

16 November 2021
Motu Design Ltd

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Environment Committee
Parliament Buildings
Wellington
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To the Parliamentary Select Committee on the Resource Management (Enabling Housing Supply and Other Matters) Amendment Bill

This submission is made on behalf of Motu Design Ltd and Tracy Ogden-Cork

INTRODUCTION

1. My full name is Tracy Maree Ogden-Cork. I hold a Bachelor of Architectural Studies, a Bachelor of Architecture (Hons) and a Master of Architecture (Hons) from the University of Auckland. I am the Director of Motu Design Limited (**Motu Design**), a specialist urban design agency, which I established in 2005. I have over 20 years' experience in policy planning, urban design and more recently landscape design through my practice Motu Design Limited. My clients include a wide range of developers, and Auckland Council. Over 60% of the work we do, relates to the provision of medium density housing under provisions of the Auckland Unitary Plan.
2. I am also a qualified to make decisions under the Resource Management Act 1991 (**RMA**) on Independent Hearing Panels, am a Chair of the Auckland Urban Design Panel and have been a panel member since 2012. Over the last two years I have also co-lead a Masters of Architecture design studio at the University of Auckland on the design of Papakainga.
3. I have approached my submission as if I was providing expert evidence on urban design matters in a hearing under the Resource Management Act or the Environment Court. Therefore, for the avoidance of doubt, I can confirm that I have read the Code of Conduct for expert witness contained in the Environment Court's Practice Note 2014 and have complied with the Code in preparing this submission. The comments I am about to give is within my area of expertise and represents my best knowledge. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express. Where there are aspects of relevance to my submission, but outside my specific expertise and experiences (such as planning matters), I have quoted others on whom I rely.

4. In preparing this submission I have collaborated and consulted with others in the design, planning and development professions in the formation of my professional opinion, and in principle support the submissions that have been made by the following organisations.

i) Urban Design Forum

ii) Urban Auckland

5. This submission includes the following attachments.

Attachment A - Analysis of Building Coverage

Attachment B – Comparison of MDRS vs Recommended Minimum Standards

Attachment C – Comparison of Standards Table

6. The information provided in Attachment's A - C has been prepared by Motu Design at my direction, and provided to other groups where possible (due to timeframes) in order to assist with an analysis of the issues, identification of recommended changes to the proposed Medium Density Residential Standards, and public communications.

Scope of Submission

7. My submission will focus on the following matters:

(a) Ensuring urban intensification supports both affordable housing and quality, sustainable living environments for all.

(b) Schedule 3A - Medium Density Residential Standards and recommended changes to ensure a better standard of liveability.

8. The extent of matters that this submission addresses is limited to the above, due to the constraints of time, not importance of other matters. However, I have contributed in detail to the formation of the Urban Auckland submission, include the requested changes to multiple aspects of the Bill.

SUBMISSION POINTS

Intensification principals

9. I support the proposed objective of the bill, that *“seeks to rapidly accelerate the supply of housing where the demand for housing is high.”* And consider that in some parts of New Zealand, *“This will help to address some of the issues with housing choice and affordability that Aotearoa New Zealand currently faces in its largest cities.”*¹
10. However, I disagree with the proposed methodology, the limited range of qualifying matters and overly permissive standards in the Bill. We can do better. Having more discretion on where intensification occurs, and the density of development, along with more refined standards will not necessarily reduce the potential number of dwellings that could be built overall, nor increase their cost when infrastructure is included. More refined standards will result in a better balance between the provision of more homes and the quality of living environments that are created.
11. I support urban intensification and the creation of diverse living environments and have for two decades. However, I consider that:
- The outcomes of this Bill, if un-amended, would be inconsistent with the efforts made in Auckland in recent years to integrate increased density with a reasonable standard of living under the Auckland Unitary Plan,
 - It will result in more dispersed densities, and poor urban design outcomes through not supporting the integration of land use and transport planning, and investments in public transport, walking and cycling,
 - In Auckland, where three houses are already permitted on most residential sites in the city, the constraints on affordable housing and intensification of properties to accommodate multi-generational family living and Papakainga² are not caused by the planning provisions to the AUP. Other constraints such as the prices of construction materials, labour, development contributions and access to resources, including funding mechanisms all contribute.
12. I also consider that the standards in the proposed schedule 3a are:
- Contrary to the principles and purpose of the RMA

¹ Explanatory Note

² A key reason for the bill as cited in the explanatory note.

- Not aligned with the future direction and creation of Well-Functioning Urban Environments
- Not aligned with Treasury's Well Being Framework
- Inadequate to manage development in a way that reduces the impact of urban development on climate change, due to detracting from a focus on development of 6 stories with frequent public transport to more development fringes of the city ; and no requirement for landscaping and tree planting.

13. Substantive amounts of additional development is already being considered under the existing directive of the National Policy Statement of Urban Development to allow at least 6 stories in areas located along major transport routes and in walking distance of metropolitan centres. This directive, encompasses large parts of the central Auckland suburbs, and thus the debate on redevelopment or intensification of central Auckland suburbs, character areas and single house zones, will be appropriately addressed through the NPS-UD process already established. The inclusion of the MDRS in schedule 3A of the RMA will serve to undermine the comprehensive and greater scale of intensification within these central areas that will be enabled by the NPS-UD. On these matters I agree with the submission made by David Mead, that is attached to the submission of Urban Auckland.

14. Within the Auckland context, the proposed RMA amendment will enable a relatively modest increase in the amount of houses, or size of houses, that are able to be built, but will have a substantial impact on the quality of new development and the effects of this on adjoining properties. In my opinion, it will lead to the large scale development of substandard housing and will not lead to equitable and sustainable city for future generations.

15. Thus, I concur with the following submission points from the Urban Design Forum for the same reasons

UDF supports intensification that generates sustainable urban areas. For this to occur intensification must occur in the right place, along transport corridors and in compact walkable neighbourhoods around city and suburban centres. Intensification around walkable neighbourhoods enhances and strengthens communities making them resilient to climate change and our changing economic environment. The proposed Bill is likely to disperse intensification where consolidation is needed.

UDF does not support the Bill as it is currently drafted, because, while promoting intensification, it does not promote quality design. Both the purpose and the proposed set of standards have multiple gaps and issues that will create poor design outcomes. UDF is concerned that these will repeat poor development outcomes experienced in our larger cities (Tier 1 and 2) in the past. Broad legislative changes such as this Bill should be informed by the positive intensification and quality medium density mechanisms that are occurring now in our Tier 1 and 2 cities.

UDF does not support the one size fits all blanket approach. To enable quality design, each city's unique set of circumstances needs to be considered to form its new intensive residential identity and increase its quality of life. UDF considers the nature and type of intensification must respond to its context and be place based, to generate good quality urban design.

Quality of on-site living environments

16. I consider that the that 'the one size fits all' approach is not appropriate given the varied character, topography, historical context, demographics and economics of each Tier 1 city. However, the Auckland Unitary Plan has now been operative for several years, and development consented and built under these provisions provides some guidance on the challenges of designing and delivery good quality medium density housing.
17. The Regulatory Impact Assessment consider the application of the Mixed Housing Urban (MHU) zone but dismissed that in its evaluation because of complexities of integrating it into other council plans. Thus it has favoured a bespoke set of provision.
18. However, whilst the administrative benefits of this are understood, no explanation or in-depth assessment of the proposed MDRS has been undertaken. The PWC report is particularly weak in that regard.
19. The PWC report is inherently flawed because it fails to equitably consider the economic, social and cultural, and health impacts of the proposed standards. For example, whilst it considers the economic loss in value of a sea view, it does not consider the economic impact and well-being implications of only a 3 metre view from living rooms to fences.

20. If the government is to progress with the introduction of MDRS, there is the opportunity to establish standards that not only allow greater densities and diversity of housing, but that also enable and encourage the creation of a quality living environments.

21. For this reason I support the following submission points from the Urban Design Forum.

- *UDF would support a national set of minimum standards if they ensure the creation of a liveable standard of urban housing capable of supporting people's physical and mental well-being and that better addresses climate changes issues. UDF would also support further direction giving councils the ability to manage urban intensification in a more flexible and sustainable manner appropriate to local contexts.*

22. I would also support the proposition to that a small working group comprising practising urban designers, planners and developers representing the Tier 1 cities is formed to assist MfE to prepare a shared set of provisions, to be completed in the first quarter of 2022. These can then be applied across the country, with opportunity for some variability to allow for topographic and geographic differences and to reflect turangawaewae, in conjunction with the NPS-UD.

23. However, in order to assist with the above, and share experiences from many years at the coalface of designing and assessing medium density housing, I make the following recommendations based on a modification of the AUP Mixed Housing Urban Zone.

- Maximum Height of 11m or three stories
- The MHU Alternative HIRB becomes the standard HIRB for the first 20m of the site.
- A HIRB control of 3m and 45 degrees for boundaries further than 20m from a street frontage
- Maximum building coverage of 40%
- Maximum impervious area of 60%
- Landscape area of 25% excluding decks and patios
- A minimum ground floor outdoor space of 20m² (with no dimension less than 4m) and/or balconies of at least 8m² and 1.8m deep, and that must not be on south side of building.
- Outlook of 6x4m from living area, 3x3m from principal bedroom and 1m from other rooms

- Front yard of 2.5m, side and rear yards of 1m
- A daylight control
- Minimum unit size of 30m² for studios and 45m² for one bedroom and more.

24. The rationale behind each of these recommendations is illustrated in Attachments A and B.

25. The first group of built examples shown in Attachment A are from the Terraced House and Apartment Building (THAB) zone where 50% building coverage is permitted. These show typical three storey developments of apartments and terraced houses, that best reflect the scale and type of development that the MDRS encourages, being 3 stories with 50% building coverage.

26. Within all of the AUP residential zones, there is a minimum outlook depth of 6m from the living room windows that ensures buildings (and windows) are set back from neighbouring properties to enable a reasonable standard of visual privacy. Even with the 6m outlook, the linear developments determined by long narrow sites typically found in Auckland, are resulting in buildings overlooking the neighbours. Privacy conflicts will increase when neighbouring sites are developed with similar linear typologies. The reduction of outlook space to 3m proposed by the MDRS will exacerbate this problem.

27. In our experience designers tend to be pushed by developer clients to start their design process by only providing for the minimum design standards required for the AUP zone, in terms matters like outlook. They are then asked to maximise the amount of building coverage possible, subject to how carparking is to be managed. Permeable paving is frequently used to enable development beyond impervious coverage controls to provide more space for carparking and vehicle access. Whilst this may be acceptable in some parts of the city such as the THAB zone that is located adjoining town centres, but in my opinion it is not appropriate for the majority residential areas

28. The other examples shown, from the MHU and Mixed Housing Suburban (MHS) zones show that with less building coverage, a reasonable level of development is still able to occur, and the on-site amenity increases. Due to the time constraints of this submission, we have only used examples of projects that we had on file. The examples also illustrate the pressure for car parking, and the importance of minimum landscape requirements even at lower densities when there is more space for specimen trees, amenity planting within communal spaces (driveways and pedestrian paths) and for small private gardens. Again, the outlook space, together with the HIRB controls ensure buildings are set back from the boundaries and do not visually dominate, shade,

or cause privacy conflicts with neighbours. Including, allowing space for planting along boundaries. This ensures better quality living situations that have a positive effect on the health and well-being of future residents.

