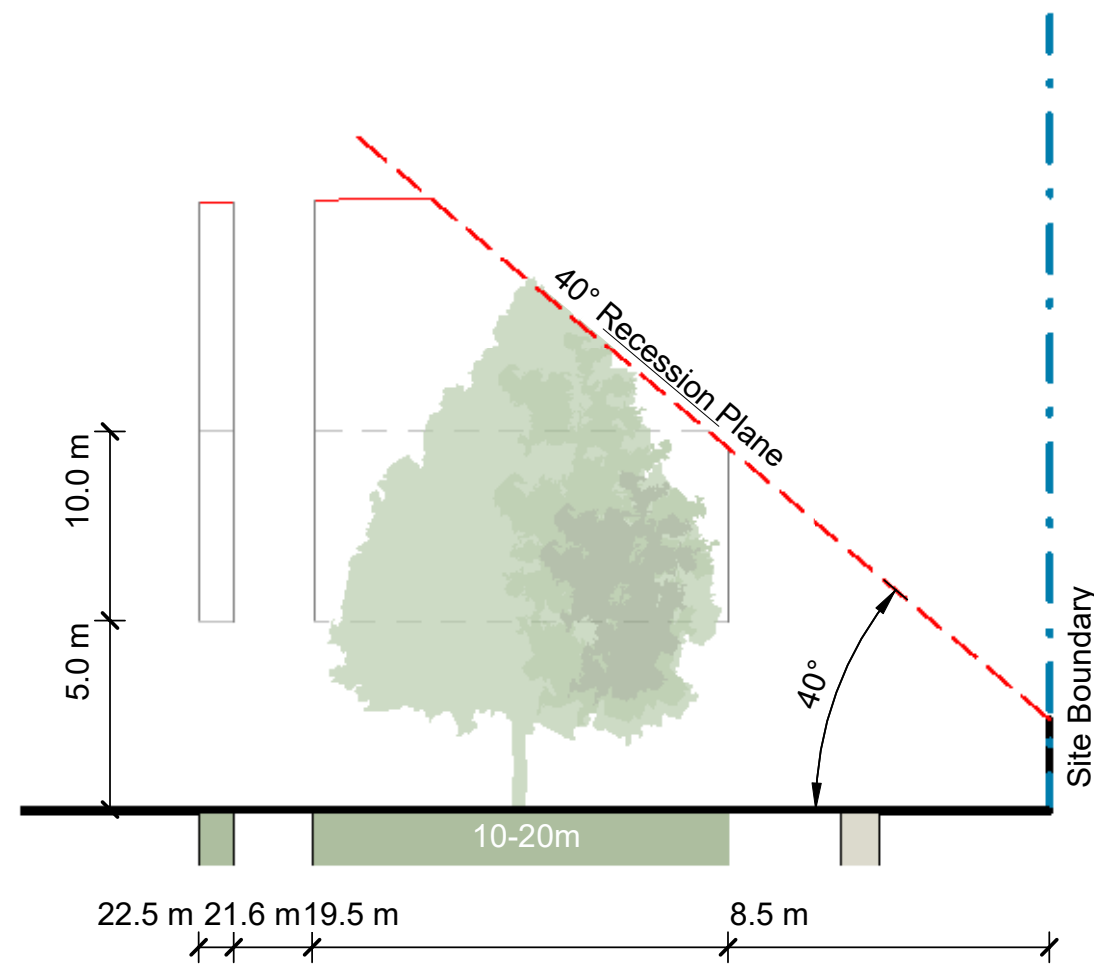
2 Section 1
Scale: 1 : 200



3 Section 2
Scale: 1 : 200

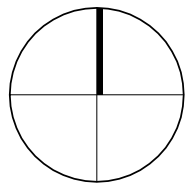


4 Section 3
Scale: 1 : 200



5 Section 4
Scale: 1 : 200

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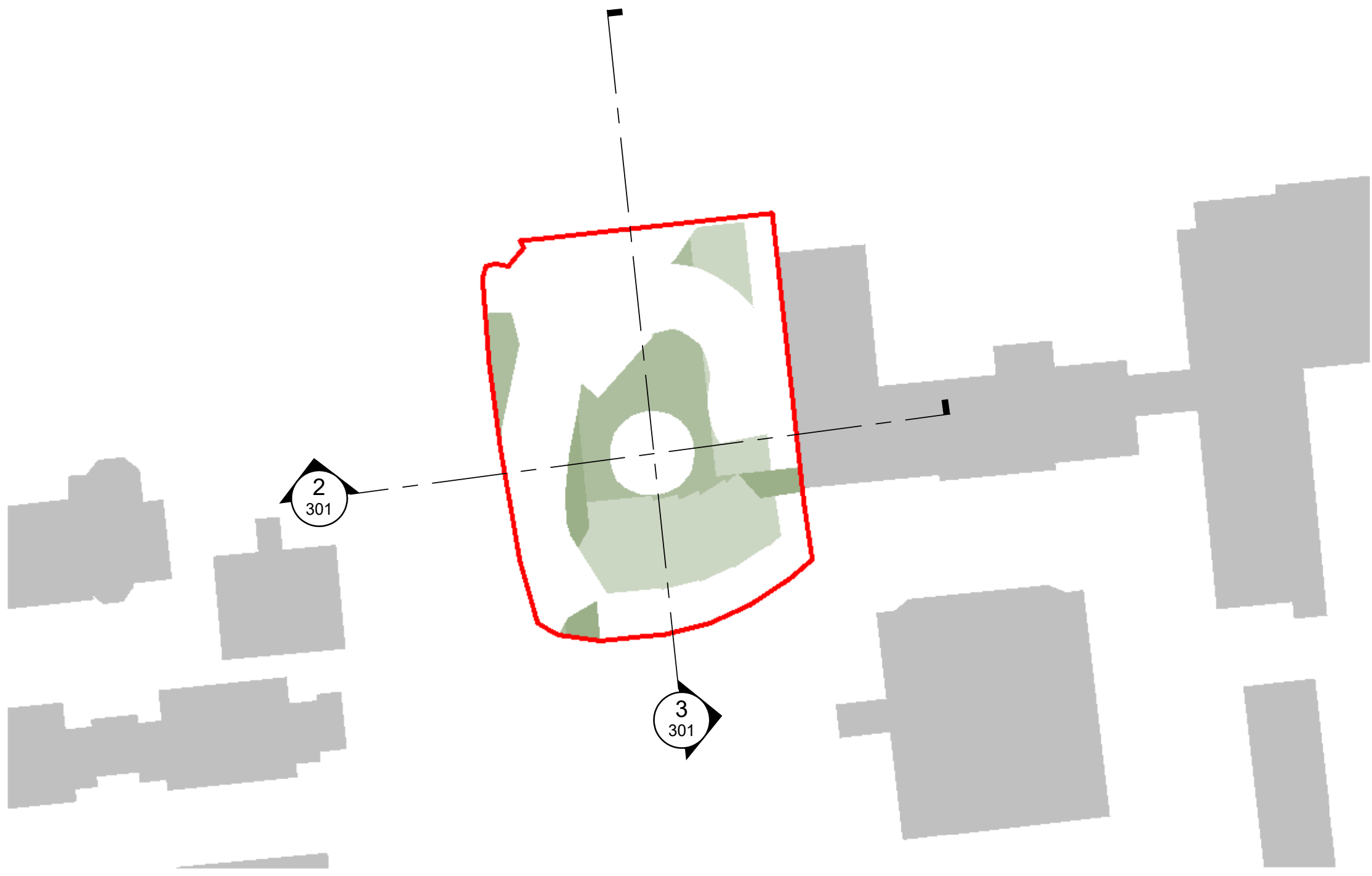
Cross Section Studies of Potential Tree
Heights

