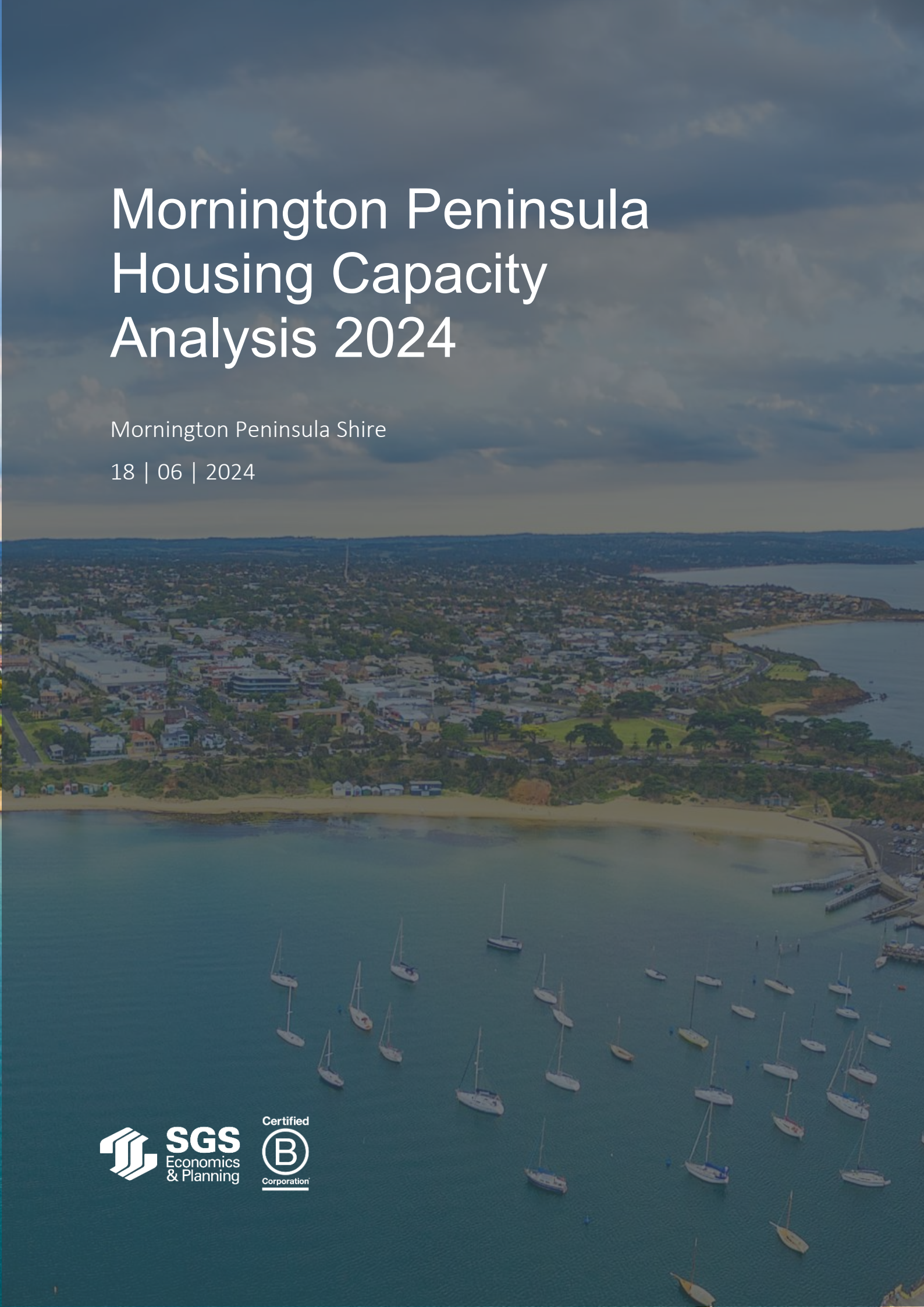
Mornington Peninsula Housing Capacity Analysis 2024

Mornington Peninsula Shire

18 | 06 | 2024



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Contents

Glossary

Term	Definition
Zoned residential land	Refers to total land where residential development is permitted, excluding public realm areas (e.g. roads and footpaths) that cannot be development for residential purposes. It includes land that is zoned Commercial 1, Mixed Use and selected Public Use Zone (PUZ).
Available land	Refers to the subset of net land areas after land that is considered constrained (or 'unavailable') for new residential development within the planning horizon under consideration. Non-developable areas are determined using a defined set of assumptions (including lot size, recently development, etc.).
Lots	Parcels of land. May have no dwellings (i.e. vacant or non-residential uses), one dwelling or multiple dwellings (i.e. apartments).
Net dwelling capacity	Total capacity for dwelling *minus* the existing dwelling/s on available land.
Dwelling density assumptions	Refers to density assumptions derived from planning controls and/or past development trends that are used to estimate dwelling capacity.

Executive summary

Overview

This report provides estimates of housing capacity in the Mornington Peninsula Shire (the Shire) based on the existing planning scheme controls and the controls proposed by Amendment C219morn. It also considers the issue of 'take up' of housing capacity by comparing forecast housing demand to housing capacity by submarkets, dwelling types across the 15 year planning horizon.

Background

Planning Scheme Amendment C219morn implements Council's Housing and Settlement Strategy Refresh 2020-2036 (the HSS) and Neighbourhood Character Study and Guidelines (the NCSG). The amendment proposes changes to the zones, overlays and policies to the Shire's residential areas.

Council completed a housing capacity analysis in March 2019. In late 2022 SGS was commissioned to undertake a peer review of this capacity work. The SGS peer review applied more conservative assumptions to Councils capacity analysis findings and suggested that a more conservative capacity estimate of 26,921 dwellings (vs Councils' estimate of 52,895 dwellings). The Panel's report on C219morn was published in May 2023 and recommended Council "reassess its dwelling capacity to determine a more accurate estimated figure" assessing "the potential impact of the provisions proposed by the Amendment … because the Amendment proposes more focussed neighbourhood character objectives combined with more restrictive provisions" and to give consideration to "at least one, if not a few different likely take up figures, to differentiate between potential housing capacity and likely housing supply".

Amendment C219morn

The current planning scheme in the Shire applies a largely consistent zoning of urban residential land General Residential Zone (GRZ) however there is a considerable diversity of controls in practice, achieved via the application of other design provisions through Design and Development Overlays (DDOs). This represents the prevailing approach to scheme design prior to the new residential zones (i.e. pre-2013), where local policy and overlays were used to particularise and moderate development outcomes. Amendment C219morn seeks to apply the Neighbourhood Residential Zone (NRZ) to substantial areas where the GRZ currently applies, recognising them as minimal or incremental change areas and unlikely to accommodate three-storey development.

The use of the NRZ reflects changes to the design of zones, and current guidance about how they should be applied, that emphasises the GRZ as the appropriate zone where widespread three-storey development is anticipated or desired. The GRZ no longer aligns with expectations for many areas in which it is currently applied. The use of the NRZ reflects a better alignment of zone settings with expected outcomes.

Housing capacity

The estimated housing capacity under the current controls is 25,397 net additional dwellings. The estimated capacity under amendment C219morn (post exhibition version as taken to Panel) is 25,183 net additional dwellings. In practical terms, there is little to distinguish between the capacity under current controls and the C219morn controls. These estimates are lower than Council's initial capacity estimate

from the 2019 but are similar to the adjusted capacity estimate from SGS's 2023 peer review of Council capacity assessment.

Both capacity estimates described in this report are based on minimum lots size assumptions found in zone and overlay controls (existing and C219morn). For NRZ and GRZ areas without explicit minimum lot size subdivision controls in zone or overlay controls, a minimum lot size assumption of 400 sqm per dwelling was applied. This is a likely to be a conservative assumption in that previous analysis of 412 permitted planning applications under current controls in these areas suggested an *average* lot size was 366 sqm. Another sample of 10 recently approved multi-dwelling developments found an average lot size of 260 sqm (with a range 180 sqm to 294 sqm).

TABLE 1: CAPACITY ANALYSES COMPARED

Capacity assessment	Council's estimate (2019)	Peer review estimate (SGS, 2023, based on Council's 2019 estimate)	Current controls (SGS, 2024)	C219morn post-exhibition controls (SGS, 2024)
Activity Centres (C1Z, MUZ, PU6Z)	11,360	5,680	7,380	7,380
GRZ/NRZ (w/o lot size controls)	32,658	13,985	11,071	10,983
GRZ/NRZ (with min. lot size controls)	7,072	7,072	6,444	6,153
LDRZ/SUZ	1,685	1,685	502	667
Adjustment in Council's capacity analysis	120			
Total capacity (2019)	52,895	28,422	(na)	(na)
Total capacity (2021)	(na)	26,921*	(na)	(na)
Total capacity (2023)	(na)	(na)	25,397	25,183

*Based on estimated take up for capacity of 1,621 dwellings in 2019 and 2020.

Take-up analysis

Historically, on average around 1000 net additional dwellings have been added in the Shire each year between 2011 and 2021. In December 2023 new government official dwelling growth forecasts (Victoria in Future or VIF) were released and forecast demand for 730 dwellings per year for the 15 years between 2021 and 2036. This represents a significant change from the 2019 VIF forecasts of 1,178 dwellings per year that was consider at the Planning Panels. Evidently, the most recent demand forecast demand is well below the recent rate of supply.

It is difficult to predict the future realisation of dwelling stock based on housing capacity. The extent to which theoretical housing capacity is linked to housing supply is highly contested. Notwithstanding this context the question of 'take up' of housing capacity has been explored in three different ways: by comparing demand and capacity by housing submarket (i.e. broad geographic areas); by comparing demand and capacity by dwelling type (i.e. apartment, medium density and lower density); and by an analysis of the ratio of housing demand to capacity over time (i.e. demand vs capacity year-on-year). All three analyses suggest that C219morn provides considerable capacity in excess of demand for the next 15 years.

Further considerations

The total housing capacity estimated is likely to be conservative for a number of reasons:

- There is evidence to suggest higher densities (i.e. lower lots sizes) can be accommodated in areas without explicit subdivision controls than implied by the 400 sqm minimum lot size benchmark applied in this analysis.
- The proposed amendments to the "ResCode standards" in C219morn are not mandatory controls and can be varied based on individual site constraints and the development of an appropriate design response.
- This capacity analysis has not considered recent planning changes related to Victoria's Housing Statement that will increase capacity: small secondary dwellings (SSDs) on lots of over 300 sqm without a planning permit; the expansion of the Future Homes program.

Summary

The Planning Panel's report on Amendment C219morn recommended Council "demonstrate it can provide at least 15 years housing supply by determining the likely take-up of capacity".

This report provides evidence there will be sufficient capacity to accommodate 15 years of supply in the Shire finding that:

- The 2023 VIF forecasts indicate the Shire will accommodate 730 dwellings per annum between 2021 and 2036. This figure is lower than the average for the period 2011 to 2021 or around 1000 dwellings per year (and 40% fewer dwellings than the 2019 forecast that was consider during the panel hearing).
- Amendment C219 would deliver a capacity of about 25,183 net additional dwellings, 43.5% of which is required to provide for the 15 year demand forecast, leaving additional capacity for 14,233 dwellings.
- Three different approaches to considering the likely take up of capacity (housing submarkets, dwelling types and ratio of demand to capacity over time) all suggest C219morn will provide capacity that broadly aligns with the locational preference and dwelling type preferences of households in the future.

1. Introduction

1.1 Background

Planning Scheme Amendment C219morn implements a series of strategic documents: the Housing and Settlement Strategy Refresh 2020-2036 (Mornington Peninsula Shire, 2020) (the HSS) and Neighbourhood Character Study and Guidelines (Ethos Urban, 2019) (the NCSG). The amendment proposes changes to the zones, overlays and policies to the Shire's residential areas (i.e. areas that are currently zoned residential GRZ or LDRZ and/or covered by Schedules 1 to 7, 11, 17 to 20, and 22 to 24 of the DDO).

Council completed a housing capacity analysis in March 2019. In late 2022 SGS was commissioned to undertake a peer review of this work. The peer review was presented at the C219morn panel hearing in February 2023. Council's capacity analysis suggested capacity for 52,895 dwellings. The SGS peer review applied more conservative assumptions to Councils capacity analysis findings and suggested that a more conservative estimate of capacity of 26,921 dwellings.

The 2019 Victoria in the Future forecasts indicated that the Shire might accommodate an additional 17,750 dwellings between 2021 and 2036. To accommodate this forecast demand for additional dwellings would require 34% of housing capacity (Council capacity estimate) or 66% of housing capacity (SGS revised capacity estimate).

The Panel's report was published in May 2023 and recommended Council "reassess its dwelling capacity to determine a more accurate estimated figure" assessing "the potential impact of the provisions proposed by the Amendment … because the Amendment proposes more focussed neighbourhood character objectives combined with more restrictive provisions" and to give consideration to "at least one, if not a few different likely take up figures, to differentiate between potential housing capacity and likely housing supply".

1.2 This report

This report provides as assessment of housing capacity based on the existing planning scheme and the controls proposed by the post-exhibition version of Amendment C219morn.[1] It also considers the issue of 'take up' by comparing housing demand to housing capacity by housing submarkets within the Shire, by dwelling type and analysis of demand and capacity over time.

It is structure as follows:

- The next chapter discusses the planning context
- Chapter 3 provides results of the capacity analysis
- Chapter 4 the question of take-up is explored in three ways: by housing submarkets, by dwelling types, and ratio of demand to capacity over time. This chapter also includes the latest VIF forecasts for the Mornington Peninsula.
- The appendices contain supporting information.

[1] All references to Amendment C219morn in this report refer to the post-exhibition version of the Amendment sent to Panel.

