BEFORE THE HEARINGS PANEL
PALMERSTON NORTH CITY COUNCIL

UNDER the Resource Management Act 1991

IN THE MATTER of the Palmerston North District Plan

Plan Change I: Increasing Housing Supply and Choice

STATEMENT OF EVIDENCE OF KAAREN ROSSER (PLANNING) ON BEHALF OF ENVIRO NZ SERVICES LTD – SUBMITTER (S203)

8 AUGUST 2025

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1. Executive Summary

1.1 By way of summary, it is my opinion that the changes sought to the provisions of the new Medium Density Residential Zone as detailed in the evidence below are appropriate and should be adopted by the Hearings Panel.

1.2 I accept the rejection of the submission point SO203.2 as being out of scope, however request that this matter is noted for any subsequent revision of the Residential zone provisions. Enviro NZ therefore do not consider it necessary to attend the 18 August hearing to speak to this submission point.

1.3 I support the acceptance of Submission Point SO203.1 which seeks an amendment to include "rubbish and recycling storage and collection areas" in the list of information required to be submitted with an application for resource consent.

1.4 Under the Medium Density Residential Zone provisions, I support the acceptance of Submission Point SO203.3.

1.5 I accept the rejection of the submission point SO203.4. The recommended amendment to MRZ-O2(g) in response to the submission point from Enviro NZ and MoE, is to clarify the intent of the clause to refer to development infrastructure only, where (g) states "*integrates with existing and planned development infrastructure*". The reporting planner also proposes to include the definition of development infrastructure, with the same wording as in the NPSUD. In consideration of the recommended amendments to MRZ-P3, I am satisfied that waste infrastructure will be considered for any built development within the zone.

1.6 For Policy MRZ-P3, Enviro NZ sought an amendment to add a sub-point regarding the provision of waste storage and waste collection (SO203.5). I do not agree with the s42A report that the PNCC drafting is entirely fit for purpose, and consider that the word "*adequate"* does not convey sufficient direction for the decision makers of an application to make an informed decision on the size, location and accessibility of waste storage areas. I consider that the word "sufficient" refers to the size of the space better than the word adequate. The sub-point should also refer to the collection of waste where the main element is the accessibility by users and collection vehicles. I would therefore prefer a hybrid drafting of the sub-point as follows:

Site layouts provide sufficient, screened ~~adequate~~ rubbish and recycling ~~collection and~~ storage facilities with accessible and safe collection;

1.7 I accept the rejection of submission point SO203.6 referring to an amendment of MRZ-P4(1) to include a reference to safe kerbside waste collection. Provided the issue of proliferation of individual bins on the road frontage is addressed with the addition of a sub-point within S19 as outlined at paragraph 7.25, any non-compliances with this sub-point of the standard can then be assessed under the "safety effects on the land transport network and pedestrians" matter of discretion.

1.8 For MRZ-R9 - Addition or alteration of buildings and structures (excluding accessory buildings), I do not agree with the recommended amendments to this rule to remove compliance with a number of standards including S19 On-site Rubbish and Recycling Storage and Collection. In my view, the rationale that the rule should focus on matters most likely to result in a neighbour's amenity, also includes waste storage. Larger additions could easily impact the location of waste storage and therefore compliance with this standard should remain.

1.9 I support the submission point SO203.7 to require compliance with MRZ-Standard 19 for accessory buildings under Rule MRZ-R11. I do not agree with the assessment in the S42A report that the potential monitoring and compliance burden associated with applying the standard as sought is disproportionate to the potential level of effect. As intensified sites are very tight in layout, all the urban design elements needing careful planning to ensure that good design and functionality results. Even a shed may impact the location of all these elements.

1.10 Enviro NZ sought to require that visitor accommodation comply with relevant parts of the S19-On-site rubbish and recycling storage and collection standard (SO203.8). I consider that sub-points (2) and (3) should apply to ensure that these minimum screening and accessibility standards for storage areas apply to any visitor accommodation proposed.

1.11 For MRZ – S19 On-site Rubbish and Recycling Storage and Collection, Enviro NZ sought some amendments to this standard to be fit for purpose both now and in the future (SO203.9). I consider the re-drafted recommended text for the standard is generally acceptable but consider some further inclusions of text from the submission are required to screen waste storage areas from adjoining sites and prevent encroachment into outdoor living areas, along with having a bin kerbside width criteria for each residential unit.

1.12 The amended recommended text for the standard is as follows:

1. *Each residential unit must have access to a ~~screened~~ rubbish and recycling storage area (which may be individual or communal) with a minimum area of 1.5m^2 and a minimum dimension of 1m in any direction ~~which is sized to accommodate one 240l wheelie bin and one recycling crate~~.*
2. *~~Communal r~~Rubbish and recycling storage areas must be screened or located so as not to be visible from a public road, shared accessway or communal area and/or adjacent sites, and must not be located in outdoor living spaces.*
3. *Where on-site rubbish and recycling collection is used:*
   a. the storage area must be accessible for the collection vehicle to service the rubbish storage area and
   b. where the site fronts an Arterial or Collector Road, on-site turning for trucks is required.
4. ~~*Where there are more than 20 residential units on one site, and the site fronts an Arterial or Collector Road, on-site turning for trucks is required.*~~

4. *Where kerbside collection is employed, a kerbside space of 1m per residential unit is available without impeding the public footpath*.

1.13 I accept the rejection of submission point SO203.10 relating to SUB-MRZ-P1. On balance, by including a standard to limit bin numbers accessing the kerb, I accept the rejection of the amendment given the likely limited number of new streets enabled by the subdivision rules.

2. Introduction

2.1 My full name is Kaaren Adriana Rosser.

2.2 I am an Environmental Planner with Enviro NZ Services Limited (Enviro NZ). My qualifications and experience are detailed at **Appendix 1**.

