

Attachment B

Evidence of Nicholas Rae

Map #	Centre	Centre classification/ expansion?	800m catchment from centre	800m Catchment from station	400m catchment from centre or station	400-800m catchment from centre or station	Zone application explanation
1	Siverstream - Train Station			HDRz			The application of the HRZ at Silverstream is required by NPS-UD Policy 3(c) in a walkable catchment. Have applied 800m generally from the Silverstream Station. The density is also supported by the commercial centre and schools and some employment land. Small additional areas to the IPI are recommended along Field Street to Kurth Crescent being a logical location to change zones at an intersection, and open space opposite at approximately 814m from the station. The second area is along Whitemans Road, Blue Mountains Road and Chatsworth Road where access to rear lots and Sunbrae Drive provide the boundary. The third area is along the south eastern side of Pempsey Street and eastern side of Gloucester Street providing the same zone on both sides of these streets. The fourth area is along the north western side of Fergusson Drive, adjacent to St Patricks College and one block contained by Courtenay Road, being consistent with the built form strategy of a consistent zoning both sides of Fergusson Drive, albeit that some of these sites are a little beyond the 800m principle from both Silverstream and Heretaunga Stations.
1	Siverstream - Town Centre	Town Centre. Expand as per maps.					The centre classification is considered to be a Local Centre consistent with others in the Wellington Region, and the extent of the HRZ is therefore not related to a Town Centre function. There is limited growth potential in the existing centre and the Kainga Ora submission to expand the zone along Kiln Street provides some opportunity, acknowledging that many of these properties contain existing dwellings which may not be redeveloped for some time. However, expanding the centre to Field Street would enable new development to address the main street access from Fergusson Drive under the railway. It would enable develop to assist with creating a more suitable street environment to support walkability from the western station access. The LCZ would enable a slightly greater building height which would assist in providing density at the station and centre.
2	Heretaunga - Train Station			HDRz			The application of the HRZ at Heretaunga Station is required by NPS-UD Policy 3(c) in a walkable catchment. Have applied 800m generally. It is a more of a suburban station with limited other community facilities. However, it is likely to be a key transportation option for people visiting the campus of innovation and sport developing to the south east of the station. Support the IPI HRZ zoning, and expand the HRZ along the northern side of Fergusson Drive as a consistent strategy as above.
2	Trentham - Train Station			HDRz			The application of the HRZ at Trentham Station is required by NPS-UD Policy 3(c) in a walkable catchment. Have applied 800m generally. Support the IPI application of HRZ, and provide expansion to the northern side of Fergusson Drive as above. The direct connection provided by Tawai Street to Brentwood Street results in a larger area east of the recreation grounds. The northern extent is defined by the open space zone providing a connection from Brentwood to the recreation reserve.
2	Trentham - Camp Street & Ararino Street	Local Centre - no change.					Intensification at this location is not driven by the centres, however these assist with providing facilities to support intensification. Camp Street has a commercial character with a mix of activities that the Ararino Street Centre does not have, rather has a bar and accommodation, TAB and dairy. The two are unrelated and there is no economic support for a town centre at this location, particularly as they are not on main roads. It is unlikely that these centres would provide much support for the proposed development at the Trentham Racecourse due to limited connections. It would make sense to avoid a spot zoning on the corner of Totara and Ararino Streets and recommend the two sites are zoned LCZ, acknowledging that a dwelling has recently been constructed on the corner site.
3	Trentham North - Fergusson X Nicolaus St	Local Centre.					The Kainga Ora submission sought an expanded centre to replace the residential to the north of the MUZ to allow for a larger commercial/employment offering - building on the MUZ. The expanded LCZ is too large and not supported economically. The MUZ is a strange island isolated from the public realm (Fergusson Drive in this case). Unconvinced that there are benefits in retaining the lots between the MUZ and Fergusson Drive as residential. Consider extending MUZ to Fergusson Drive. This area is proposed as HRZ in the IPI, as an area being more than is required by the NPS-UD, however consistent zoning approach continuing the corridor of HRZ between the railway and Fergusson Drive. Recommend that the northern side of Fergusson Drive is also zoned HRZ consistent with built form strategy both side of this main street.

4	Wallaceville - Train Station			HDRz		Support IPI application of HRZ being generally consistent within 800m of the station considered a walkable catchment required by NPS-UD Policy 3(c). However, recommend HRZ applies to those properties generally fronting the northern side of Fergusson Drive. This enables 6 storey buildings on both sides of Fergusson Drive, supporting this main corridor with similar opportunities both sides. The northern side will be restricted to some degree by the General (medium) residential zone further north. HRZ also would enable non-residential activities at ground level fronting Fergusson Drive particularly if the Kainga Ora submission on small commercial activities is accepted.
4	Wallaceville - Miro - Local Centre	Local Centre. Expand as per maps.				The expansion of the LCZ along Ward Street responds to the existing activities near the station and linking these to the LCZ at Miro Street. The LCZ effectively then wraps around the local park and links to the Heretaunga College. The LCZ provides for 7 storeys and could result in a slightly taller built form which would assist with the identification and legibility of this centre. It supports intensification but not the driver for the HRZ in this location.
4	Wallaceville - Ward St (southwest of train station)	Mixed Use				Zoning to suit the intended activity, refer to Ms Blackwell's statement for details. The intended business park activity at this location together with the National Centre for Biosecurity and Infectious Diseases provide employment opportunities for surrounding residential.
4,5,6	Upper Hutt - Train Station			HDRz		The application of HRZ at this location is primarily in response to the CCZ, rather than an origin from the station which over rides the requirement of Policy 3(c), which would otherwise apply. The station function assists with the function of the urban environment providing alternative modes of transport for residents in and around this centre.
6	Upper Hutt - City Centre	CCZ, but considered as a Metropolitan Centre in role and function. Expand as per maps to reflect operative DP CCZ boundaries generally.				Mr Cullen supports greater opportunity for business and residential activities in and around the city centre, consistent with NPS-UD Policy 3(b) and retaining the Operative District Plan CCz extent (rather than reducing it as proposed in IPI) provides a greater theoretical opportunity than the HRZ, as no height control is included except where the CCZ adjoins a residential zone a 4m+60 recession plane controls height relative to the boundary (as proposed in the IPI).
						Large sites such as that currently used as a car park north of Andrews Lane, together with the low density activities in older buildings fronting Sinclair Street (mostly not residential) provide a good opportunity for redevelopment. The CCZ provides greater opportunities for commercial, community and residential outcomes than the HDZ.
						Likewise there are no distinguishing features at the eastern end of the block bound by Savage Crescent and Queen Street to Pine Ave, where both are used for at grade car parking. The northern half is proposed as HDR in the IPI, and the southern is CCZ. CCZ also applies to the east of and front Savage Crescent currently with a Countdown supermarket. Arguably the CCZ could extend further north to Savage Park, however providing for residential activities at this interface is more important than providing for larger commercial activities that may or may not include residential. The relationship to the school to the west of Pine Ave does not provide a clear context why the HDR is most appropriate in the northern part of the block, other than the potential for more morning sun access to a part of the school.
						Whilst the HRZ is suitable for the School site west of Pine Ave, this restricts the opportunity in the CCZ further to the west fronting Royal Street through the HIRB standard at the residential zone interface. The CCZ on the western side of Royal Street would not be height restricted except at the northern interface. The interface with the school includes some large trees which would potentially shade the school to a greater extent than taller buildings on the neighbouring sites. The lower half of the school site is recommended to be zoned CCZ to avoid further restrictions on the surrounding adjoining land included in the IPI as CCZ. Noting this is consistent with the IPI proposing to zone the site CCZ on which the St Joseph's Catholic Church exists.
						The IPI includes the MUZ at the western and eastern edges of the city centre at Gibbons Street, and King Street, South of Fergusson Drive (east of King Street), and west of Fergusson Drive at Martin Street. A small triangle south of Brown Street, east of Blenheim Street at the railway. Most adjoin the HRZ along a back boundary, while the southern two areas are bounded by roads and railway.

							The issue with the use of the MUZ at the residential interface is that it provides for a very different scale of built form such as large format retailing and provision for car parking at the street frontage with a 1.5m landscape strip. This does not encourage a walkable environment and could leave a relatively poor gap in the streetscape experience between the HRZ and the CCZ. The objectives of the CCZ seek a more suitable outcome with buildings fronting the street with a pedestrian focus. LFR is enabled in the CCZ however CCZ-S8 requires an active frontage. The CCZ is more enabling for residential activities as it does not limit density, and it requires assessment of the proposed building to ensure it is appropriate for its context, rather than the uncontrolled outcome potential in the MUZ.
4,5,6	Upper Hutt - HRZ adjacent to City Centre		HDRZ	HDRZ	Height overlay of 10 storeys - 36m	6 storeys - 22m	The NPS-UD Policy 3(c) requires HRZ to apply to land generally within a walkable catchment of the CCZ (Metropolitan Zone function), and an 800m distance has been used. It is recommended that the focus of HRZ should be to the northern side of the centre and railway, and some expansion to the IPI proposed area to the north is recommended abutting the edge of the open space, noting that length of Pine Avenue from Main Street to Riverbank Street is approximately 850m. The expansion to the north enables greater opportunities with connections to the open space and river environment with a range of direct connections to the city centre. The city centre and walkable catchment is weighted to the northern side of the railway.
							The provision of an additional height overlay enables 10 storey buildings within 400m of the CCZ, also focused on the northern side of the railway. This is a consistent strategy as with other metropolitan centres in the Wellington Region sought by Kainga Ora. It provides additional density opportunity within a short walk of the centre and the rail station, but also the employment opportunities to the south of the railway. It is noted that while 10 storeys maybe enabled, the HIRB standard generally has the greatest control on building height. It is likely that an amalgamation of sites would be required to achieve 10 storeys and the scale of amalgamation will depend on the resulting HIRB standard, where the 19m+60 degrees will require less overall site width than the IPI standard.
							There is a limited area to the south of the railway where 10 Storey buildings opportunities are proposed along either side of Lane Street between the MUZ and the Railway, based on Blenheim Street providing the pedestrian connection to the city centre. The height overlay has not been applied to the HRZ east or Railway Ave or Maidstone Terrace as this area appears to be part of the Maidstone Park environs, and includes the Orongomai Marae. This area is connected to the centre via the underpass at the station which will suit some people but there are limited alternative connections. The facilities at Maidstone Park help to support higher density, however it is opposite the General Industrial Zone.
6	Upper Hutt - Industrial zone						The General Industrial zone and Mixed Use Zone to the south of the railway has been and will continue to provide opportunities for redevelopment. Given its location in close proximity to the station and City Centre, the 12m height standard does not provide for 6 storey buildings, and this area should be revisited. It is understood the industrial zone is not within scope of this plan change. It also does not make sense as the MUZ beyond would enable 26m. This area could accommodate taller buildings, particularly the industrial zone which is within 400m of the centre.

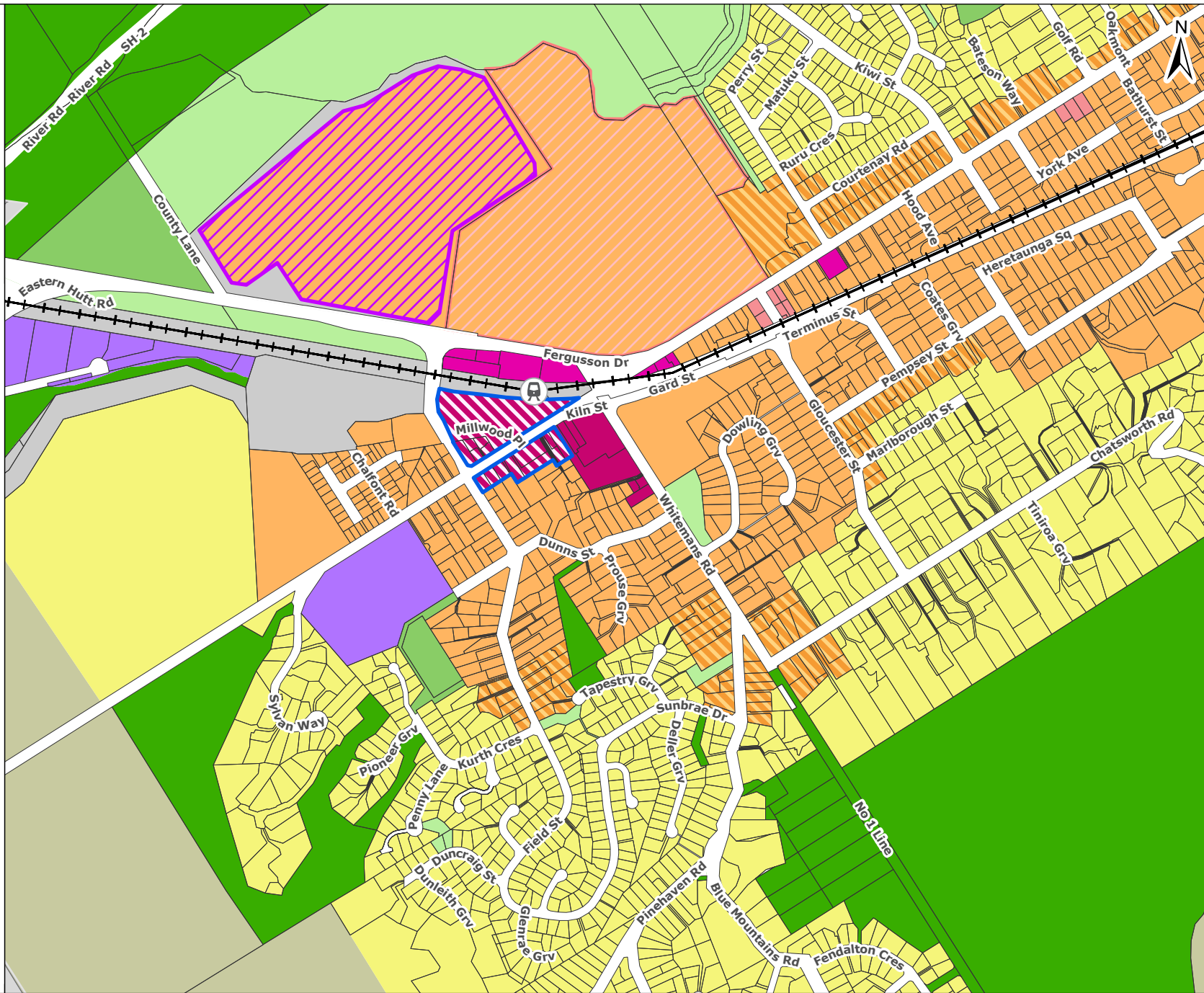
ADJUSTED ZONE MAPS

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Maps has been produced by The Property Group in response to advice from Mr. Rae.