29. In my experience a building coverage of less than 45% is necessary for permitted activities, due to the complexity of site planning and building design when coverage is greater than that. In particular it avoids the risk of developers anticipating a greater yield than what is often possible, on consideration of access, bins and bike or car parking, along with some planting to support an attractive living environment.
30. Attachment B - compares a development possible under the MDRS proposal with the recommended changes to building coverage, HIRB, outlook space and outdoor living space listed above. It shows that the same number of houses are possible under both scenarios but with the recommended minimum standards, a better level of on-site amenity is able to occur with more space for exterior related residential activity. The reduced amount of site coverage, also limits the extent and length of buildings that then helps to manage the effects of shading, both internal to the site and to neighbours.
31. It also illustrates how the MDRS proposal will result in larger houses built closer to the boundaries with little to no space for landscaping or outdoor seating. The more permissive HIRB control results in taller buildings at the rear of the site in close proximity to neighbours boundaries, resulting in shading, visual dominance and loss of privacy.

Attachment C - is a comparison of the MHU zone provisions, government's proposed MDRS, and our recommended minimum standards. Along with some additional explanation.

RECOMMENDATIONS

32. That bill is not supported in its current form.
33. That at the very least, the proposed MDRS is replaced by the standards recommended in Attachment A to this submission.

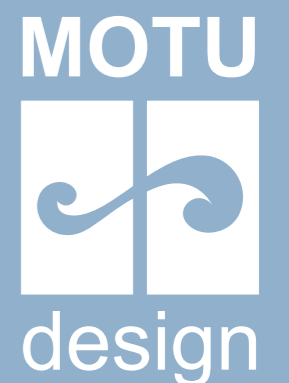
Tracy Ogden-Cork. BAS, BArch (Hons) MArch (Hons)

16 November 2021

Attachment A: Analysis of Building Coverage

Auckland Unitary Plan Standards in comparison to the
Proposed Medium Density Residential Standards in Schedule 3A of Amendment

Prepared by Motu Design.



Building Coverage Examples from Auckland Unitary Plan

Auckland Unitary Plan THAB Zone

(50% Building coverage permitted)

Three storey terraced units with garages and upper floor living



Existing Auckland Unitary Plan - Example from THAB Zone

Building Coverage : 48%

Impermeable: 78%

Landscape area: 22%



Recently built terraced apartments with balconies as primary outdoor space, with an outlook area greater than the 6x4 required in the zone. The site backs onto a town centre zone.



Landscaping area required as part of the consent, including specimen trees and hedges. newly planted in the image above. Additional impervious area mitigated by stormwater tanks.

Auckland Unitary Plan THAB Zone

(50% Building coverage permitted)

Three storey terraced units with garages and upper floor living



Existing Auckland Unitary Plan - Example from THAB Zone

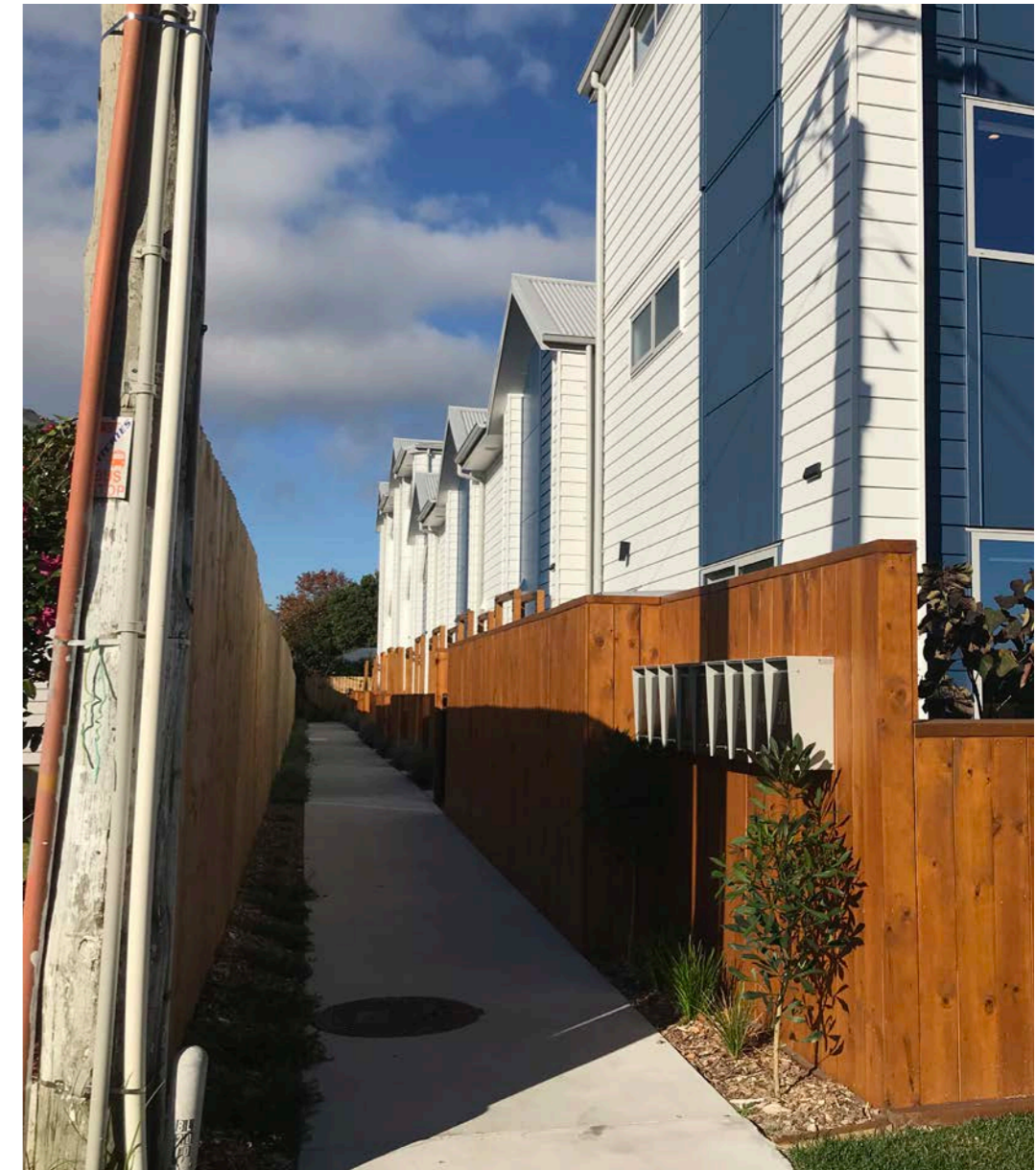
Building Coverage : 40%

Impermeable: 45%

Landscape area: 57%



Two front units have outlook over the streets. All units to the rear have 6x4 outlook from building face to side boundary, and complies with the THAB zone controls. Neighbouring site currently under construction with similar typology and site layout.



'Front' entry to units

Auckland Unitary Plan THAB Zone

(50% Building coverage permitted)

Three storey terraced units with garages and upper floor living



50% building coverage leaves little to no space for landscaping or specimen trees

Auckland Unitary Plan THAB Zone

(50% Building coverage permitted)

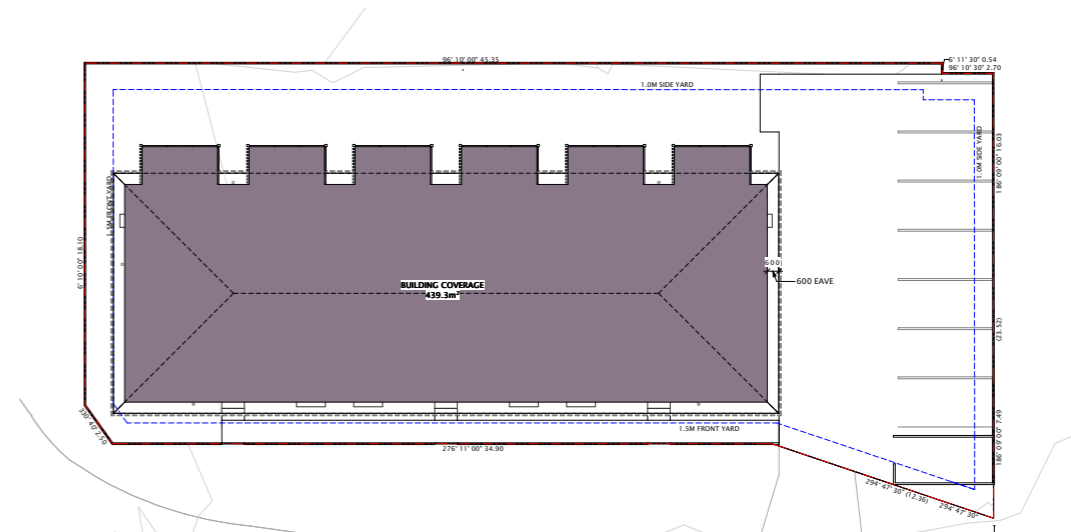


Living rooms set back 6m from the boundary to comply with 6x4m outlook space required by the zone. The reduction of outlook space to 3m proposed by MDRS will exacerbate overlooking, privacy and visual dominance concerns.

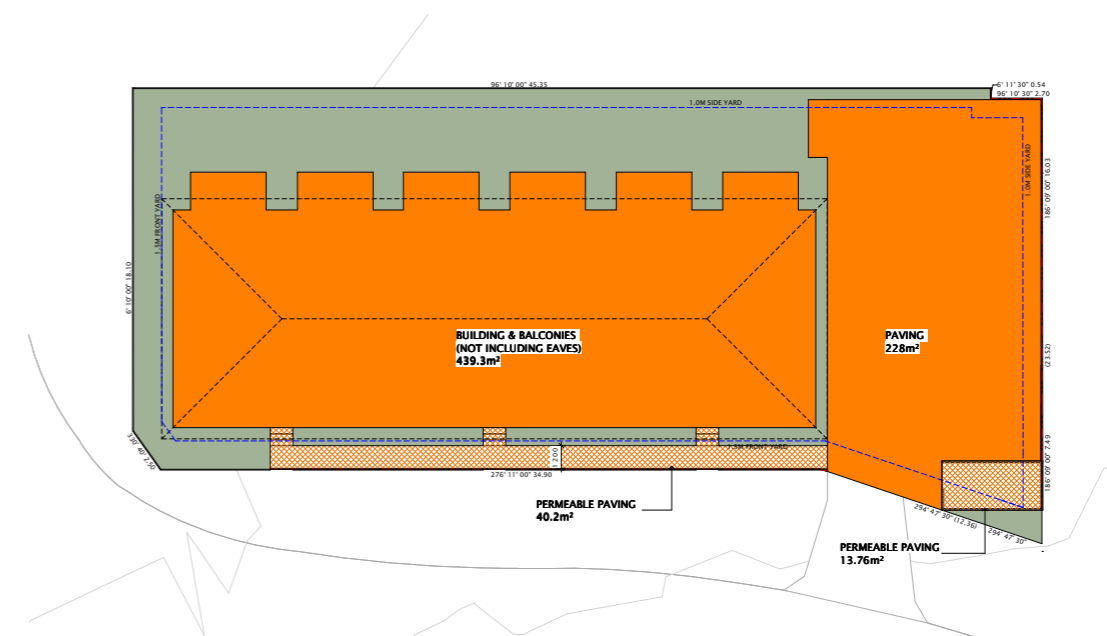
Auckland Unitary Plan THAB Zone

(50% Building coverage permitted)

Three storey apartment block with some car parking



Building Coverage : 44.5%
 Impermeable: 67.6%
 Landscape area: 30.9%



Auckland Unitary Plan MHU Zone

(45% Building coverage permitted)

2x terraced houses with carparking and 4x apartments without car parking



Building Coverage : 45%



Auckland Unitary Plan MHS Zone

(40% Building coverage permitted)

2-3 Level Terraced Houses a combination of garages and carparking on sloping site.