2.3 My evidence is given on behalf of Enviro NZ in relation to those matters to be heard under Plan Change I of the Palmerston North District Plan. Within my evidence I have addressed the matters relating to the provision of waste collection, treatment and disposal relevant to the residential intensification provisions proposed in the Plan Change.

2.4 I have reviewed the Section 42A Technical Report Planning ("S42A") completed for the Council by Sarah Jenkin, and the relevant S42A Hearing Reports for other specialist disciplines. I have reviewed the S32 Report for the Plan Change, and the Summary of Submissions document where relevant.

2.5 I am generally familiar with the Palmerston North area.

Code of Conduct

2.6 While this matter is being heard at Council level, I have read the Code of Conduct for Expert Witnesses, contained in the Environment Court Consolidated Practice Note (2023) and I agree to comply with it (as if I was presenting to the Environment Court). I can confirm that the issues addressed in this statement are within my area of expertise and that in preparing my evidence, I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

3. Scope of Evidence

3.1 This statement of evidence will, in the context of Enviro NZ's submission, address the following matters:

(a) The background and reasons for the submission;
(b) Comment on the Hearing Reports in terms of the waste management for the Medium Density Residential Zone, Subdivision and consequential changes to the District Plan.

4. Background and Reasons for Submission

4.1 In general, the submitter is generally supportive of the introduction of a Medium Density Residential zone and its spatial extent but specifically seeks some inclusion of matters pertaining to waste infrastructure within the new residential chapter.

4.2 Compared with other countries, our reuse and recycling rates are poor. For the year of 2021, each New Zealander is estimated to have sent nearly 700 kilograms of waste to municipal landfills. The Government has been working towards a circular economy and addressing waste produced is a key component of that work. Enviro NZ considers that District Plans have a key part to play in making sure that consenting processes take account of the need for waste management infrastructure and services.

4.3 To enable a circular economy, waste must be separated, collected and sorted and/or processed for re-use of the constituent materials. As waste management specialists and collectors of waste generated on sites, operators of transfer stations, recycling facilities and landfills, Enviro NZ considers that having appropriate standards for the separation of waste and the collection of waste is necessary to achieve a circular economy. It also helps to achieve climate change directives.

4.4 The Emissions Reduction Plan (Dec 2024) is a requirement of the Climate Change Response Act 2002. As waste plays a significant role in climate change (being approximately 5% of emissions), this document is relevant to any intensification planning provisions. The Emissions Reduction Plan has a particular focus on reducing organic waste disposal. The collection of food waste and garden waste as proposed in the Palmerston North Waste Management and Minimisation Plan 2024 will help to reduce organic waste disposal but only if the size and design of the waste management spaces on sites being developed in the Medium Density Residential Zone is fit for the current, but more importantly, the future kerbside waste collections.

4.5 Against this context, I consider the provision of an effective and efficient waste management system is a vital component to any town or district, which also ensures the safe and effective delivery of a quality built and a well-functioning urban environment as directed by the National Policy Statement on Urban Development.

4.6 As stated in the submission, to ensure a quality-built environment at greater densities, providing for waste (rubbish) storage and collection needs to be carefully planned to ensure that waste is able to be managed and minimised easily and effectively, with accessible and safe collection. Monitoring in Auckland for multi-unit developments has shown that the spatial and operational requirements for waste management need to be designed at the start of the design process. In not having a clear standard defining minimum standards for waste storage and collection there was a disparity in the commitment to waste management in processing the resource consents, and therefore often a lack of implementation of locating suitable facilities on site. Therefore, ensuring that this Medium Density Residential zone appropriately provides for waste facilities allows that waste can be separated on site, stored in a healthy manner that is visually appropriate, and provides for safe collection of waste materials.

5.0 Out of Scope Submission Point

5.1 Submission point SO203.2 of the Enviro NZ submission requested Rule R10.6.3.3 for the Residential Zone be amended to update the waste management assessment criteria. This was to strengthen the Rule to include waste space and accessibility considerations.

5.2 Enviro NZ accepts the rejection of the submission point as being out of scope, however request that this matter is noted for any subsequent revision of the Residential zone provisions.

6.0 Consequential Amendments

6.1 I support the acceptance of Submission Point SO203.1 which seeks an amendment to the list of information required to be submitted with an application for resource consent. The recommended text to include '*rubbish and recycling storage and collection areas*' will be appropriate to enable assessment of the on-site rubbish storage and collection standard.

7.0 Medium Density Residential Zone provisions

7.1 Introduction – Enviro NZ sought an amendment to the Introduction wording to add having appropriate waste and waste recycling space for denser residential development. I support the acceptance of the submission point SO203.3 by the reporting planner, where incorporating space for waste and waste recycling helps to lower greenhouse gas emissions by separating waste to enable landfill diversion.

7.2 Objective MRZ-O2 – Enviro NZ sought an amendment to objective MRZ-O2 (g) (SO203.4) to include waste storage and collection, as waste storage and collection, in my opinion, is essential infrastructure required for any urban environment.

7.3 The reporting planner has put forward an amendment in response to the submission point from Enviro NZ and MoE, to clarify the intent of the clause to refer to development infrastructure only. She also proposes to include the definition of development infrastructure as the same in the NPSUD.

7.4 While I agree with the intent of this clause to encompass development infrastructure, which has a broader meaning that the definition of infrastructure in the RMA, the proposed definition for development infrastructure under the NPSUD will only refer to Council controlled kerbside collection and will not include collections undertaken by private companies. The definition outlines a broader problem of how waste infrastructure is considered in the national context. However, in consideration of the recommended amendments to MRZ-P3, I am satisfied that waste infrastructure will be considered for any built development within the zone. I therefore accept the rejection of the submission point.