Design	HCo	Scale	Date
Drawn	ARo	As Shown	14.12.2023
Check	GRo		

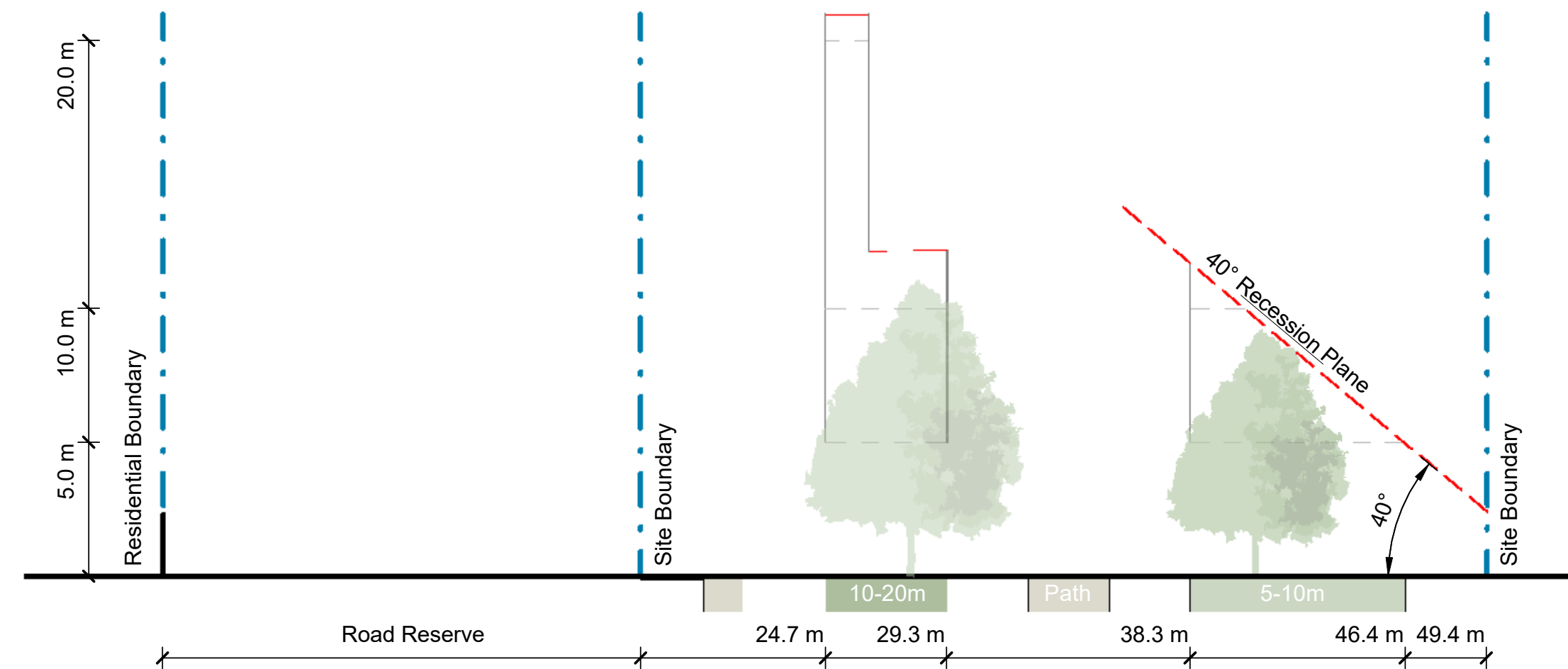
Concept Design

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BM230857_300