Upper end of Property Market



Building Coverage : 43 %

Impervious Area: 64 %

Landscape Area 36% (including pedestrian paths & decks)



Auckland Unitary Plan MHS Zone

(40% Building coverage permitted)



Building Coverage : 36 %
Impervious Area: 75 %
Landscape Area 28% (including pedestrian paths & decks)



Auckland Unitary Plan MHS Zone

(40% Building coverage permitted)



Building Coverage : 33 %
Impervious Area: 58 %
Landscape Area 35% (including pedestrian paths & decks)

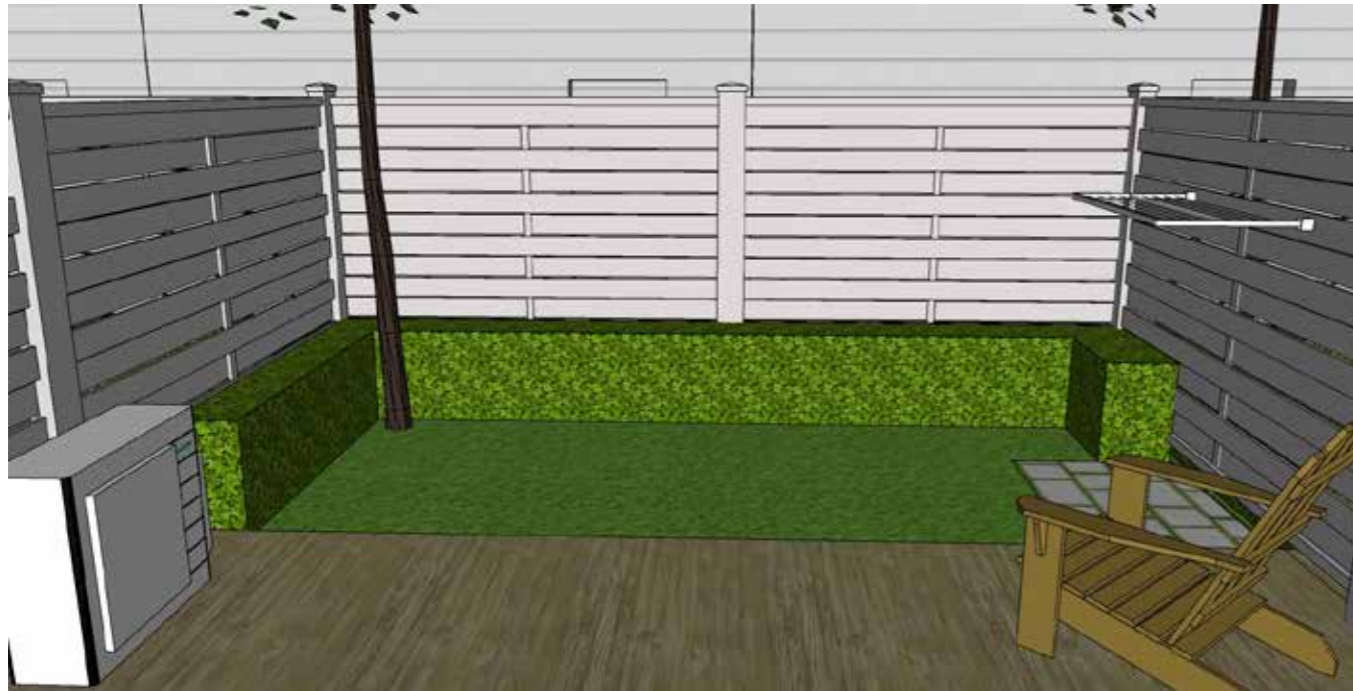


Attachment B: Comparison of MDRS vs Recommended Minimum standards

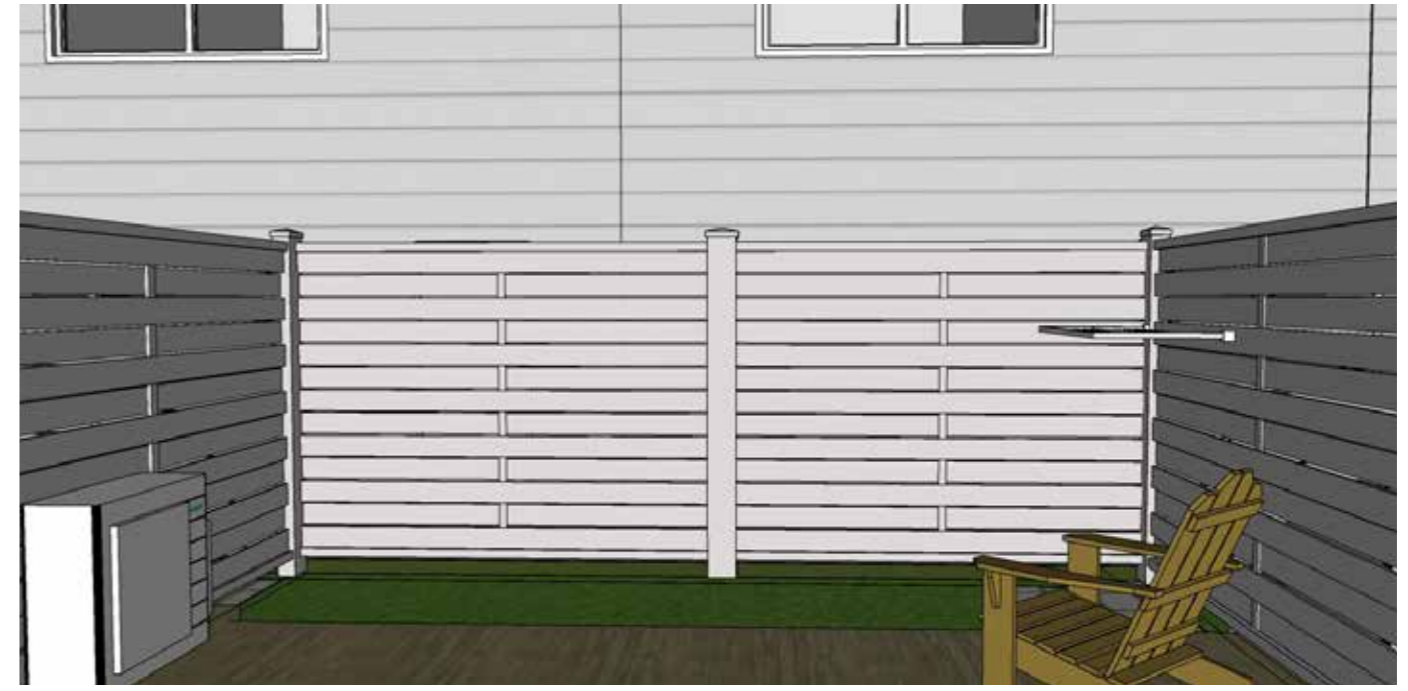
Prepared by Motu Design.



Outlook & Outdoor Space Comparisons



20m2 Outdoor Living Space: Existing Auckland Unitary Plan - minimum outdoor living area at ground floor

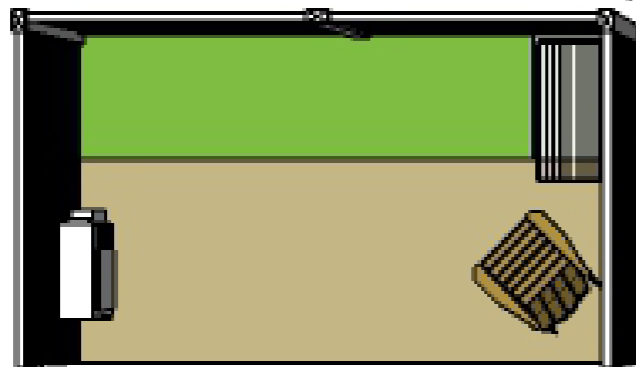
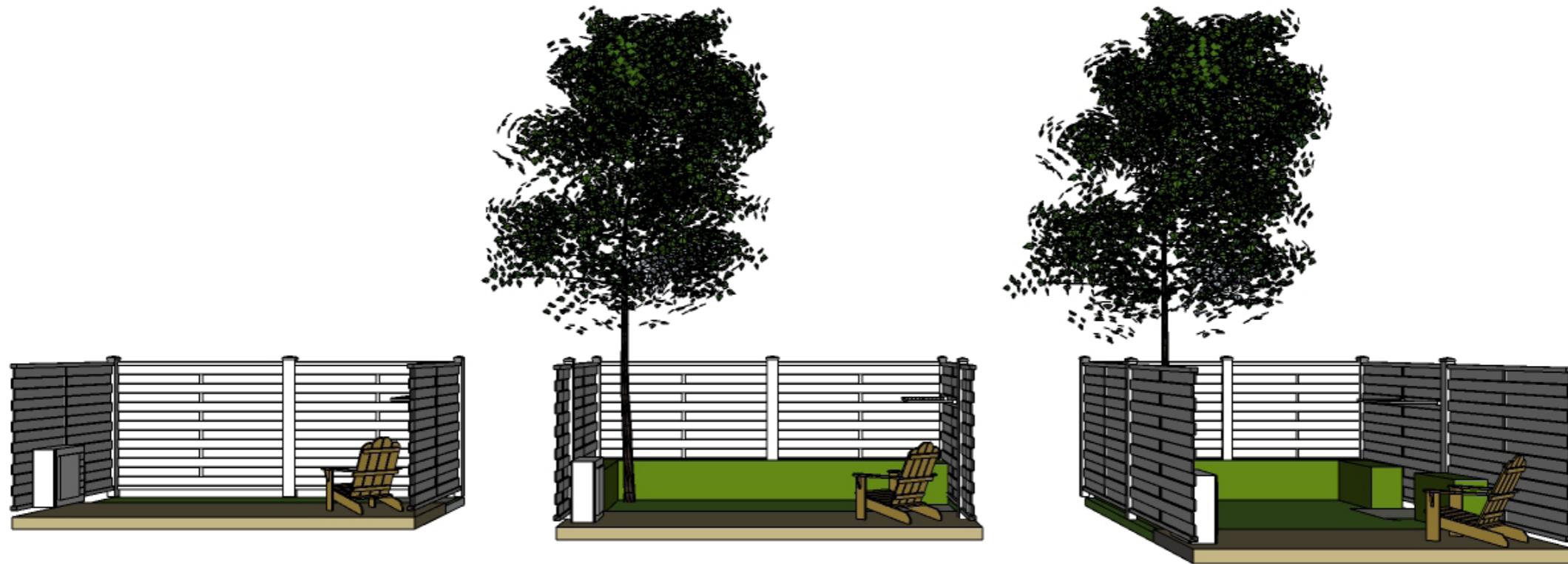


15m2 Outdoor Living Space: Government's Proposal - minimum outlook area of 3m deep from living room



24m2 Outdoor Living Space: Existing Auckland Unitary Plan - minimum outlook area of 6m deep from living room