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client : Kainga Ora
Date : 18th April 2023



Public Transport

- Train Station
- Railway

Kāinga Ora Proposed Changes Sought

- Centre Expansion
- Town Centre
- High Density Residential

Proposed District Plan Zones (IPI)

- St Patricks Urban Precinct
- St Patricks College Precinct
- High Density Residential
- Local Centre Zone
- Mixed Use
- Town Centre
- General Residential

Operative District Plan Zones

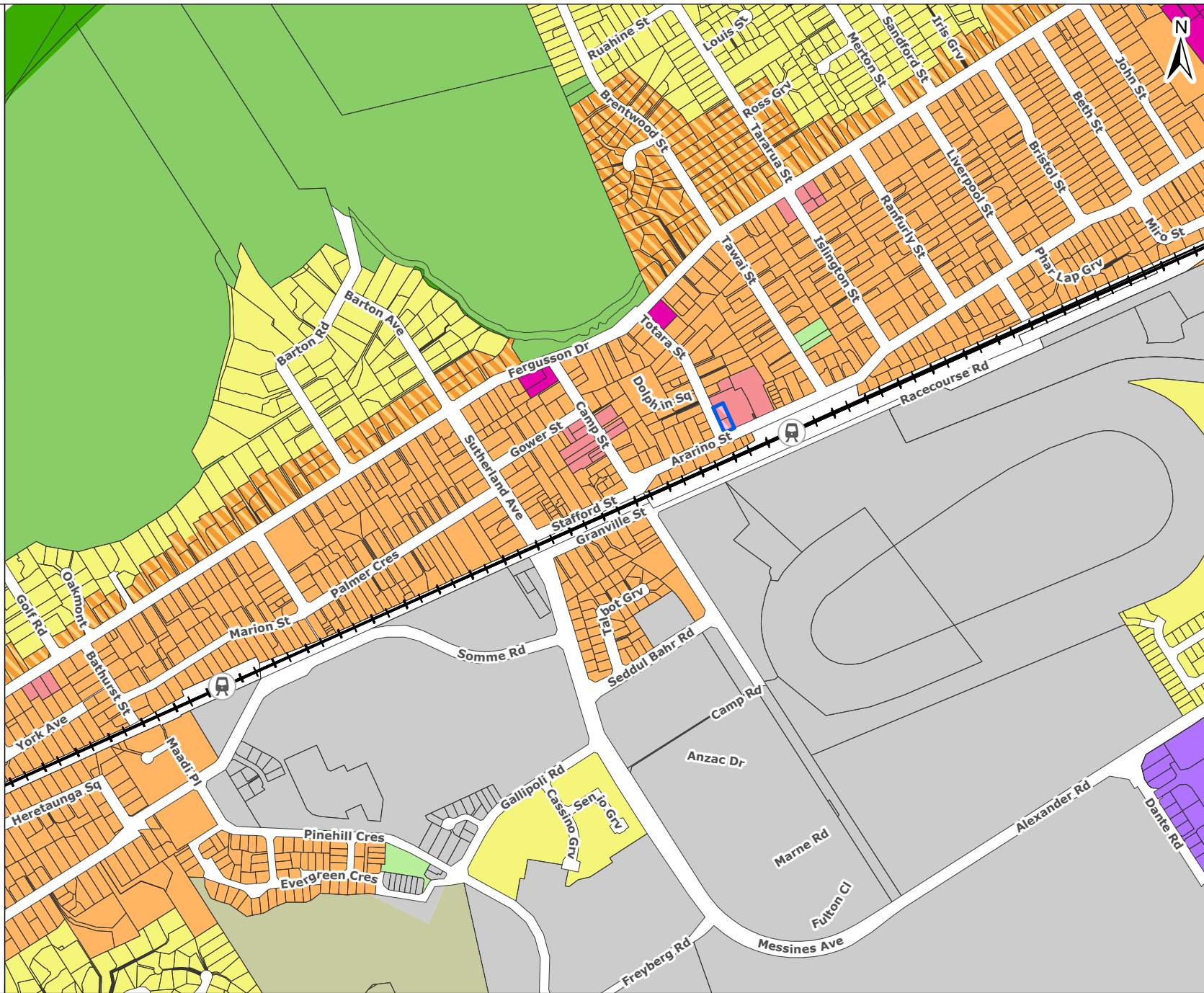
- General Rural
- Open Space
- Sport and Active Recreation
- Natural Open Space
- General Industrial
- Special Activity

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
Centre: Silverstream

PREPARED BY	TPG REF.	718449
Conor McIntosh	SHEET	1 OF 6
DATE	18/04/2023	A4 Scale 1:10,000
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Public Transport

-  Train Station
-  Railway







Kāinga Ora Proposed Changes Sought

-  Centre Expansion
-  Local Centre
-  High Density Residential

Proposed District Plan Zones (IPI)

-  High Density Residential
-  Local Centre Zone
-  Mixed Use
-  General Residential

Operative District Plan Zones

-  General Rural
-  Open Space
-  Sport and Active Recreation
-  Natural Open Space
-  General Industrial
-  Special Activity

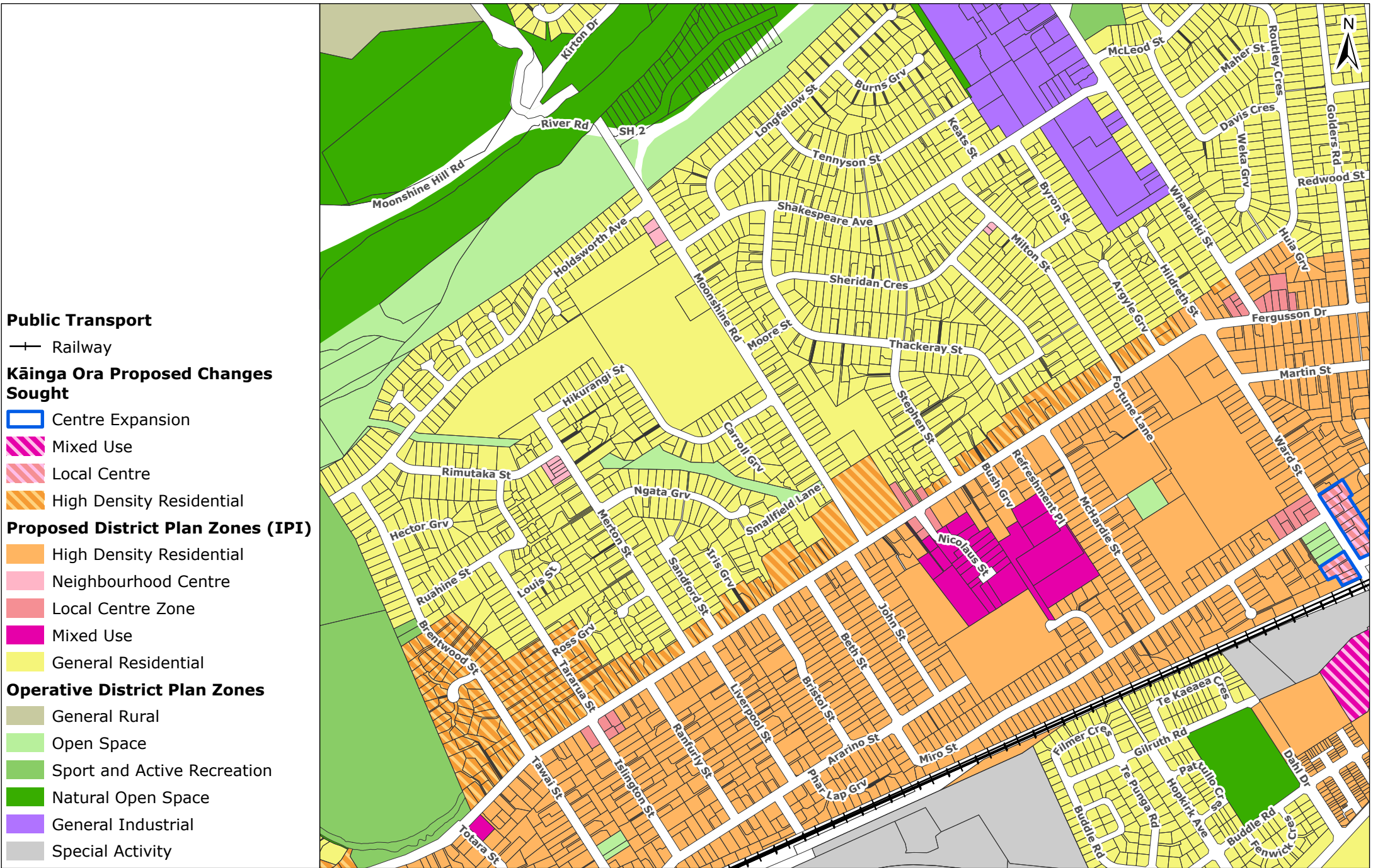
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Centre: Heretaunga/Trentham South

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Kāinga Ora
Homes and Communities



Public Transport

—+ Railway

Kāinga Ora Proposed Changes Sought

- Centre Expansion
- Mixed Use
- Local Centre
- High Density Residential

Proposed District Plan Zones (IPI)

- High Density Residential
- Neighbourhood Centre
- Local Centre Zone
- Mixed Use
- General Residential

Operative District Plan Zones

- General Rural
- Open Space
- Sport and Active Recreation
- Natural Open Space
- General Industrial
- Special Activity



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Centre: Trentham North


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Kāinga Ora
Homes and Communities






Public Transport

-  Train Station
-  Railway

Kāinga Ora Proposed Changes Sought

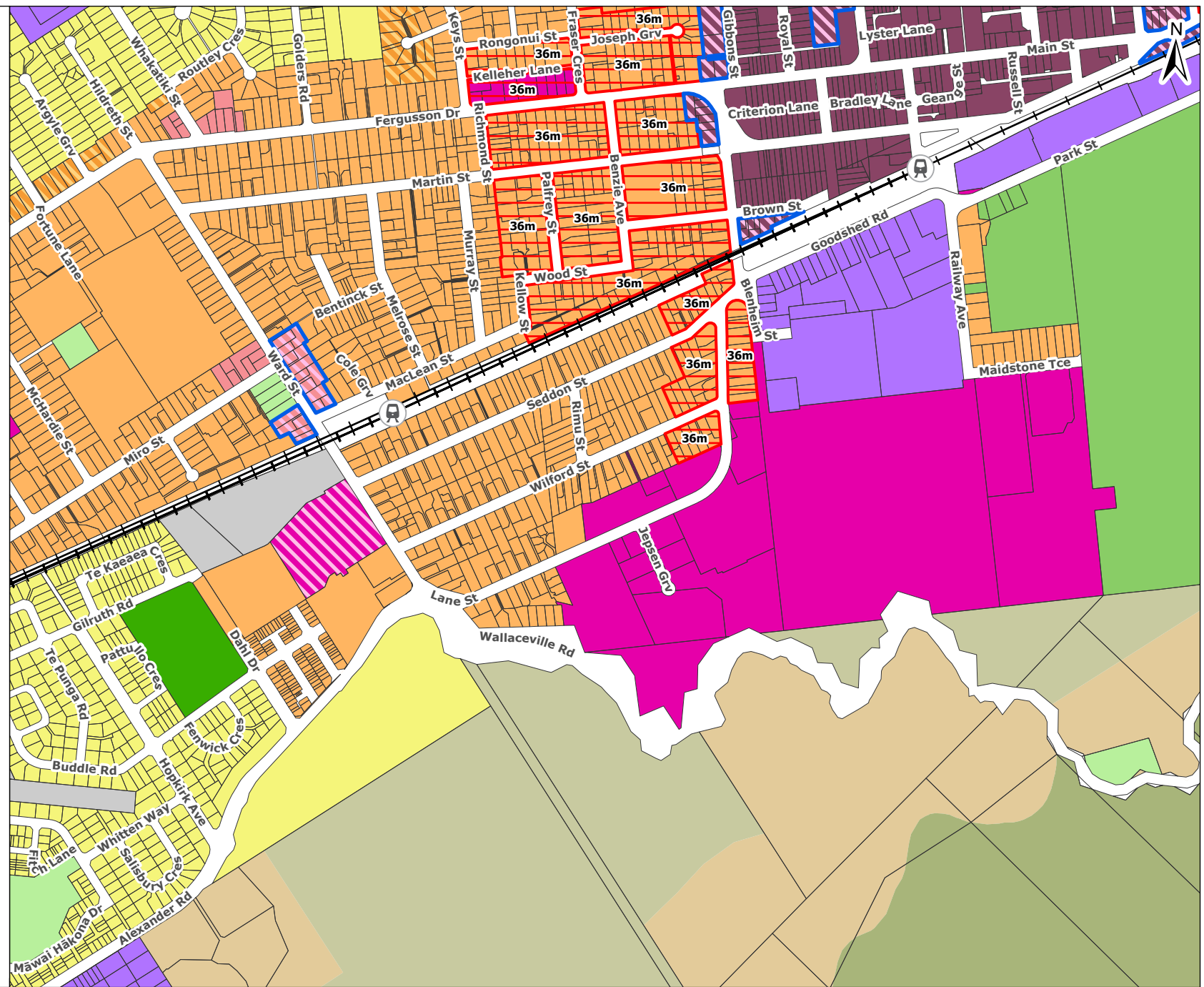
-  Centre Expansion
-  City Centre
-  Mixed Use
-  Local Centre
-  High Density Residential

Proposed District Plan Zones (IPI)

-  High Density Residential
-  Local Centre Zone
-  Mixed Use
-  City Centre
-  General Residential

Operative District Plan Zones

-  Rural Lifestyle
-  General Rural
-  Rural Production
-  Open Space
-  Sport and Active Recreation
-  Natural Open Space
-  General Industrial
-  Special Activity



Centre: Wallaceville

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DATE 18/04/2023	SHEET 4 OF 6
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Kāinga Ora
Homes and Communities



Public Transport

- Train Station
- Railway

Kāinga Ora Proposed Changes Sought

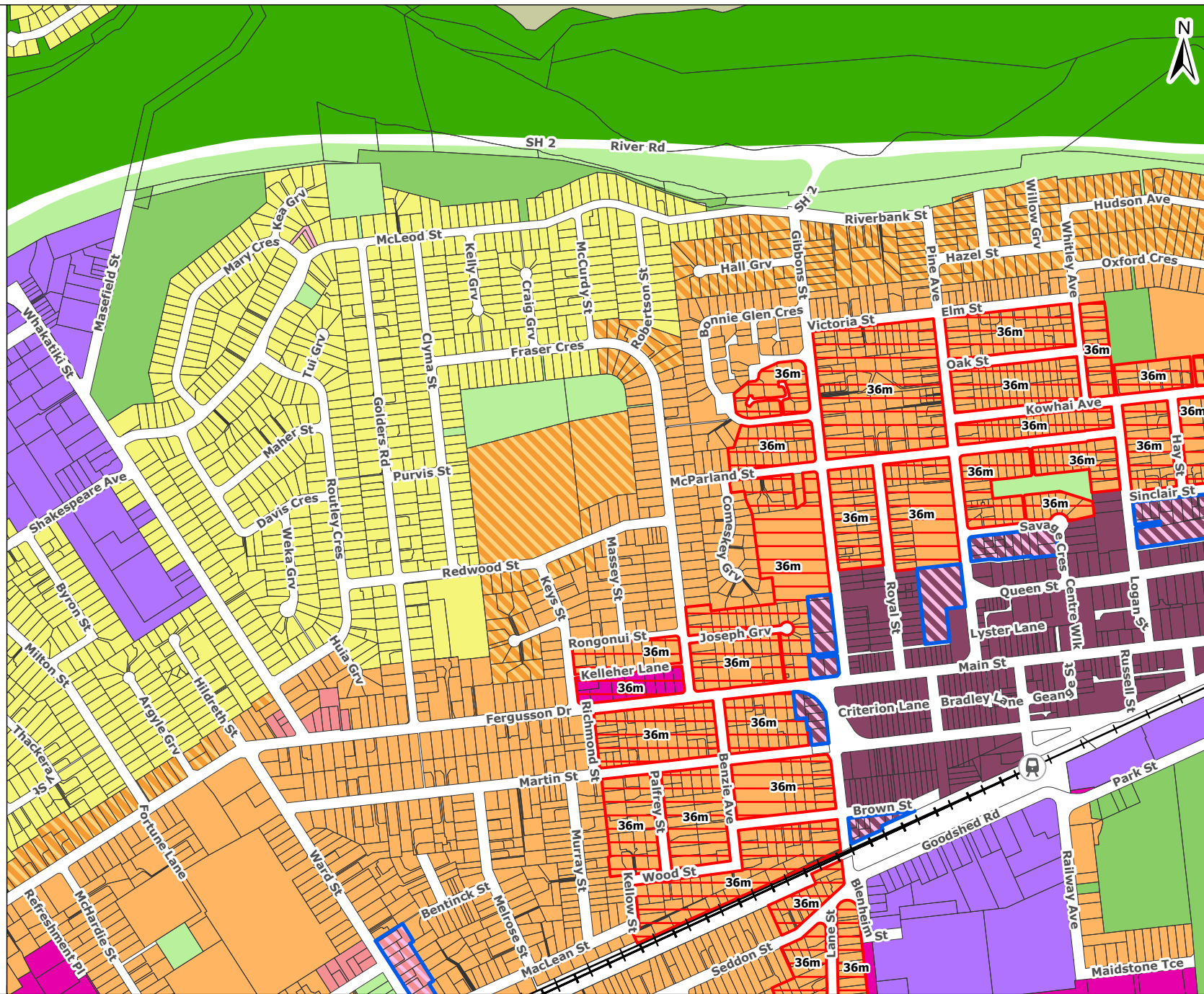
- Centre Expansion
- City Centre
- Local Centre
- High Density Residential