2. Planning context

2.1 Existing controls and scheme settings

The overwhelming majority of existing residential urban land within the Shire is currently zoned General Residential Zone (GRZ), carrying forward the largely singular zoning used in most metropolitan areas prior to the 2013 revisions to the residential zones. Only two schedules to the GRZ have been applied, and neither alters the default settings of the zone.

The Neighbourhood Residential Zone (NRZ has been applied only to a single precinct in Crib Point, and the Residential Growth Zone (RGZ) has not been applied at all. The Township Zone (TZ) is also not used, with the Shire's small townships using the GRZ for their residential precincts. The Commercial 1 Zone (C1Z) is applied within the activity centres. There are small areas of Mixed Use Zone (MUZ), typically close to commercial centres, but these represent a very small amount of the total residentially-zoned land. Some PUZ6 land in major activity centres has been identified as suitable for mixed use development within the relevant structure plans.

Outside of townships there are also some substantial areas of Low Density Residential (LDRZ) land, most notably on the fringes of Mornington, Somerville, Tyabb, Hastings, and Bittern/Crib Point, and some SUZ4 zoned land inside the UBG.

Despite this largely consistent zoning of urban residential land, considerable diversity of controls is in practice achieved via the application of other design provisions through Design and Development Overlays (DDOs). This represents the prevailing approach to scheme design prior to the new residential zones, where local policy and overlays were used to particularise and moderate development outcomes for particular precincts (rather than zone schedules as has been encouraged after 2013). Indeed, many of the DDOs have their origins in development controls that preceded the new format planning scheme's gazettal in May 1999. The lineage of these controls is also likely the reason that council has not applied the Neighbourhood Character Overlay (NCO) (a tool introduced in August 2001).

While these DDOs include a variety of design controls, it is noted that many include minimum subdivision lot size restrictions that require lots notably above typical lot sizes that would apply under a default GRZ. These lot sizes are large enough that generally they are considered likely to be the key yield constraint applied by these DDOs.

The DDOs – and to a degree, other provisions such as the Vegetation Protection Overlay (VPO) – reflect various contextual factors that are considered development constraints even using a first-principles assessment without the overlay. In particular, many of the lots in the Shire exhibit contextual or character traits with one or more of the following qualities:

- Existing large lot sizes
- Extensive vegetation (which warrants protection for character, habitat, and cooling qualities)
- Distinct character traits, with much of the municipality having coastal/holiday township, semirural and/or bush-suburban character
- Landscape factors (for example significant skylines)
- Design imperatives such as view sharing.

While the DDOs – and their minimum lot sizes especially – doubtless currently limit yields in these areas, the above factors alone would moderate development outcomes compared to a typical metropolitan suburban outcome.

The effect of this is that while the scheme currently makes extensive use of the GRZ, which under current guidance (Planning Practice Note 91: Using the Residential Zones) is used for incremental and substantial change, in practice the planning outcomes for areas with a combination of the GRZ and a DDO has been moderated and has reflected varying degrees of minimal or incremental growth.

It should also be noted that the current guidance about the application of the GRZ frames the zone as a more intense zone than it was at the time the zone was first applied. For example, the current Planning Practice Note 91, July 2023, states as follows about the GRZ (at page 3):

> The General Residential Zone should be applied to areas where housing development of three storeys exists or is planned for. It is inappropriate to apply the General Residential Zone to areas where a planning authority seeks to respect the existing single and double storey character of an area.

This can be contrasted with the guidance when the General Residential Zone was introduced (Practice Note 78: Applying the Residential Zones, July 2013, page 2) that described it as for:

> A mixture of single dwellings, dual occupancies with some villa units and in limited circumstances town houses, where appropriate.

The shire's areas of GRZ certainly do not currently exhibit notable areas of three storey form and this is not considered to be an outcome suggested by current built form controls. They are much closer – especially where DDOs are applied – to the conception of the zone at its introduction in 2013.

The extensive use of minimum lot sizes in DDOs also means that changes in height expectations for the GRZ over time have likely had little impact upon expected yields. Therefore, increasing typical heights from 2 to 3 storeys is unlikely to increase housing capacity where minimum lot sizes reduces the ability to use height to realise additional dwelling numbers on a lot (e.g. apartments as opposed to villas and town houses).

2.2 Amendment C219morn

Amendment C219morn implements the Shire's HSS and NCSG.

Notably, the application of the zones is changed to reflect current guidance. As discussed in the preceding section, the existing approach largely reflects pre-2013 approaches (and indeed pre new format scheme approaches) that used the GRZ and its predecessor the Residential 1 Zone (R1Z) as a broad default zone and then used overlays to further clarify the type of outcomes and hence the extent of change expected in different areas.

Current planning guidance no longer recognises any "default" residential zone (see page 4 of Planning Practice Note 91). Furthermore, current guidance does not treat the GRZ as a purely mid-tier zone. As shown in Figure 1 below, the GRZ now covers both incremental and substantial change areas.

FIGURE 1: ZONE APPLICATION TABLE

Zone	Minimal	Incremental	Substantial
Low Density Residential Zone	✓		
Mixed Use Zone		✓	✓
Township Zone	✓	✓	
Residential Growth Zone		✓	✓
General Residential Zone		✓	✓
Neighbourhood Residential Zone	✓	✓	

Source: Page 4, Planning Practice note 91

The practice note further notes (page 5):

> The right residential zone will reflect the true development capacity of the land. If land is impacted by special attributes or physical constraints that are identified in the MPS and PPF, then a residential zone should be applied that aligns with these attributes or constraints.

With regards to height the practice note (page 5 and 6) indicates as follows:

> The GRZ has a maximum building height of 11 metres and three storeys. It is important to remember that through the building system, a single dwelling can be constructed to a height of 11 metres and three storeys in the GRZ without the need to obtain a planning permit. If applying the GRZ, this should be considered.
>
> If an area has an existing single and double storey character that is sought to be maintained, applying the GRZ is likely to be inconsistent with this preferred neighbourhood character outcome.
>
> While the purpose of the GRZ includes '*To encourage development that respects the neighbourhood character of the area*', it is unlikely that neighbourhood character can be respected if existing development is single and double storey. However, the GRZ may be the appropriate zone to apply to areas with existing three-storey development.

The practice note also notes (at page 3):

> The General Residential Zone should be applied to areas where housing development of three storeys exists or is planned for. It is inappropriate to apply the General Residential Zone to areas where a planning authority seeks to respect the existing single and double storey character of an area.

These changes in guidance since 2013 mean that the application of the GRZ does not align with areas that:

- Have a widespread one or two-storey form and / or are not expected to accommodate three-storey development.
- Have special attributes or physical constraints that limit development outcomes.

Amendment C219morn therefore introduces more widespread application of the NRZ recognising those residential areas in the Shire that are either minimal or incremental change areas and are unlikely to accommodate three-storey development.

Although changing large areas from GRZ to NRZ has the appearance of 'downzoning', given the change in the zones and the guidance regarding how they should be applied since 2013, these changes are intended to reflect a 'neutral translation'. It applies the appropriate zoning to reflect current guidance. By contrast, maintenance of widespread application of the GRZ would signal an expectation of three-storey development in many areas where this is not considered to be a typical or desired outcome.

2.3 State Government's Housing Statement

The State government's housing statement was released in September 2023. The statement and associated planning reforms are intended to facilitate greater housing supply through 'global' changes to planning schemes throughout the state.

Four key reforms associated with the Housing Statement are relevant to this work:

- The 'ResCode' provisions (which set the "default" development standards for single dwellings and medium density housing) have been partially codified, reducing the scope of qualitative and character based-assessments. This change was implemented by Amendment VC243, gazetted on 29 November 2023, with further codification proposed by September 2024.
- A facilitated planning pathway has been created for developments pursuant to the "Future Homes" project, which involves the use of a range of state-government developed exemplar designs. This pathway is available within 800 metres of identified activity centres. This was also introduced by Amendment VC243 on 29 November 2023.
- The ability to require permits for single dwellings between 300 sqm and 500sqm – which Amendment C219morn proposed to take up – was removed, again by Amendment VC243.
- Permit exemptions were introduced for "small second dwellings" – granny flat-style small second houses on a lot – through amendment VC253 on 14 December 2023.

In all four cases the effect of these changes is difficult to quantify with regards to both theoretical capacity and especially actual take-up.

The ResCode changes can be expected to have less effect in the Mornington Peninsula Shire than in other councils, as they affect the default provisions but do not negate local controls such as DDOs or local variations to the ResCode standards. These localised provisions – notably minimum lot sizes – will influence yields more than nigher than achievable under underlying ResCode changes. The changes also do not change the actual quantum of ResCode standards; while it could be expected to be somewhat easier to build in compliance with standards, this would not affect the maximum capacity attributable to lots using this methodology. Furthermore, ResCode remains subject to an overriding qualitative character assessment and in the Mornington Peninsula context these are expected to hold development to yields less than a minimally compliant ResCode approach.

The current ResCode controls are also an interim set of arrangements that the State government has committed to revising further by September 2024. That next round of changes may have more substantial impacts on capacity, as full codification would strip out all local variations. However the final form of those changes is not yet known.

The Future Homes capacity impacts are challenging to reliably estimate as the provisions require application of exemplar designs to actual site circumstance (likely involving consolidation of lots). Even if qualifying lots could be reliably identified, yields will vary from design to design. In practice, likely take-up of that capacity is also questionable, with the attractiveness of Future Homes to developers not established.

The change to the lot size at which a permit is required for single dwellings is not expected to have appreciable capacity implications. This affects the approval process for dwellings on some lots, and may affect character outcomes, but should not affect achieved yields on such lots.

The small second dwelling exemptions will likely add some supply. However this cannot easily be factored into the following analysis as realised yield of small second dwelling would occur partially at the expense of traditional two-dwelling development. With the controls only recently having come into operation, it is difficult to ascertain what likely take-up of the provisions is and how this overlaps with existing medium density forms.

Given the above, the specific impacts of these changes have not been considered in the analysis in this report. However, for all these cases if there is an impact it will be to increase supply. This means that the analysis of supply will be conservative (in that capacity factoring in these changes should be higher than that calculated here).

3. Capacity analysis approach

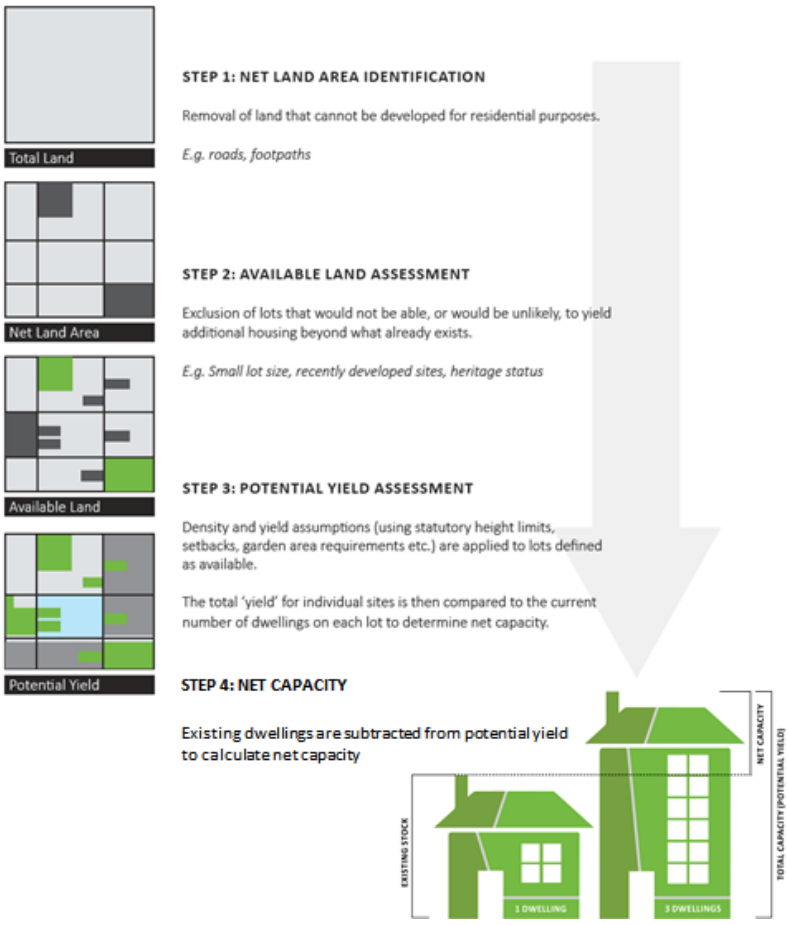
3.1 Overview

Capacity for housing in the Mornington Peninsula Shire has been estimated using a four step approach:

- Identify lots with zoning that allow residential uses[2]
- Excluded the subset of lots that are unlikely to yield additional housing in the next 15 years
- Estimate the potential dwelling yields on land available for residential development, based on planning and policy controls using relevant assumptions and calculations
- Calculate the net dwelling capacity by subtracting existing housing dwellings stock from the total capacity.

These steps are also described in Figure 2.

FIGURE 2: HOUSING CAPACITY MODEL PROCESS



[2] That is accommodation uses are permitted as either Section 1 and 2 uses in the zone.

This capacity assessment considers two "scenarios": the existing planning controls and the post-exhibition version of the amendment that was taken to the Panel hearing. The findings of these two analyses are presented at Section 4.1 and Section 4.2 respectively.

A comparison of housing capacity and housing demand is explored in Section 5 to provide an understanding of whether there is sufficient capacity to accommodate 15 years of forecast housing demand.

3.2 Extent, timeframe, submarkets

Extent

The assessment considers all zoned land in the municipality which could provide additional housing, that is, land zoned NRZ, GRZ, LDRZ, selected C1Z land (see below), MUZ, SUZ4 (inside the Urban Growth Boundary (UGB)) and selected areas zoned PUZ6 in activity centres (which are designated for substantial change due to their strategic development potential to facilitate higher density residential development under an appropriate residential zone. (i.e. mixed use).