Outdoor Space Comparison



5x3m: 15m²

Minimum proposed by MDRS



5x4m: 20m²

AUP minimum outdoor living space



6x4m: 24m²

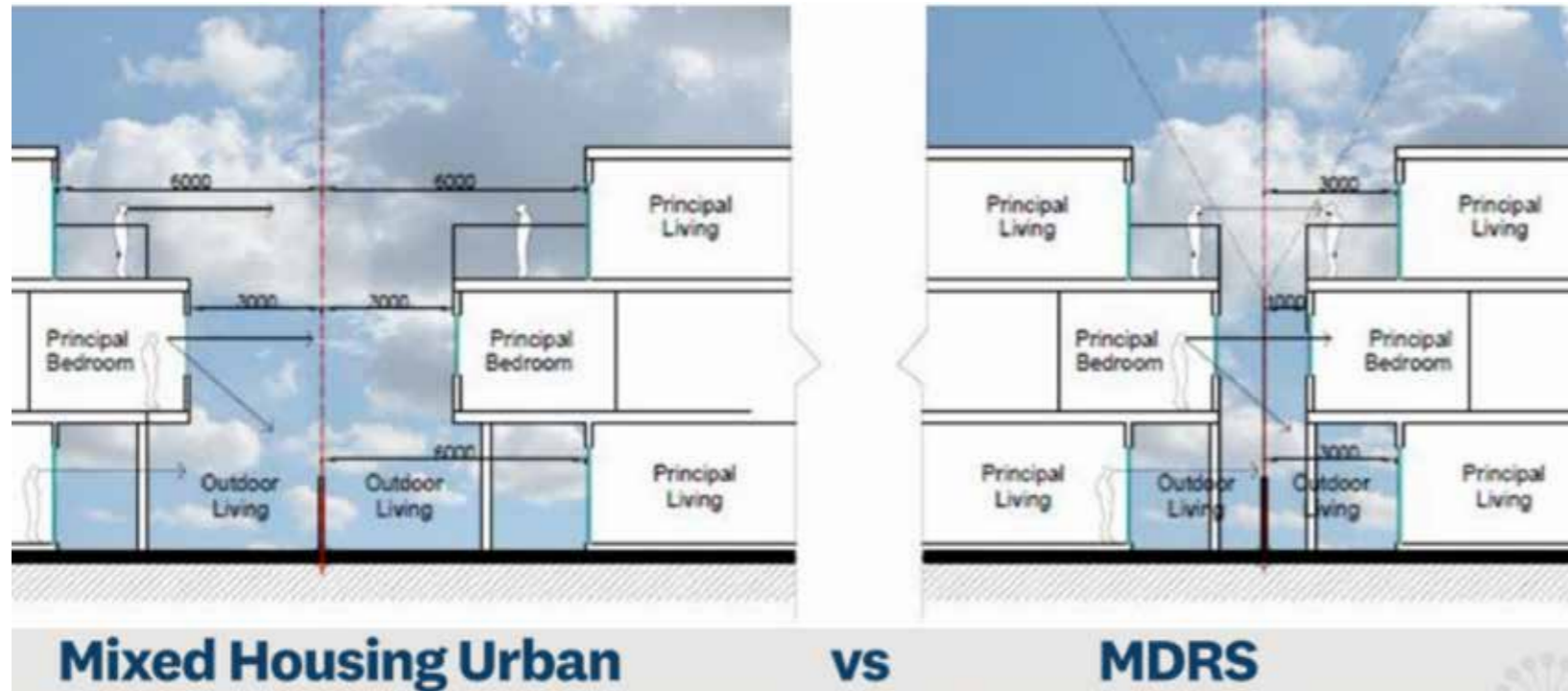
AUP minimum outlook space

Outlook - From Upper Floor Living Areas

COMPARISON IMAGES

Comparison of Building Separation and Outlook

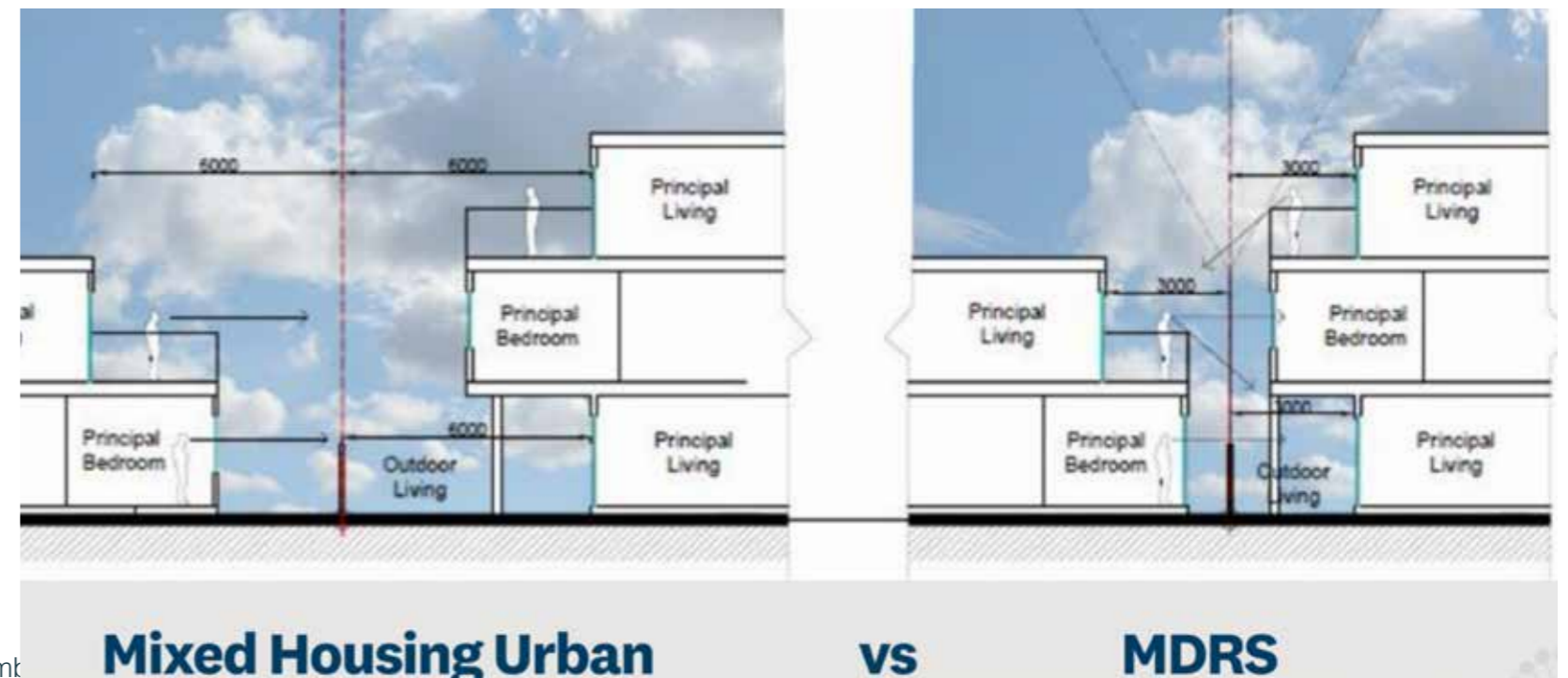
Scenario 1



The following drawings prepared by Auckland illustrate the potential for substantial amenity effects between neighbouring developments, including lack of privacy and lack of sunlight and daylight to residential units. In our opinion, these scenarios are likely.

Comparison of Building Separation and Outlook

Scenario 1



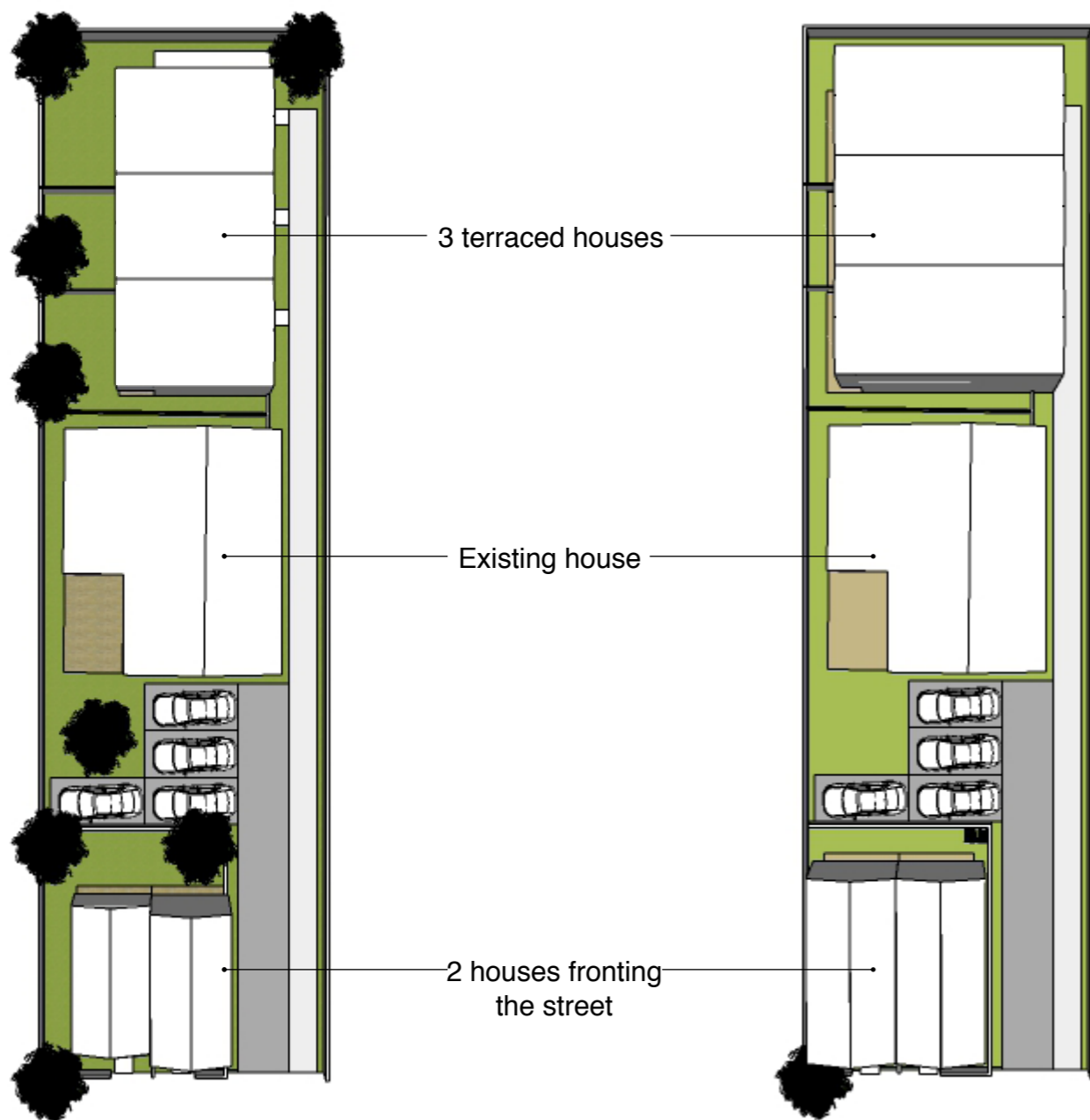
Built Form Example MDRS vs Recommended

Government's proposed Medium Density Residential Standards

- Maximum Height of 11m or three stories
- A HIRB control of 6m and 60 degrees
- Maximum building coverage of 50%
- Maximum impervious area of 60%
- A minimum ground floor outdoor space of 15m² (with no dimension less than 3m) and/or balconies of at least 8m² and 1.8m deep.
- Outlook of 3x3m from living area and 1m from other rooms
- Front yard of 2.5m, side and rear yards of 1m

Recommended Standards

- Maximum Height of 11m or three stories
- The MHU Alternative HIRB becomes the standard HIRB for the first 20m of the site.
- A HIRB control of 3m and 45 degrees for boundaries further than 20m from street frontage
- Maximum building coverage of 40%
- Maximum impervious area of 60%
- Landscape area of 25% excluding decks and patios
- A minimum ground floor outdoor space of 20m² (with no dimension less than 4m) and/or balconies of at least 8m² and 1.8m deep, and that must not be on south side of building.
- Outlook of 6x4m from living area, 3x3m from principal bedroom and 1m from other rooms
- Front yard of 2.5m deep, side and rear yards of 1m
- A daylight control
- Minimum unit size of 30m² for studios and 45m² for one bedroom and more.