Proposed District Plan Zones (IPI)

- High Density Residential
- Neighbourhood Centre
- Local Centre Zone
- Mixed Use
- City Centre
- General Residential

Operative District Plan Zones

- General Rural
- Open Space
- Sport and Active Recreation
- Natural Open Space
- General Industrial





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Centre: Upper Hutt City West




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Public Transport

-  Train Station
-  Railway

Kāinga Ora Proposed Changes Sought

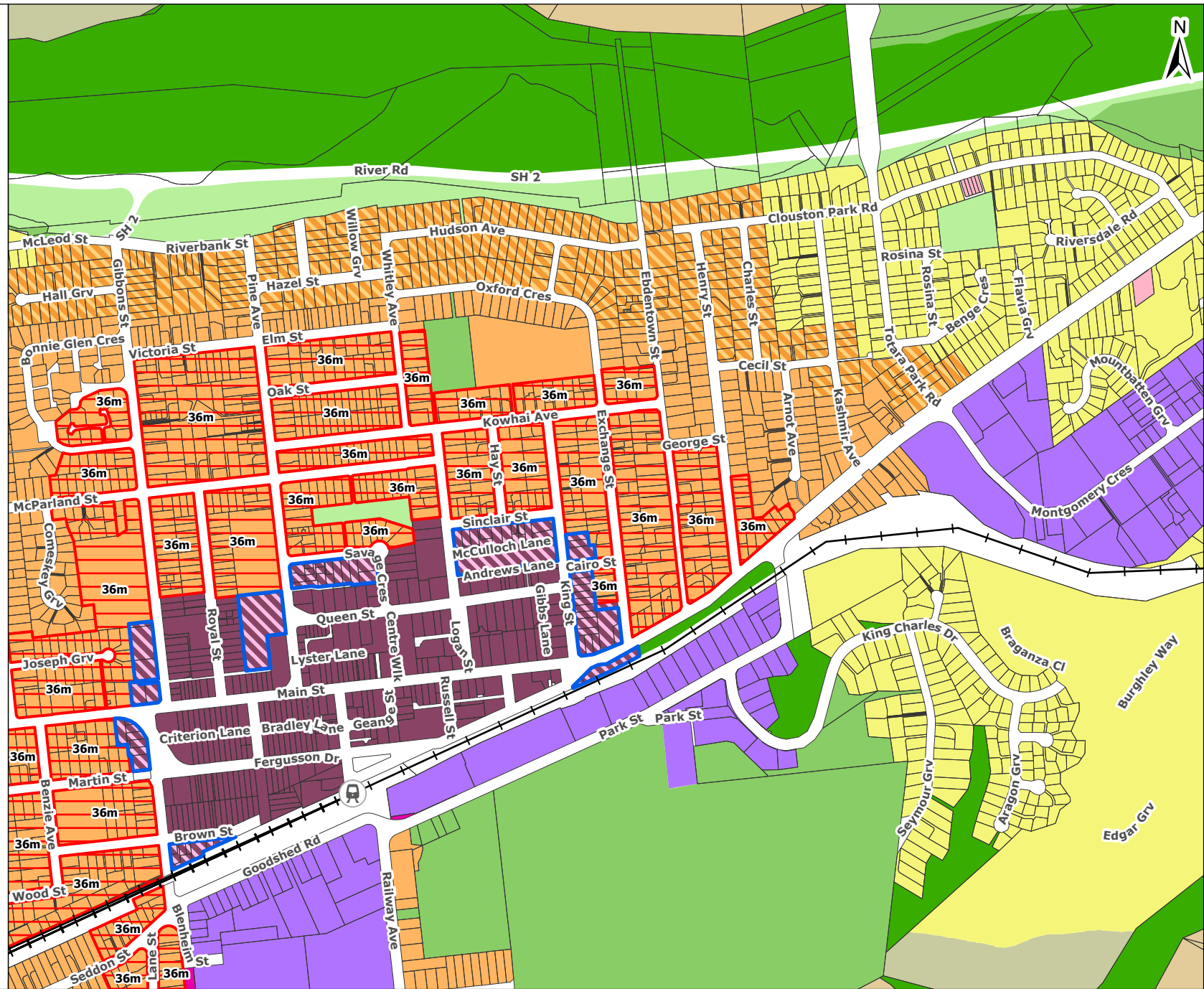
-  Centre Expansion
-  City Centre
-  High Density Residential

Proposed District Plan Zones (IPI)

-  High Density Residential
-  Neighbourhood Centre
-  Mixed Use
-  City Centre
-  General Residential

Operative District Plan Zones

-  Rural Lifestyle
-  General Rural
-  Open Space
-  Sport and Active Recreation
-  Natural Open Space
-  General Industrial
-  Special Activity



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Centre: Upper Hutt City East

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North

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SITES INFORMATION

HIRB CASE STUDY

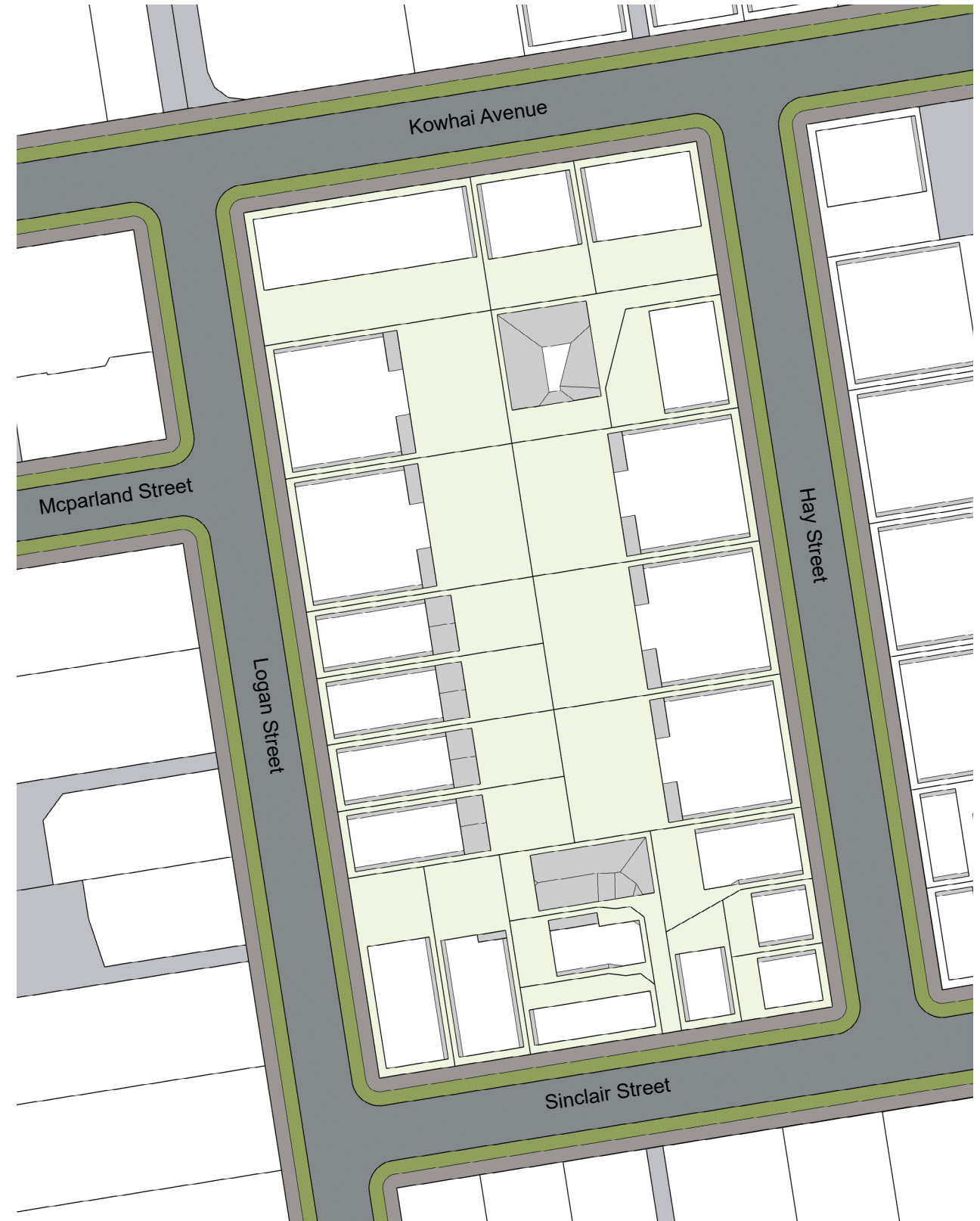
Kainga Ora

Date : 19 April 2023

SK01
Rev 0



IPI HRZ - 70% site coverage (gross site area)



KO HRZ - 50% site coverage (gross site area)

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North

BUILDING COVERAGE - HRZ - IPI VS KAINGA ORA

HIRB CASE STUDY

Kainga Ora

Date : 19 April 2023

SK02
Rev 0

MRZ			
Height	Building Coverage	Yards	HIRB
11m	50%	1.5m (front), 1m (side and rear)	4m+60°



Fig. 1



Fig. 2

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MRZ - POTENTIAL STREETSCAPE

HIRB CASE STUDY

Kainga Ora

Date : 19 April 2023

SK03
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HRZ - IPI

Height	Building Coverage	Yards	HIRB
20m	70%	1.5m (front), 1m (side and rear)	5m+60°

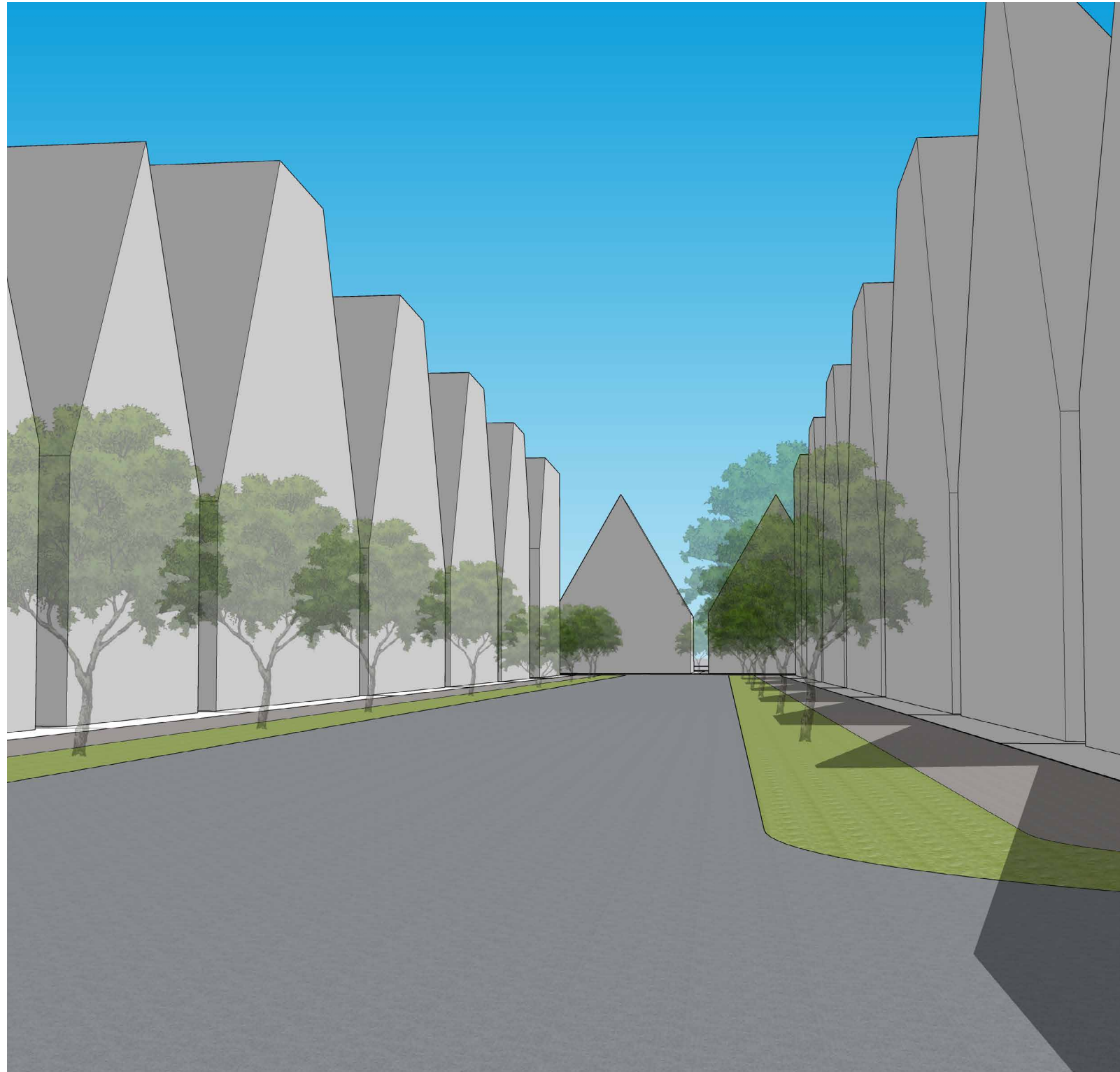


Fig. 1

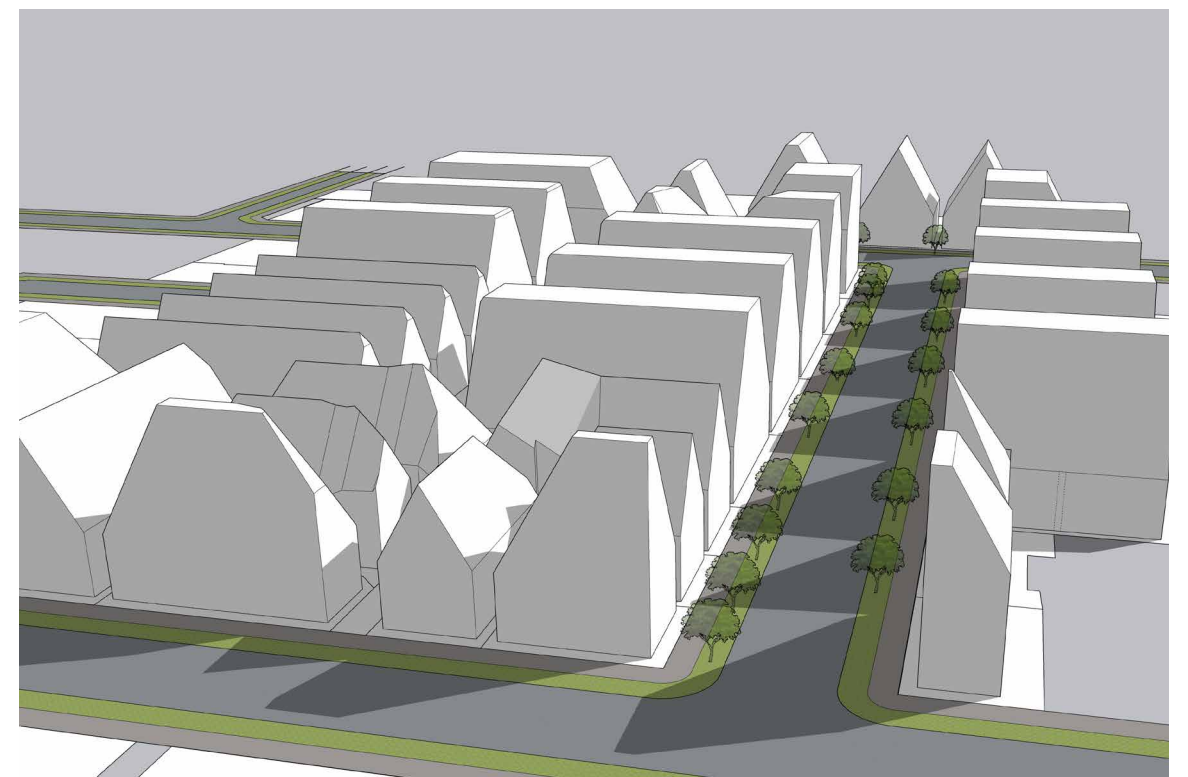


Fig. 2

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IPI HRZ - POTENTIAL STREETSCAPE