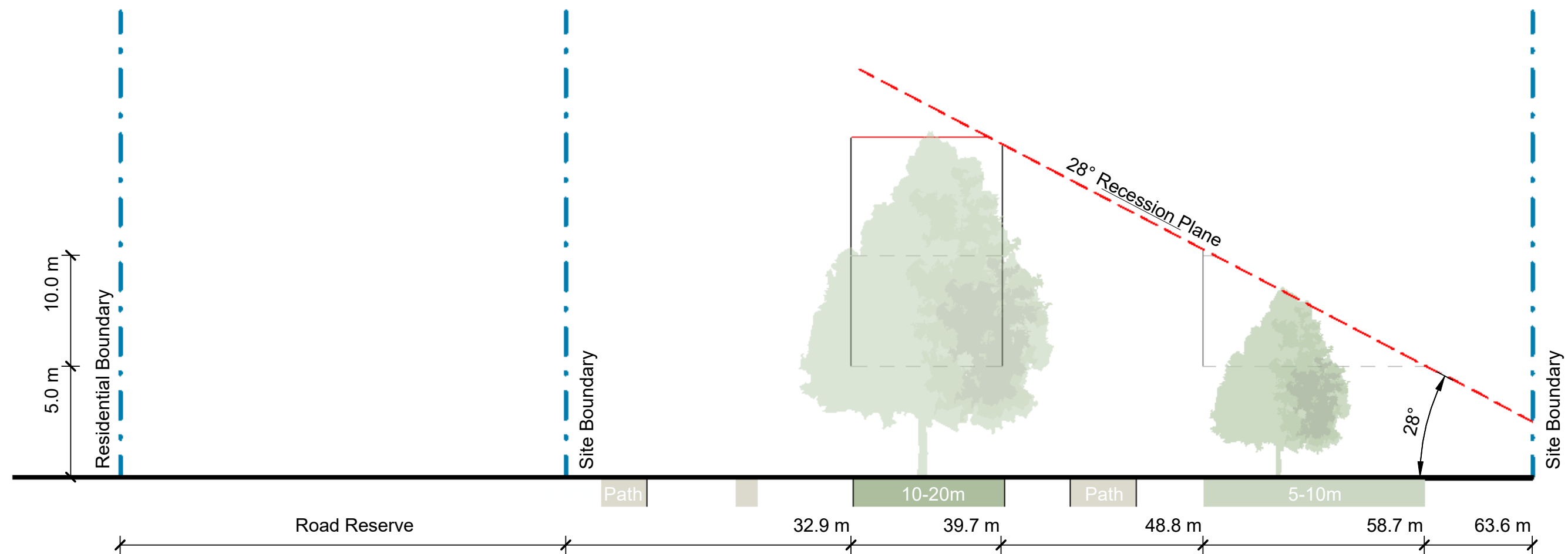
REVISION
B



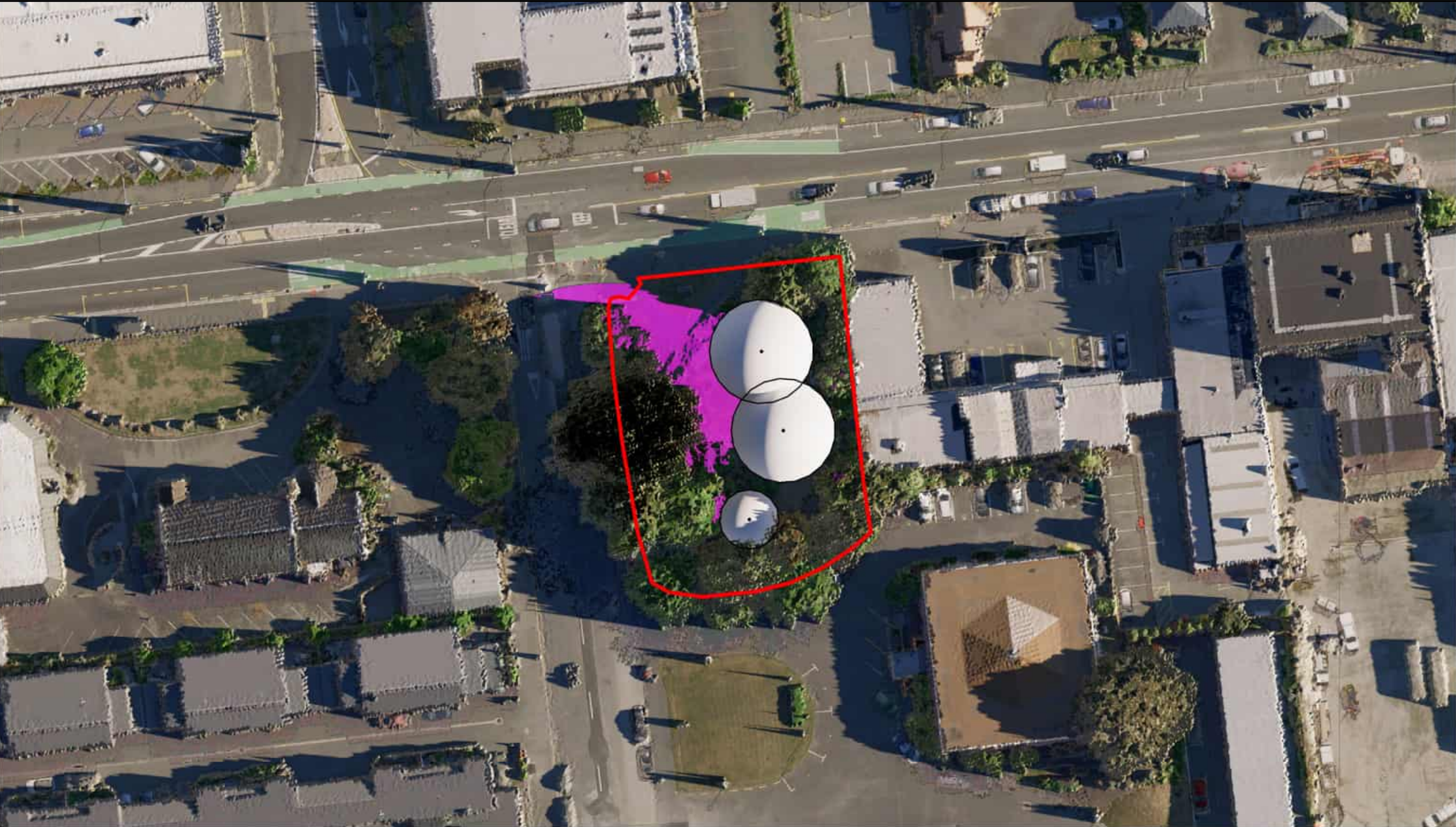
1 Sections - Cross Section Plan
Scale: 1 : 500