RECOMMENDED MINIMUM STANDARDS

- 40% building coverage
- 6x4m outlook space
- 20m² private outdoor space

MDRS PROPOSAL

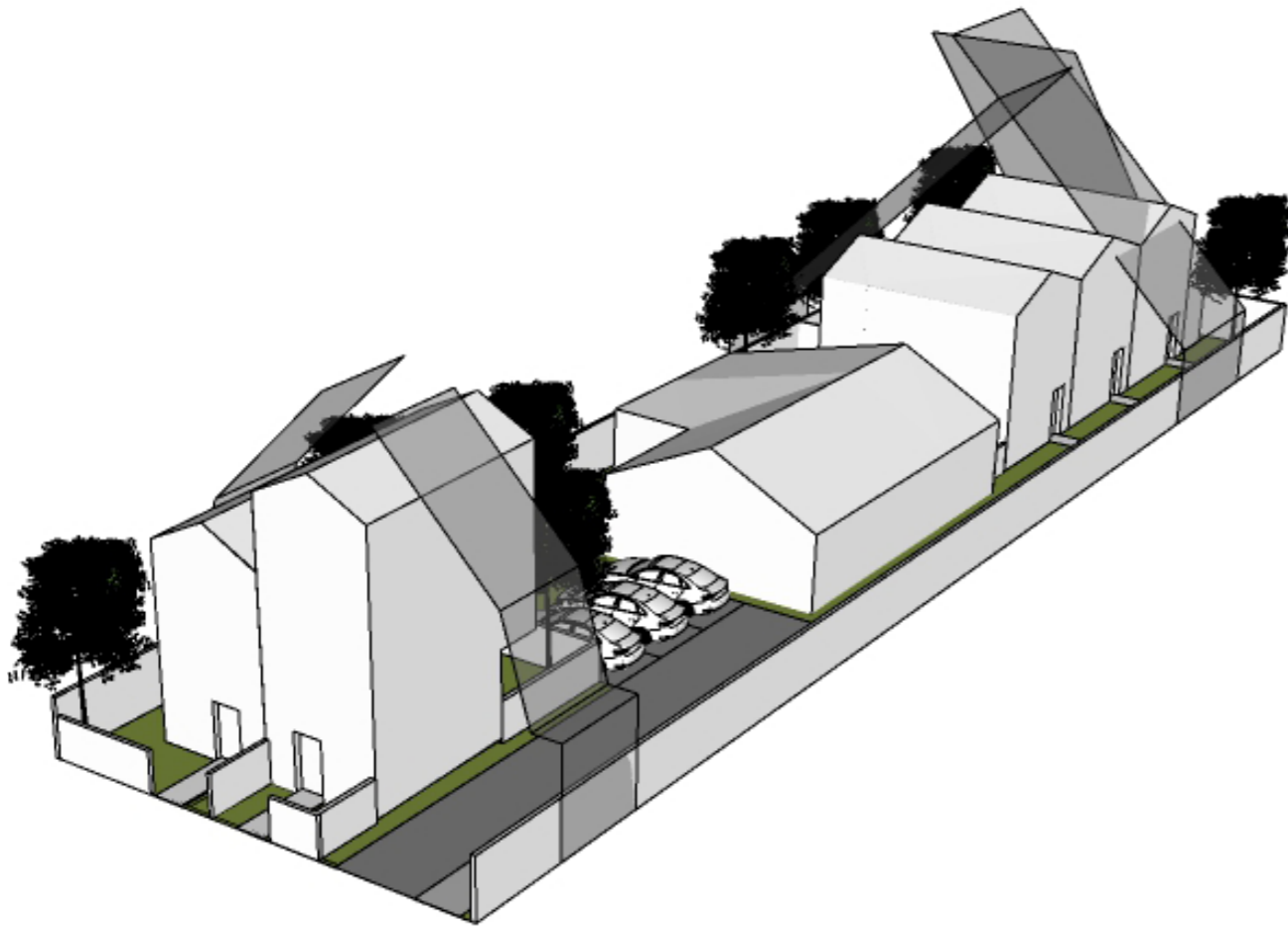
- 50% building coverage
- 3m deep outlook space
- 15m² private outdoor space

SIMILARITIES

1. Same number of houses provided in each scenario
2. 3 terraced homes at back of section
3. Existing house (that could be retained / redeveloped for car parking / more housing)
4. Duplex (2 houses) fronting the street

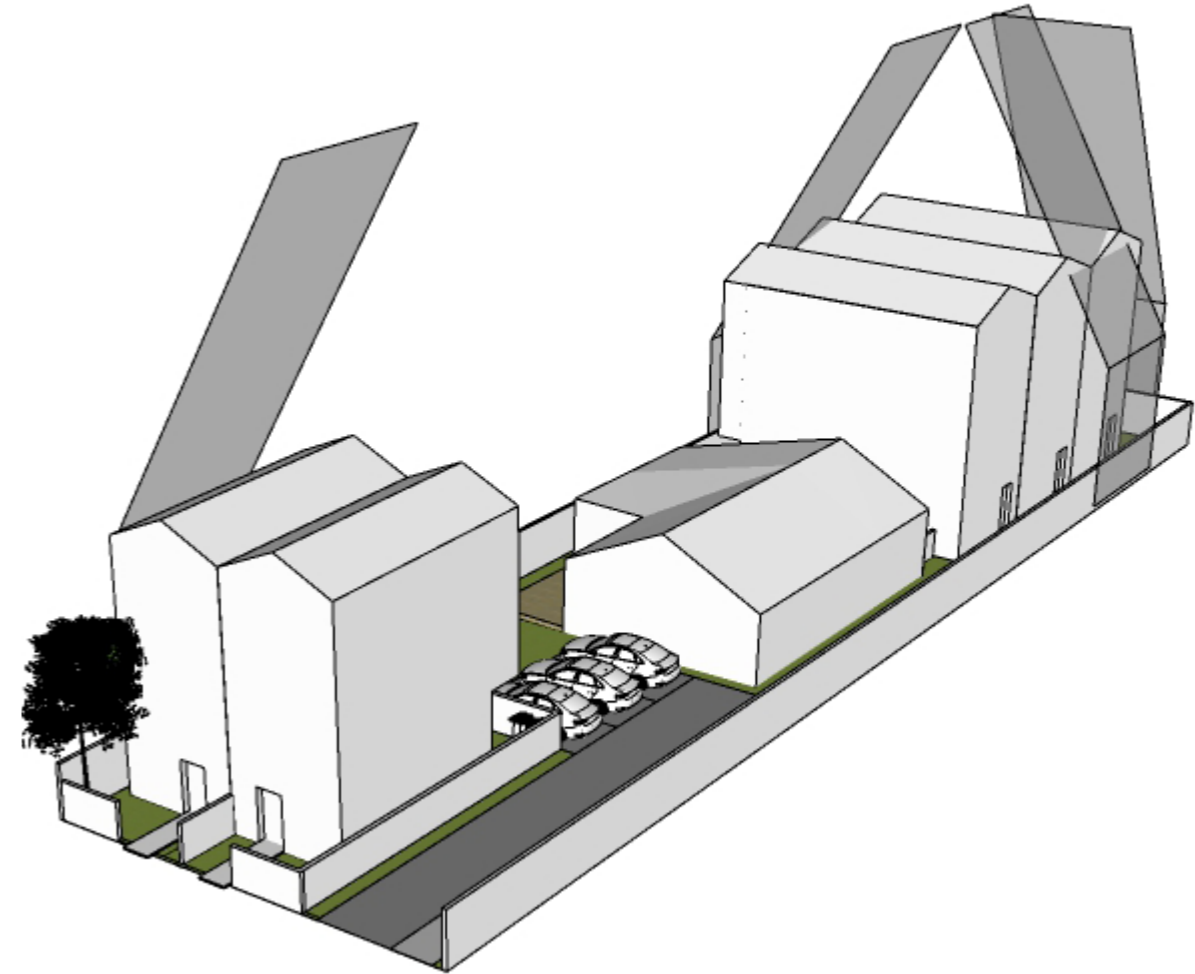
KEY DIFFERENCE

1. The MDRS encourages larger houses to meet the permitted 50% building coverage. The recommended standards encourage smaller, more affordable houses.
2. The recommended standards, encourage site amalgamation to get greater height, and more diversity in house types, whilst ensuring a good standard of livability.
3. The MDRS does not have a minimum requirement for landscaping or trees, or sufficient space to encourage it.



RECOMMENDED MINIMUM STANDARDS

- 40% building coverage
- AHIRB within 20m of site frontage
- HIRB 3m + 45% for the rear part of the site



MDRS PROPOSAL

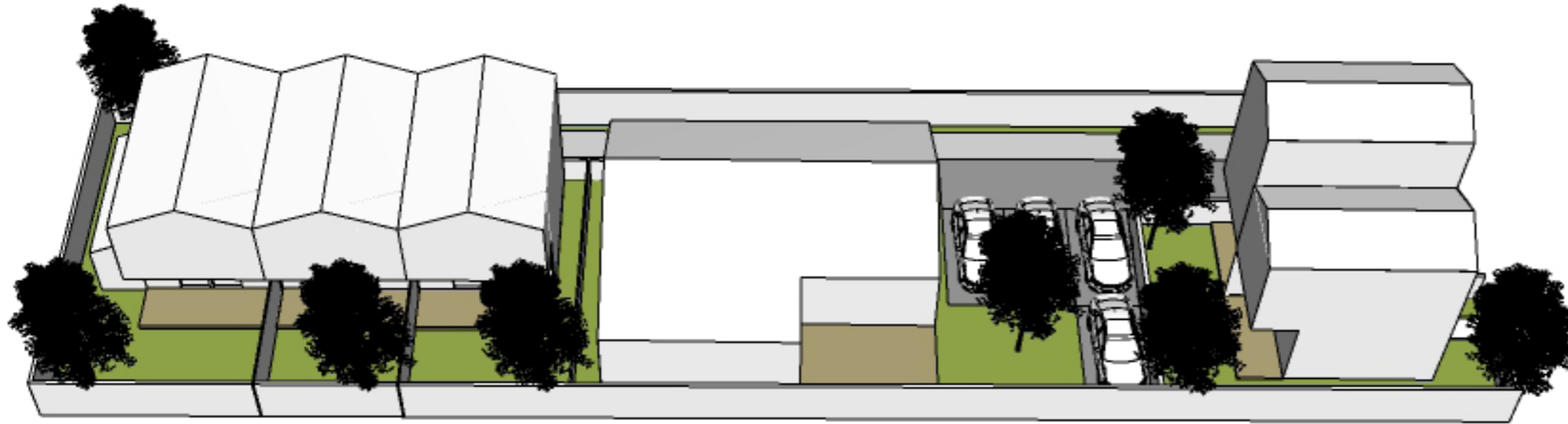
- 50% building coverage
- HIRB 6m + 60% applies for the whole site

SIMILARITIES

1. Same number of houses provided in each scenario
2. Same front yard of 2.5m
3. Same number of car parks
4. Three storey buildings along street frontage
5. Same maximum height of 11m