More specifically, the land included in the assessment is:

- NRZ1 - where in and outside of UGB (i.e. Balnarring Beach, Merricks Beach, Merricks and Point Leo)
- GRZ1 - where in and outside of UGB (i.e. Balnarring Beach, Merricks Beach, Merricks and Point Leo)
- GRZ3 - where in and outside of UGB (i.e. Balnarring Beach, Merricks Beach, Merricks and Point Leo)
- LDRZ - where in and outside of UGB (i.e. Balnarring Beach, Merricks Beach, Merricks and Point Leo)
- SUZ4 - inside UGB only (Safety Beach (Martha Cove) and Tootgarook)
- MUZ - where in and outside of UGB, as appropriate
- PUZ6 - only where inside MAC and designated for substantial change due to their strategic development potential to facilitate higher density residential development under an appropriate residential zone (i.e. mixed use)
- C1Z - in Mornington, Rosebud and Hastings MACs, Somerville Township (area as per DDO30), Rye Town Centre (area as per DDO58), Dromana township (area as per DDO29) and Baxter Township (area as per DDO25).

Timeframe

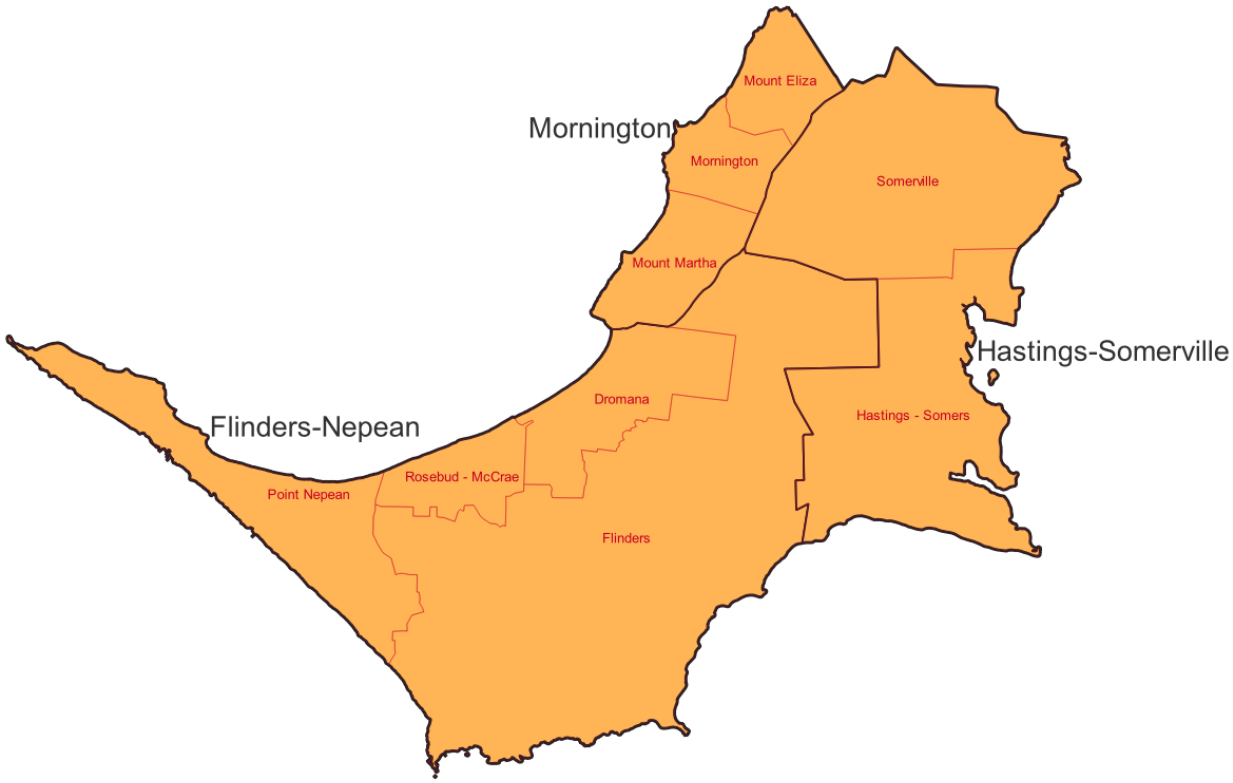
The assessment has considered the following time periods:

- The assessment reference year is 2023.
- Theoretical capacity is 'untimed' and based on what is possible under relevant planning controls
- The take up assessment has considered a 15-year time horizon to 2038.

Housing submarkets

The take-up assessment compares capacity and demand across a series of housing submarkets. VIF small area districts (VIFSA) have been used for this purpose, as shown in the figure below. These are 'Mornington' which includes the northern coastal areas closest to metropolitan Melbourne, 'Hastings-Somerville' which includes the eastern portion of the Shire, and 'Flinders-Nepean' which includes the western and southern portions of the LGA. The VIFSAs are amalgamations of the nine ABS SA2 geographies as shown in the figure below.

FIGURE 3: BROAD HOUSING SUBMARKETS – VIFSA DISCTRICTS



Source: SGSEP based on VIF 2019.

3.3 Data sources

The following key data sources were used in the assessment, and which are further detailed in the report:

- Property layer provide by Council (which combined adjoining lots in single ownership, rated as one property)
- Zones – existing and proposed by Amendment C219morn
- Design and Development Overlays – existing and proposed by Amendment C219morn
- Housing and Development Data (2005 – 2016)[3]
- Building permit data provided by Council (2011 – 2023).

[3] The Housing and Development Data (HDD) is a spatial data set of new housing development, collected by the state government for each year in the period 2005 to 2016.

4. Capacity analysis

This chapter sets out the findings of capacity analysis based on existing controls and the C219morn controls in Sections 4.1 and 4.2 respectively. Section 4.3 compares these capacity analyses with the earlier capacity analysis results that were presented at the Panel hearing. The final section of this chapter discusses some additional considerations, not accounted for in these analyses, but are likely to influence the capacity for housing in the Shire.

4.1 Housing capacity under existing controls

Density assumptions in activity centres

For land zoned C1Z and MUZ in specific activity centres, the dwelling capacity has been estimated by applying the average dwelling density for each centre derived from the relevant structure plan or urban design framework. These estimates draw on Council's previous modelling of floor space yields for each activity centre, based on the height and setback controls for each precinct. These floor space yields were converted to dwelling per hectare. Although there is some variability with respect to density across the various precincts within each activity centre, the average for the whole centre has been used to estimate capacity. The specific density assumptions applied to each activity centre are set out in Table 2.

TABLE 2: DENSITY ASSUMPTIONS FOR ACTIVITY CENTRES

Zone	Overlay	Dwelling density (dph)*	Note
CZ1 and MUZ	DDO13	105	Mornington Major Activity Centre
CZ1	DDO25	110	Baxter Small Activity Centre
CZ1 and MUZ	DDO26	135	Rosebud Major Activity Centre
CZ1 and MUZ	DDO27	105	Hastings Major Activity Centre
CZ1	DDO29	105	Dromana Large Activity Centre
CZ1	DDO30	110	Somerville Large Activity Centre
CZ1 and MUZ	DDO58	110	Rye Large Activity Centre

*Note: These estimates are based on average apartment size of 100 sqm per dwelling.

Density assumptions on residential land

A large proportion of residential land in the Shire has some form of minimum lot size control, implemented through zones or overlays. Where an explicit minimum lot control for subdivision exists, these controls have been used to estimate the dwelling capacity as these are likely to be the primary limiting factor on the density of new development (see Chapter 2). These assumptions are shown in Table 7 below.

For areas without minimum lot size controls a minimum lot size assumption of 400 sqm per dwelling has been used. This benchmark was used in the 2023 SGS peer review of Council capacity analysis as a review of over 400 permitted applications on land without subdivision controls found the *average* lot size of these

developments was 366 sqm.[4] The 400 sqm *minimum* lot size benchmark was thus chosen for that analysis a conservative assumption (on the high side) to inform the capacity analysis. It also aligns with the Panel's report which noted that "While the HSS has applied a sound methodology, the Panel agrees with Mr Spencer that… An assumed minimum 400 square metres should be applied because it better reflects actual circumstances".

The average lot size of a more recent sample of 10 approved permit applications in areas without subdivision controls was found to be 260 sqm. The average lot size per dwelling ranged from 180 sqm to 294 sqm per dwelling. The characteristics of the group of approved projects adds weight to the suggestion that a blanket a 400 sqm benchmark across all residential areas without subdivision controls is a conservative assumption (on the high side).

TABLE 3: DENSITY (AVERAGE LOT SIZE) FOR A SAMPLE OF RECENT DEVELOPMENTS

Case study	Current zone	Proposed zone	Lot size (sqm)	Dwellings	Average lot size	Type
85 Marine Pde Hastings	GRZ	NRZ2	1,232	6	205	2 x 3 on wide lot
7 Rankin Road Hastings	GRZ	NRZ39	813	3	271	3 'down the lot'
24 Thomas Street Rosebud	GRZ	GRZ1	720	4	180	4 'down the lot'
775 Point Nepean Road Rosebud	GRZ	NRZ2	2,024	9	225	9 'down the lot'
6 Bimble Street Rye	GRZ	NRZ2	510	2	255	2 on shallow lot
26 Government Road Rye	GRZ	NRZ2	909	3	303	3 on corner lot
6 Yacht Court Mornington	GRZ	NRZ2	588	2	294	Side-by-side duplex
6 Bimble Street Rye	GRZ	NRZ2	510	2	255	2 on corner lot
26 Government Road Rye	GRZ	NRZ2	909	3	303	Side-by-side duplex
36 Broadway Capel Sound	GRZ	NRZ3	855	3	285	3 'down the lot'
Average			**882**	**3.6**	**257**	

Source: Sample of recent planning permit applications provided by Mornington Peninsula Shire Council, 2024.

Capacity on vacant sites vs land with existing dwellings

The application of minimum lot size assumptions in the capacity analysis accounts for whether a lot is vacant or hosts existing dwellings, as per the table below. For example, assuming an average lot size of 400 sqm per dwelling, a lot of 950 sqm in area with a single dwelling that is has been assessed as having capacity for one additional dwelling. Alternatively, a vacant lot of 810 sqm has been assessed as having capacity for two dwellings.

[4] The permit data in question showed a wide range of lots sizes for permitted developments ranging from 120 sqm to 1,280 sqm per dwelling. The variation reflects the fact that this data set cover a wide range of contexts and that new developments do not always maximise the potential yield (e.g. a development may propose fewer dwellings than are technically permissible).

TABLE 4: NET DWELLING CAPACITY FOR VACANT LOTS VS LOTS WITH DWELLINGS

Lot size	Capacity if existing dwelling (400 sqm)	Capacity for vacant lot (400 sqm)
Less than 799 sqm	0	1
800 sqm – 1,199 sqm	1	2
1200 sqm – 1,399 sqm	2	3
Etc.		

TABLE 5: CURRENT CONTROLS - MINIMUM LOT SIZE ASSUMPTIONS FOR RESIDENTIAL AREAS

Zone	Overlay	Minimum lot size assumption (sqm)	Note
LDRZ	Default	4,000	This assumption has been applied to all LDRZ land, however LDRZ land with a reticulated sewerage connection can be subdivided to 2,000sqm.
	DDO5	5,000	
	DDO6	10,000	
	DDO7	20,000	
	DDO7 - Precinct H	80,000	
	DDO7 - Precinct I	40,000	
	DDO7 - Precinct J	40,000	
	DDO22 – Precinct 1	3,000	
	DDO22 – Precinct 2	6,000	
NRZ1	All	650	
GRZ1	Default	400	Assumption (not a planning requirement)
	DDO2 – default	650	Bayside and Village Design. Part of an integrated subdivision, meaning that a lot of 1,300 sqm could be subdivided into 2, but a lot of 1,950 sqm could not be subdivided into 3.
	DDO2 - designated area	450	Bayside and Village Design Part of an integrated subdivision, meaning that a lot of 900 sqm could be subdivided into 2, but a lot of 1,350 sqm could not be subdivided into 3.
	DDO3	1,500	Coast & Landscape Design
	DDO4 – default	2,500	Environmental Design
	DDO4 – Precinct C	5,000	Environmental Design
	DDO4 – Precinct D1	3,000	Environmental Design
	DDO4 – Precinct D2	1,200	Environmental Design

Zone	Overlay	Minimum lot size assumption (sqm)	Note
	DDO4 – Precinct E	10,000	Environmental Design
	DDO4 – Precinct F1	2,500	Environmental Design
	DDO4 – Precinct F2	1,300	Environmental Design
	DDO4 – Precinct G1	2,500	Environmental Design
	DDO4 – Precinct G2	2,000	Environmental Design. Part of an integrated subdivision, meaning that a lot of 4,000 sqm could be subdivided into 2, but a lot of 6,000 sqm could not be subdivided into 3.
	DDO11	2,000	Mt Eliza (North of Tower Road)
	DDO17	700	Woodthorpe Estate, Rosebud West
	DDO18	2,000	Mount Eliza Woodland Area
	DDO19	650	Bittern & Crib Point Township Residential Area
	DDO20	600	Crib Point Town Centre Residential Area
	DDO23	900	Hendersons – Creswell Residential Precinct
	DDO24	700	Beleura Hill, Mornington, Esplanade and Northeast
	DDO24	500	Beleura Hill, Mornington, Southeast and West
	DDO24	400	Beleura Hill, Mornington, South
GRZ3	Default	400	Assumption (not a planning requirement)
SUZ4		20,000	

Findings

The application of these assumptions to the available land in the Shire yields the total net capacity estimate of 25,397 dwellings. The breakdown by zone and submarket is shown in the table below.