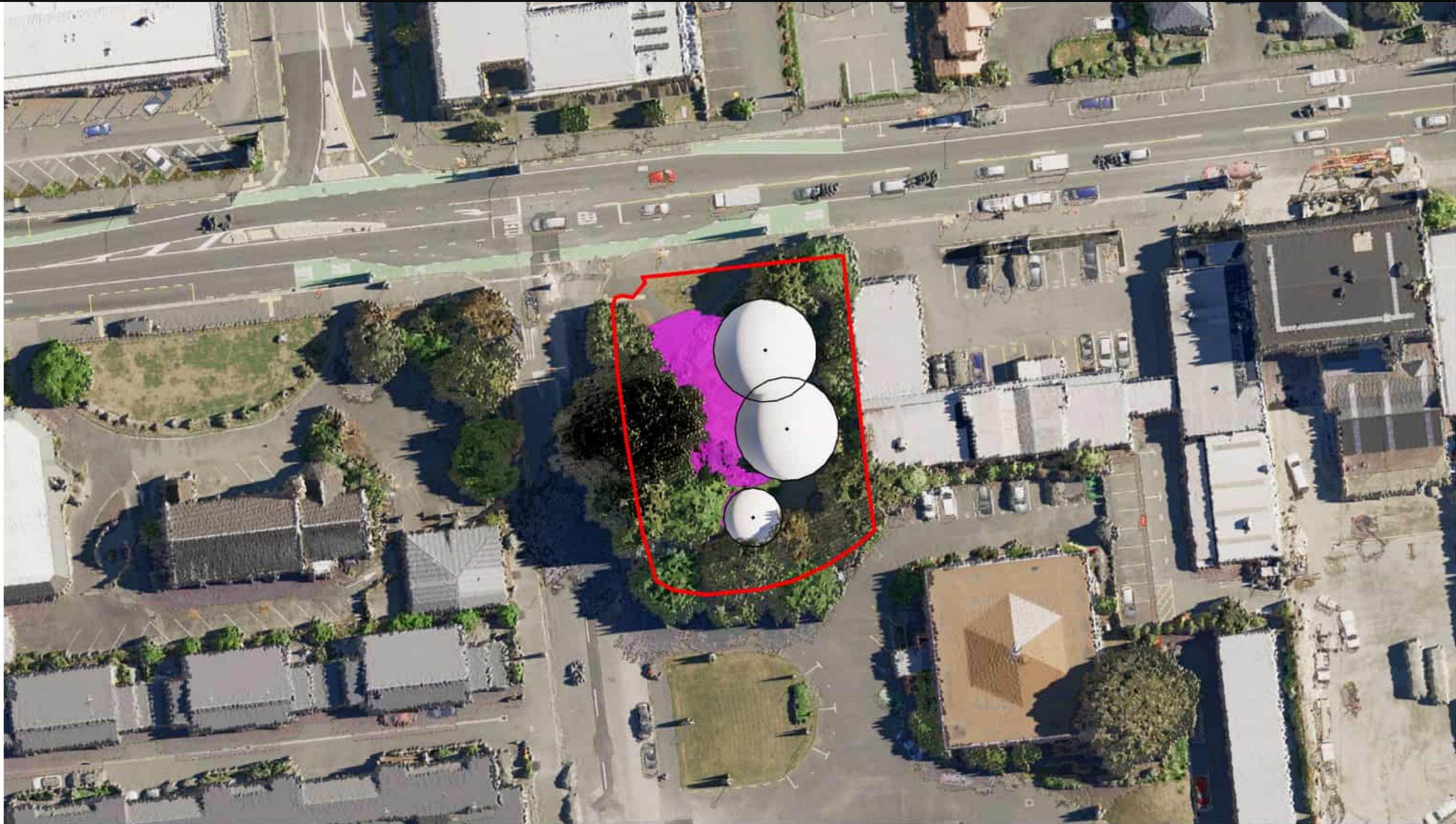
2 Cross Section 1
Scale: 1 : 200



3 Cross Section 2
Scale: 1 : 200



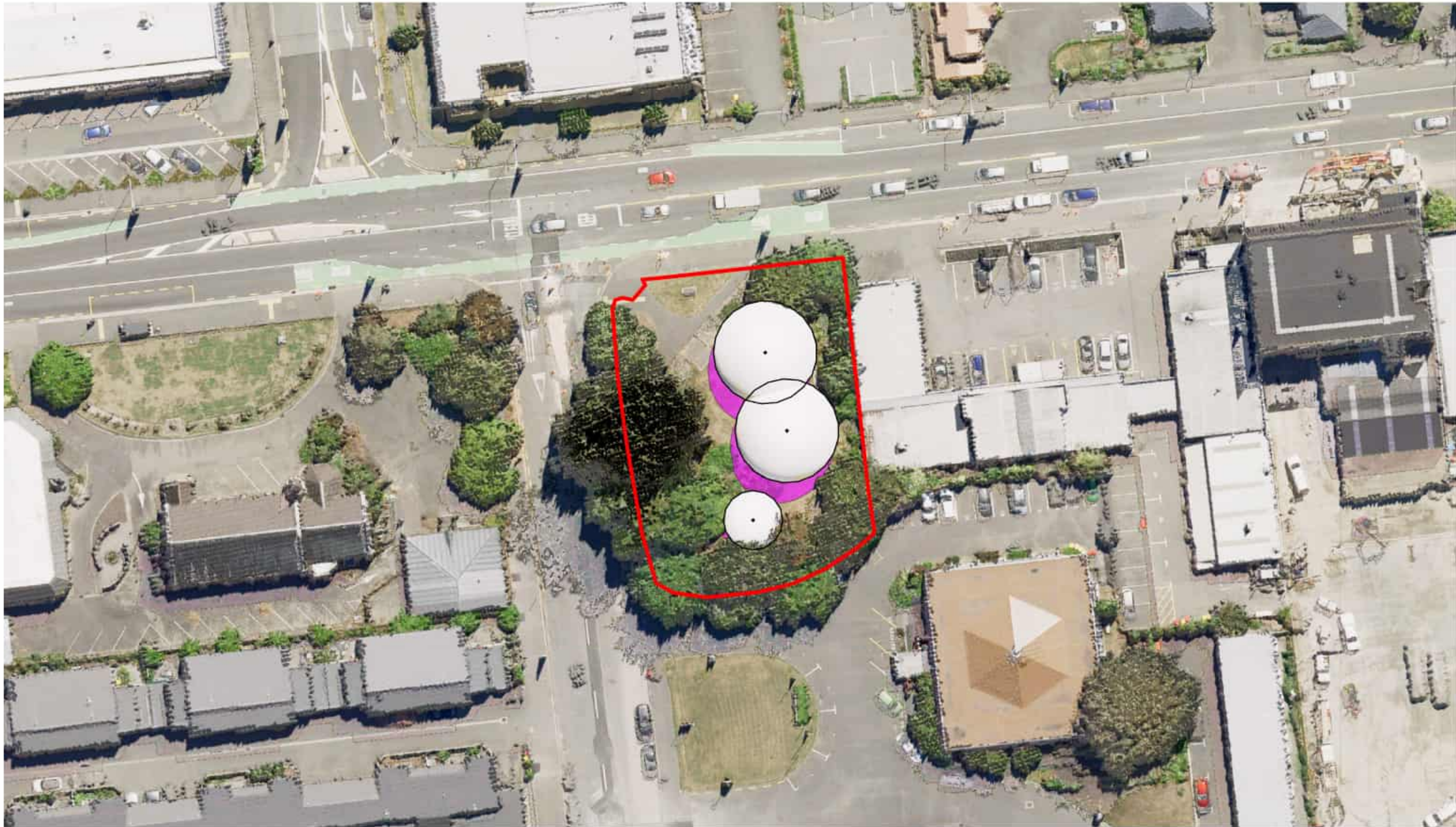
1 Summer - 7:30am
Scale: 1 : 500