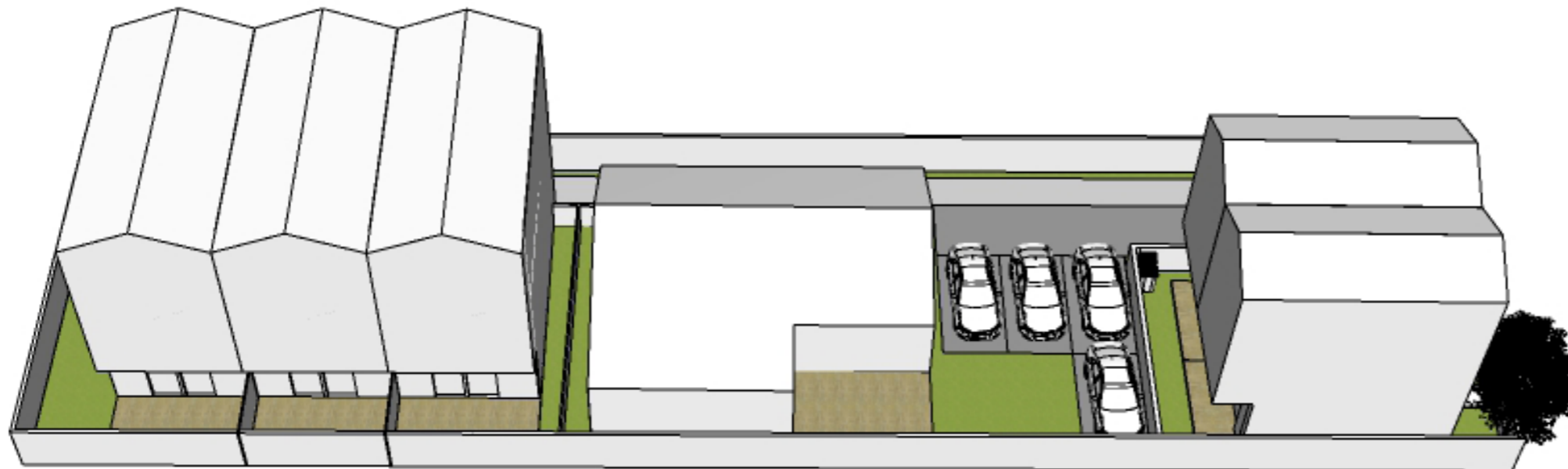
KEY DIFFERENCE

1. 3m+45% HIRB standard restricts height to the rear of the site to a two storey unit. This reduces visual dominance, privacy and shading effects to neighbours.
2. MDRS increase in building coverage encourages narrow pedestrian accessways to rear houses with limited space for bins and bikes.
3. MDRS increase in building coverage reduces landscape area and space for tree planting



RECOMMENDED MINIMUM STANDARDS

- 40% building coverage
- 6m deep outlook space
- 20m² private outdoor space



MDRS PROPOSAL

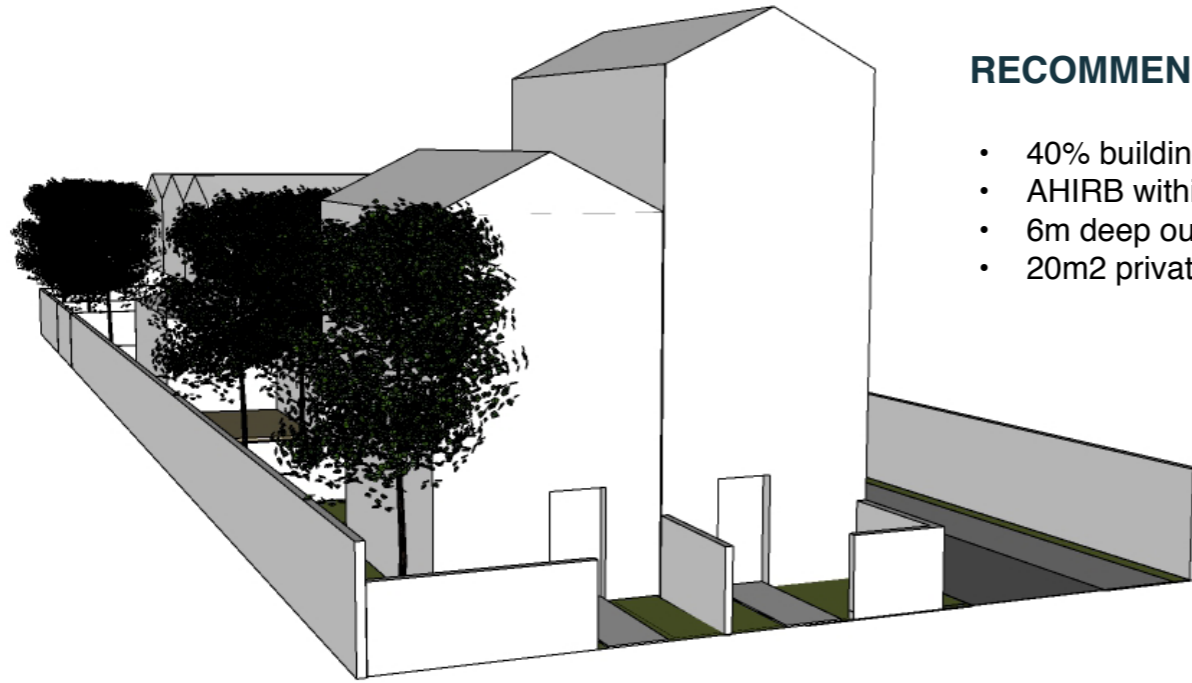
- 50% building coverage
- 3m deep outlook space
- 15m² private outdoor space

SIMILARITIES

1. Same number of houses provided in each scenario
2. Same number of car parking spaces

KEY DIFFERENCE

1. The MDRS allows 3 storey houses at the rear of the site, much closer to the boundary. This reduces the separation between buildings on neighbouring sites and will cause privacy and shading effects to neighbours.
2. The recommended minimum standards ensure a better level of amenity in terms of useable outdoor space, sunlight access, landscaping and tree planting, and privacy.



RECOMMENDED MINIMUM STANDARDS

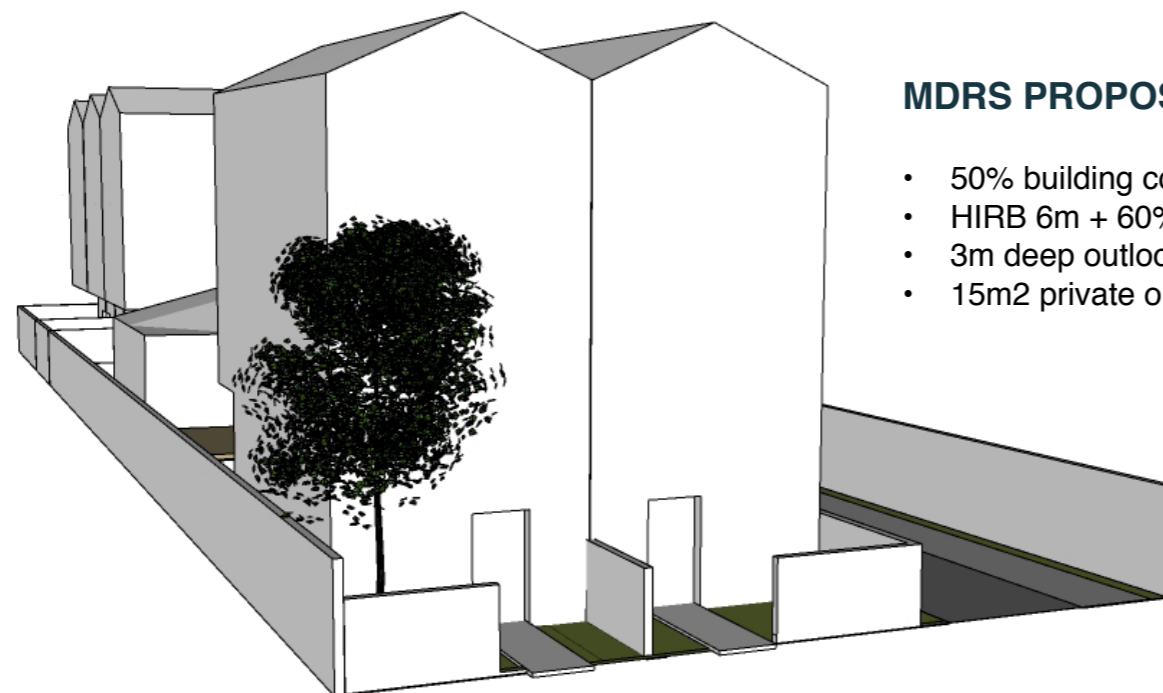
- 40% building coverage
- AHIRB within 20m of site frontage
- 6m deep outlook space
- 20m² private outdoor living space

SIMILARITIES

1. Same number of houses provided in each scenario
2. Same front yard of 2.5m
3. Same number of car parks
4. Three storey buildings along street frontage
5. Same maximum height of 11m

KEY DIFFERENCE

1. Recommended AHIRB within 20m of the street frontage ensures compatibility with 1-2 storey houses on adjoining sites and encourages site amalgamation to achieve the full benefit of the 11m height limit
2. Recommended minimum standards ensure buildings are set back from boundaries to allow space for tree planting and also assists with privacy between neighbours
3. Path to rear units is narrower under MDRS proposal due to increased building coverage



MDRS PROPOSAL

- 50% building coverage
- HIRB 6m + 60% applies across the whole site
- 3m deep outlook space
- 15m² private outdoor space



Attachment C: Comparison of Standards Table

Government's Proposed Medium Density Residential Standards (MDRS) vs Existing Auckland Unitary Plan - H5 Residential- Mixed Housing Urban Standards (MHU) and Recommended Alternative Medium Density Residential Standards

Prepared by Motu Design Ltd.

In support of Submissions on the Resource Management (Enabling Housing Supply and Other Matters) Amendment Bill

16 November 2021

This table has been prepared to assist with the assessment of the proposed MDRS and to compares it to the Mixed Housing Urban (MHU) Zone provisions of the Auckland Unitary Plan. The MHU zone was chosen as this referred to the in the Regulatory Impact Assessment undertaken as part of the justification of the proposed legislation and MDRS to be included in Schedule 3A of the RMA.

This table fills a gap in the analysis undertaken in MFE regulatory impact statement that discards keen aspects of the MHU as being too difficult to implement, without due consideration of key metrics that are important to ensuring quality of living environments, and sustainable neighbourhoods.

The recommended standards have been coded as follows

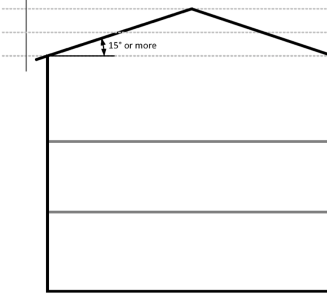
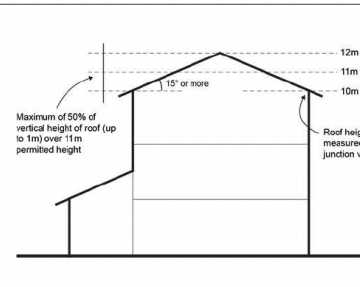
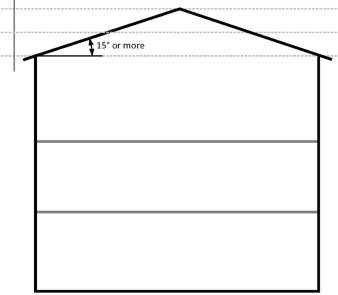
RED – Recommended Standards that are consistent with both the MHU zone and proposed MDRS

ORANGE – Recommended standards, or parts of standards, that are different to both the MHU and MDRS to ensure standards achieve a better balance between housing, liveability and environment, on the basis that Local Government have the discretion to be more permissive in specific areas, but not more restrictive.

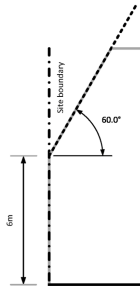
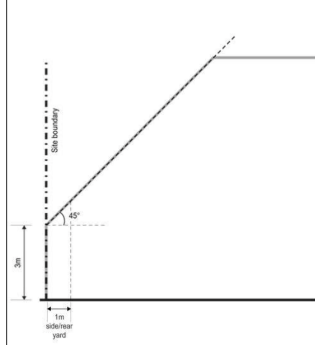
GREEN - Recommended standards, or parts of standards, that are consistent with the MHU zone.