TABLE 6: C219MORN CAPACITY BY SUBMARKET

Category	Mornington	Hastings-Somerville	Flinders - Nepean	Total
Activity Centres (C1Z, MUZ, PU6Z)	1,462	2,507	3,411	**7,380**
GRZ/NRZ (w/o lot size controls)	3,620	2,779	4,584	**10,983**
GRZ/NRZ (with min. lot size controls)	2,395	486	3,272	**6,153**
LDRZ/SUZ	146	252	269	**667**
Total	**7,623**	**6,024**	**11,536**	**25,183**

4.2 Capacity under Amendment C219morn (post exhibition version taken to panel)

Density assumptions in activity centres

The planning controls for land zoned C1Z, MUZ and PUZ6 within these areas are unchanged so the approach to the capacity assessment is the same as that for the current controls as outlined in Section 4.1 above.

Density assumptions on residential land

A similar approach has been applied to estimate housing capacity under the proposed C219morn controls. Where there are explicit minimum lot size controls implemented via zones or overlays, these have been used to estimate housing capacity. These assumptions are shown in Table 8 below.

For areas without minimum lot size controls the benchmark of 400 sqm per dwelling has been applied as the proposed changes to the ResCode standards in the Amendment appear unlikely to impact dwelling capacity. While increases to setbacks and open space requirements may require some design changes, built form testing by Council officers of recently approved permit applications (in areas without subdivision controls) found that compliance with the C219morn controls required only minor changes to some developments (see Table 7 and Appendix C). It was possible to achieve the same dwelling yield in all but one case. In that case the compliance required the loss of one bedroom (i.e. from 3 to 2) from 4 of the 9 dwellings or the reduction of the total numbers of dwellings from 9 to 8 (to retain all as three bedroom dwellings). In each of these examples the average lot size per dwelling is below the 400 sqm per dwelling assumption.

TABLE 7: IMPACT OF C219MORN ON AVERAGE LOT SIZES FOR A SAMPLE OF RECENT DEVELOPMENTS

Case study	Current zone	Proposed zone	Original lot size (sqm)	Dwellings	Average lot size (sqm)	Change to yield due to C219morn requirements
7 Rankin Road Hastings	GRZ	NRZ39	813	3	271	None
24 Thomas Street Rosebud	GRZ	GRZ1	720	4	180	None
775 Point Nepean Road Rosebud	GRZ	NRZ2	2,024	8 or 9	225/253	4 beds or 1 dwelling
6 Yacht Court Mornington	GRZ	NRZ2	588	2	294	None
36 Broadway Capel Sound	GRZ	NRZ3	855	3	285	None
Average			**882**		**251/257**	

Source: Sample of recent planning permit applications provided by Council, 2024.

TABLE 8: C219MORN - MINIMUM LOT SIZE ASSUMPTIONS FOR RESIDENTIAL AREAS

Zone	Overlay	Min lot size assumption (sqm)	Note
LDRZ1		2,000	
LDRZ2		2,500	
LDRZ3		3,000	
LDRZ4		4,000	
LDRZ5		5,000	
LDRZ6		6,000	
LDRZ7		10,000	
LDRZ8		20,000	
LDRZ9		40,000	
LDRZ10		80,000	
LDRZ11		10,000	
LDRZ	DDO5	5000	
LDRZ	DDO6	10,000	
LDRZ	DDO7	20,000	
NRZ19		2,000	
NRZ23		700	
NRZ34		900	
NRZ36		650	
NRZ or GRZ	Default	400	Assumption (not a planning requirement)
NRZ or GRZ	DDO1	400	Assumption (not a planning requirement)
NRZ or GRZ	DDO2	650	
NRZ or GRZ	DDO3	1500	
NRZ or GRZ	DDO4	2,500	
NRZ or GRZ	DDO11	2,000	
NRZ or GRZ	DDO17	700	
NRZ or GRZ	DDO19	650	
NRZ or GRZ	DDO20	600	
NRZ or GRZ	DDO24	700	Beleura Hill, Mornington, Esplanade and Northeast
NRZ or GRZ	DDO24	500	Beleura Hill, Mornington, Southeast and West
NRZ or GRZ	DDO24	400	Beleura Hill, Mornington, South
NRZ or GRZ	DDO32	450	
NRZ or GRZ	DDO33	1,300	
SUZ4		20,000	

Findings

The application of these assumptions to the available land in the Shire yields the total net capacity estimate of 25,183 dwellings. The breakdown by zone and submarket is shown in the table below.

TABLE 9: C219MORN CAPACITY BY SUBMARKET

Capacity assessment	Mornington	Hastings-Somerville	Flinders-Nepean	Total
Activity Centres (C1Z, MUZ, PU6Z)	1,462	2,507	3,411	**7,380**
GRZ/NRZ (w/o lot size controls)	3,620	2,779	4,584	**10,983**
GRZ/NRZ (with min. lot size controls)	2,395	486	3,272	**6,153**
LDRZ/SUZ	146	252	269	**667**
Total	**7,623**	**6,024**	**11,536**	**25,183**

4.3 Capacity analyses compared

It is estimated that the capacity in the Shire under the current controls is 25,397 net additional dwellings. The estimated capacity under amendment C219morn (post exhibition version as taken to Panel) is 25,183 net additional dwellings. These estimates are lower than Council's 2019 capacity estimate but similar to the adjusted capacity estimate from SGS's 2023 peer review of council's capacity assessment (although the distribution of capacity across categories differs).

TABLE 10: CAPACITY ANALYSIS COMPARED

Capacity assessment	Council estimate (2019)	Peer review estimate (SGS, 2023, based on council capacity estimate, 2019)	Current controls (SGS, 2024)	C219morn post-exhibition controls (SGS, 2024)
Activity Centres (C1Z, MUZ, PU6Z)	11,360	5,680	7,380	**7,380**
GRZ/NRZ (w/o lot size controls)	32,658	13,985	11,071	10,983
GRZ/NRZ (with min. lot size controls)	7,072	7,072	6,444	6,153
LDRZ/SUZ	1,685	1,685	502	667
Adjustment in Council's capacity analysis	120			
Total capacity (2019)	52,895	28,422	(na)	(na)
Total capacity (2021)	(na)	26,921*	(na)	(na)
Total capacity (2023?)	(na)	(na)	25,397	25,183

*Based on estimated take up for capacity of 1,621 dwellings in 2019 and 2020.

4.4 Discussion

The findings above suggest that, in practical terms, there is little to distinguish between the housing capacity under the Shire's current planning controls and the proposed C219morn controls.

This total capacity is likely to be a conservative assessment for a number of reasons:

- As noted above, there is evidence to suggest higher densities (i.e. lower lots sizes) can be accommodated in areas without explicit subdivision controls than implied by the 400 sqm minimum lot size benchmark (under both the existing and proposed C219morn controls).
- The proposed amendments to the "ResCode standards" in C219morn are not mandatory controls and can be varied based on individual site constraints and the development of an appropriate design response.
- We understand that some standards in the post-exhibition version of C219morn may not be implemented to respond to some of the planning panel recommendations
- The capacity analysis has not considered recent planning changes introduced to implement elements of Victoria's Housing Statement. Specifically, it does not account for the potential for small secondary dwellings (granny flats) to be constructed on lots of over 300 sqm without a planning permit or the expansion of the Future Homes program.
- Council has estimated that there might be in the order of 64,628 lots that could technically be eligible for small secondary dwellings.[5]

Thus, the total capacity for housing in the Shire is likely to be somewhat higher than suggested by the figures above.

[5] Council's analysis considered lots zoned NRZ, GRZ, LDRZ or MUZ, are 300 sqm or greater in size, and not subject to the ESO, SLO, EMO, FO, LSIO, BMO, PAO or RO.

5. Take up analysis

5.1 Introduction

The purpose of this take-up analysis is to consider whether the new housing required to meet forecast growth might be realised on the land available for redevelopment, at the likely densities/likely housing forms, during the time period in question. This is a speculative exercise. It is very difficult to predict with precision and how new or amended planning controls influence the conversion of theoretical housing capacity into built housing stock. To do so would require a significant amount of data (fine grained information about population growth, housing demand, land prices, dwelling prices, housing preferences, construction cost and development feasibility now, and in the future) and even if this data were available, the analysis would encounter the challenge of predicting the decisions and behaviours of thousands of households and businesses that are buyers, sellers, renters, developers, land bankers, lenders, and so on that are all participants in the housing system.

The extent to which zoning and planning controls influence housing supply and price has also been the subject of lively debate in recent years. Two perspectives have emerged that coalesce around polar opposite views. The first is that zoning has a primary role and significant influence over housing supply (and rents/ prices). Whereas the contrary view holds that zoning has very little to do with housing supply (and rents/prices) as the flow of new housing is controlled by actors (and factors) are largely beyond the influence of planners and the planning system.[6] A recent review of actual studies of the impact zoning changes on supply and prices has found mixed evidence and concluded that:

> upzonings offer mixed success in terms of housing production, reduced costs, and social integration in impacted neighborhoods; outcomes depend on market demand, local context, housing types, and timing (Freemark, 2023).

Notwithstanding the limitations of trying to predict future development trends, or debates about the extent to which zoning and planning changes actually influence the rate or type of development realised, in this chapter housing capacity and demand will be compared. In doing so we make the following observations:

- Although consideration should be given to the alignment of theoretical housing capacity and forecast housing demand, however this is a prediction about future of dwelling supply.
- This alignment of capacity and demand has multiple dimensions (e.g. spatial locations and dwelling types) that might be considered.
- There is very little empirical evidence of an appropriate 'ratio' of capacity to demand. A recent report has cited a figure of market capacity in the range of 7 to 10 times demand (i.e. a capacity to demand ratio of between 7:1 and 10:1) although the empirical source of this claim is unclear.[7]
- Modest planning changes are unlikely (in themselves) to significantly disrupt the prevailing market conditions for housing supply.

With these principles in mind the take-up analysis consists of three separate analyses:

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[6] Examples of the 'pro-zoning' perspective include (Kendall and Tulip, 2018; Greenaway-McGrevy and Phillips, 2022). Examples of the counter-perspective include (Murray, 2020; Helm, 2023).

[7] See Committee for Sydney (2022) *Planning for Growth*.

- A comparison of demand and capacity by housing submarket (i.e. broader geographic areas)
- A comparison of demand and capacity by dwelling type (i.e. apartment, medium and lower density)
- An analysis of the ratio of demand to capacity over time (i.e. demand vs capacity year-on-year).

The first compares capacity to forecast dwelling demand by housing sub-market, based on the VOFSA areas described above (see 3.2). The second compared demand by dwelling type, based on recent trends, adjusted for shifts towards more diverse housing in the future compared to recent trends.

5.2 Housing demand

The starting point for the take-up analysis is to consider the amount of housing that is likely to be required. The official government population and dwellings forecasts, Victoria in the Future (VIF) were updated in December 2023 to reflect changes in forecasts of population growth patterns and rates. While the 2019 VIF forecasts indicated that Mornington might need to accommodate an additional 17,750 dwellings between 2021 and 2036. The most recent VIF forecasts have revised this forecast down to 10,950 dwellings, or 40% lower than the 2019 forecast (Table 11). This downward revision is likely to reflect lower growth forecasts for the state of Victoria and changes to the forecast distribution of growth within the state.

VIF forecasts by LGA do not extend beyond 2036. However, for the sake of this exercise we have assumed that the 15 year dwelling demand forecasts of 10,950 for 2021 to 2036 is also a reasonable estimate of the likely demand for the 15 years period 2023 to 2038.

TABLE 11: VICTORIA IN THE FUTURE DWELLING FORECASTS FOR MORNINGTON PENINSULA SHIRE

	2021	2036	Change
VIF 2019	95,500	113,250	17,750
VIF 2023	93,600	104,540	10,950
Difference	(1,900)	(8,710)	(6,800)

5.3 Recent dwelling growth

The VIF forecast implies average dwelling construction of around 730 dwelling per year for the 15-year period. ABS data indicates that between 2011 to 2021 around 10,000 net additional dwelling were added in the Shire, an average of 1,000 dwellings per year. Evidently, these recent rates of dwelling supply are higher than the updated VIF forecasts.

5.4 Demand and capacity by sub-market compared

The first element of the take-up analysis compares capacity and demand across three broad housing submarkets (see Figure 3). The VIF small area districts (VIFSA) have been used for this purpose: 'Mornington', 'Hastings-Somerville' and 'Flinders-Nepean'.

Capacity and demand by the three sub-markets in the Shire are shown in the table below. In each sub-market, capacity exceeds demand. The submarket where the highest amount of capacity is required to satisfy demand is Mornington, where 69% of capacity is required. This suggests that after 15 years 31% of capacity remains (assuming no additional capacity is identified in that time).

TABLE 12: CAPACITY AND DEMAND BY SUB-MARKET COMPARED

Type	Capacity (C219)	Demand (2023-2038)	Excess capacity	Capacity required 2021-2036
Mornington	7,623	5,266	2,357	69.1%
Hastings-Somerville	6,024	2,408	3,616	40.0%
Flinders-Nepean	11,536	3,276	8,260	28.4%
Total	25,183	10,950	14,233	43.5%

5.5 Demand and capacity compared by dwelling type

This element of the take-up analysis compares capacity and demand by dwelling type. Comparing ABS dwelling type data from 2016 and 2021 suggests that the majority of new dwellings in the Shire are detached, with some medium and higher density dwellings Table 13). Rather than assuming the continuation of these trends in relation to dwelling mix, a slight shift towards higher density dwellings has been assumed to estimate future housing demand. The forecast shares of dwelling by type are shown in the third column of Table 13. These have been multiplied by the forecast demand total of 10,950 dwellings. The resulting notional dwelling demand, by type, is shown in the final column.

TABLE 13: FORECAST BY DWELLING TYPE

Type	Share of growth 2011-2021*	Adjust share for higher density	Notional dwelling demand 2023 to 2038
High and medium density	4%	8%	876
Detached/lower density	91%	88%	9,636
Very low density	5%	4%	438
Total	100%	100%	10,950

*Based on ABS, 2021; **Based on share of growth in LDRZ between 2005 to 2016 from DPE's Housing and Development Data.