7.5 Policy MRZ-P3 – Enviro NZ sought an amendment to the Policy to add a clause regarding the provision of waste storage and waste collection. The proposed amendment is as follows:

Site layouts incorporate sufficient, screened rubbish storage areas that allow for waste separation and accessible and safe collection.

7.6 This amendment is recommended to be partially accepted with the following drafting from PNCC:

Site layouts provide adequate rubbish recycling collection and storage facilities;

7.7 I do not agree with the s42A report that the PNCC drafting is entirely fit for purpose. I do not consider that the word "*adequate"* conveys sufficient direction for the decision makers of an application to make an informed decision on the size, location and accessibility of waste storage areas. I consider that the word "sufficient" refers to the size of the space better than the word adequate. The clause should also refer to the collection of waste where the main element is the accessibility by users and collection vehicles. The rationale for this is explained at 7.16 below. I would therefore prefer a hybrid drafting of the clause as follows:

Site layouts provide sufficient, screened ~~adequate~~ rubbish recycling ~~collection and~~ storage facilities with accessible and safe collection;

7.8 Policy MRZ-P4 – I accept the rejection of submission point SO203.6 referring to an amendment of the policy to include a reference to safe kerbside waste collection under (1). While the issue of proliferation of individual bins on the road frontage does fall under the 'safety and efficiency of the transport network', the issue will go unnoticed unless the On-site Rubbish and Recycling Storage and Collection Standard is altered to minimise this issue. I therefore support some amendments to the Standard as detailed below at paragraph 7.25. Any non-compliances with the standard can then be assessed under the "safety effects on the land transport network and pedestrians" matter of discretion.

7.9 MRZ-R9 - Addition or alteration of buildings and structures (excluding accessory buildings) – I do not agree with the recommended amendments to this rule to remove compliance with a number of standards including S19 On-site Rubbish and Recycling Storage and Collection for which no specific submission point requested its removal. In my view, the rationale that the rule should focus on matters most likely to result in a neighbour's amenity, should include waste storage. Insufficient or unscreened waste storage can lead to flying waste debris, odour, and be visually dominating to neighbours. Larger additions could easily impact the size and location of waste storage and therefore compliance with this standard should remain.

7.10 MRZ-R11 – construction of, alteration or additions to accessory buildings – Enviro NZ requested under submission point SO203.7 that construction or alteration and addition to accessory buildings be required to comply with the rubbish and recycling storage and collection standard. This was to ensure that waste storage areas are still able to be provided if an altered site layout relocates waste storage areas to alternative areas on site.

7.11 While the reporting planner acknowledges the Enviro NZ concern that an accessory building may alter rubbish storage areas, they consider the potential monitoring and compliance burden associated with applying the standard as sought is disproportionate to the potential level of effect. I do not agree with this assessment as intensified sites are very tight in layout,

with all the urban design elements needing careful planning to ensure that good design and functionality results. Even a shed may impact the location of all these elements. I therefore support the submission point to require compliance with Standard 19.

7.12 MRZ-R14- Visitor Accommodation – Enviro NZ sought to require that visitor accommodation comply with relevant parts of the S19-On-site rubbish and recycling storage and collection standard (SO203.8). Those aspects of waste storage and collection relevant to visitor accommodation were that the storage area be screened and that on-site collection be accessible for the collection vehicle.

7.13 I do not agree with the s42A report that the standard only applies to residential units. Sub-points 2 and 3 can be applied without sub-points 1 and 4 applying (these refer to residential units). Inclusion of these two sub-points will ensure that these minimum screening and accessibility standards apply to any visitor accommodation proposed. I agree that the volume and type of waste produced by visitor accommodation should not comply with the other clauses of the standard.

7.14 Therefore, given the proposed amended standard as below, Rule 14 should be amended to:

1. *Activity status:* ***Permitted***
   Where:
   ……
   b. Compliance with the following standards is achieved:
   …..
   viii. MRZ-S19(2)&(3) - On-site rubbish and recycling storage and collection

7.15 MRZ – S19 On-site rubbish and recycling storage and collection - Enviro NZ sought some amendments to this standard to be fit for purpose both now and in the future (SO203.9). At p170 of the s42A report the amendments proposed by Enviro NZ are discussed and accepted in part. The submission point proposed amendments as follows:

1. Each residential unit must have access to a screened rubbish storage area ~~which is sized to accommodate one 240l wheelie bin and one recycling crate~~ with a minimum area of 1.5m2 and a minimum dimension of 1 metre in any direction, except:
~~2~~. a. where c~~C~~ommunal rubbish storage areas are provided.
2. The location of any storage area must be screened or located so as not to be visible from a public road and/or adjacent sites, and must not encroach into driveways, manoeuvring areas, parking and outdoor living spaces.
3. Bins must be accessible for residents to get to the kerb.
4. Where kerbside collection is employed, a kerbside space of 1m per dwelling is available without impeding the public footpath.
5~~3~~. Where on-site waste collection is used:
a. the space must be accessible for the collection vehicle.
b. where there are more than 20 residential units on one site, and the site fronts an Arterial or Collector Road, on-site turning for trucks is required.

Matters of discretion where the standard is infringed:
1. Safety effects on the land transport network and pedestrians;

2. Effects on the safe internal site circulation and manoeuvring areas, including for pedestrians; and
3. Accessibility, odour and noise effects of rubbish storage location.
4. Location and size of rubbish storage area.