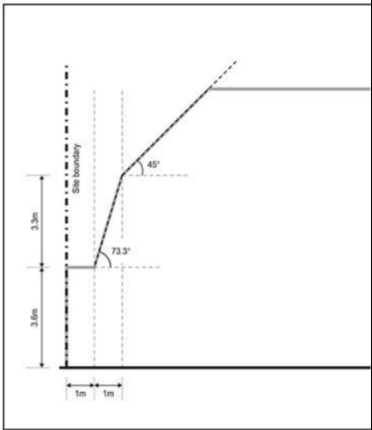
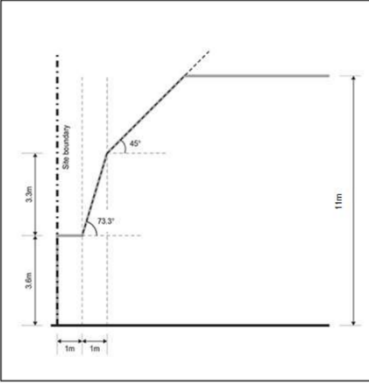
MDRS Medium Density Residential Standards	AUP-MHU Auckland Unitary Plan- Mixed Housing Urban	Recommended	Comments
Up to three dwellings are permitted as of right subject to compliance with the standards.	Up to three dwellings are permitted as of right subject to compliance with the standards.	Up to three dwellings are permitted as of right subject to compliance with the standards.	<i>This is supported because it will enable a wider range of small house opportunities in cities the Tier 1 cities. Including extended family living options, smaller houses on existing properties and more opportunities for smaller scale developers to contribute to the provision of housing. In Auckland, this is already possible in MHS and MHU zones that encompasses most of the city.</i>
<p>9 Building height</p> <p>Buildings must not exceed 11 metres in height, except that 50% of a building's roof in elevation, measured vertically from the junction between wall and roof, may exceed this height by 1 metre, where the entire roof slopes 15° or more</p>	<p>H5.6.4. Building height¹</p> <p>(1) Buildings must not exceed 11m in height, except that 50 per cent of a building's roof in elevation, measured vertically from the junction between wall and roof, may exceed this height by 1m, where the entire roof slopes 15 degrees or more, as shown in Figure H5.6.4.1 Building height in the Residential – Mixed Housing Urban Zone below.</p>	<p>Building height</p> <p>Buildings must not exceed 11 metres in height, except that 50% of a building's roof in elevation, measured vertically from the junction between wall and roof, may exceed this height by 1 metre, where the entire roof slopes 15° or more</p>	<p><i>This is consistent between MDRS and MHU and subject to other controls is a good way to enable a variety of homes and the efficient use of land. Including the provision for both apartments and larger family homes, and affordable two - three storey terraces.</i></p>

¹ Purpose:

	<p>Figure H5.6.4.1 Building height in the Residential – Mixed Housing Urban Zone</p> 		
<p>10 Height in relation to boundary</p> <p>(1) Buildings must not project beyond a 60° recession plane measured from a point 6 metres vertically above ground level along all boundaries, as shown on the following diagram. Where the boundary forms part of a legal right of way, entrance strip, access site, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of way, entrance</p>	<p>H5.6.5. Height in relation to boundary²</p> <p>(1) Buildings must not project beyond a 45 degree recession plane measured from a point 3m vertically above ground level along side and rear boundaries, as shown in Figure H5.6.5.1 Height in relation to boundary below.</p>	<p>Height in relation to boundary (excluding the first 20m from the street)</p> <p>(1) Buildings must not project beyond a 45 degree recession plane measured from a point 3m vertically above ground level along side and rear boundaries, as shown on the following diagram.</p> <p>Where the boundary forms part of a legal right of way, entrance strip, access site, or pedestrian access way, the height in relation to boundary applies from the farthest boundary of that legal right of</p>	<p><i>This is important to neighbours and residential development on the rear parts of the site, because it ensure sunlight into houses, and limits the effects of visual dominance and privacy within the centre of urban blocks.</i></p> <p><i>Without this the scale of shading and privacy effects, when applied to typical section sizes and shapes in most New Zealand cities, would be considered unacceptable in most professional assessments of effects.</i></p> <p><i>(refer 3d illustrations)</i></p>

² Purpose: to manage the height and bulk of buildings at boundaries to maintain a reasonable level of sunlight access and minimise adverse visual dominance effects to immediate neighbours.

<p>strip, access site, or pedestrian access way.</p> 	<p>Figure H5.6.5.1 Height in relation to boundary</p> 	<p>way, entrance strip, access site, or pedestrian access way</p>	
	<p>(2) Any buildings or parts of buildings within 20m of the site frontage must not exceed a height of 3.6m measured vertically above ground level at side and rear boundaries. Thereafter, buildings must be set back 1m and then 0.3m for every additional metre in height (73.3 degrees) up to 6.9m and then 1m for every additional metre in height (45 degrees) as shown in Figure H5.6.6.1 Alternative height in relation to boundary below.</p>	<p>Height in relation to boundary for the first 20m of a site measured from street frontage</p> <p>Any buildings or parts of buildings within 20m of the site frontage must not exceed a height of 3.6m measured vertically above ground level at side and rear boundaries. Thereafter, buildings must be set back 1m and then 0.3m for every additional metre in height (73.3 degrees) up to 6.9m and then 1m for every additional metre in height (45 degrees) as shown in Figure H5.6.6.1 Alternative height</p>	<p><i>It is recommended to adopt the AHIRB control in the MHU zone as development standard applying to the first 20m of a site, for a permitted activity. This will provide developers with certainty and encourage taller buildings at the street end of sites, which enables intensification and the creation of urban street frontages, with light and outlook achieved from overlooking the street, and not to side boundaries.</i></p> <p><i>This also results in less shading and privacy effects where development set back from street frontage and internal to the site where, as noted above a 3m + 45 deg HIRB is recommended.</i></p> <p><i>Consideration has been given to using the 6m and 60 deg angled HIRB proposed in the MDRS for the first 20m of the site. However, the environmental effects of this in varying suburban contexts have not being as fully assessed as the</i></p>

	<p>Figure H5.6.6.1 Alternative height in relation to boundary</p> 	<p>Figure H5.6.6.1 Alternative height in relation to boundary</p> 	<p><i>AHIRB in the MHU zone. And, it is noted that councils will have the opportunity to have more permissive not restrictive standards.</i></p>
<p>11 Setbacks</p> <p>(1) Buildings must be set back from the relevant boundary by the minimum depth listed in the yards table below:</p> <p>Yard Front 2.5 metres Side 1 metre Rear 1 metre (excluded on corner sites)</p>	<p>Table H5.6.8.1 Yards</p> <p>Yard Minimum Depth Front 2.5m Side 1m Rear 1m</p>	<p>Setbacks</p> <p>(1) Buildings must be set back from the relevant boundary by the minimum depth listed in the yards table below:</p> <p>Yard Front 4 metres Side 1 metre Rear 1 metre (excluded on corner sites)</p>	<p><i>It is recommended to keep the proposed side and rear yards as they are consistent with the MHU although there are benefits to deeper rear yards.</i></p> <p><i>However, 4m is recommended for front yards. This is to provide scope for councils to vary yard depth in response street type character and scale of any street trees. For example for houses fronting an arterial road a greater separation from high volumes of traffics ensure better transition to living areas and space for tree planting. Either on site, or for existing street trees to have more space for mature canopies. It is also possible for councils to be more permissive and in localised areas to allow for zero front yards.</i></p>

<p>13 Impervious area The maximum impervious area must not exceed 60% of the site area.</p>	<p>H5.6.9. Maximum impervious area (1) The maximum impervious area must not exceed 60 per cent of site area.</p>	<p>Maximum impervious area (1) The maximum impervious area must not exceed 60 per cent of site area.</p>	<p><i>It is recommended to keep the proposed permeable area as this is consistent with MDRS and MHU. It supports the provision of green spaces, however a landscape control is still recommended as per the comments below.</i></p>
<p>12 Building coverage The maximum building coverage must not exceed 50% of the net site area.</p>	<p>H5.6.10. Building coverage³ (1) The maximum building coverage must not exceed 45 per cent of the net site area.</p>	<p>Building coverage The maximum building coverage must not exceed 40% of the net site area.</p>	<p><i>It is recommended that the building coverage for permitted activities, be reduced to 40% to ensure a better balance between provision of more houses, climate change resiliency (including space for trees) and provision of outlook and outdoor living areas and services. 40% building coverage ensures adequate space for multiple units, with 20m2 open spaces and a 6m outlook. Plus site facilities such a space for bicycle parking (and the option of some car parking), rubbish bins, heat pumps and safe pedestrian access routes to rear sites. It also ensures space for landscaping and tree retention or planting. When combined with 60% impermeable coverage it ensures sufficient flexibility in materials and</i></p>

³ Purpose: to manage the extent of buildings on a site to achieve the planned urban character of buildings surrounded by open space.

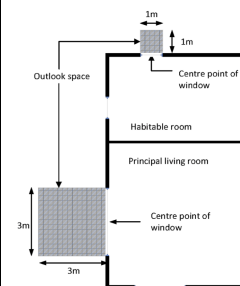
			<p>space for these, and for driveways and outdoor areas. Currently in Auckland, most developers use slatted decks and permeable pavers to build to 45% and 50% building coverage whilst still staying within permeable area. This then results in infringements in landscape area, insufficient for rubbish bins and bicycle parking etc, with or without carparking.</p> <p>40% building coverage and no limit on unit number, provides a significant increase in housing options relative to a Single House zone, but will provide an easier development scenario and thus 'less red tape' when it comes to designing new housing as it will ensure land is purchased with more realistic yields. Councils also have the ability to have more permissive controls, but Auckland THAB zone (that has 50% coverage) is not appropriate for large expanses of the city.</p>
	<p>H5.6.11. Landscaped area</p> <p>(1) The minimum landscaped area must be at least 35 per cent of the net site area.</p>	<p>Landscaped area</p> <p>(1) The minimum landscaped area must be at least 25 per cent of the net site area. This must be planted and excludes decks, patios, concrete paths, and artificial grass.</p>	<p>In Auckland, without a landscape area requirement(and in particular with a 50% building coverage) there is a high risk of sites being developed without any form of planting. This is due to the increasing popularity of permeable pavers to enable more area for car access and car parking without an increase in impervious surface, and artificial turf for outdoor spaces. This would have significant adverse effects on city health, ecology and climate change initiatives, including the provision of trees within the city. A minimum landscape areas is recommended as essential to ensure sustainable cities, provision of trees, the health and well-being of whanau and</p>

			<p>communities, to support eco-systems and carbon reduction initiatives.</p> <p>However, the definition of landscape area in the Auckland Unitary Plan can be confusing and includes uncovered decks and open jointed pavers provided that they make up only 25% of the total landscaped area (which is to be at least 35% of site area). Artificial turf is also allowed to be included as landscaping providing it is no more than 50% of a front yard area. These factors confuse and complicate the provision of landscaping and consenting.</p> <p>It is recommended to adopt the MHU landscape area provision, but modified to exclude hard surfaces and thus reducing the total amount required to 25%.</p>
<p>15 Outlook space (per unit)</p> <p>(1) An outlook space must be provided from habitable room windows as shown in the diagram below. Where the room has 2 or more windows, the outlook space must be provided from the largest area of glazing.</p> <p>(2) The minimum dimensions for a required</p>	<p>H5.6.12. Outlook space</p> <p>(2) The minimum dimensions for a required outlook space are as follows:</p> <p>(a) a principal living room of a dwelling or main living and dining area within a boarding house or supported residential care must have a outlook space with a minimum dimension of 6m in depth and 4m in width; and</p>	<p>H5.6.12. Outlook space</p> <p>(1) An outlook space must be provided from habitable room windows as shown in the diagram below. Where the room has 2 or more windows, the outlook space must be provided from the largest area of glazing.</p> <p>(2) The minimum dimensions for a required outlook space are as follows:</p>	<p>It is recommended that the AUP outlook spaces be adopted. These have been tested and shown to provide a minimal standard of living, in terms of light, sense of space and privacy, but have been effective at providing for a greater mix and density of development. Any reduction as a permitted activity is at high risk of resulting in substandard, poor quality development that will have adverse effects on mental health and well being of whanau and communities, as well as tensions between neighbours as result of reduced privacy.</p> <p>Consenting pathways already exist for the assessment of proposed housing that cannot or does not meet the minimum outlook provisions. These are currently assessed on the basis</p>

outlook space are as follows:

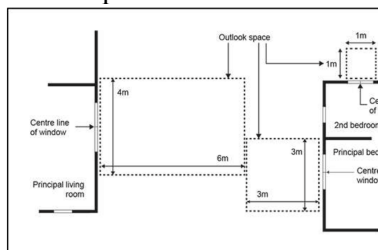
(a) a principal living room must have an outlook space with a minimum dimension of 3 metres in depth and 3 metres in width; and

(b) all other habitable rooms must have an outlook space with a minimum dimension of 1 metre in depth and 1 metre in width.