HIRB CASE STUDY

Kainga Ora

Date : 19 April 2023

SK04
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HRZ - KO

Height	Building Coverage	Yards	HIRB
22m	50%	1.5m (front), 1m (side and rear)	19m+60°(21.5m) 8m+60°

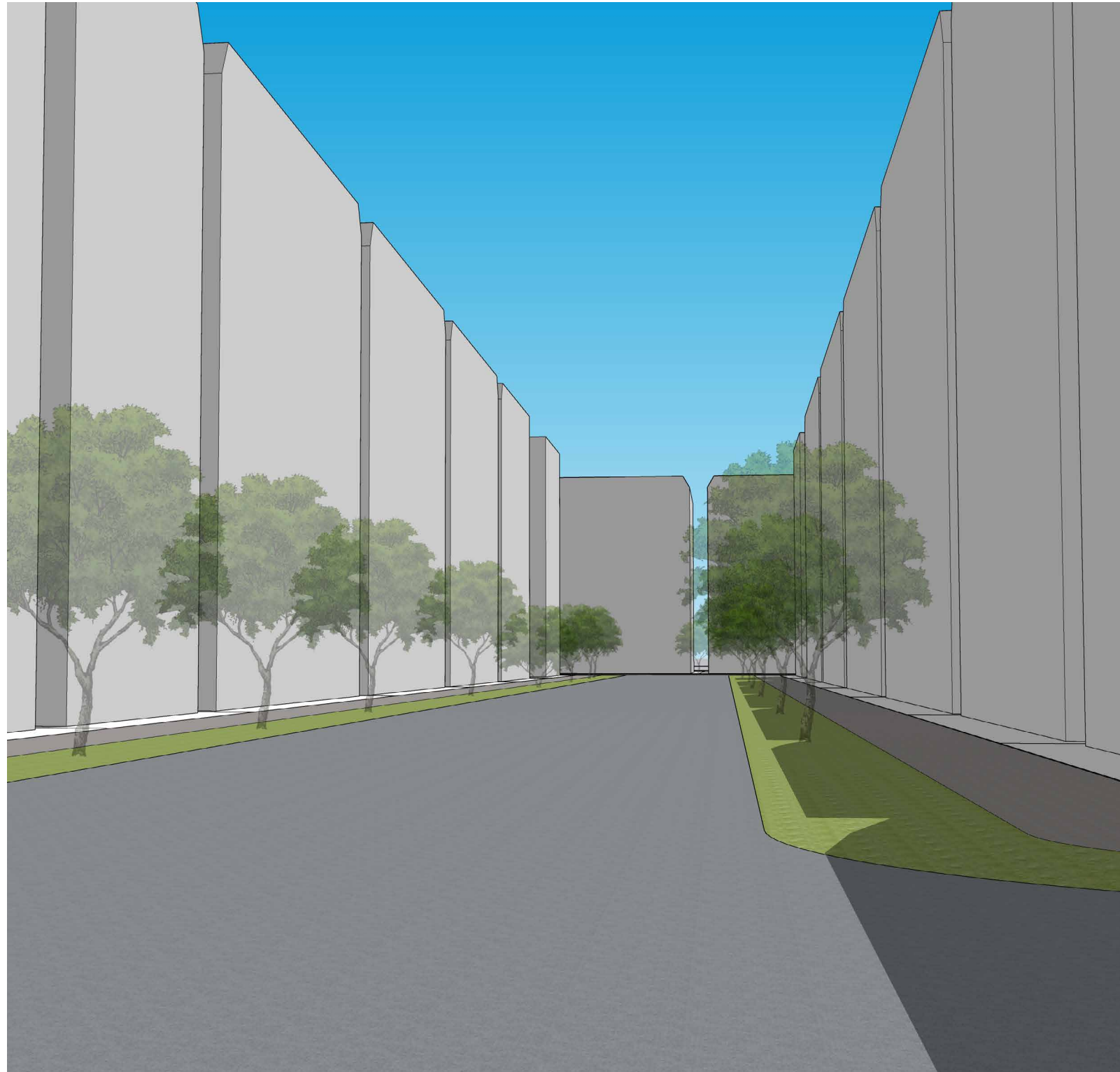


Fig. 1



Fig. 2

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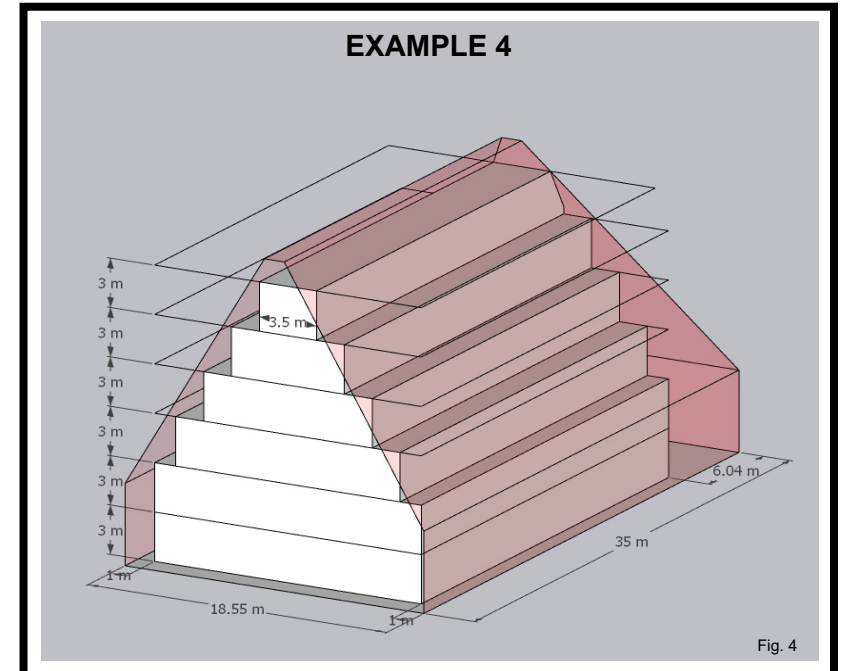
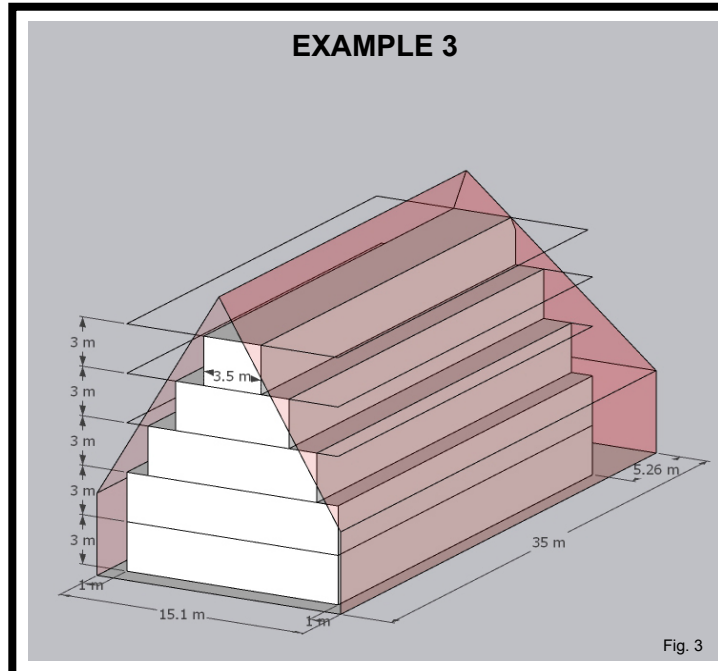
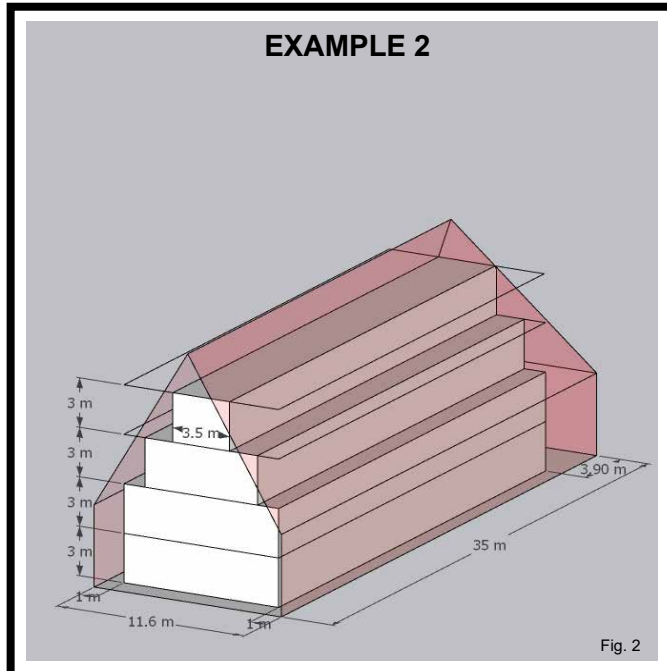
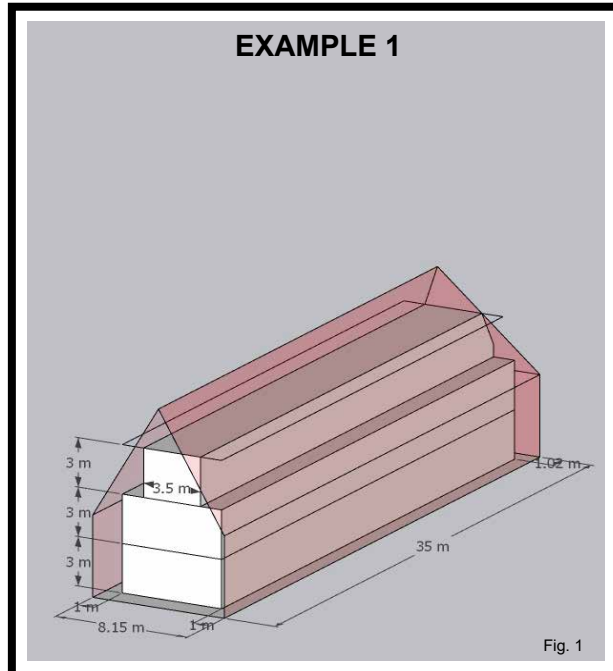
HRZ KAINGA ORA - POTENTIAL STREETSCAPE

HIRB CASE STUDY

Kainga Ora

Date : 19 April 2023

SK05
 Rev 0



HRZ - IPI

Height

20m

Building Coverage

70%

Yards

1.5m (front), 1m (side and rear)

HIRB

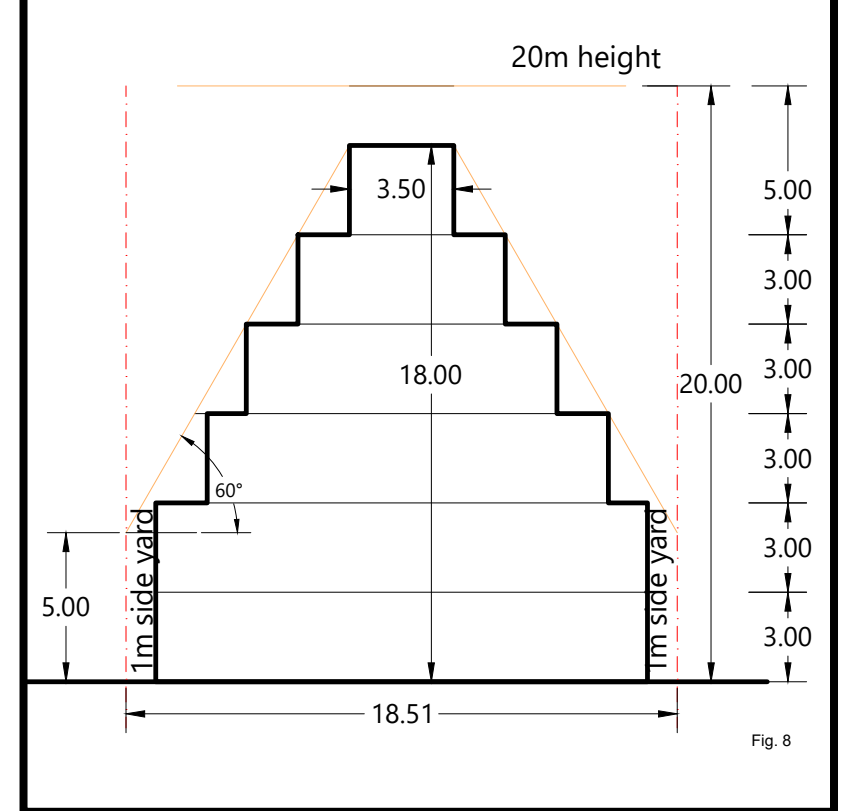
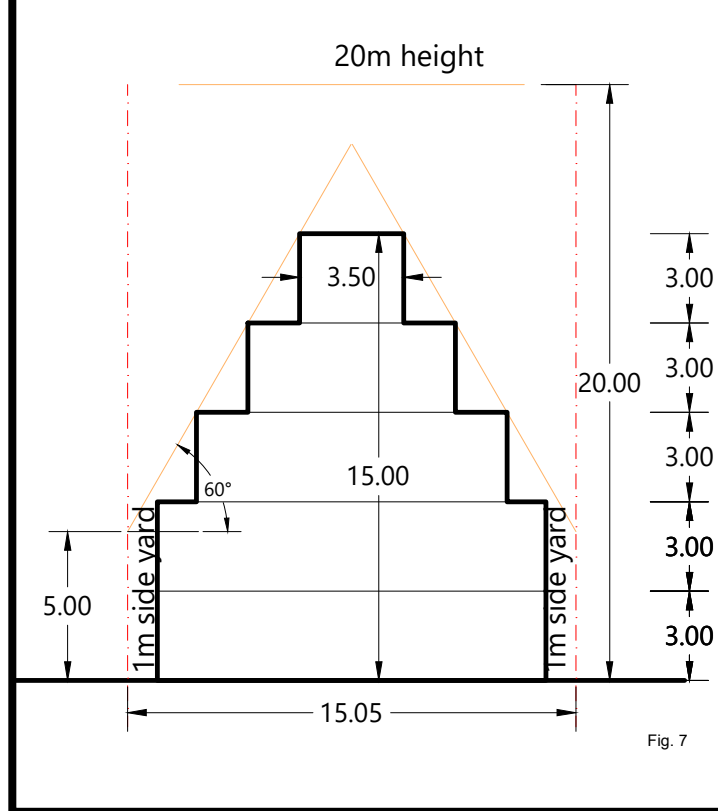
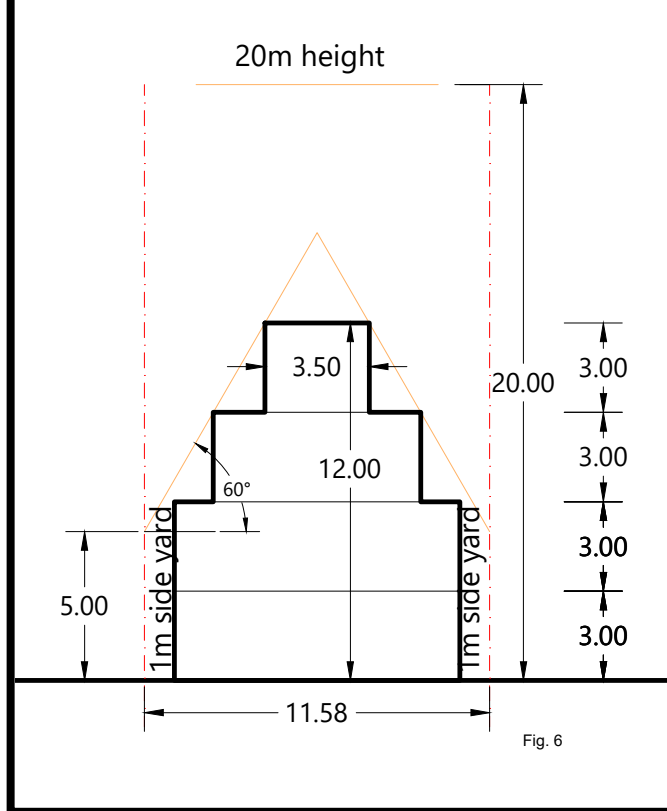
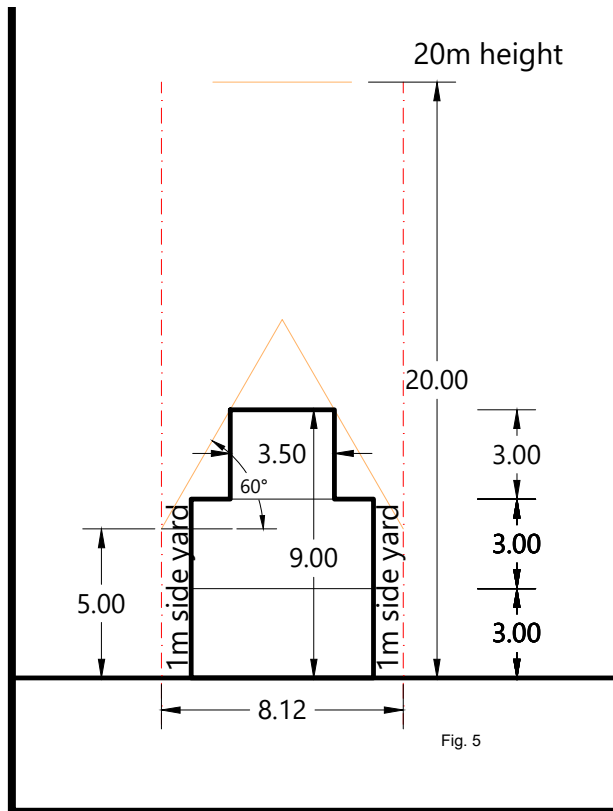
5m+60°