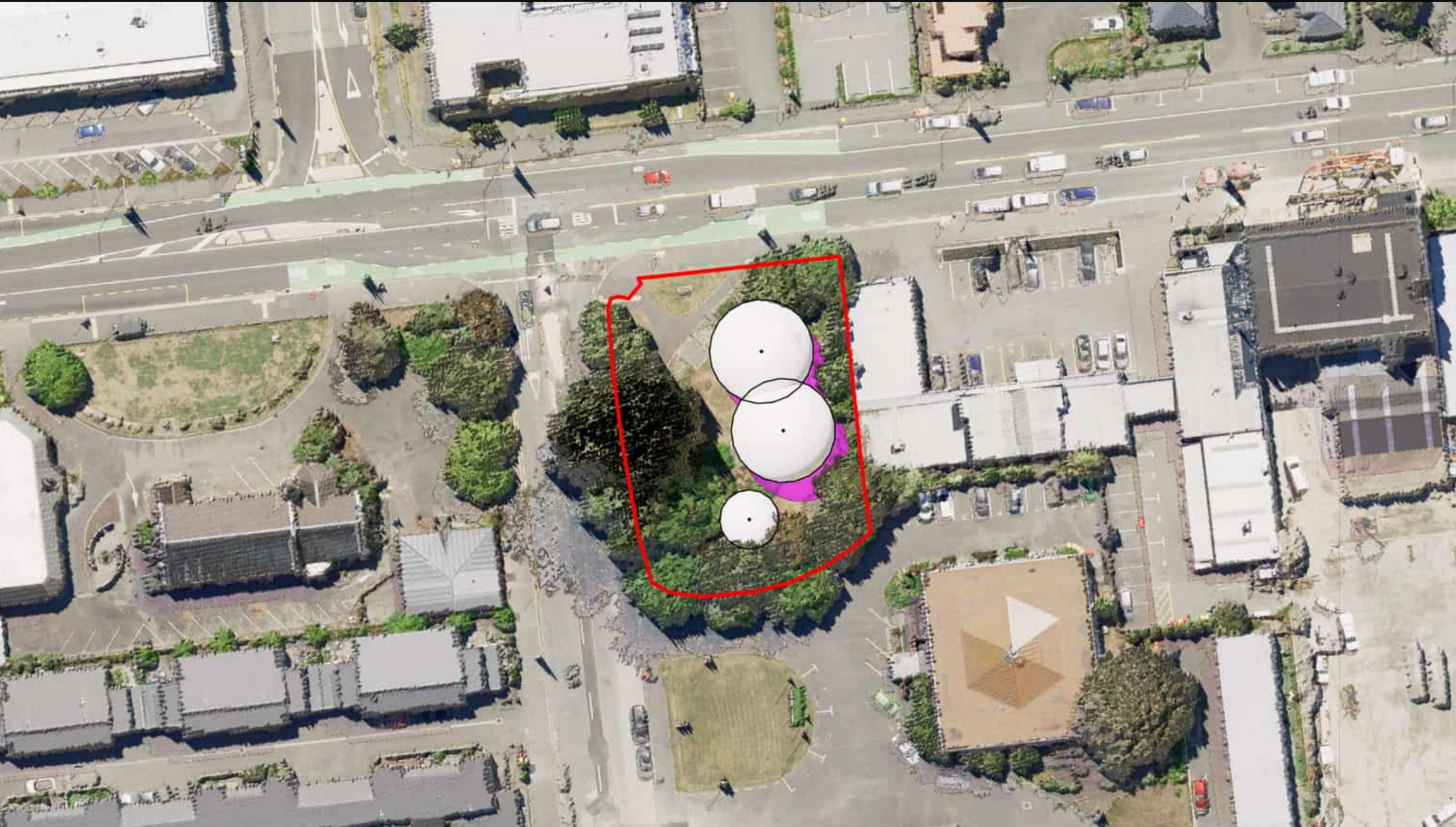
2 Summer - 9:00am
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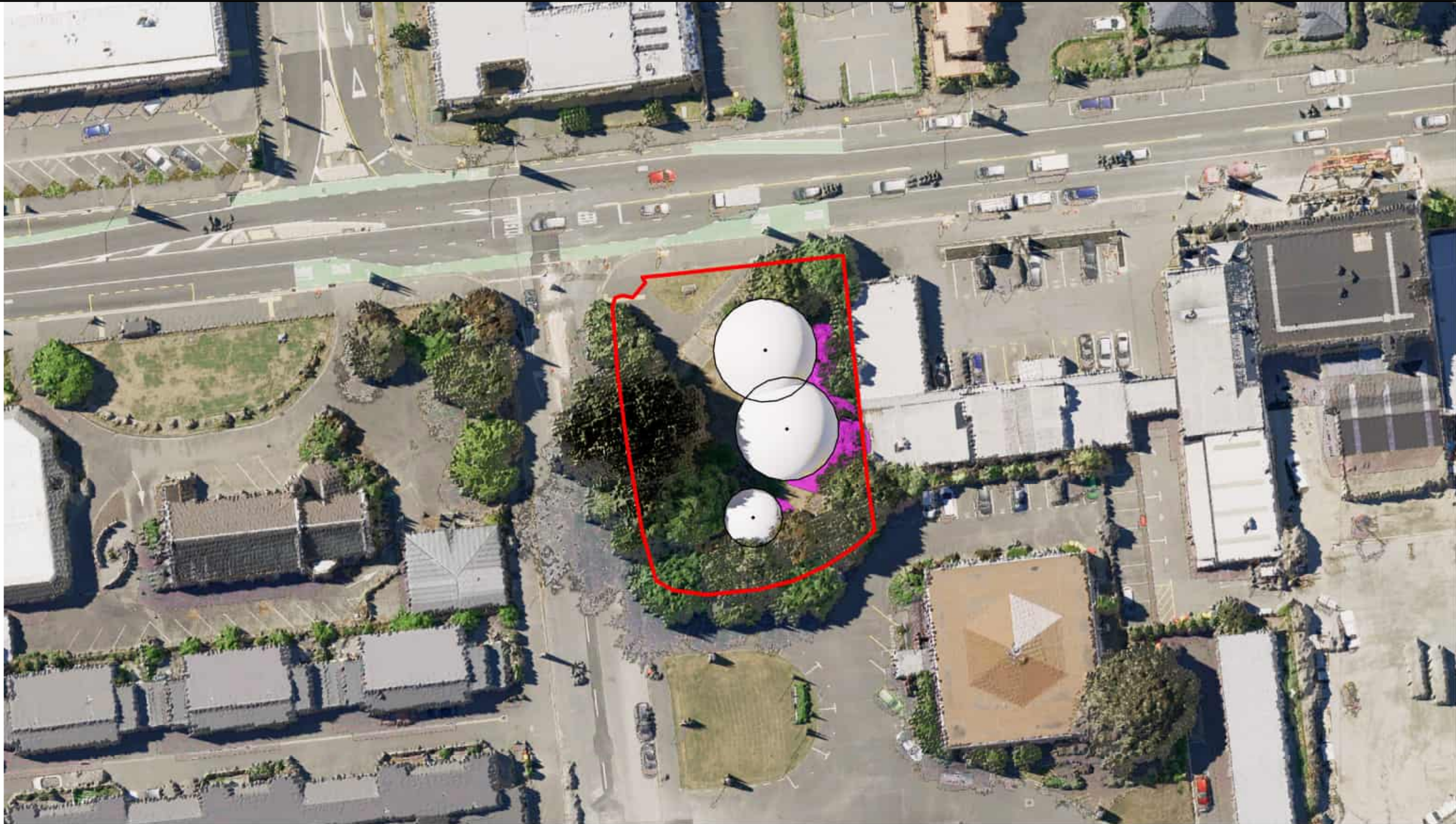
3 Summer - 10:30am
Scale: 1 : 500