7.16 The rationale for these amendments is demonstrated in the extract from the s32 report for the intensification Plan Change 78 for the Auckland Unitary Plan attached at **Appendix 2**. The conclusions from monitoring multi-unit developments is that the spatial and operational requirements for waste management need to be designed at the start of the development design process. Without minimum standards for waste management storage and collection, planners are left to decide what is appropriate, and this has often resulted in poor waste management facilities. Complaints from road users (pedestrians, cyclists and vehicles and collection trucks), site occupants, and neighbouring properties occur when safety and amenity is being impacted from:

- Too many bins blocking the footpath to allow safe pedestrian access;
- Too many bins along the frontage to allow for safe collection of waste by the collection vehicle;
- Inadequate bin storage on site in terms of physical space provided, leading to bins being located in common areas or within outdoor living spaces;
- Poor on-site location of waste storage requiring negotiation of steep gradients, steps, or through buildings, to get bins to the kerb for collection.

7.17 While I agree with the recommended drafting of the proposed S19 Standard in many aspects, there are some drafting changes that I disagree with.

7.18 Firstly, I note that there is a discrepancy between the minimum area detailed in the report at paragraph 685(a) and the proposed recommended text of the standard. I agree with the area being either 1.5m2 or 1.7m x 1.2m. Ensuring the space is big enough to accommodate different waste streams in different bins going forward will enable more recycling to be undertaken.

7.19 I agree with the recommended changes to sub-point 1. Ensuring a minimum standard for 'waste space' for each residential unit, regardless of whether individual or communal collection, will allow for different bin configurations in the future.

7.20 In terms of sub-point 2, I consider the inclusions to screening from shared accessways or communal areas to be appropriate however in my opinion screening of waste storage areas should also apply to adjoining sites. I also consider that, at the very least, encroachment into outdoor living areas should be added to ensure that this issue can be managed. Encroachment into driveways and parking areas can be managed via ROW agreements however for outdoor living areas, however bins taking up outdoor spaces is found to be common from analysis of monitoring multi-unit developments in Auckland[1]. This leads to poor functionality of outdoor living spaces.

[1] https://www.aucklandcouncil.govt.nz/UnitaryPlanDocuments/pc-79-att-5-section-35-monitoring-b2-3-a-quailty-built-environment.pdf

7.21 For sub-point 3, I support the recommended text, however I note that sub-point 4 seems to be a repeat of Clause 3(b) and would appear unnecessary.

7.22 One of the amendments put forward by Enviro NZ was to require a kerbside space of 1m per dwelling to avoid impeding the public footpath with bins. Too many bins on the street has led to unsafe street environments when pedestrians and cyclists cannot navigate around bins. In the extracts from the s32 report from PC78 of the Auckland Unitary Plan (attached at **Appendix 2**), examples illustrate this issue, along with difficulty for collection vehicles to pick up bins from the street in a safe manner.

7.23 Two examples are provided below at Figures 1 -2.

Figure 1 and 2 – bin locations forcing pedestrians to the carriageway and/or impeding bus entry and exit and waste pickup from collection vehicles

7.24 Enviro NZ's proposed kerbside bin clause deals with the number of bins between vehicle crossings. Long sites may have multiple dwellings for a narrow site width. The proposed sub-point provides for a 1m kerb width for bins within each household, that would need to be picked up on collection day. This allows for both recycling and general rubbish bins, plus an organics bin. If the kerb width is insufficient, then on-site collection will be needed and assessed through compliance with the communal rubbish storage clauses. The spatial requirements on-site would then be re-assessed.

7.25 I therefore support the submission point for a sub-point to manage the amount of bins being placed on the kerb. The recommended text of S19 On-site Rubbish and Recycling Storage and Collection standard is therefore amended as below in blue to include the points discussed:

5. Each residential unit must have access to a ~~screened~~ rubbish and recycling storage area (which may be individual or communal) with a minimum area of 1.5m^2 and a minimum dimension of 1m in any direction ~~which is sized to accommodate one 240l wheelie bin and one recycling crate~~.

6. ~~*Communal r*~~*Rubbish and recycling storage areas must be screened or located so as not to be visible from a public road, shared accessway or communal area and/or adjacent sites, and must not be located in outdoor living spaces.*
7. *Where on-site rubbish and recycling collection is used:*
   a. the storage area must be accessible for the collection vehicle to service the rubbish storage area and
   b. where the site fronts an Arterial or Collector Road, on-site turning for trucks is required.

~~*8. Where there are more than 20 residential units on one site, and the site fronts an Arterial or Collector Road, on-site turning for trucks is required.*~~

4. *Where kerbside collection is employed, a kerbside space of 1m per residential unit is available without impeding the public footpath.*

7.26 The amended text to S19 in terms of a Section 32AA analysis is assessed as follows:

- Effectiveness and efficiency – will achieve better provision for waste storage and collection and the necessary separation of waste materials.
- Costs – Potential for more intensive sites to require on-site waste collection instead of kerb collection, however if not employed costs are transferred to the surrounding community and on-site residents in terms of safety, health and wellbeing and amenity.
- Benefits – provides minimum thresholds for developers and planners to assess applications allowing safer and better quality development that also takes account of road users.
- Risk of acting or not acting - Risk of accidents in the road corridor and undersized waste storage which leads to amenity and health effects. No opportunity to retrofit given the intensive nature of development.
- Decision about provision – the alternative relief is appropriate to achieve the purpose of the RMA.

8.0 Subdivision in Medium Density Residential Zone

8.1 SUB-MRZ-P1 - Enviro NZ (SO203.10) sought an addition of "*including safe waste kerbside collection*" to sub-point 4. The reporting planner considers safe kerbside waste collection is a land use matter rather than something to be considered during subdivision and recommends rejecting the submission point.

8.2 Enviro NZ records that many new intensive subdivisions elsewhere in the country have not allowed sufficient space for rubbish collection access and manoeuvring and the pickup of bins within the road network, particularly as on-street parking is more prevalent in higher intensity developments. This exposes the drivers and other road users to significant health and safety risks.