(b) a principal bedroom of a dwelling or a bedroom within a boarding house or supported residential care unit must have an outlook space with a minimum dimension of 3m in depth and 3m in width; and

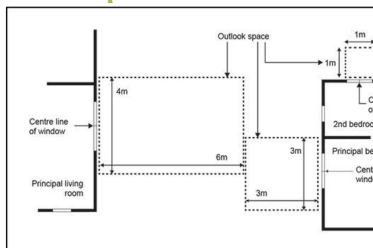
(c) all other habitable rooms must have an outlook space with a minimum dimension of 1m in depth and 1m in width.



(a) a principal living room of a dwelling or main living and dining area within a boarding house or supported residential care unit must have an outlook space with a minimum dimension of **6m in depth and 4m in width; and**

(b) a principal bedroom of a dwelling or a bedroom within a boarding house or supported residential care unit must have an outlook space with a minimum dimension of **3m in depth and 3m in width; and**

(c) all other habitable rooms must have an outlook space with a minimum dimension of **1m in depth and 1m in width.**



of privacy effects and quality of outlook, including context, and mitigating features such as whether or not a unit has a second window and outlook space, and boundary conditions, including impact of retaining walls.

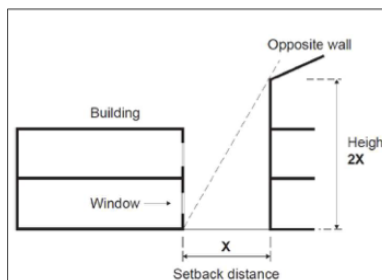
The existing outlook provisions in the AUP were also designed to enable feasibility of 3 storey development and centralised laneways with vehicle access, manoeuvring for garages, and a small amount of space for landscaping⁴ or at least a tree or two to improve quality of view and pedestrian route to front doors. A reduction in outlook from 6m to 3m will result in just a 6m space between units and upper floor living areas, with no way to manage privacy and quality of outlook due to the constrained space. With buildings allowed to be so close to each other there will also be a substantial reduction in the amount of sunlight that houses will get. This will all also have substantial effects on well-being, thermal performance and enjoyment of homes.

⁴ Evidence presented by Graeme McIndoe in the Auckland Unitary Plan Hearings

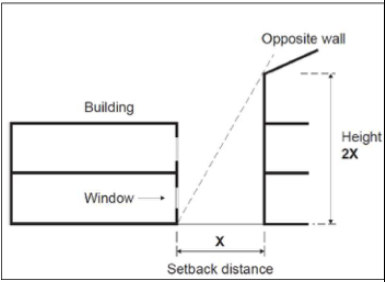
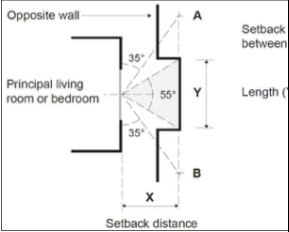
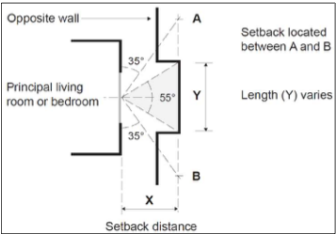
	<p>H5.6.13. Daylight⁵</p> <p>(1) Where the proposed building and/or opposite building contains principal living room or bedroom windows in a dwelling, or main living/dining area or bedroom windows in supported residential care and boarding houses, then:</p> <p>(a) that part of a building higher than 3m opposite buildings within the same site is limited in height to twice the horizontal distance between the two buildings for a length defined by a 55 degree arc from the centre of the window. The arc may be swung to within 35 degrees of the plane of the wall containing the window as shown in Figure H5.6.13.2 Required setbacks for daylight below.</p>	<p>Daylight</p> <p>(1) A daylight control applies to proposed buildings and/or opposite buildings, in relation to windows to the principal living room and principal bedroom of a dwelling. As shown in the diagram below:</p> <p>(a) that part of a building higher than 3m opposite buildings within the same site is limited in height to twice the horizontal distance between the two buildings for a length defined by a 55 degree arc from the centre of the window. The arc may be swung to within 35 degrees of the plane of the wall containing the window.</p> <p>(2) Where the room has two or more external faces with windows, Standard H5.6.13(1)</p>	<p><i>This development standard is minimal standard, and is usually able to be easily met through the application of the outlook controls when building coverage is limited to 40%. However, on occasion due to unusual site shapes and site layout constraints, or poor design skills, then sufficient provision for daylight can be overlooked. This daylight standard also assists in increasing the likelihood of sunlight into rooms which due to seasonal variations is harder assess for permitted activities. Sunlight and daylights support the overall quality and liveability of homes and quality of life.</i></p> <p><i>Including a daylight control is recommended as it adds minimal complexity to the provisions, but ensures a reasonable standard of daylight and sunlight is provided for all homes. It will also reduce ‘red tape’ associated with meeting the building code, and any environmental performance standards through ensuring a minimal amount of daylight to assist with energy efficiencies.</i></p>

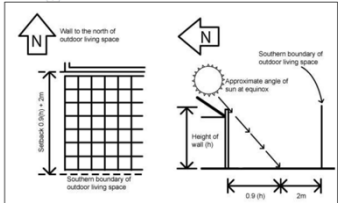
⁵ Purpose: to ensure adequate daylight for living areas and bedrooms in dwellings, supported residential care and boarding houses; and in combination with the outlook standard, manage visual dominance effects within a site by ensuring that habitable rooms have an outlook and sense of space.

	<p>Refer to Table H5.6.13.1 Maximum height of the part of a building within a site facing a principal living room or bedroom window within the same site;⁶ Figure H5.6.13.1 Required setbacks for daylight and Figure H5.6.13.2 Required setbacks for daylight below.</p> <p>(2) Where the principal living room, main living/dining area or bedroom has two or more external faces with windows, Standard H5.6.13(1) above will apply to the largest window.</p> <p>(3) Where the window is above ground level, the height restriction is calculated from the floor level of the room containing the window.</p> <p>(4) Standard H5.6.13(1), (2) and (3) does not apply to development opposite the first 5m of a building which faces the street, measured from the front corner of the building.</p>	<p>above will apply to the largest window.</p> <p>(3) Where the window is above ground level, the height restriction is calculated from the floor level of the room containing the window.</p> <p>(4) Standard H5.6.13(1), (2) and (3) does not apply to development opposite the first 5m of a building which faces the street, measured from the front corner of the building.</p>	
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⁶ Not included here – refer AUP

	 		
<p>14 Outdoor living space (per unit)</p> <p>A residential unit at ground floor level must have an outdoor living space that is at least 15 square metres and that comprises ground floor or balcony or roof terrace space that,—</p> <p>(a) where located at ground level, has no dimension less than 3</p>	<p>H5.6.14. Outdoor living space⁷</p> <p>(1) A dwelling, supported residential care or boarding house at ground floor level, must have an outdoor living space that is at least 20m² that comprises ground floor and/or balcony/roof terrace space that:</p> <p>(b) where provided in the form of balcony, patio or roof terrace is at least 5m² and has</p>	<p>Outdoor living space (per unit)</p> <p>A residential unit at ground floor level must have an outdoor living space that is at least 20 square metres and that comprises ground floor or balcony or roof terrace space that -</p> <p>(a) where located at ground level, has no dimension less than 4 metres; and</p>	<p><i>It is recommended to require a minimum of 20m² of private outdoor space, per residential units, and to strengthen definitions in planning frameworks that this is to exclude storage and water tank etc,</i></p> <p><i>Orientation is important and the standards need to ensure south facing private outdoor space is avoided. Providing there is flexibility for ground floor and balconies, this is not an unreasonable requirement.</i></p> <p><i>Consideration has been given to having a control based on hours of sunlight received in winter. However, this harder to</i></p>

<p>metres; and</p> <p>(b) where provided in the form of a balcony, patio, or roof terrace, is at least 8 square metres and has a minimum dimension of 1.8 metres; and</p> <p>(c) is accessible from the residential unit; and</p> <p>(d) is free of buildings, parking spaces, and servicing and manoeuvring areas.</p>	<p>a minimum dimension of 1.8m;</p> <p>(3) Where outdoor living space required by Standard H5.6.14(1) or Standard H5.6.14(2) above is provided at ground level, and is located south of any building located on the same site, the southern boundary of that space must be separated from any wall or building by at least $2m + 0.9(h)$, where (h) is the height of the wall or building as shown in the Figure H5.6.14.1</p> <p>Location of outdoor living space below.</p> <p>Figure H5.6.14.1 Location of outdoor living space</p>  <p>For the purpose of this standard south is defined as between 135 and 225 degrees.</p>	<p>(b) where provided in the form of a balcony, patio, or roof terrace, is at least 8 square metres and has a minimum dimension of 1.8 metres; and</p> <p>(c) is accessible from the residential living or dining areas; and</p> <p>(d) is free of buildings, parking spaces, servicing and manoeuvring areas, rubbish bins, storage sheds and other types of site and service infrastructure.</p> <p>(e) Is not located to the South of a proposed residential unit.</p> <p>For the purpose of this standard south is defined as between 135 and 225 degrees.</p>	<p>assess for a permitted standard. Thus simple orientation control recommended, that combined with the recommended outlook, HIRB and building coverage controls, should suffice to support the ability of most units to receive some sublight.</p>
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	H5.6.15. Front, side and rear fences and walls	Not proposed	Not carried over as is a matter that whilst important in terms support safe streets, and residential amenity, it can be addressed through other processes.
	H5.6.16. Minimum dwelling size (1) Dwellings must have a minimum net internal floor area as follows: (a) 30m ² for studio dwellings. (b) 45m ² for one or more bedroom dwellings.	Minimum dwelling size (1) Dwellings must have a minimum net internal floor area as follows: (a) 30m ² for studio dwellings. (b) 45m ² for one or more bedroom dwellings.	It is recommended to include this standard. For most types of housing it is not an issue, and most affordable terraced houses in Auckland are able to meet these controls, even if not well designed or in accordance with best practice size. However, when apartments are proposed, the minimum dwelling size standard becomes critically important to ensuring a basic level of liveability for studio apartments in particular.