3 - storeys

4 - storeys

5 - storeys

6 - storeys



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HEIGHT VS SITE WIDTH - HRZ PDP - MINIMUM SITE FRONTAGE INVESTIGATION

HIRB CASE STUDY

Kainga Ora

Date : 19 April 2023

SK06
Rev 0

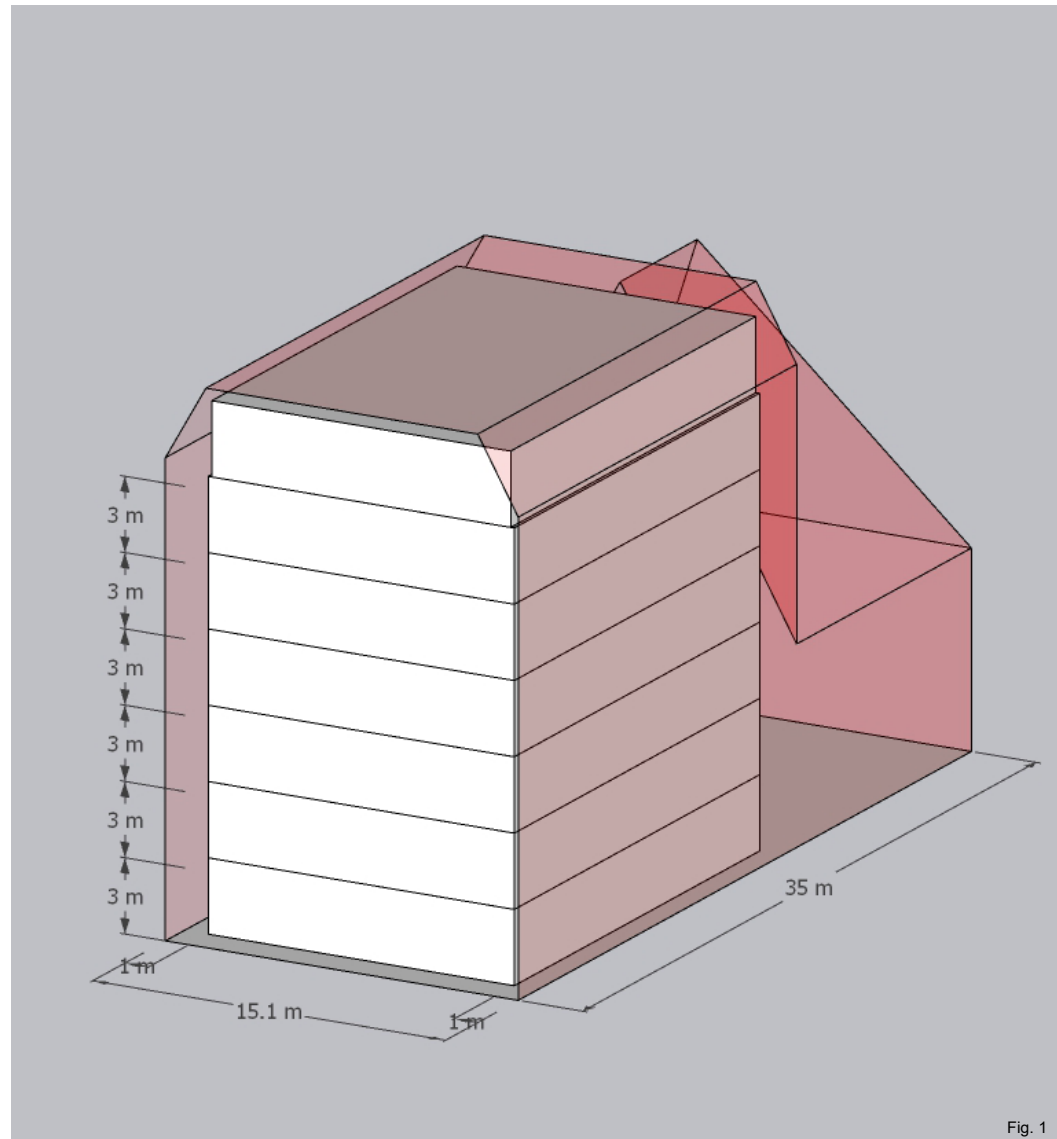


Fig. 1

HRZ - KO
Height
22m
Building Coverage
50%
Yards
1.5m (front), 1m (side and rear)
HIRB
19m+60° (21.5m) - 8+60°

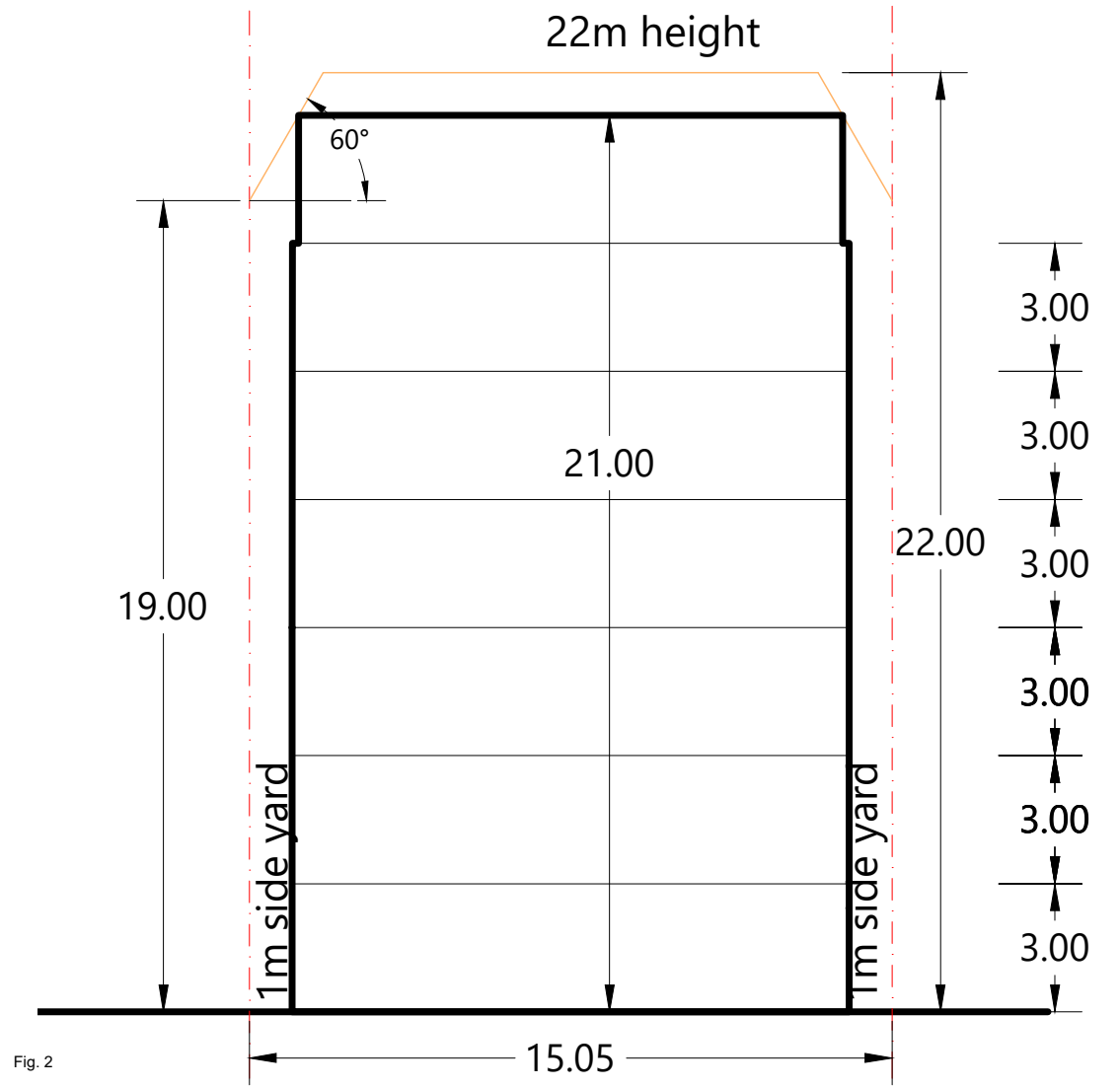


Fig. 2

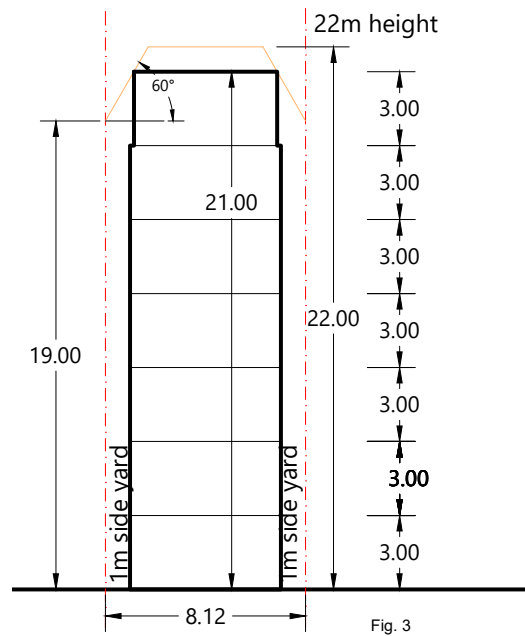


Fig. 3

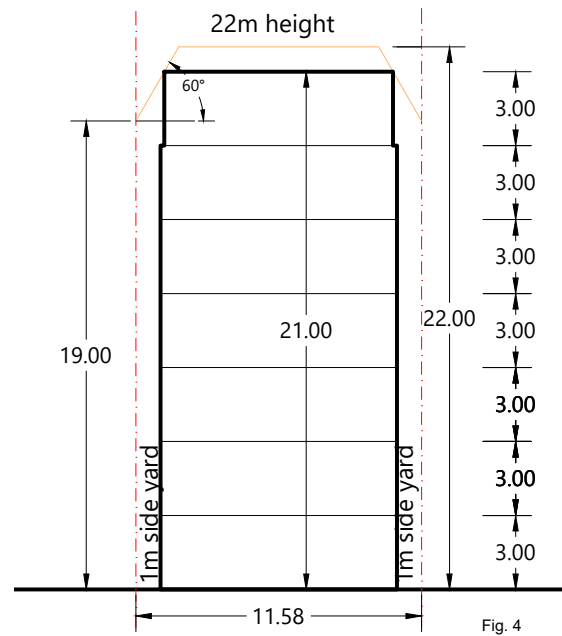


Fig. 4

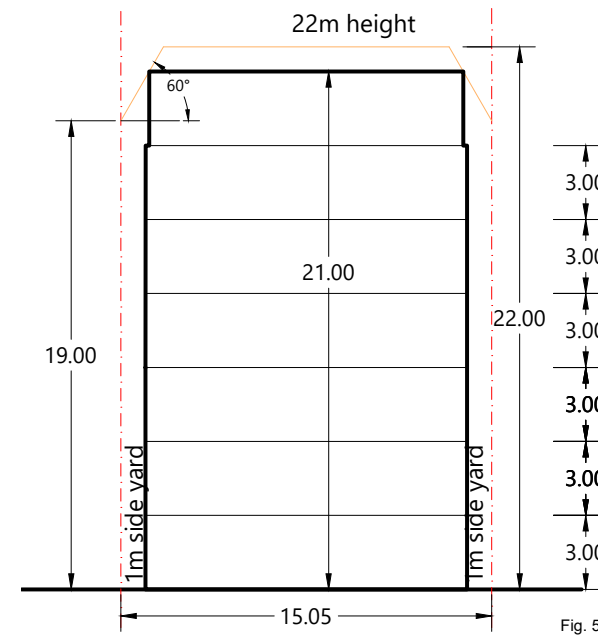


Fig. 5

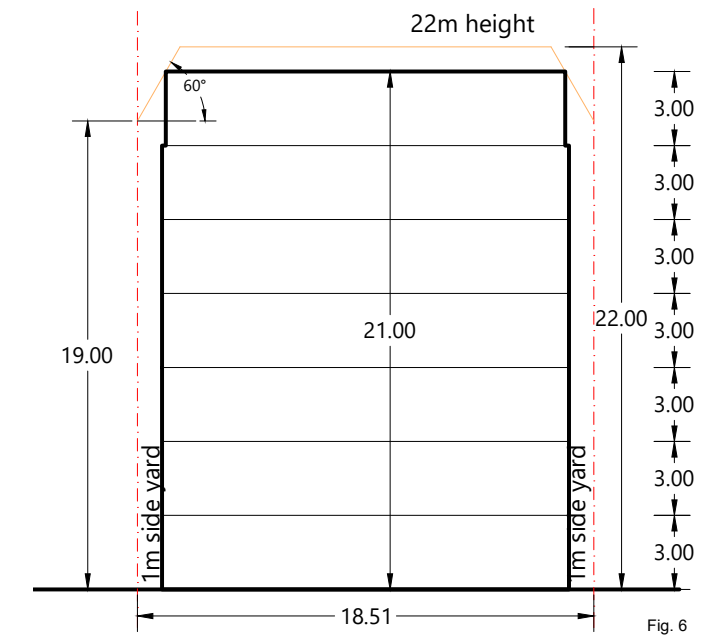


Fig. 6

Disclaimer:
SketchUp 3D model created using LINZ data (parcels) and standards from Section 42A and Kainga Ora Alternative as recommended by Mr Rae. Images generated from the 3D model with no specific scale. These images are in perspective, therefore not suitable for measuring.