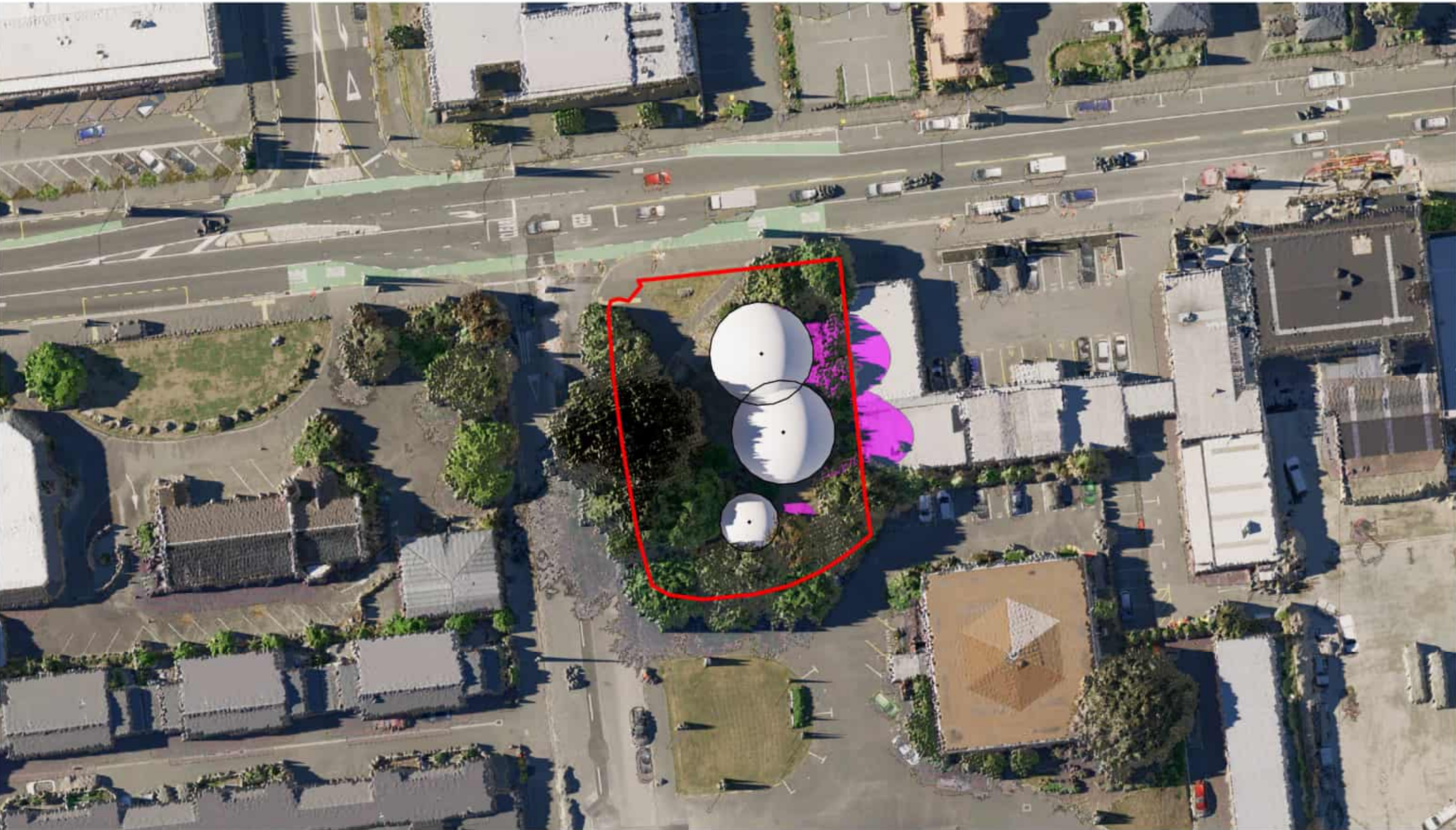
4 Summer - 12:00pm
Scale: 1 : 500



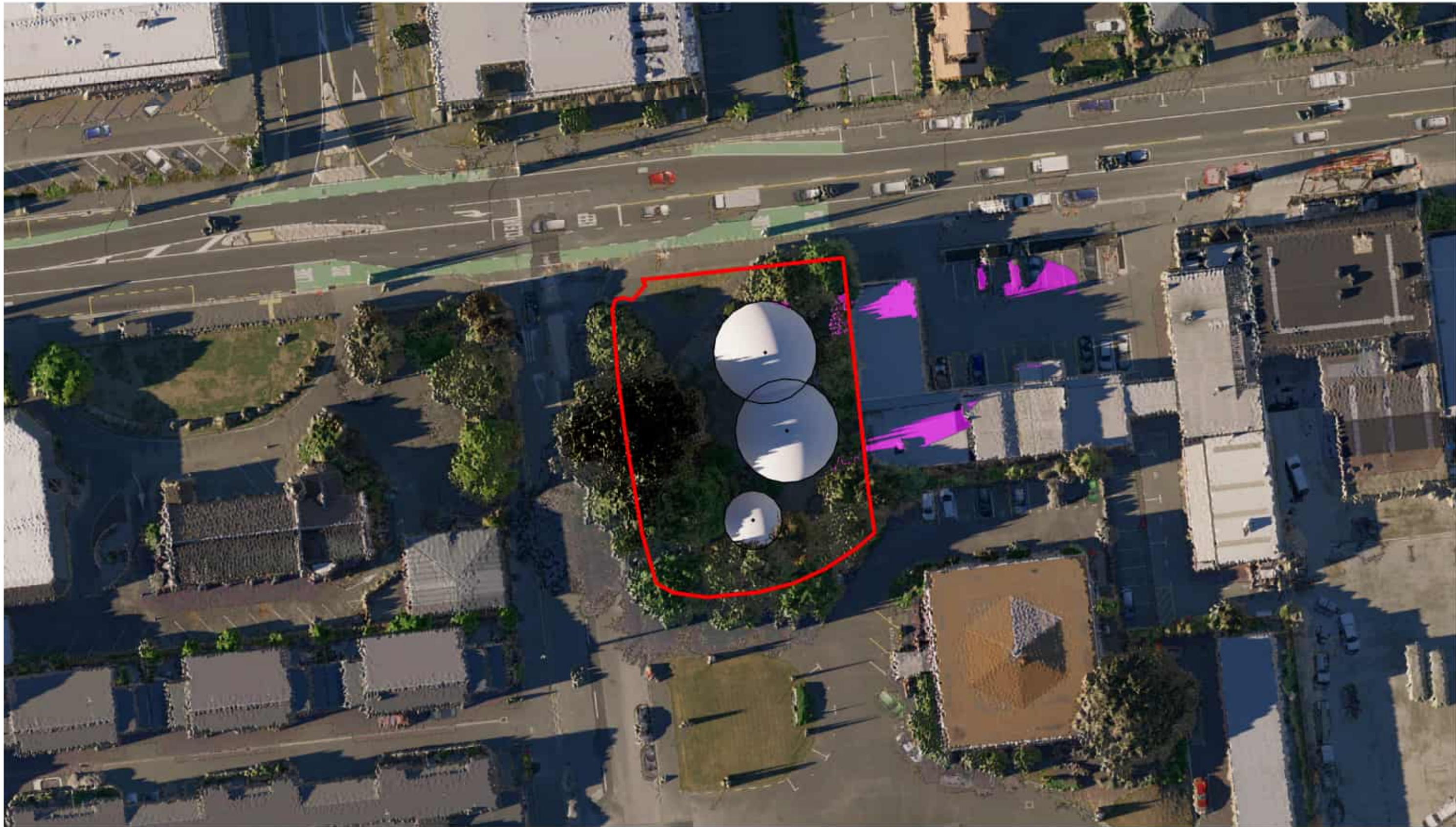
1 Summer - 1:30pm
Scale: 1 : 500



2 Summer - 3:00pm
Scale: 1 : 500



3 Summer - 4:30pm
Scale: 1 : 500