Capacity and demand by dwelling type are compared in the table below. Capacity was assigned to dwelling types as follows:

- Activity centres: high and medium density
- LDRZ/SUZ4 – very low density
- All other residential areas: detached/low density.

For each dwelling type category, capacity exceeds demand. For the detached dwelling categories, 56% of capacity would be required to satisfy the forecast demand. There is considerable capacity for higher density dwellings compared to the demand forecasts for these dwelling types (even with the assumption of a doubling of the future share apartments and medium density dwellings from 4% to 8%).

TABLE 14: CAPACITY AND DEMAND BY DWELLING TYPE COMPARED

Type	Capacity	Demand (2023-2038)	Excess capacity	Capacity required
High and medium density	7,380	876	6,504	11.9%
Detached/lower density	17,136	9,636	7,500	56.1%
Very low density	667	438	229	40.1%
Total	25,183	10,950	14,233	43.5%

5.6 Demand and capacity over time

Finally, consideration is given to the relationship between demand and capacity over time and the manner in which the development of new housing 'consumes' capacity. Specifically, at the start of the planning horizon, there is a large amount of capacity compared to average annual demand figure. In each year a share of the capacity is consumed as new dwellings are realised, reducing the housing capacity available in the subsequent years. This is illustrated in the table and figure on the following page which compare annualised dwelling demand for the Shire (730 dwellings per year) to remaining capacity, year-on-year. In the chart, average annual demand is shown in orange and the remaining capacity in blue.

It is apparent from this comparison that the capacity consumed in any one year represents a modest share of all capacity. The ratio of total capacity to annual demand is 33:1 in year 1 and decreased progressively to 19:1 by year 15. This means that in the year 2038, for every dwelling required to meet demand there will be capacity for 20 dwellings. As noted above, one study has cited a target for capacity to be 7 to 10 times annual demand (a ratio of between 7:1 and 10:1), which is exceeded throughout the 15 years period.

The remaining figures present similar year-on-year take up analysis for the three housing submarkets and three broad housing type categories.

TABLE 15: CAPACITY AND DEMAND OVER TIME

Year	Dwelling demand per annum	Ratio of capacity to annual demand	Remaining capacity
Year 0	na	na	25,183
Year 1	730	33:1	24,453
Year 2	730	32:1	23,723
Year 3	730	31:1	22,993
Year 4	730	30:1	22,263
Year 5	730	29:1	21,533
Year 6	730	28:1	20,803
Year 7	730	27:1	20,073
Year 8	730	26:1	19,343
Year 9	730	25:1	18,613
Year 10	730	24:1	17,883
Year 11	730	23:1	17,153
Year 12	730	22:1	16,423
Year 13	730	21:1	15,693
Year 14	730	20:1	14,963
Year 15	730	19:1	14,233

FIGURE 4: DEMAND VS CAPACITY OVER TIME (ALL CAPACITY)

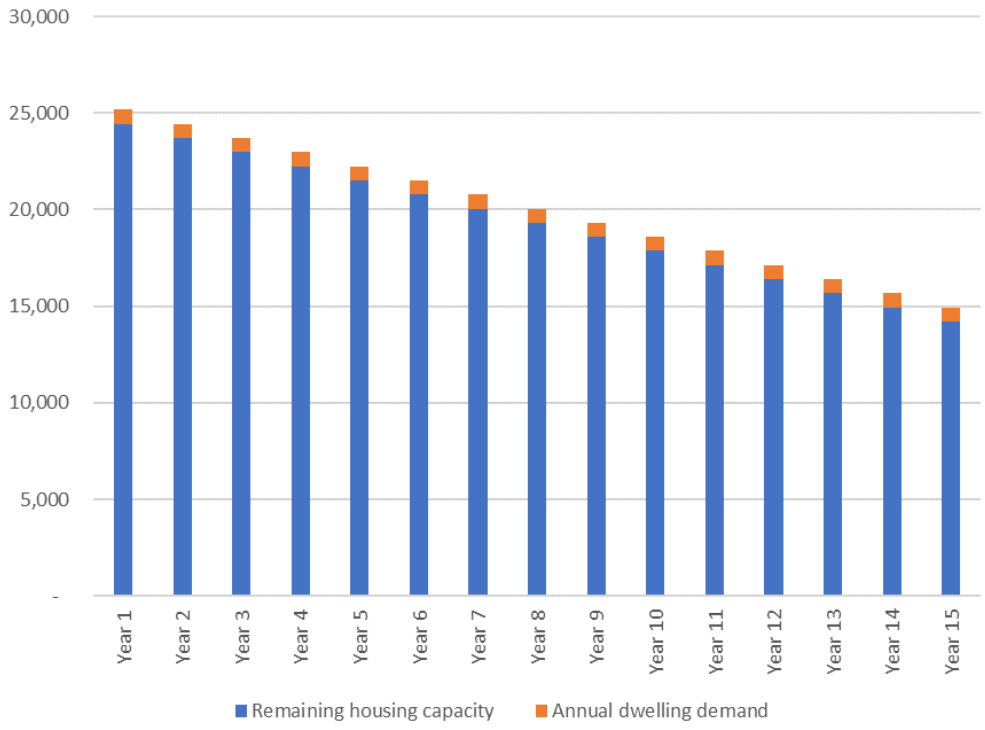
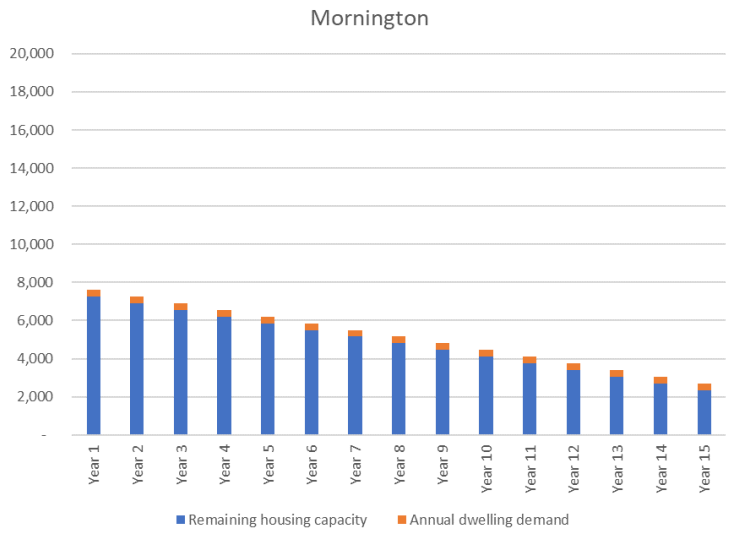
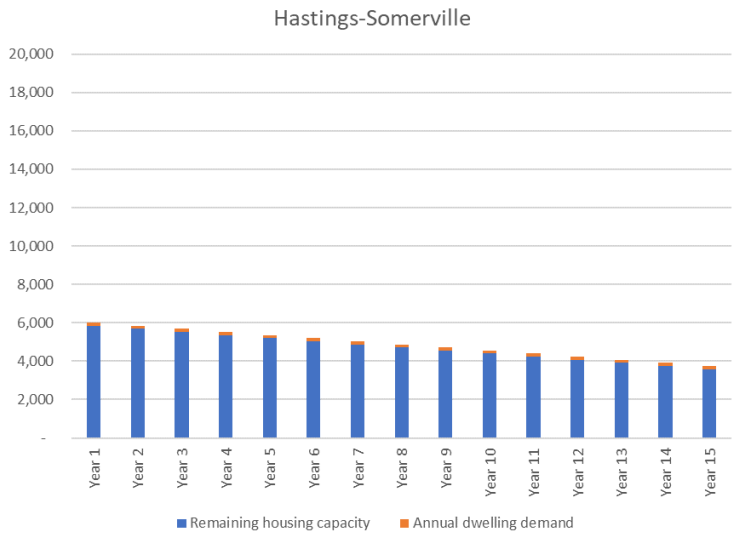


FIGURE 5: DEMAND VS CAPACITY OVER TIME (BY SUBMARKET)





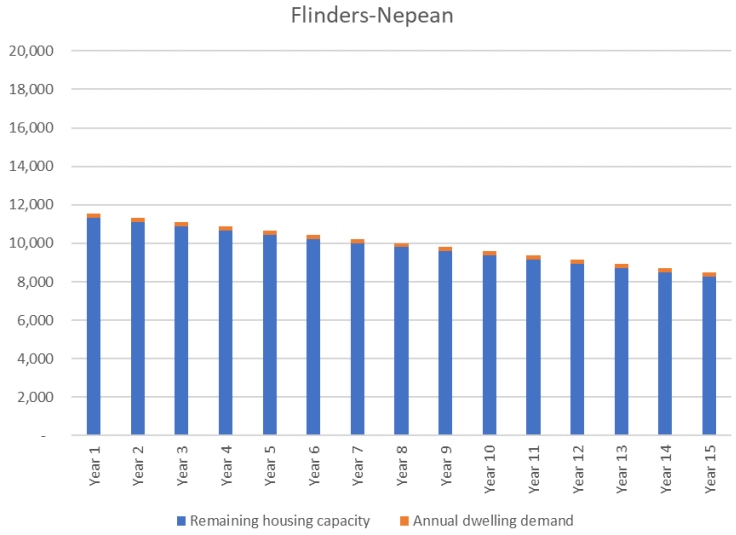
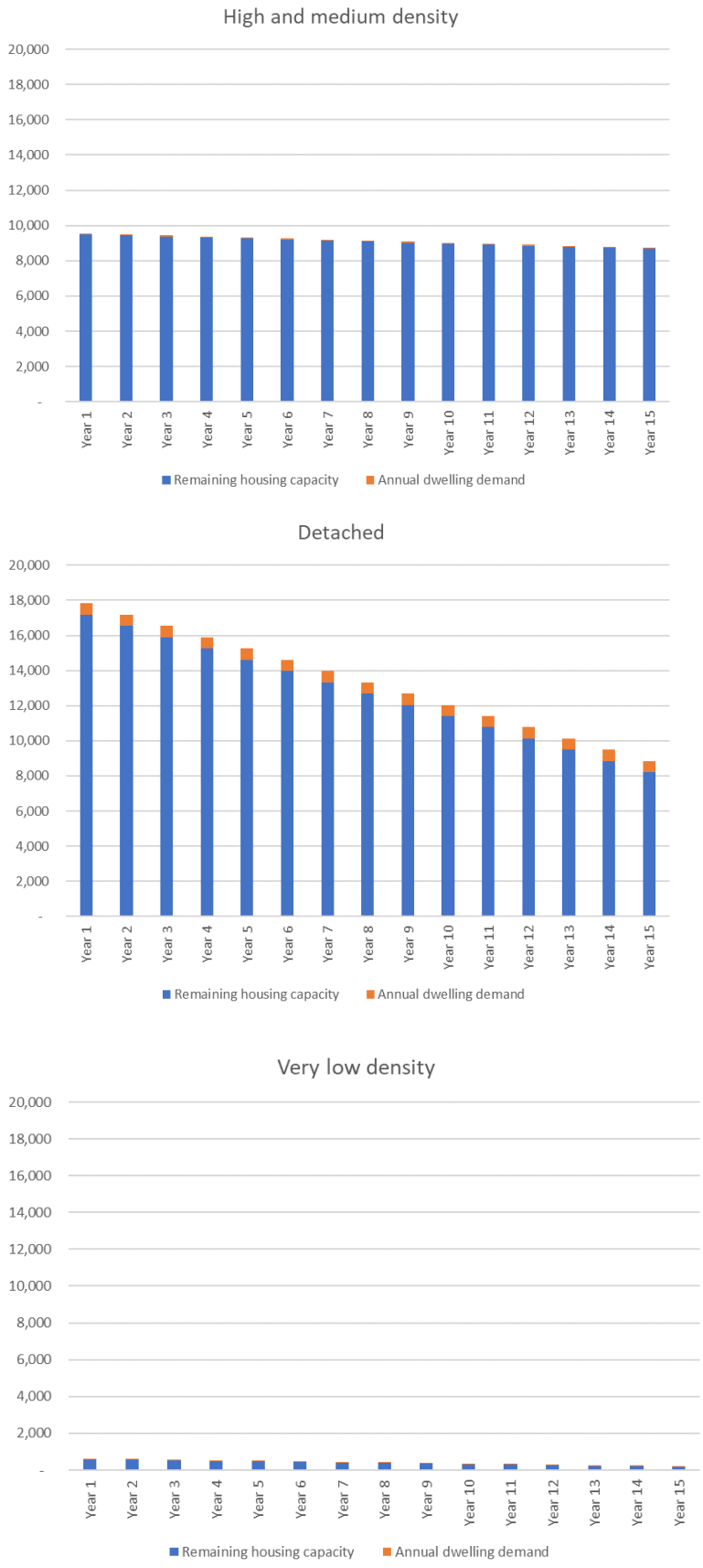


FIGURE 6: DEMAND VS CAPACITY OVER TIME (BY TYPE)



6. Conclusions

The analyses presented above provides evidence there will be sufficient capacity to accommodate 15 years of supply in the Shire finding that:

- Recent official forecasts of dwelling demand in the Shire are 40% lower than previous forecasts.
- The implied annual rate of supply of 730 dwelling pr year is lower than than the average for the period 2011 to 2021 of around 1000 dwelling per year.
- Amendment C219 would deliver a capacity of about 25,183 net additional dwellings, 43.5% of which is required to provide for the 15 year demand forecast, leaving additional capacity for 14,233 dwellings.
- The alignment of theoretical housing capacity and forecast housing demand by submarket found that there is suffice capacity to meet demand in all submarkets. Mornington is the tightest submarket largely by virtue of higher demand in that submarket.
- The alignment of theoretical housing capacity and forecast housing demand by type found that there is suffice capacity to meet demand for all dwelling types.
- Although there is very little empirical evidence of an appropriate ratio of capacity to demand. The ratio of annual demand to total capacity is consistently higher than 10:1 *at the end of the 15 year planning horizon*.