8.3 While I understand that most of the area within Palmerston North to be re-zoned Medium Density takes place on existing streets, if any intensive housing developments create new streets, then this matter needs to be considered. On balance, by including a standard to limit

bin numbers accessing the kerb, I accept the rejection of the amendment given the likely limited number of new streets enabled by the subdivision rules.

9.0 Conclusion

9.1 I support those points which have been accepted within the s42A report, and outline the reasons where I disagree with the rejection of certain submission points.

9.2 The proposed waste management standard, will in my opinion, ensure that good urban design outcomes will result from the increased intensification promoted by the Plan, by designing for waste at the beginning of the development design process in accordance with minimum standards. Ensuring the standard applies to other development where noted will ensure that essential waste management storage and collection can still be carried out in an appropriate manner.

9.3 Thank you for your consideration.

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Appendix 1

Qualifications and Experience

I hold a Bachelor of Science (Earth Sciences) from the University of Waikato and a Post-Graduate Diploma in Natural Resources from the University of Canterbury, along with a Certificate of Proficiency in Planning from the University of Auckland. I am an Associate Member of the New Zealand Planning Institute.

I have over 25 years' experience, which includes both working in local government and the private sector. I have undertaken policy analysis and the preparation of submissions for a wide range of clients as a consultant planner and I have also written precinct provisions for the Auckland Unitary Plan (Clevedon Waterways Precinct). I have advised clients on a wide range of planning matters, but with a particular focus on water and air discharge matters relating to industrial sites and airport infrastructure. I have also processed complex planning applications for Auckland Council including chicken farms and large multi-unit developments.

I currently specialise in waste management sites and processes, undertaking consenting and policy analysis for this specialised sector.

Appendix 2

Extracts from the Plan Change 78 – s32 report – Residential and Business Zones (attached)

16.0 Residential Waste Management

16.1 Proposed Amendments and Statutory Context

The following table provides a summary of the proposed residential waste collection standards of the AUP(OP) within the zones identified.

Zone	Summary of Key Operative AUP(OP) Standard	Summary of Key Proposed Standard	IPI Status
Residential – Mixed Housing Urban Zone	N/A	On-site storage of individual or communal bins: Individual = space 1.4m^2 Communal = solid waste calculator Collection requirements: If kerbside – 1m per dwelling clear/unobstructed If onsite - adequate manoeuvring area; and accessible for collection	Achieving quality built environment outcomes when incorporating MDRS.
Residential – Terrace Housing and Apartment Buildings Zone	N/A	On-site storage of individual or communal bins: Individual = space 1.4m^2 Communal = solid waste calculator Collection requirements: If kerbside – 1m per dwelling clear/unobstructed If onsite - adequate manoeuvring area; and accessible for collection	Achieving quality built environment outcomes when incorporating MDRS and giving effect to NPS-UD policy.

This proposed standard is not provided for under Schedule 3A of the RMA or the AUP(OP). Section 80E(1)(b)(iii) of the RMA provides for the amendment or inclusion of additional provisions that support, or are consequential on the MDRS or Policy 3 of the NPS-UD.

The overall intent of this standard is to ensure sufficient, accessible provision of space for the storage and collection of residential waste bins. The presence of rubbish and waste bins has the potential to generate adverse effects on amenity and to the health and safety of people.

Increased density as a result of giving effect to the RMA is anticipated to increase demand for waste collection. The proposed standard is considered necessary to ensure that in giving effect to the RMA, development continues to achieve quality built environment outcomes. Specifically, the proposed standard responds to RPS objectives B2.3.1(1)(a) and (3), and policies B2.3.2(1)(a), (b), (d), (e) and (5).

For the reasons discussed above and in the analysis below, the standard contributes to quality built environment outcomes, including RPS objectives B2.3.1(1)(a), (2) and (3), and policies B2.3.2(1)(a) and (5). It is proposed to be applied to both permitted and restricted discretionary activities as a built form standard in MHU, THAB and Walkable Catchment zones.

16.2 Key Issues and Standard Development

Introduction

Every dwelling needs to be designed to ensure the efficient, storage, separation, collection and handling of domestic waste to maximise resource recovery and provide safe and healthy spaces for people to live. The current provisions within the Auckland Unitary Plan have failed to deliver this outcome, with multiple examples where inadequate provision of space for waste has led to negative consequences for future residents, the street network and the environment. Planning controls are required so that Auckland Council meets its basic legislative requirements as a territorial authority to ensure appropriate waste services are provided that also deliver on Auckland's commitments to zero waste and climate change mitigation. The controls need to cater and be responsive to different scales of developments.

Current Performance

The Section 35 monitoring report findings showed waste management is a significant issue in terms of on-site storage, residents' access, amenity and the method of waste collection. There are also implications for the operational aspects of waste collection services (public and private), value for money (residents and council), and meeting waste reduction objectives to address climate change[34].

The monitoring showed the AUP(OP) (reliance on one assessment criteria applying to developments of 4 or more dwelling) is not effectively to managing on-site waste or collections. Council's Waste Management and Minimisation Bylaw 2019 applies to developments of 10 or more dwellings and the NZ Building Code G15 – Solid Waste provide some rules and a strategic framework for managing waste. However, this needs to be complemented with appropriate management for the type, scale and location of the development in all scales of development. Every household needs to manage waste efficiently. This includes on-site bin storage space as well as access and space for either private or public collections (on-site or street kerb).

There are space, hygiene, safety, amenity and operational aspects of waste management that affect the quality and functionality of residential developments and urban environments. Consent plans and observations from site visits from the monitoring showed there is insufficient consideration for waste management in many developments. There is also a disparity between commitments to waste management in resource consents with waste management plans and a lack of implementation for access and facilities (including waste storage) on site.

The relevant recommendations from the s35 monitoring are[35]:

- Develop a new standard for managing residential waste on all residential zone sites – including but not limited to bin storage location, screening, hygiene, access and collection of waste bins.