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HEIGHT VS SITE WIDTH - HRZ KAINGA ORA - MINIMUM SITE FRONTAGE TO PERMIT 6-STOREYS

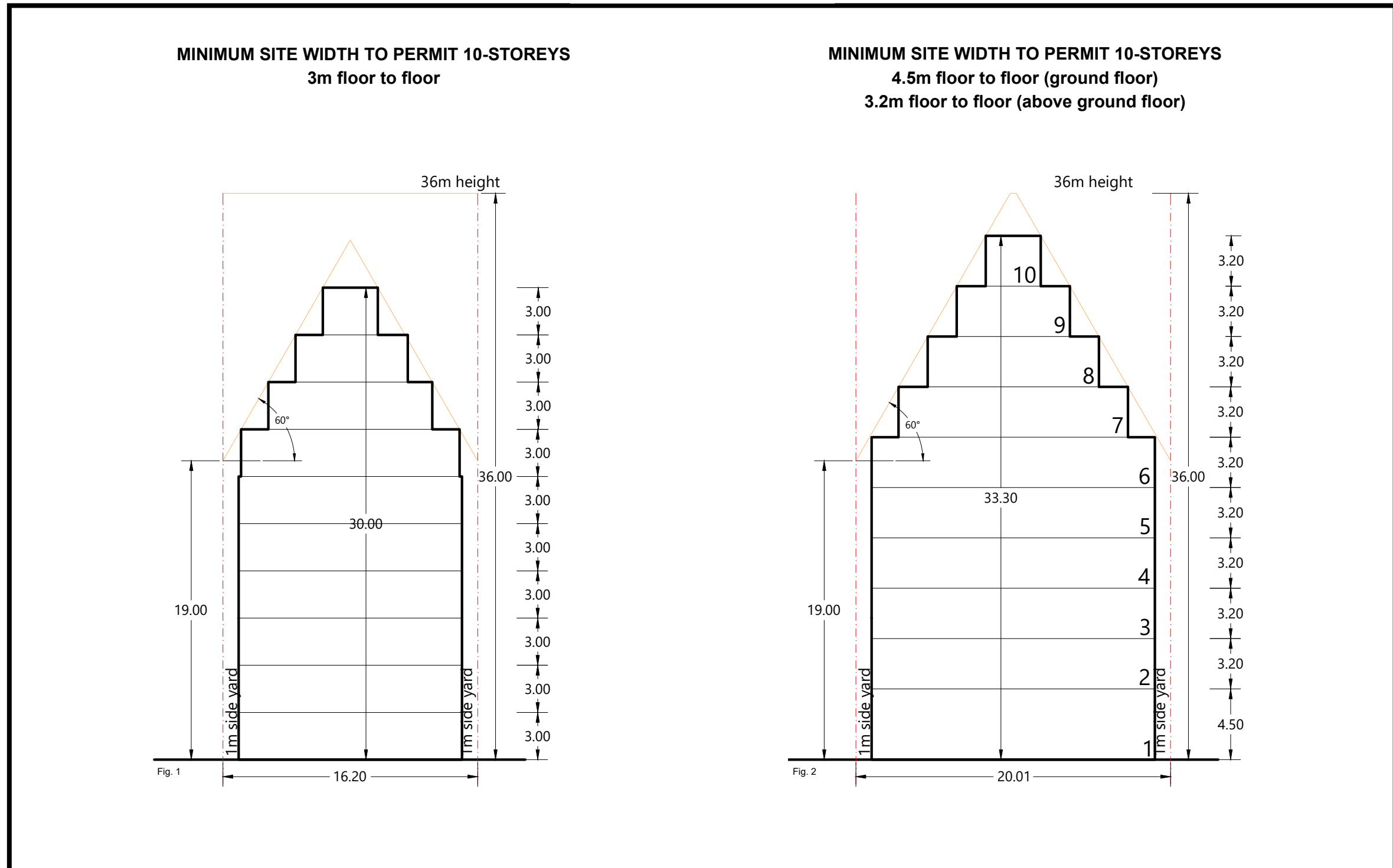
HIRB CASE STUDY

Kainga Ora

Date : 19 April 2023

SK07
Rev 0

36m Height Overlay



HDRZ-KO
 Height
 36m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from Section 42A and Kainga Ora Alternative as recommended by Mr Rae. Images generated from the 3D model with no specific scale. These images are in perspective, therefore not suitable for measuring.

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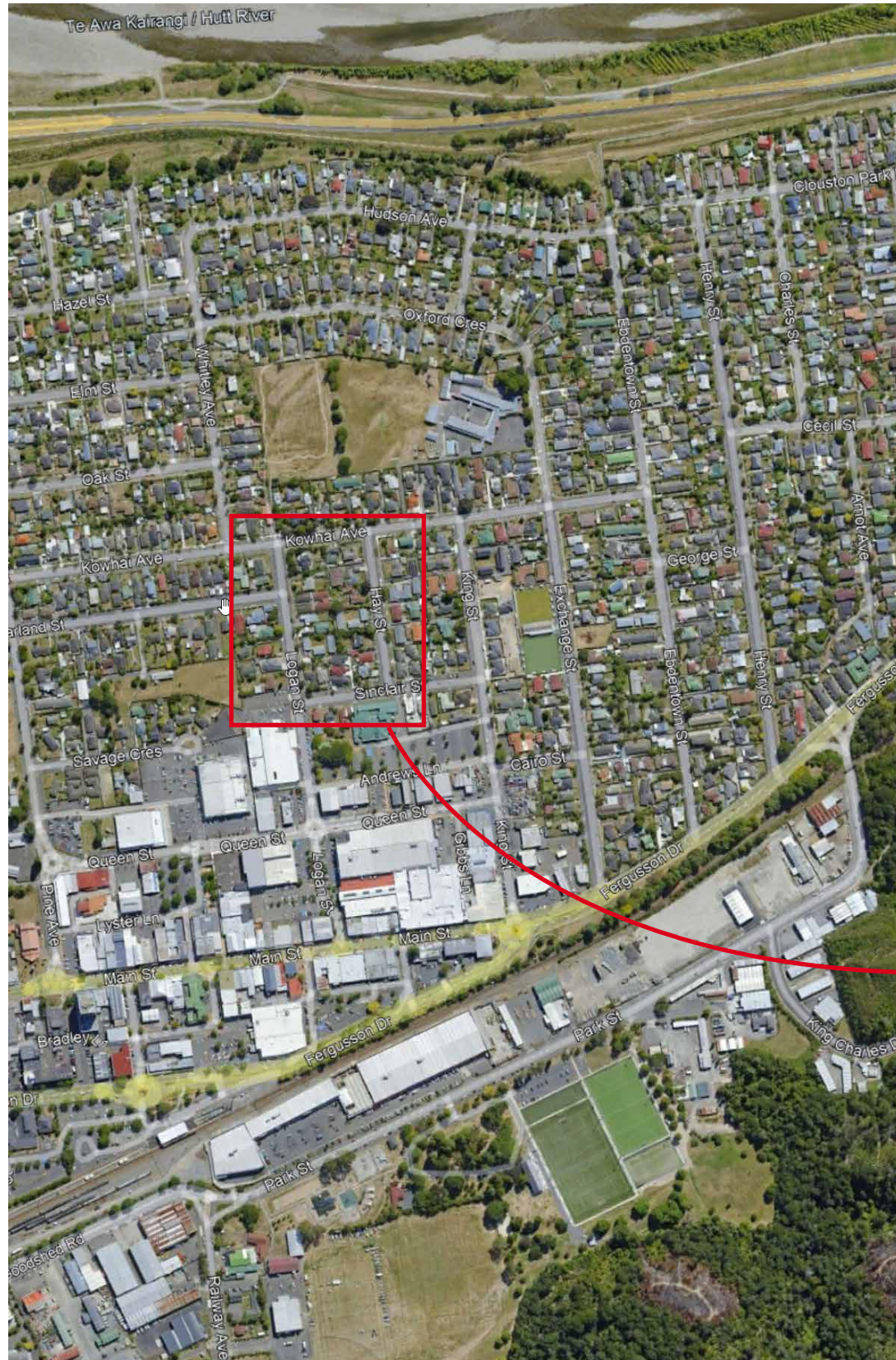
HEIGHT VS SITE WIDTH - KAINGA ORA 36m Height Overlay

HIRB CASE STUDY

Kainga Ora

Date : 19 April 2023

SK08
 Rev 0



Disclaimer:
SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.



North

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SITES INFORMATION

SUN ACCESS ANALYSIS

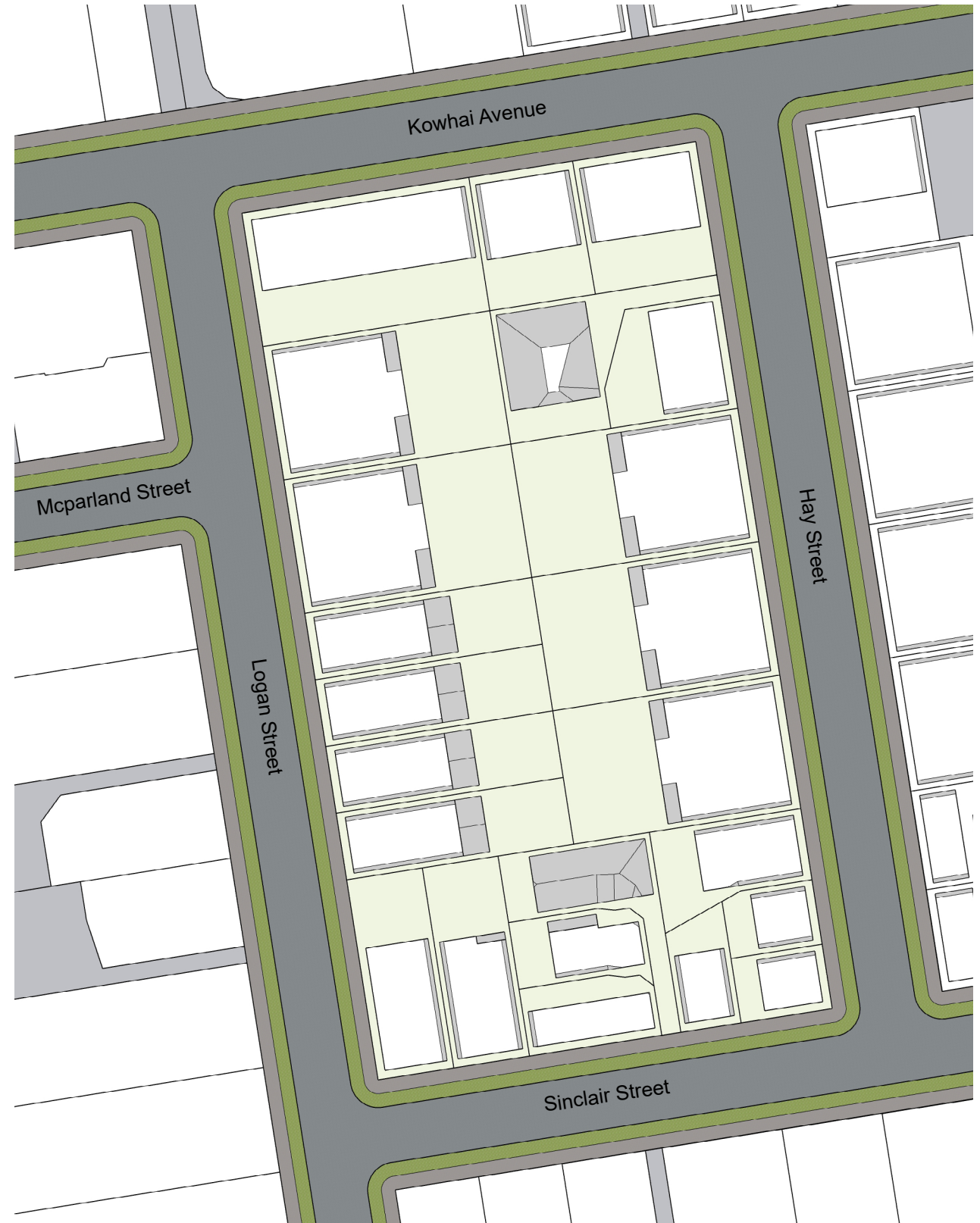
Kainga Ora

Date : 19 April 2023

SK01
Rev 0



IPI HRZ - 70% site coverage (groos site area)



KO HRZ - 50% site coverage (groos site area)

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.

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BUILDING COVERAGE - HRZ - IPI VS KAINGA ORA

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023



North

SK02
Rev 0



Fig. 1

IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°



Fig. 2

KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

Note:
 The two models illustrate the options recommended by the Reporting Planner and Mr Rae for the HRZ. These have built form focused to the front of the site, and with no site amalgamation as one example. There is no height overlay applied, or consideration of outlook space or outdoor living space which may further reduce built form outcomes.

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.

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HRZ SUN ACCESS ANALYSIS - IPP VS KAINGA ORA

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

SK03
 Rev 0



IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°

9am - 21st March



KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 9am - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.