It should also be reiterated that the capacity estimates present in this report are conservative (on the low side) and therefore estimate of the share of capacity consumed to accommodate 15 years of dwelling growth are likely to be lower that the figures provided.

References

Freemark, Y. (2023) 'Zoning Change: Upzonings, Downzonings, and Their Impacts on Residential Construction, Housing Costs, and Neighborhood Demographics', *Journal of Planning Literature*, 38(4), pp. 548–570. Available at: https://doi.org/10.1177/08854122231166961.

Greenaway-McGrevy, R. and Phillips, P. (2022) 'The Impact of Upzoning on Housing Construction in Auckland', *Cowles Foundation Discussion Papers* [Preprint]. Available at: https://elischolar.library.yale.edu/cowles-discussion-paper-series/2689.

Helm, T. (2023) *Statement of Evidence - Proposed Wellington City District Plan*.

Kendall, R. and Tulip, P. (2018) *The Effect of Zoning on Housing Prices*. Research Discussion Paper 03, p. 41.

Murray, C. (2020) 'A housing supply absorption rate equation', 1 September. Available at: https://www.fresheconomicthinking.com/2020/09/a-housing-supply-absorption-rate.html (Accessed: 16 February 2021).

Appendices

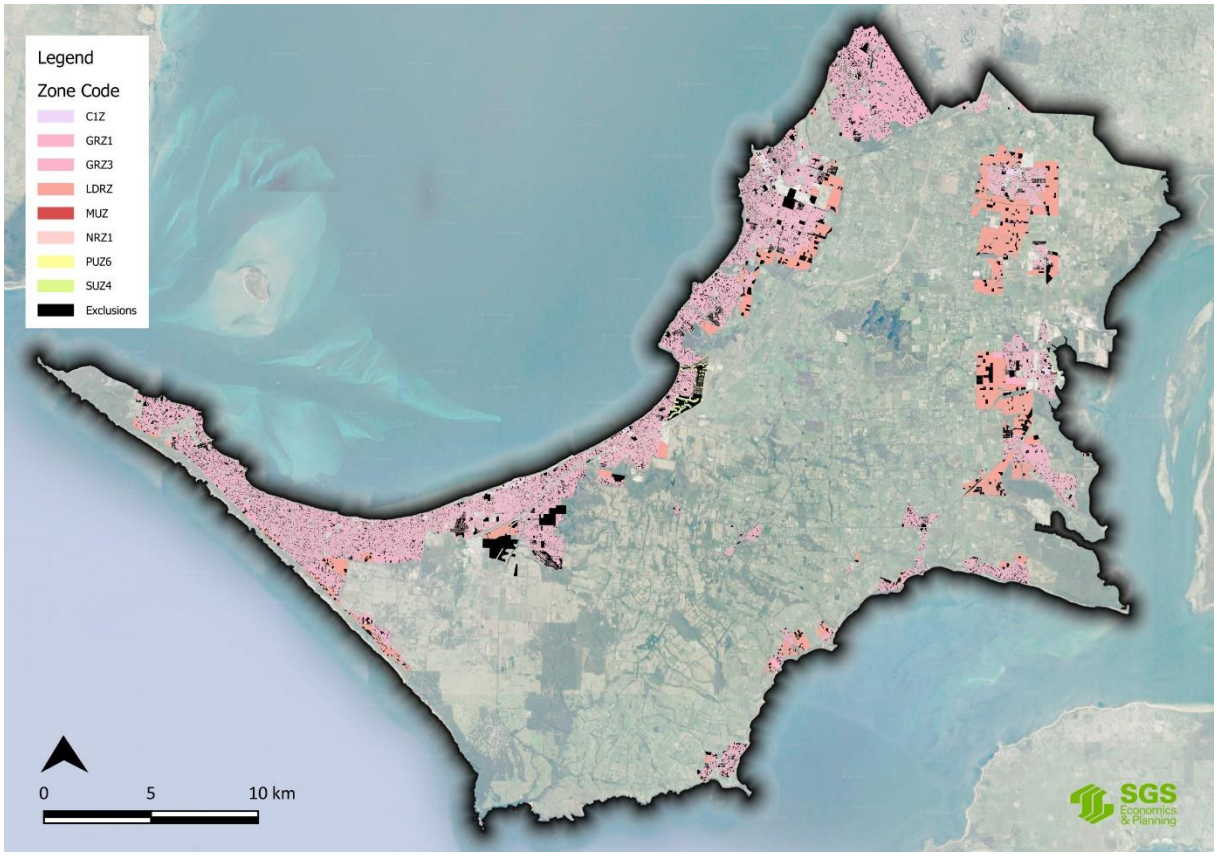
Appendix A: Zoned residential land

Zoned residential land refers to land where residential development is permitted excluding public realm areas (e.g. roads and footpaths) that cannot be developed for residential purposes.

The capacity calculation is conducted on a lot level basis, with only lots where residential development is permissible considered, and so parts of the public domain are automatically excluded.

In this assessment, the net land includes all properties within the LGA zoned NRZ, GRZ, MUZ and C1Z land within selected activity centres, PUZ6 flagged for development in Major Activity Centres, LDRZ, and SUZ4 within UGB, as per the specific extent set out at Section 3.2 above. Net land based on the proposed controls is summarised in Figure 7 below.

FIGURE 7: NET RESIDENTIAL LAND



Source: SGS Economics and Planning, September 2023

Appendix B: Available residential land

Summary of available land assumptions

Available land is a subset of net residential land and excludes lots (within the net land) which cannot be developed, or are unlikely to be developed, based on lot level attributes or characteristics described below.

Designation of lots as available does not mean that development is necessarily feasible or that property owners are ready or willing to develop these sites. Typically, only a small portion of available lots are likely to be developed in any one year. There are also likely to be site-specific attributes which may affect the development potential of some sites, but which cannot be included in a municipal wide assessment.

The table below summarises the exclusions that have been applied for the base case capacity analysis.

TABLE 16: EXCLUSIONS FOR AVAILABLE LAND ANALYSIS

Criteria	Data source	Assumption	NRZ	GRZ	MUZ	C1Z*	LDRZ	PUZ6*	SUZ4*
a) Recent development	HDD – 2008 to 2016 Council building permit data – 2011 to 2023	Exclude projects with year 2008 or later. Filtered based on code descriptions. See Table 17 below.	x	x	x	x	x	x	x
b) Land with multiple owners (e.g. strata title)	Council data	See below for description.	x	x			x		x
c) Community uses, public infrastructure, common lots	Council property layer	Filtered based on code descriptions below.	x	x	x	x	x	x	x

* Selected C1Z,PUZ6 and SUZ4 land as described in 3.2 below

TABLE 17: RECENT DEVELOPMENT – COUNCIL BUILDING PERMIT DATA – 2008 TO 2023

Permit categories of recent developments excluded from capacity analysis	Permit categories not excluded from capacity analysis
Accommodat, Apartment, Cottage, DualOcc, Dwelling, ResidDevel, Townhouse, Units/Flat	Academy, AccRamp, Add&Verand, AgeCarFac, Alarm Sys, Alfresco, Balcony, Balustrad, Barn, Basemen, Bathroom, Bed&Break, Bedroom, BoardHouse, BoatShed, Bungalow, Cabana, CareDwell, Carport, Conservat, CoverArea, Deck, Demolition, DentSurg, DepPerUnit, DressRoom, Earthworks, ElevShaft, EncVeranda, Fence, Fire Detec, Fire Servi, Fireplace, Gallery, Games Room, Garage, Gazebo, GrannyFlat, GroupHouse, GuestHouse, Gymnasium, HabOutBld, HabRoom, Hotel, InstalLift, InternAlt, Laundry, Lift, Loft, MachShed, MgrFlat, MiscBuild, MOH Unit, Office, OfficeFitO, openroof, Outbld, Pads & Col, PartDwell, Patio, PatioRoof, Pavilion, Pergola, Pool Pavil, Pool Room, PoolEncl, PoolFence, PoolHse, Porch, Portable, Portico, Ramp, RemedialWk, Removal, Restricted, Restump, RetailDeve, RetWall, Roof, RumpusRoom, SafetyFen, Screen Wal, ShadeSail, Shed, ShopCentre, ShopFitout, Sleepout, Spa, Spa & Safe, Spa Fence, Staircase, Steps, Storage, Store, Studio, Sunroom, Swimming P, SwimPool, TennisPav, Terrace, Transdwell, Verandah, VeranEncl, Vergola, Walkway, Wall, Warehouse, Workshop

Note: This table shows the categories of building permits that were used to excluded land that has been recently developed from the analysis. The “Excluded permit categories” are those deemed “recent development” and unlikely to host further residential development.

TABLE 18: EXCLUSIONS - COMMUNITY USES AND PUBLIC INFRASTRUCTURE

Excluded from capacity analysis	Included
DrainReserve, Parks&Gdns, ToiletBlock, TouristAtt, Cemetery, Library, VacHlthSrv, CommCtr, School, HistoriHom, HoliCamp, NursingHome, RecrCamp, OYOStrataF, Boatshed/Bathing Box, RefPlg2025, PublicBuil,	Dwelling, Unit, ConjUnit, GrnyFltStu, ResVacantLand, DisabHsng, RuralDwelling, Farmhouse, RuralVacantLand, SemiDetach, Dw&DepUnit, RetVilUnit, 2ndDwelling, PoultryShed, ResRoadway, ResMiscBld, ResSubdLnd, PreSchool, Bed&Break, StraUnitFl, Indiv Flat, MarketGarden, Hall, Church, DentalClin, HealthClin, InvestFlat, ShopDwelling, Shack/Hut, Vet, Motel, ServApart, Hotel, CaravanPark, Club, RelStyCtr, ReligResid, VacantLand, Flats, MiscBuilding, Creche, Market, WhseShowrm, Shop, ShopCtr, CarPark, Offices, DeptStore, Kiosk, Supermarket, YOSubFlat, LifeStyleV, Gaming, ComVacantLand, Gymnasium, Pub, PlanningAp

Note: This table shows the categories of land uses that were excluded from the capacity analysis as they host existing community uses and public infrastructure, or common lots (e.g. shared driveways), that are unlikely to be redeveloped for housing.

a) Recently developed sites

Sites that are recently developed are unlikely to be redeveloped again within the short to medium term and are therefore excluded from the capacity analysis. We have assumed that recently developed sites are unlikely to be comprehensively redeveloped again for at least 30 years. Therefore, a site developed in the last 15 years is unlikely to be redeveloped in the next 15 years – the planning horizon for this assessment. So the threshold for 'recent development' is 2008 (2023 + 15 – 30 = 2008).

Recently completed buildings were identified using two data sources:

- The Housing and Development data (HDD) was used to identify lots developed from 2008 to 2016.
- Council building permit data (from 2011 to 2023) used to identify lots developed in that period. The data was filtered to limit the exclusion to major developments (see first column of Table 17 for details).

b) Lots with multiple owners

Land that has multiple owners (e.g. is subject to strata title) is less likely to be redeveloped as it requires multiple parties to agree to the sale and/or redevelopment at the same time. Using data provided by Council on the "count of owners" per lot, lots with five 5 of more owners were excluded. As a result of these exclusions, only land with 4 or fewer owners was included in the analysis.

c) Other exclusions: community uses, essential services, common lots

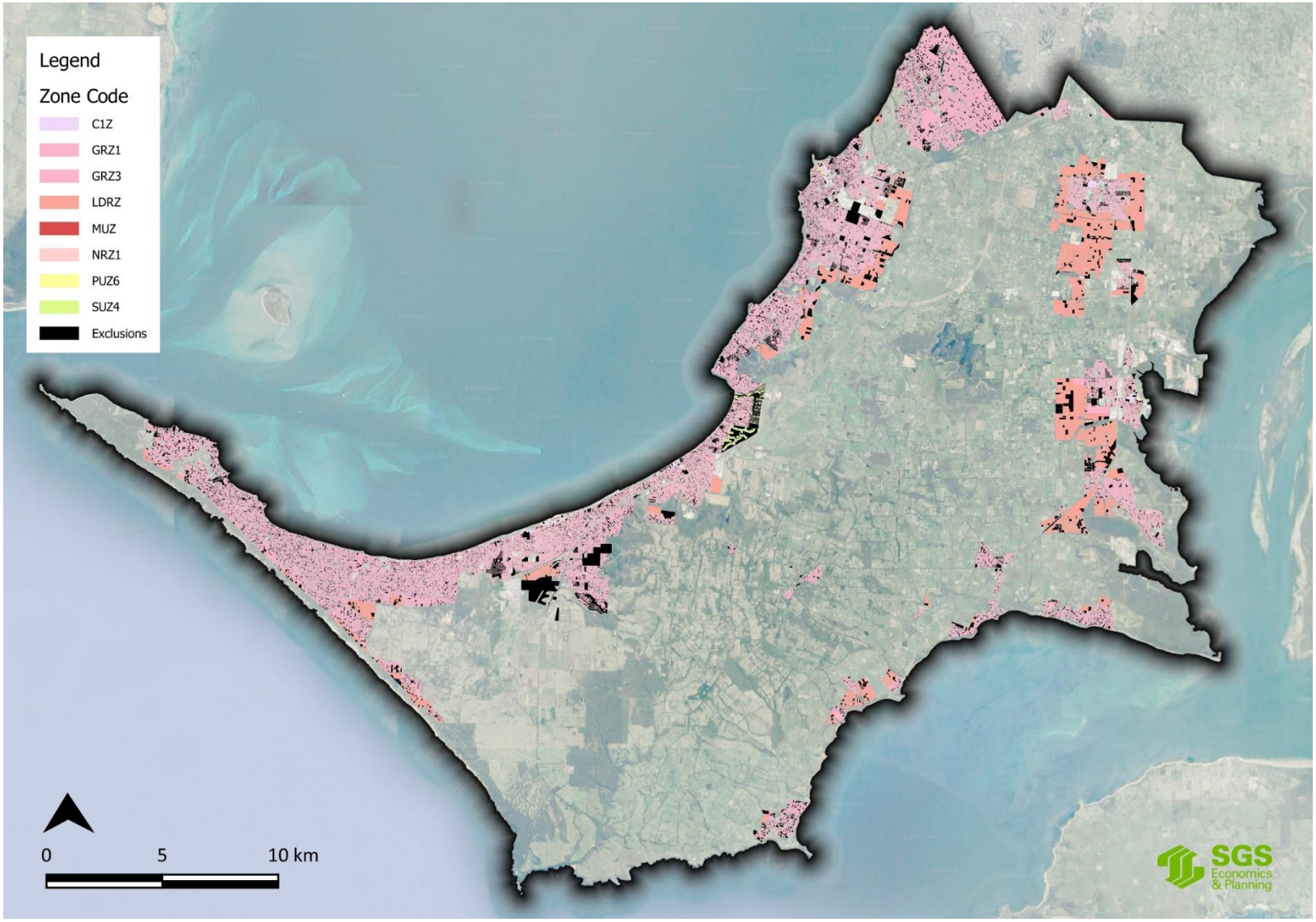
The final category of exclusions includes:

- Land currently occupied by community uses, essential services and other uses that are unlikely to be replaced with housing. Council property layer was used to identify these land uses by filtering out land with specific code descriptions. The excluded categories are listed in the first column of Table 18.
- Common lots that are typically the shared driveways in multi-dwelling developments.