[34] p94. Auckland Unitary Plan Section 35 Monitoring: B2.3 A quality built environment, July 2022, Technical Report TR2022/11, Plans and Places Department, Auckland Council.

[35] p95. Auckland Unitary Plan Section 35 Monitoring: B2.3 A quality built environment, July 2022, Technical Report TR2022/11, Plans and Places Department, Auckland Council.

- Require a waste management plan for sites of four dwellings or more in residential zones and all residential developments in the Business – Mixed Use zone.

These recommendations have been considered and addressed in the standard proposed.

A standard is the most appropriate method to ensure residential waste management is provided in all residential developments, regardless of scale, or whether it is permitted or RD activity status. The standard will require developments containing 10 or more dwellings to provide and implement a waste management plan. This will manage the complexities of higher density developments.

Achieving a compact urban environment

Provisions for collections within a site and from the kerbside are essential to achieve efficiency of private and public land as the storage space provided correlates directly to the ability of residents to efficiently separate waste materials. The type, provision and location of storage space directly affects the collection frequency and methods.

Inadequate waste storage provision directly impacts residents' ability to properly separate and divert their waste. Developments using individual bins require a total storage space of 1.4m^2. This is equivalent to the maximum volume provided to each individual dwelling by the Auckland Council kerbside collection service for separated refuse, recycling and food scraps. Figure 33 shows the space requirements for three types of waste bins.

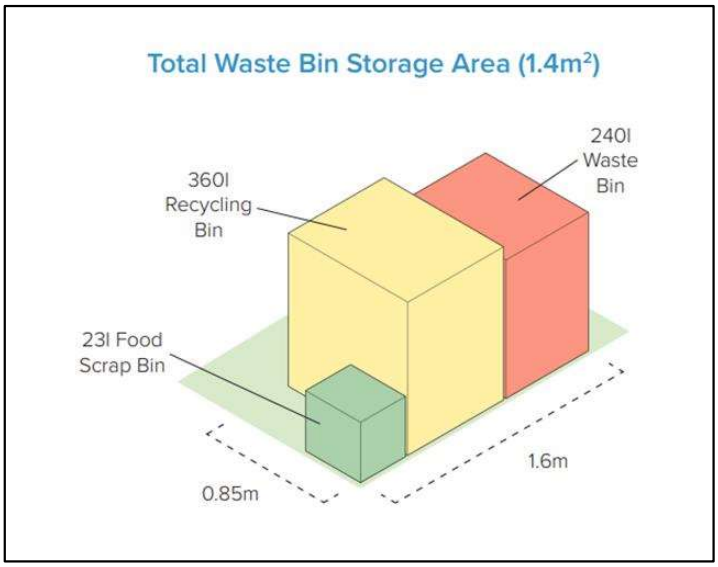

Figure 33: Space requirements for three types of waste bins.

For developments using communal bins, developers will need to refer to the Auckland Council's Solid Waste Calculator[36] to determine the amount of storage space required. The space required will be different for each development depending on the number of dwellings and occupancy, bin sizes selected, and collection frequency.

Inadequate provision of waste storage areas can lead to arrangement for collections multiple times per week, costing more than the alternative weekly Council collection. As the number of times a site needs to be serviced each week increases, so does the risk of impacts on health, safety and amenity for the residents, waste collectors, neighbouring properties, and general road-users (both pedestrians and vehicles). High frequency collection which the proposed standards will ensure facilities are provided to avoid, also does not encourage waste minimisation.

[36] https://www.aucklanddesignmanual.co.nz/resources/tools/swc

Bin storage locations and collection points must be accessible and convenient for collectors and residents. They need to avoid access through dwellings, across unpaved surfaces, landscaped areas, steps or steep gradients which would make access and collection difficult.