4 Summer - 6:00pm
Scale: 1 : 500



1 Winter - 7:30am
Scale: 1 : 500



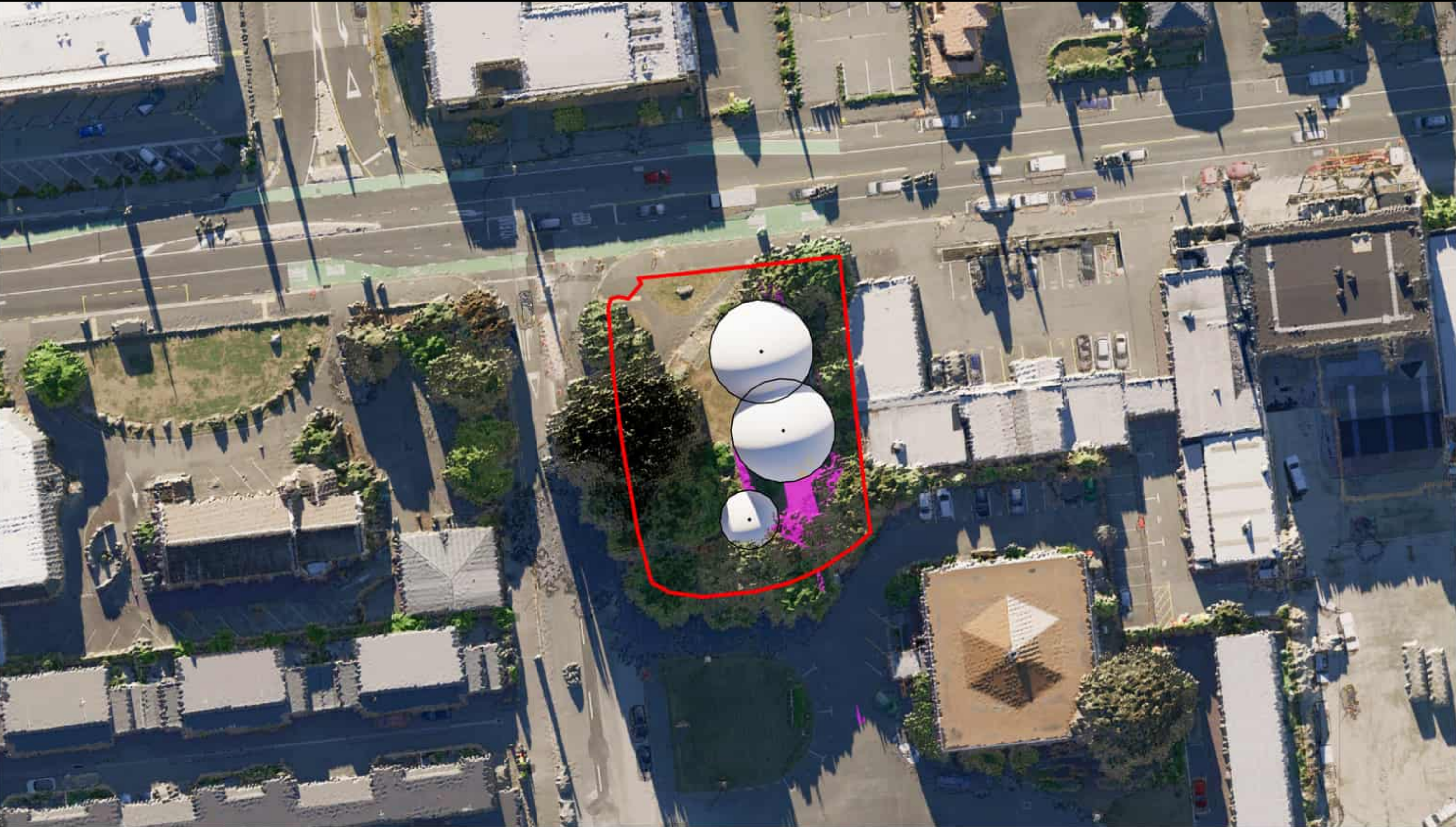
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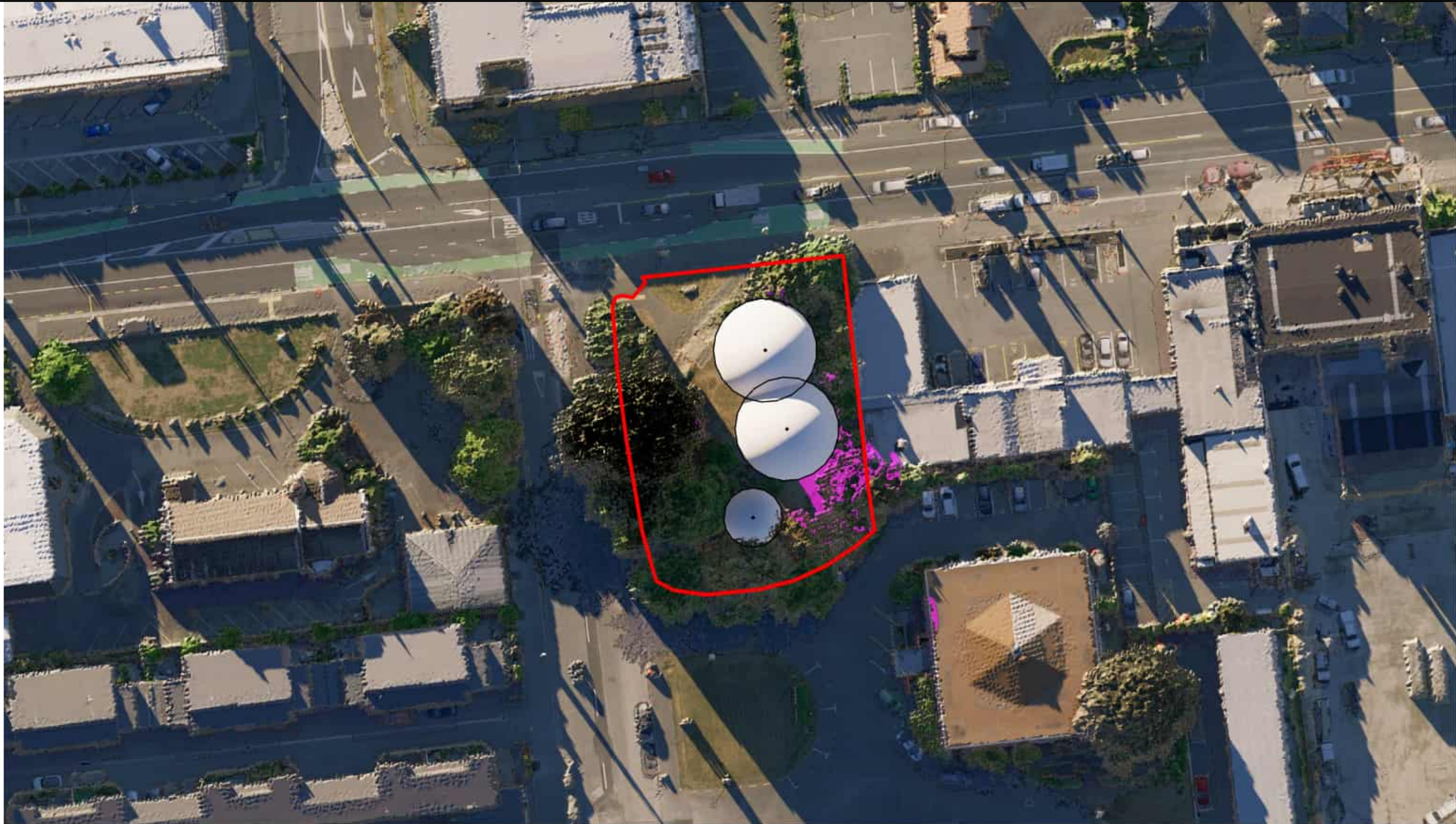
3 Winter - 10:30am
Scale: 1 : 500