All exclusions combined

Figure 8 shows all of the above exclusions combined. All land that has been deemed unavailable for new residential development within the UGB and within the next 15 years is shown in black. Excluded lots for each specific filter can be found in the attached package of maps.

FIGURE 8: AVAILABLE LAND

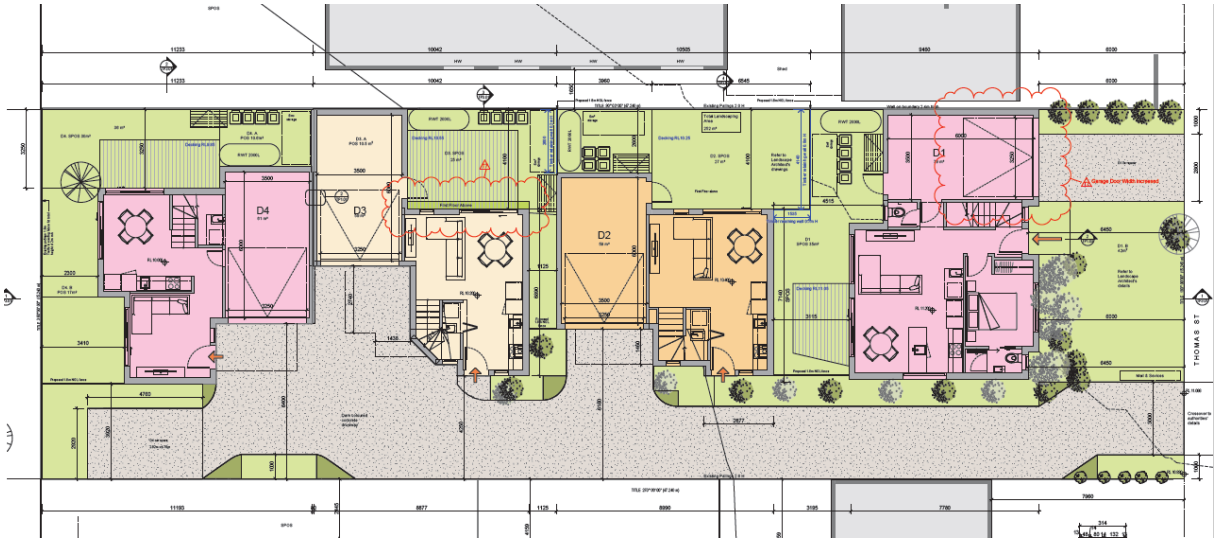


Source: SGS Economics and Planning, September 2023

Appendix C: Case studies – impact of C219morm controls on development in areas without minimum lots size controls

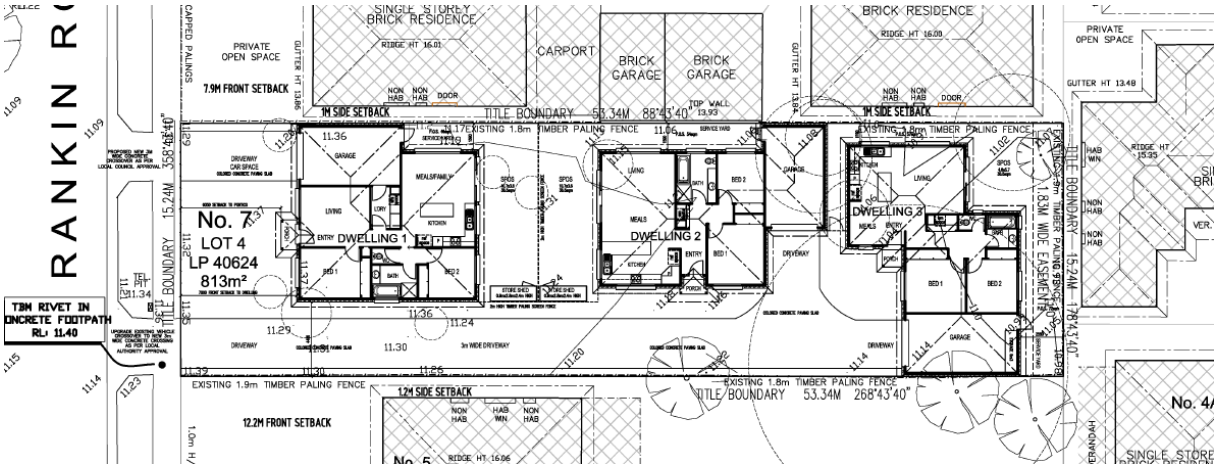
Thomas Street, Rosebud – 4 units

- No change.
- Post C219morn the site will remain GRZ1 therefore the assessment will stay the same as under C219morn



Rankins Road, Hastings – 3 units

- No change.
- The units are single storey therefore the 2 storey height limit will not result in change.
- NRZ39 has no additional ResCode requirements therefore the assessment will stay the same as under C219morn

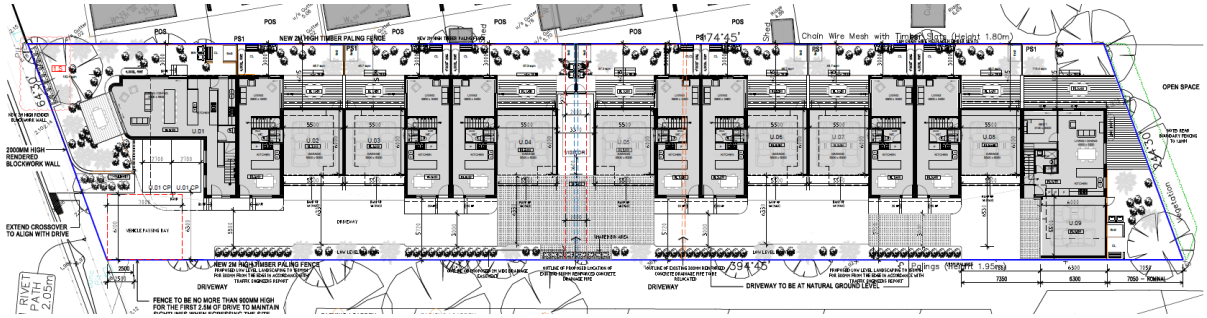


Point Nepean Road, Rosebud – 9 units

- Under NRZ2 the change to the SPOS required results in the loss of a unit or the change of unit make up.
- The other increased standards will have immaterial changes to the proposal.

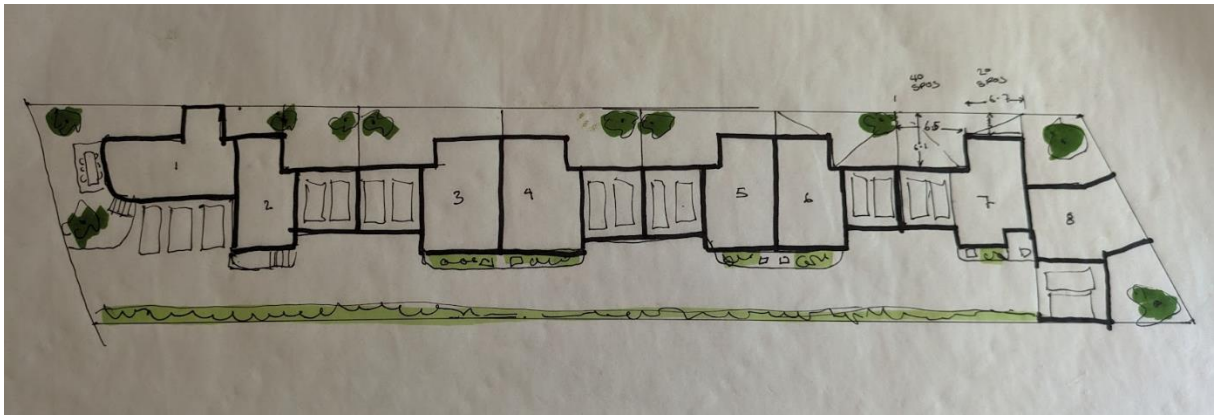
- The units are two storey therefore the 2 storey height limit will not result in change.
- The proposal already complies with 2m side setbacks.
- To comply with the 5m rear setback unit 9 would need to extend to the rear boundary to be a wall on boundary.
- NRZ2 requires SPOS 40 sqm with a min dimension of 5m + 20spm POS with a min dimension of 3m for the 3rd bedroom.

Endorsed Plans: 3 bed x9 units:



Keeping the number of lots but changing the bedroom make up: 3 bed x 5 units and 2 bed x 4 units

Keeping the bedroom makeup and therefore losing a unit: 3 bed x 8units

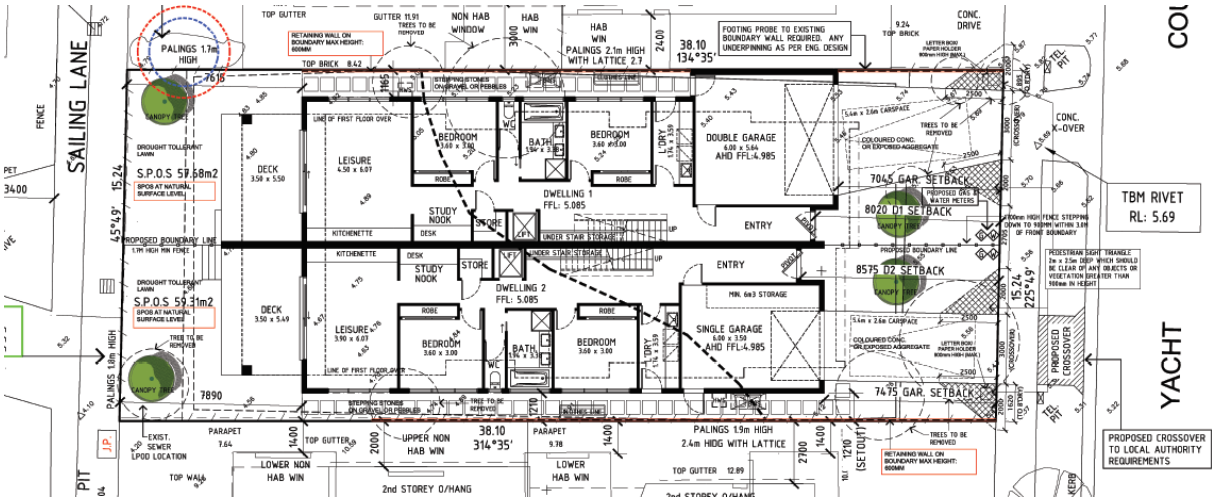


Yacht Court, Mornington – duplex

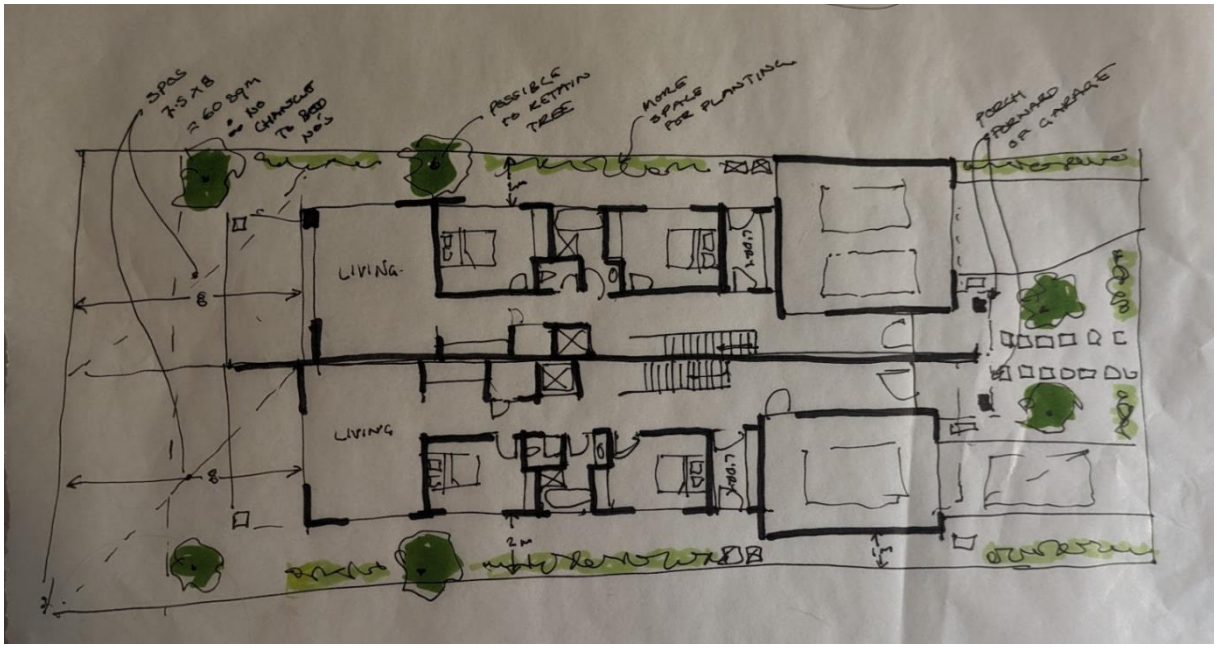
- Under NRZ2 there will only be minor tweaks to the plans required.
- The other increased standards will have immaterial changes to the proposal.
- The units are two storey therefore the 2 storey height limit will not result in change.