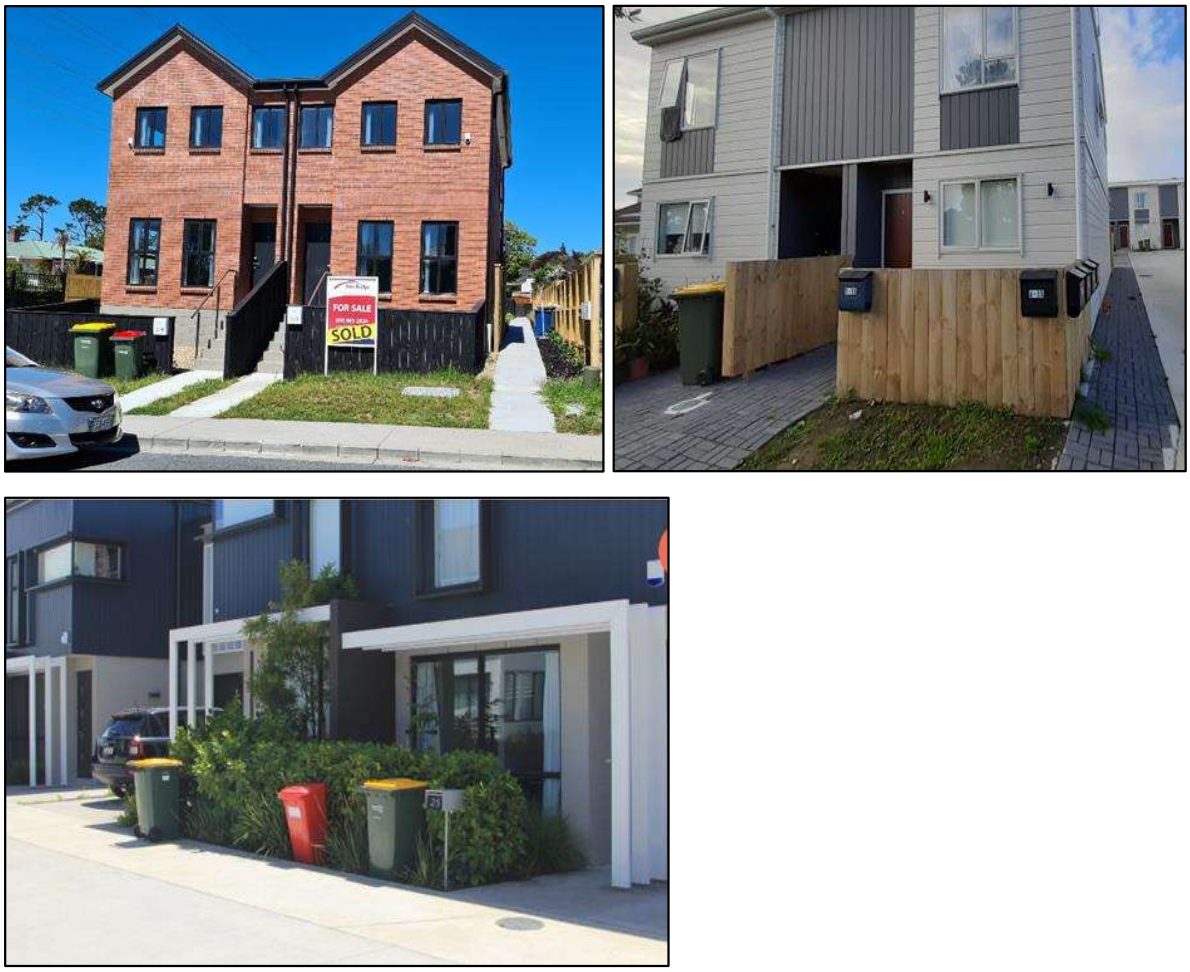

Figure 34: The first image (top left) shows waste bins stored on the public berm in the front of the property and in the side yard on the landscaped area adjacent to the primary pedestrian footpath for two further dwellings at the rear of the site. The second and third image show waste bins stored at the front of dwellings where they encroach on footpaths designed to provide safe pedestrian access and are visible to the street which detracts from the amenity of the site and urban environment. These locations illustrate poor outcomes when no spatial considerations are given to on-site waste storage from the S.35 monitoring site visits.

The following images show the incorporation of effective waste storage arrangements which the standard seeks to secure from development moving forward. Waste bins should be visually screened from the street, pedestrian footpaths within the site, shared driveways, outlook spaces, outdoor living areas, adjacent sites and neighbouring dwellings. This ensures the

storage of waste bins is spatially provided for in locations that minimise visibility or/and can be physically screened so they are not visible within the site, street and adjacent sites.

Figure 35: The left image shows a white fenced enclosed area to the right of the property which visibly screens the waste bins from the street while maintaining convenient access for residents. This dwelling is in Hobsonville where developments comply with design requirements set by the Hobsonville Land Company (now Kainga Ora). This requires rubbish bins be sited so as not to compromise outdoor living courts, be visually obtrusive and to be out of the view from the street. The right image shows communal waste bins stored in a well designed, ventilated, easily accessible communal waste area with good access for residents and on-site waste collection.

The proposed standard aligns with the amenity aspects of waste storage and accessibility as specified in the Design Element R7 Design for Residential Waste[37] and the NZ Building Code (2004)[38].

Waste collection

Waste management needs to be well-functioning and meet operational requirements for both residents and collectors. One of the most significant issues for waste management is collection. The growth enabled by the intensification provisions will create even more pressure on street environments to accommodate waste bins for collection where a significant issue already exists. This will be through the cumulative impact of multi-unit developments requiring space on streets for kerbside collection.

To manage this issue, the amount of kerb space for waste bins on a street to enable council kerbside collection service is a key determinant of the type of waste collection possible for a site.

Waste servicing from private waste collectors has the potential to significantly impact the flows of traffic around the city. It is the experience of council's Waste Management team when assessing waste management plans required under the Waste Minimisation Bylaw that many developers opt for a private waste collection from the outset, assuming a private service provider will be more adaptable and less intrusive than a council collection. If the storage space is inadequate and requires more frequent collections or the storage area is inaccessible to

[37] https://content.aucklanddesignmanual.co.nz/regulations/design-for-the rules/Documents/Design_Element_R7_Design_for_Waste.pdf

[38] https://www.building.govt.nz/assets/Uploads/building-code-compliance/g-services-and-facilities/g15-solid-waste/asvm/g15-solid-waste-amendment-3.pdf

collection vehicles, private collectors will be required. There may also be extra costs to residents for this additional level of service.

There are options for different types of on-site collection:

- a collection vehicle entering the site with provision for a driveway, manoeuvring space for reversing and a loading area for a truck of an appropriate size to collect either individual or communal bins.
- a kerbside collection service where the collection service hand-wheel bins out to the waiting vehicle and then return them to the storage area.

Both options have implications for the spatial arrangement of the site and may affect the amount of development possible. The type of collection must be included in the site planning stage of developments as the spatial requirements for waste collection vehicles access, manoeuvring and loading can be significant

Waste storage areas need to be designed to hold a week's worth of refuse, food scraps and recycling. With respect to this, it is proposed that permitted collection methods should be limited to kerbside collections (individual bins placed out for collection on the kerbside) or on-site collections (individual or communal bins collected from within the site).

Figure 36: Shows waste management collection is becoming a significant issue for multi-dwelling developments. Waste bins for kerbside collections consume footpaths, forcing pedestrians onto the carriageway creatin road safety risks.