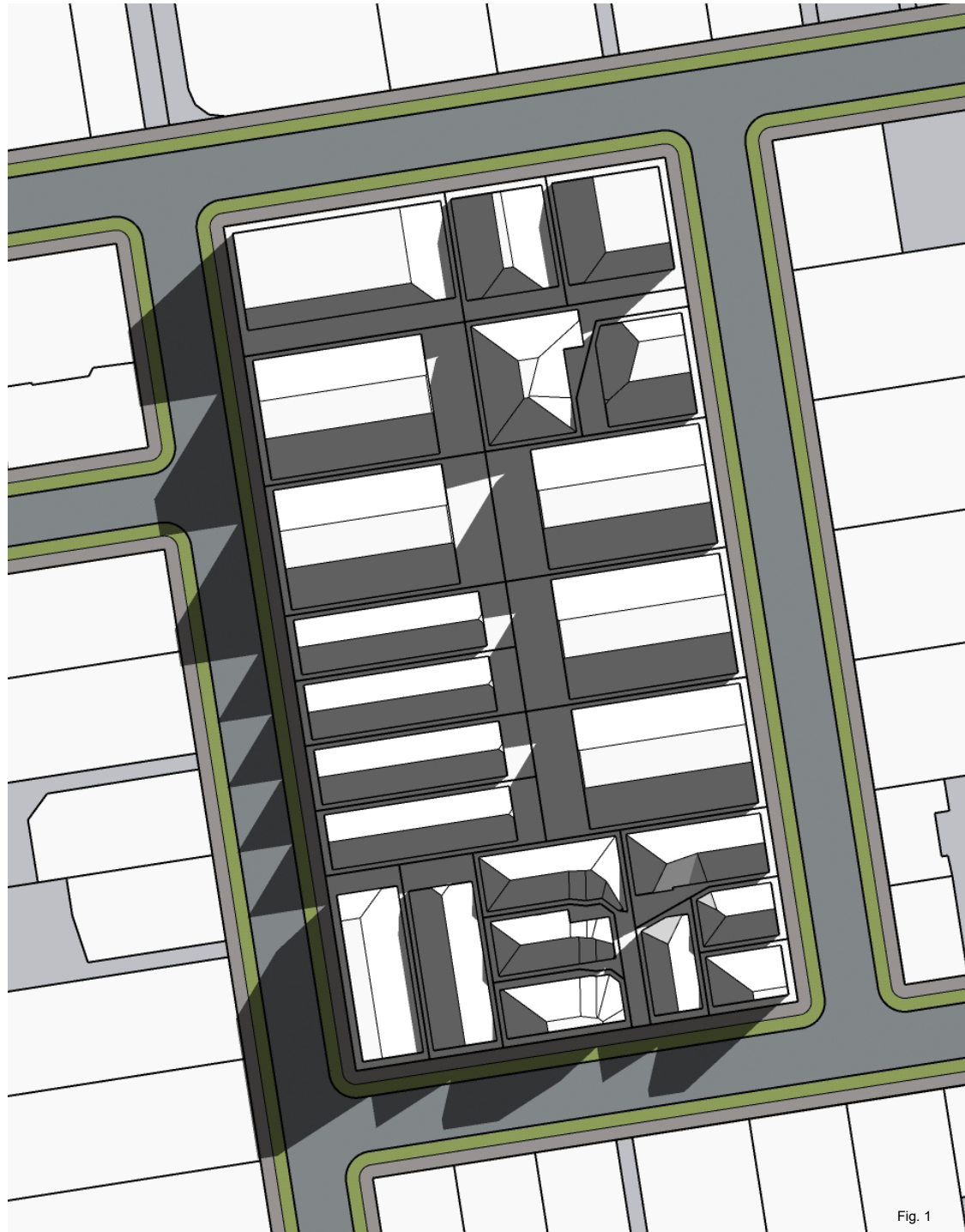


North

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SK04
 Rev 0

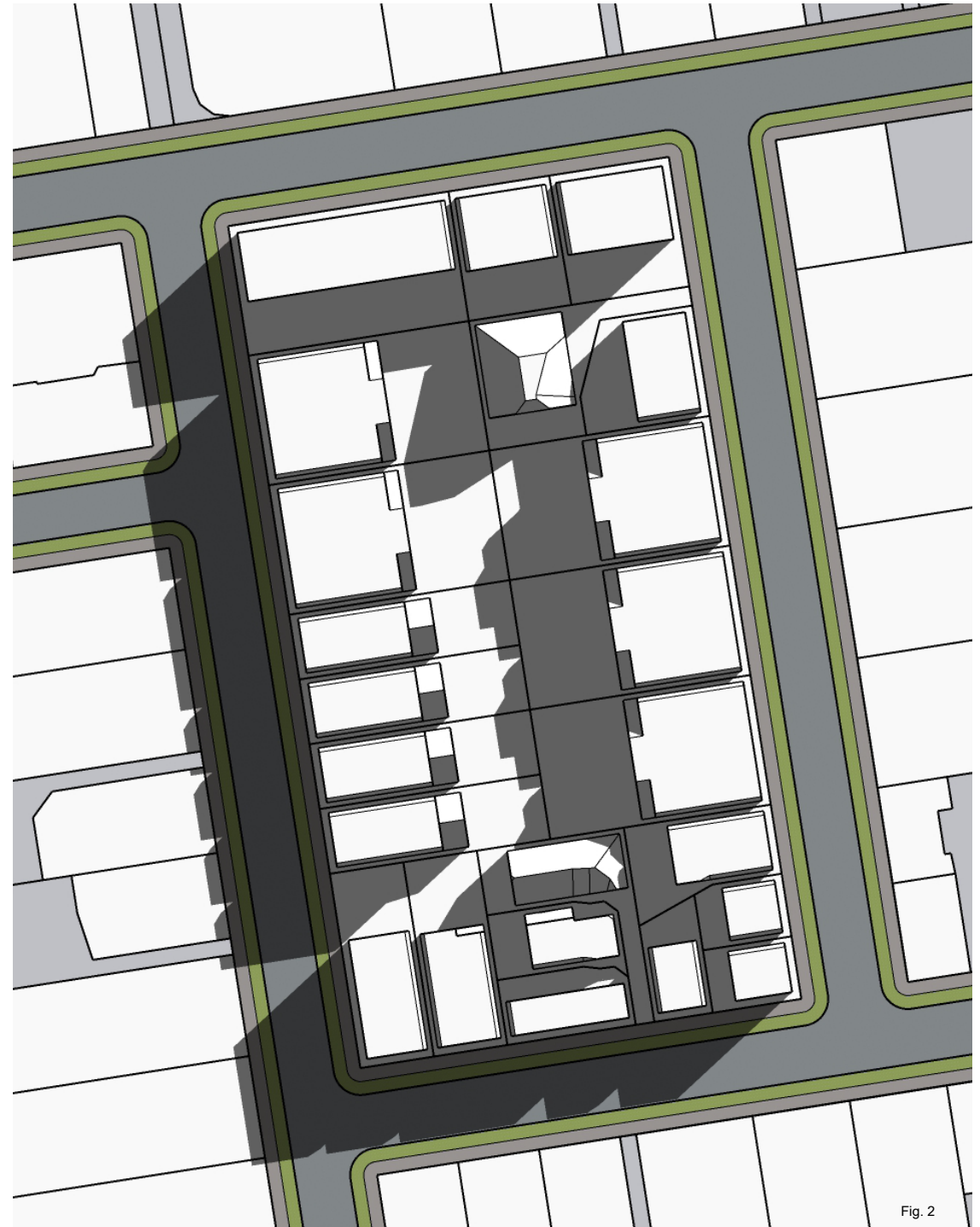


10am - 21st March

Fig. 1

IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°



KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

Fig. 2

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.



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HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 10am - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

SK05
 Rev 0



Fig. 1

IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°

11am - 21st March

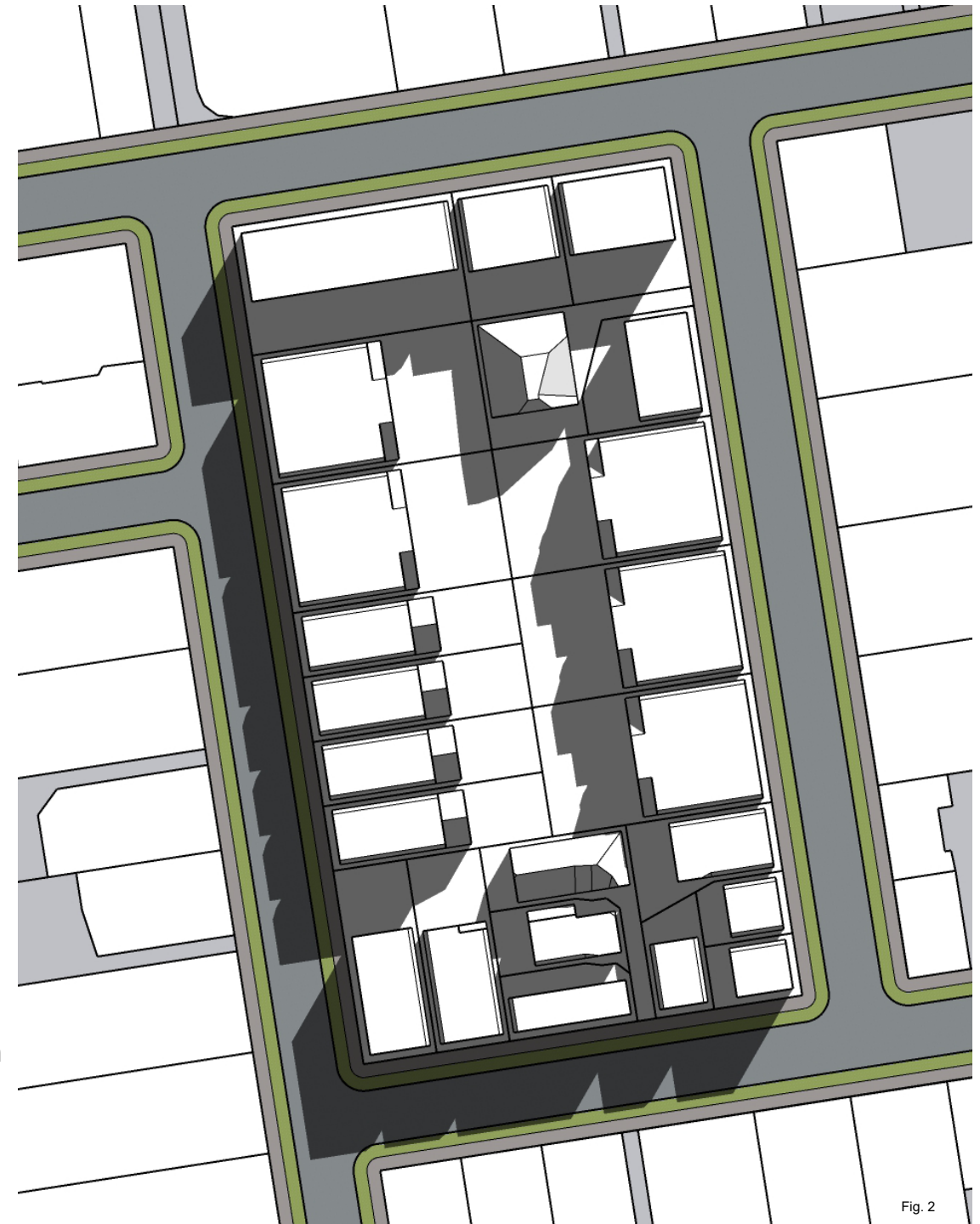


Fig. 2

KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 11am - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.



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SK06
 Rev 0

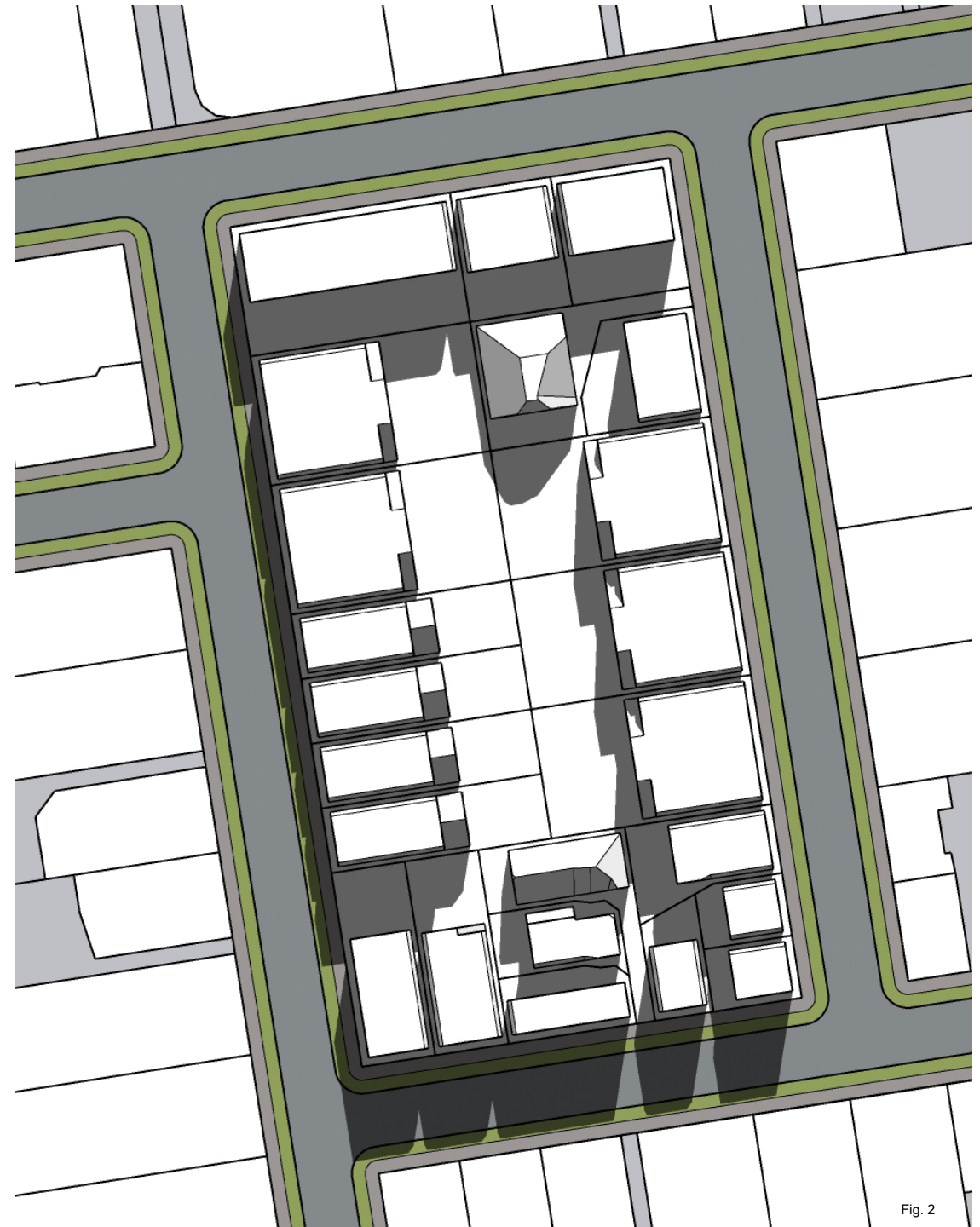


12pm - 21st March

Fig. 1

IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°



KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

Fig. 2

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.

HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 12pm - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023



North

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SK07
 Rev 0

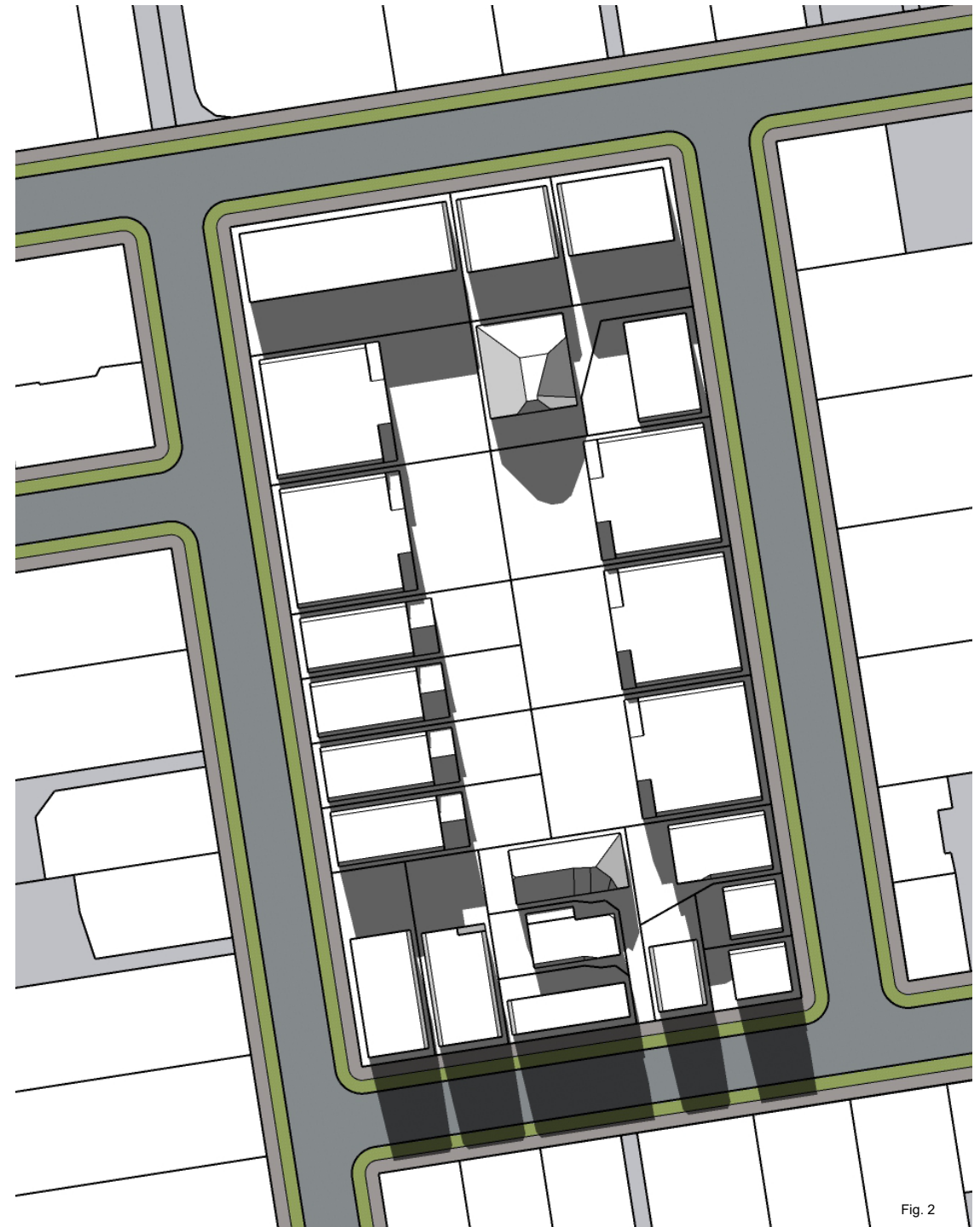


1pm - 21st March

Fig. 1

IPI HRZ

Height
20m
 Building Coverage
70%
 Yards
1.5m (front), 1m (side and rear)
 HIRB
5m+60°



KO HRZ

Height
22m
 Building Coverage
50%
 Yards
1.5m (front), 1m (side and rear)
 HIRB
19m+60° (21.5m) - 8+60°

Fig. 2

HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 1pm - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