4 Winter - 12:00pm
Scale: 1 : 500



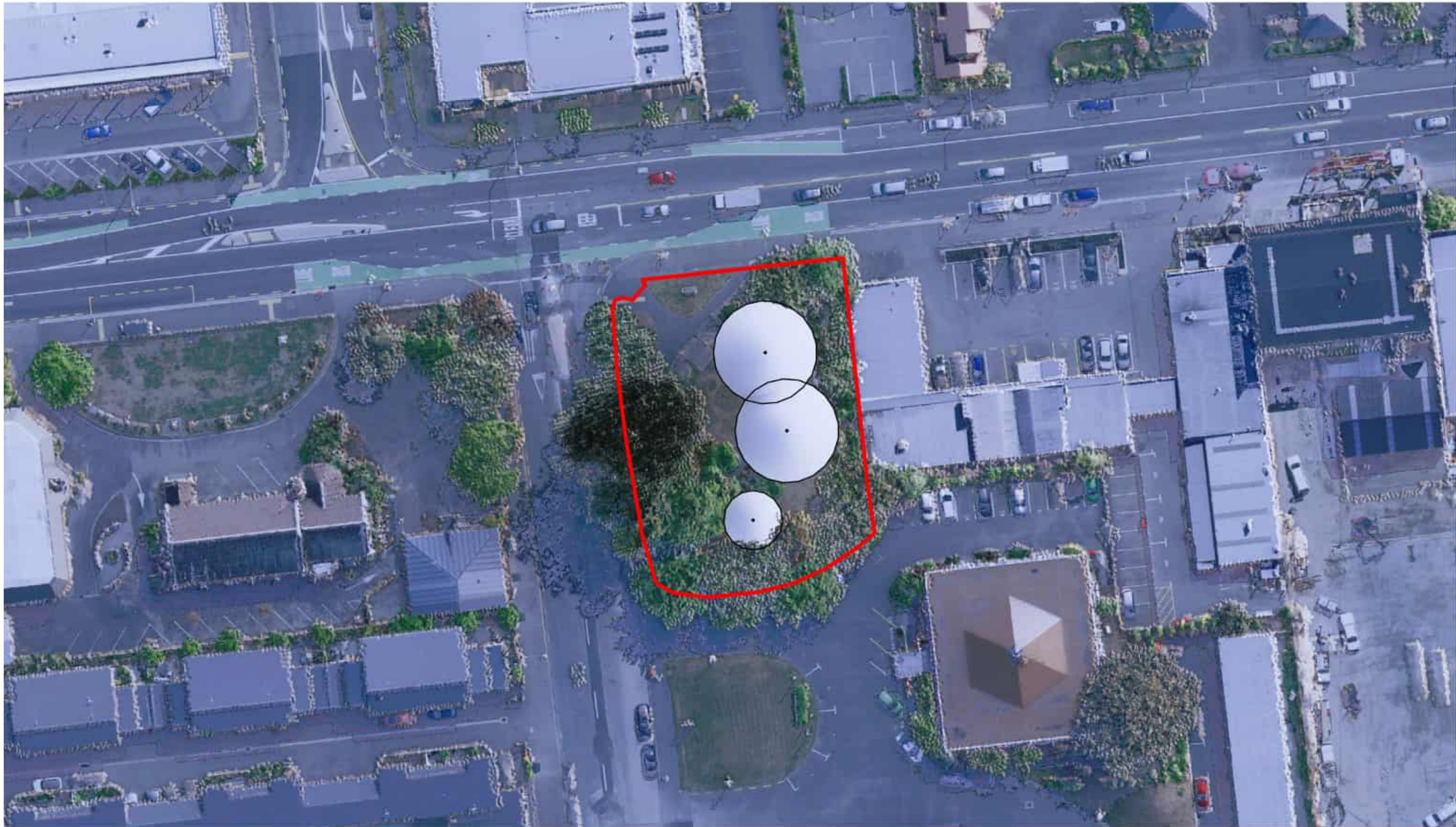
1 Winter - 1:30pm
Scale: 1 : 500



2 Winter - 3:00pm
Scale: 1 : 500



3 Winter - 4:30pm
Scale: 1 : 500



4 Winter - 6:00pm
Scale: 1 : 500



ORIGINAL IN COLOUR

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Existing Canopy Cover - 679.99 m² 51.7% Canopy coverage to existing site

Proposed Canopy Coverage - 358.14 m² 27.2% Proposed canopy coverage

Total Canopy Coverage - 1038.13 m² 78.9% Total canopy coverage

PLANTING SCHEDULE

Qty	Type	Tree Height
2	Medium Tree	Tree Height 10-15m
1	Small Tree	Tree Height 5-10m

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