Waste Management and Minimisation Bylaw 2019[39]

The Waste Management and Minimisation Bylaw 2019 encourages a transformation in the way Aucklanders reduce, recycle, reuse and recover resources to help Auckland achieve a zero-waste future. The purpose of the bylaw is to manage and minimise waste, protect the public from health and safety risks and nuisance, and to manage the use of council-controlled public places by, among other things:

The current AUP(OP) provisions has resulted in frequent examples where waste storage is an afterthought, and then becomes a problem for both residents and collectors. Council's Compliance Monitoring team deals with ongoing site issues created by this failure to address

[39] https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/bylaws/docswasteminmgmtbylaw/waste-management-minimisation-bylaw-2019.pdf

the spatial and operational requirements for waste management at the start of the development design process. This can lead to complaints from road users (pedestrians, cyclists and vehicles), site occupants, and neighbouring properties that their safety and amenity is being impacted. It is anticipated that the proposed residential waste management standards will provide much needed clarity on waste storage and collection responsibilities.

Climate change resilience

Waste makes up 3.1 per cent of Auckland's greenhouse gas emissions profile, and heavy vehicle transport emissions a further 6.8 per cent[40]. The Government's first Emissions Reduction Plan (ERP) recognises the fundamental role waste reduction, in particular removing organic material such as food waste from landfill, will have in helping Aotearoa New Zealand achieve its 2050 emissions reduction target[41]. A ban on organic waste to landfill by 2030 is being explored as part of the ERP.

The C40 Cities Climate Leadership Group is a group of over 90 global cities that are committed to taking bold climate action, leading the way towards a healthier and more sustainable future.

Auckland has been recognised as an Innovator City within the C40 Cities network since 2015, and Auckland's Mayor has signed the C40 Cities Zero Waste Declaration, which commits to:

- cutting the amount of waste generated by each citizen by 15 per cent by 2030
- reducing the amount of waste sent to landfills and incineration by 50 per cent
- increasing the diversion rate to 70 per cent by 2030.

The Zero Waste Auckland programme is a key part of Te Tāruki a Tāwhiri: Auckland's Climate Plan commitments to reduce total emissions, by reducing waste to landfill by 30 per cent by 2027 and reach net zero waste by 2040.

On 8 June 2022 Auckland Council's Finance and Performance Committee approved a significant policy shift in the Waste Management and Minimisation Plan 2018 that will, among other things, significantly reduce refuse vehicle emissions by reducing the number of collection vehicles on Auckland roads. From 2025, for the properties serviced by the standard Auckland Council services, bin sizes, access and collection frequency are being carefully designed to optimise diversion behaviour and influence waste reduction. These efforts are at odds with - and risk being undermined by - developers who do not meet the same standards or provide equitable access for individual households to achieve optimum waste reduction and diversion opportunities.

Sites using the Auckland Council service may eventually be serviced as infrequently as once per fortnight or once per month, while multi-unit sites without minimum waste storage requirements may need to be serviced five or seven times per week, undermining Auckland Council's plan to reduce emissions refuse and recycling trucks.

From an emissions perspective, increasing the number of sites requiring daily collections or multiple collections per week could be calculated to estimate the tonnes of CO_2-e produced by the additional collection vehicles required to be on Auckland's roads each day to service these sites.

For example, if an additional 66,000 multi-unit dwellings are constructed Auckland by 2031 were on a weekly rather than daily collection of their refuse, recycling and food scraps, Auckland

[40] p42. Te Tāruke-ā-Tāwhiri: Auckland Climate Plan

[41] https://environment.govt.nz/assets/publications/Aotearoa-New-Zealands-first-emissions-reduction-plan.pdf

would be able to save 4,200 t CO_2-e / year or the equivalent of removing 2,500 cars off the road.

Keeping food waste out of landfill and preventing methane emissions is a key part of Zero Waste Auckland. The importance of this work programme to climate mitigation has recently been recognised by central government through an announcement all households in New Zealand's urban centres will need to be provided with a kerbside food scraps collection by councils, and all businesses will be required to separate food waste from general waste.

Individual households also need to be provided with the best infrastructure to facilitate dry recycling. Avoided emissions from increasing household recycling rates is significant because it prevents the need to mine/harvest virgin materials (glass, paper, metal) and petrochemicals (plastics).

Poor waste diversion behaviours begin to present themselves when residents have to walk longer distances from their property to a communal waste bin, (currently only able to be controlled in the NZ Building Code 2004 which is too late in the development phase). Where communal bins are used, personal responsibility reduces, and Council's ability to enforce against bin contamination issues is reduced. Evidence shows that diversion rates drop if residents are not provided with a means to keep recycling, food and general waste separated from one another until they can deposit these three waste streams into the appropriate bins.

WRAP UK data shows that individual food scraps bins divert 57 per cent more food scraps than communal bins, and Auckland Council waste audits showed a 25 per cent increase in dry recycling diversion when households have individual bins over communal bins.

17.0 Development Yield from Proposed Standards

To assess the implications on development yield of the proposed standards and the ability to enable the intensification provisions sought by the RMA whilst having regard to the identified QBE outcomes, three dimensional design modelling has been undertaken. This is presented in detail within the following two reports:

- Terrace Housing Residential Development Study, produced by the Tamaki Makaurau Design Ope, Auckland Council.
- Apartment Residential Development Testing, produced by Jasmax.

The terrace housing study compares the operative and proposed yield of notional development models within the MHU and THAB zone. The apartment study compares the operative and proposed yield of apartment development models within the THAB zone which is a typology of housing and development particularly anticipated in this zone given the planned character and heights enabled.

These yield studies provide a comparison and understanding of the effect of the proposed changes on the development of a site where in both the operative and proposed modelled scenarios the zoning is the same. However, it is important to recognise that alongside these changes to zone provisions, geographic changes to the zoning of land within Auckland are also proposed. Notably the increase in MHU and THAB zoned land (including the introduction of walkable catchments) will in itself significantly increase the planned development capacity of Auckland, before considering the intensification amendments proposed to the zone chapters of the AUP within PPC78.