Disclaimer:
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SK08
 Rev 0

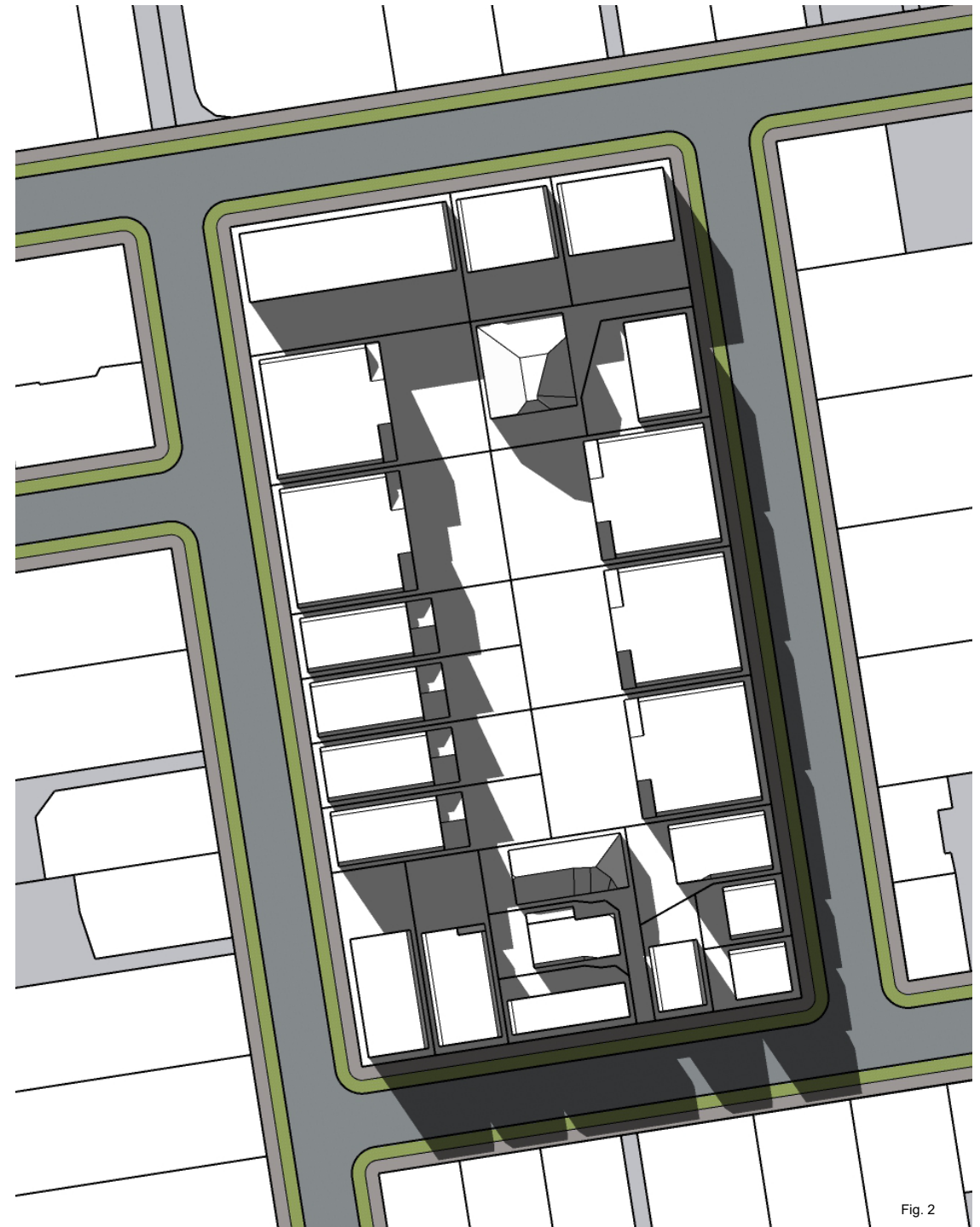


2pm - 21st March

Fig. 1

IPI HRZ

Height
20m
 Building Coverage
70%
 Yards
1.5m (front), 1m (side and rear)
 HIRB
5m+60°



KO HRZ

Height
22m
 Building Coverage
50%
 Yards
1.5m (front), 1m (side and rear)
 HIRB
19m+60° (21.5m) - 8+60°

Fig. 2

HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 2pm - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

Disclaimer:
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SK09
Rev 0



3pm - 21st March

Fig. 1

IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°



KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

Fig. 2

HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 3pm - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.

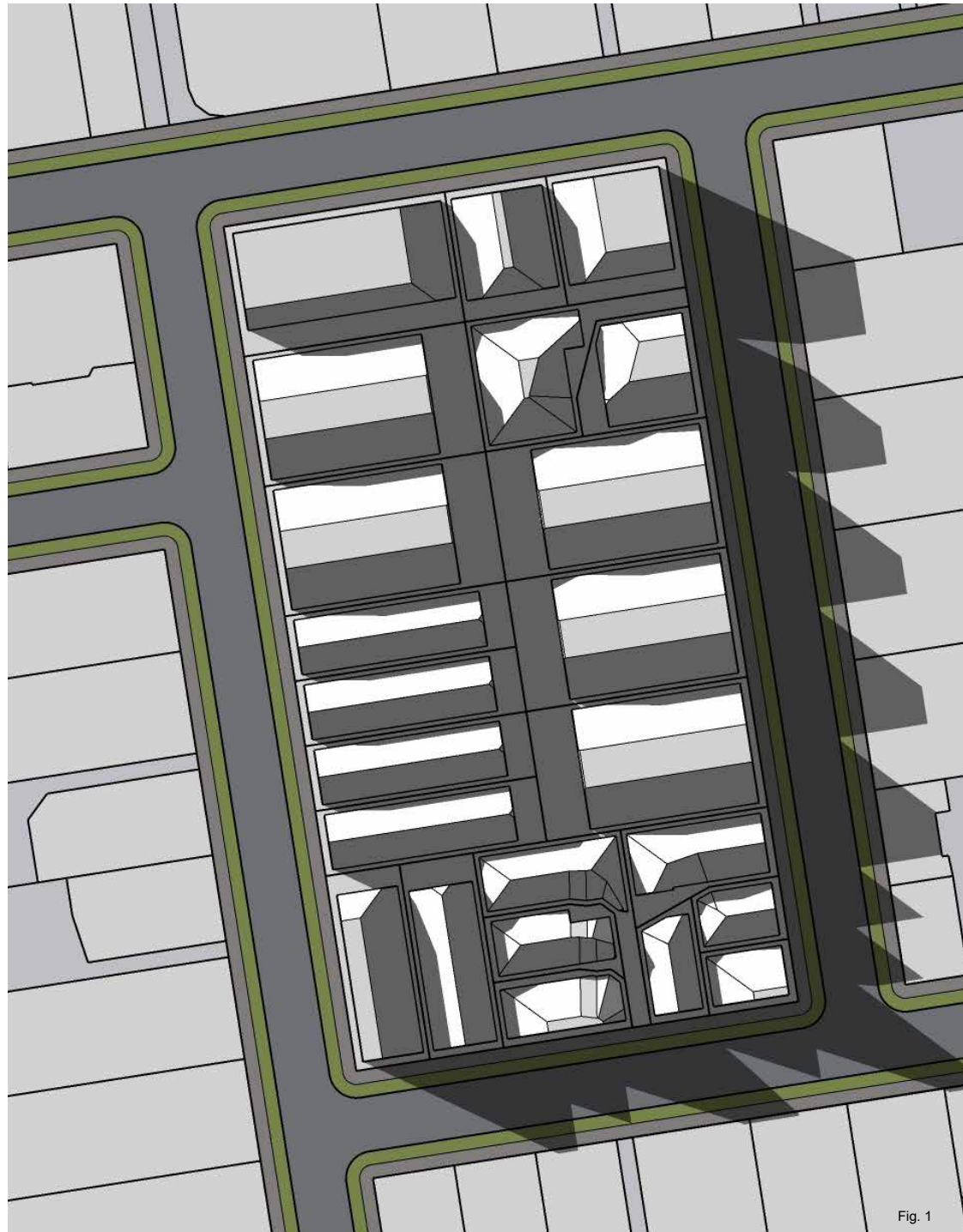


North

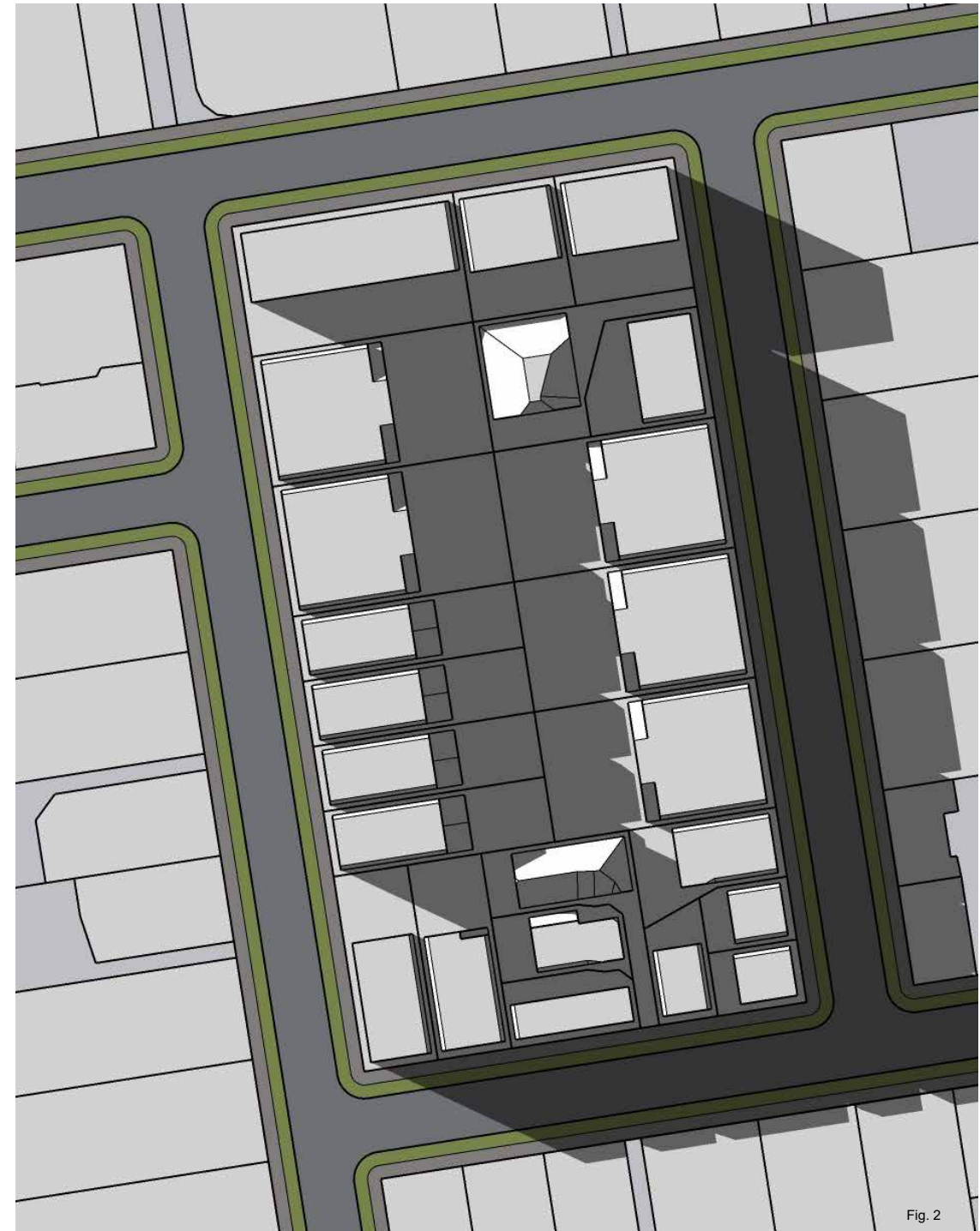
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SK10
 Rev 0



4pm - 21st March



IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°

KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.



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HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 4pm - 21st March

SUN ACCESS ANALYSIS

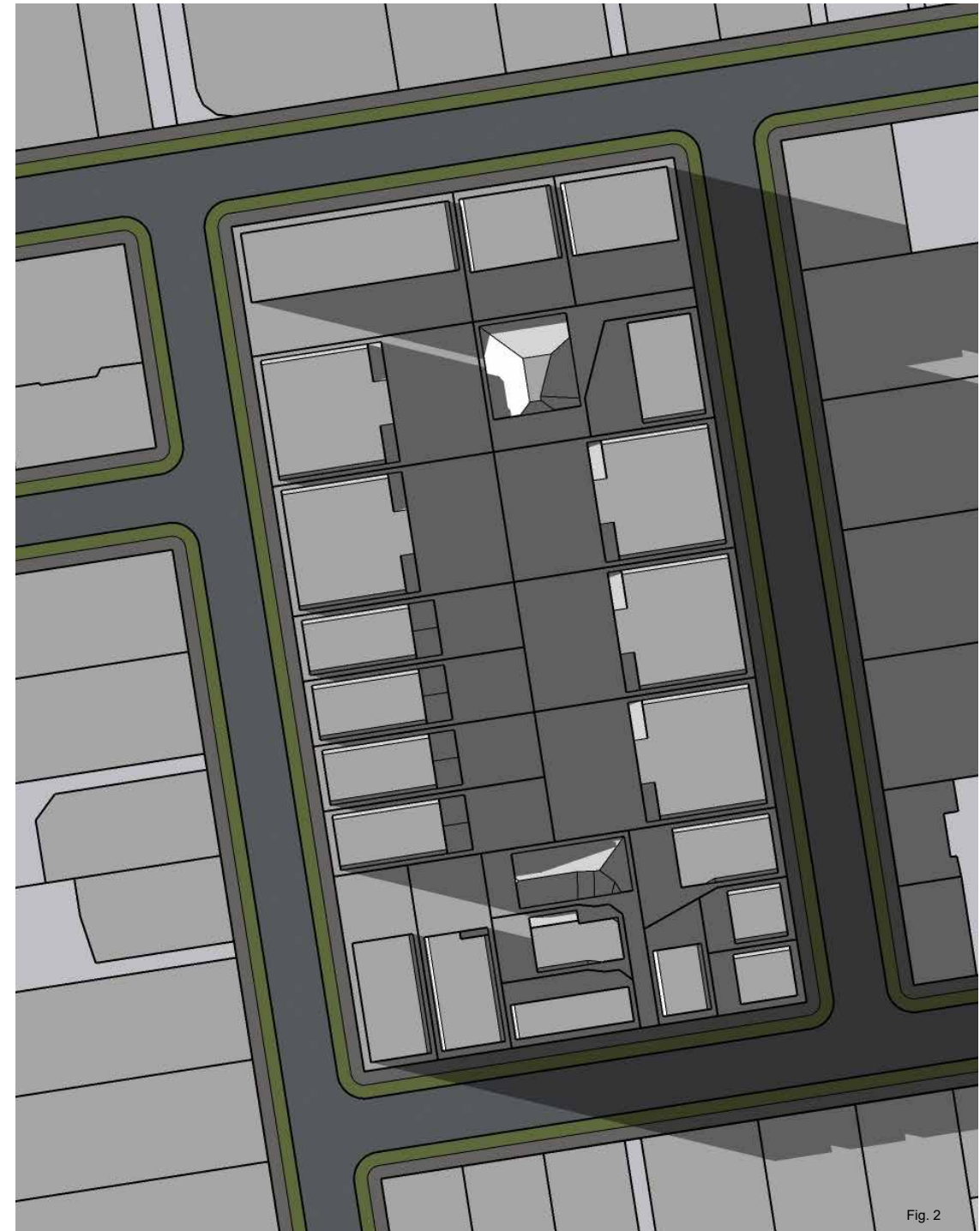
Kainga Ora

Date : 19 April 2023

SK11
 Rev 0



5pm - 21st March



IPI HRZ

Height
 20m
 Building Coverage
 70%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 5m+60°

KO HRZ

Height
 22m
 Building Coverage
 50%
 Yards
 1.5m (front), 1m (side and rear)
 HIRB
 19m+60° (21.5m) - 8+60°

Disclaimer:
 SketchUp 3D model created using LINZ data (parcels) and standards from PDP and Kainga Ora submissions. Site location data included in the SketchUp model and no adjustment for daylight saving. Images generated from the 3D model with no specific scale. This images are in perspective, therefore not suitable for measuring.



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HDRZ SUN ACCESS ANALYSIS - IPI VS KAINGA ORA - 5pm - 21st March

SUN ACCESS ANALYSIS

Kainga Ora

Date : 19 April 2023

SK12
 Rev 0