- The proposal would need an additional 0.8m on one side.
- The proposal complies with the 5m rear setback.
- NRZ2 requires SPOS 40 sqm with a min dimension of 5m + 20spm POS with a min dimension of 3m for the 3rd bedroom.
- Therefore the proposal only needs an extra 2sqm in unit 1 and 1sqm in unit 2.

Endorsed Plans:



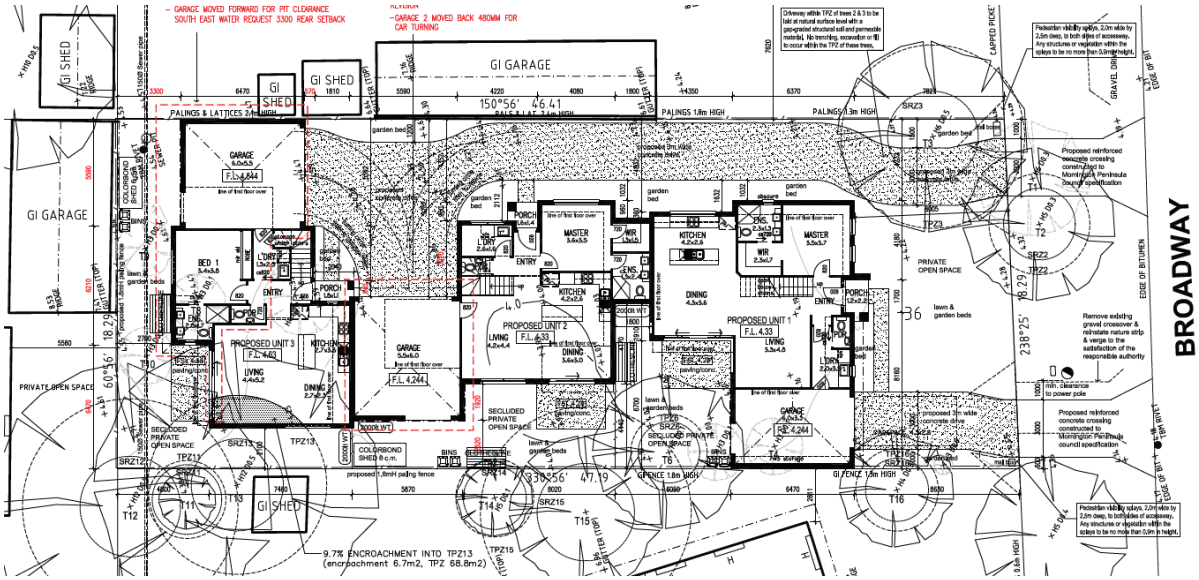
Proposed changes NRZ2:



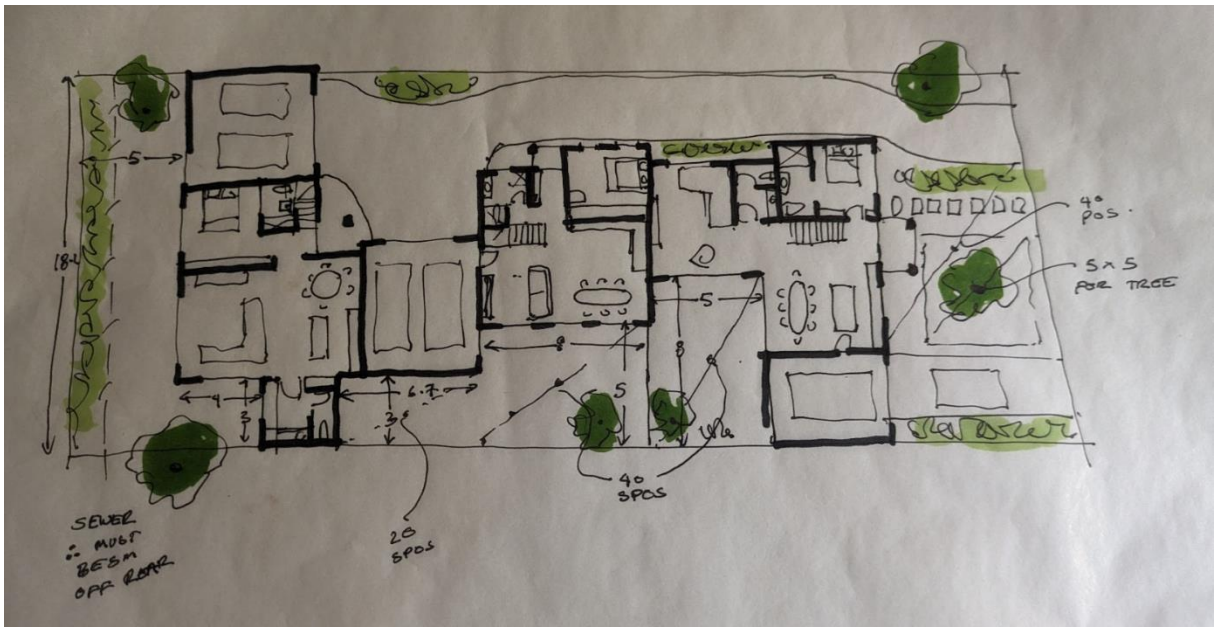
36 Broadway Capel sounds – 3 units.

- Change from GRZ to NRZ3
- Under NRZ3 the change to the SPOS required and the setbacks results in no change to the dwelling make up or subdivision yield
- There is a sewer in an easement close to the back of the lot in the rear so the building must be setback 5m as building over the easement to have the wall on boundary would not be possible.

Endorsed plans GRZ:

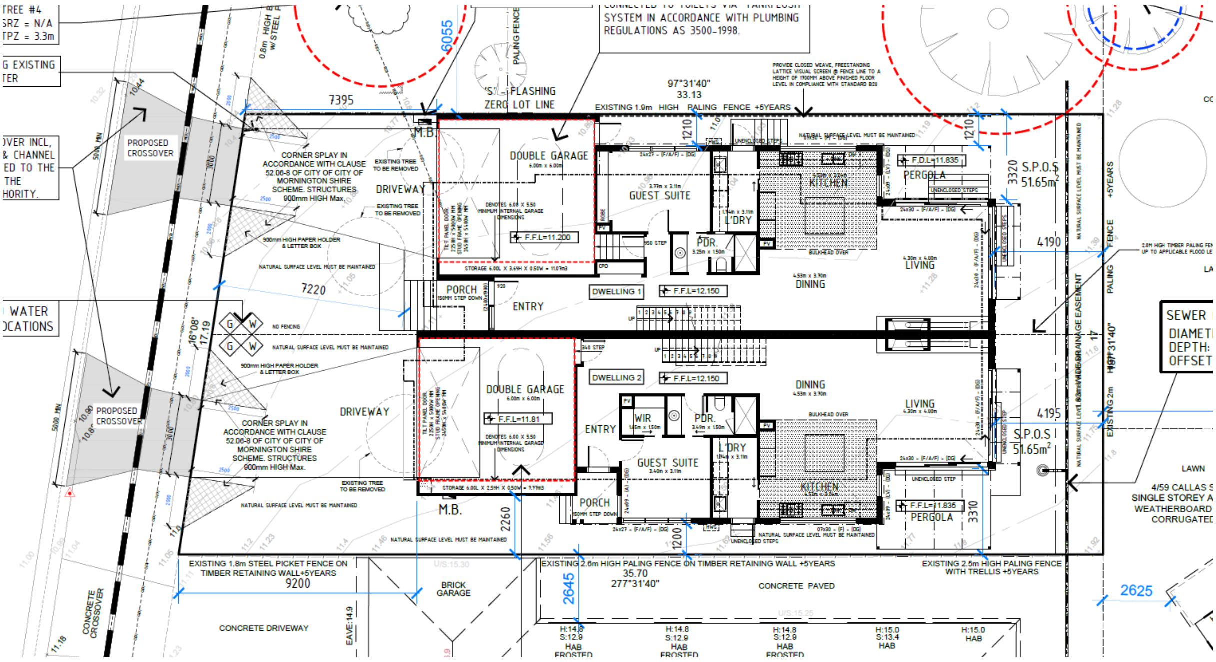


NRZ3:



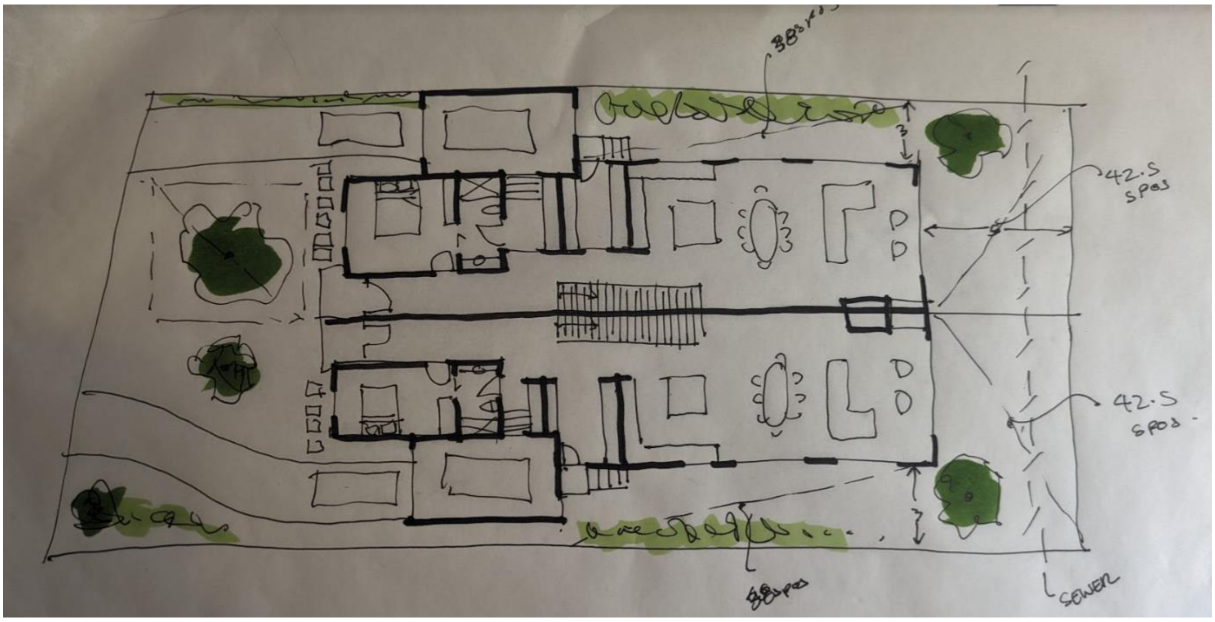
19 Mary Street Dromana – duplex

- From GRZ to NRZ36.
- Under NRZ36 the change to the res code standards would require a bit of a redesign however the dwelling typology is essentially the same.
- The big change is that the lot can no longer be subdivided before or after development



SYSTEM IN ACCORDANCE WITH PLUMBING REGULATIONS AS 3500-1998.
"S" FLASHING ZERO LOT LINE
97°31'40"
33.13
EXISTING 1.9m HIGH PALING FENCE +5YEARS
7395
PROPOSED CROSSOVER
M.B.
DOUBLE GARAGE
DRIVEWAY
GUEST SUITE
KITCHEN
PERGOLA
S.P.O.S 51.65m²
LIVING
DINING
L'DRY
PDR.
PORCH
ENTRY
DWELLING 1
F.F.L=11.200
F.F.L=12.150
7220
4190
SEWER
DIAMETER
DEPTH:
OFFSET
CORNER SPLAY IN ACCORDANCE WITH CLAUSE 52.06-8 OF CITY OF CITY OF MORNINGTON SHIRE SCHEME. STRUCTURES 900mm HIGH Max.
EXISTING TREE TO BE REMOVED
900mm HIGH PAPER HOLDER & LETTER BOX
NATURAL SURFACE LEVEL MUST BE MAINTAINED
DWELLING 2
F.F.L=11.81
WIR
4195
S.P.O.S 51.65m²
F.F.L=11.835
2260
1200
3310
EXISTING 1.8m STEEL PICKET FENCE ON TIMBER RETAINING WALL +5YEARS
9200
EXISTING 2.6m HIGH PALING FENCE ON TIMBER RETAINING WALL +5YEARS
35.70
277°31'40"
EXISTING 2.5m HIGH PALING FENCE WITH TRELLIS +5YEARS
BRICK GARAGE
CONCRETE DRIVEWAY
CONCRETE PAVED
2645
2625
LAWN
4/59 CALLAS
SINGLE STOREY
WEATHERBOARD
CORRUGATED
CONCRETE CROSSOVER

NRZ36:



42.5 SPOS
42.5 SPOS
SEWER

Appendix D: Capacity results by township

TABLE 19: CURRENT NET DWELLING CAPACITY BY LOCALITY

Locality	Activity Centres (C1Z, MUZ, PU6Z)	GRZ/NRZ (w/o lot size controls)	GRZ/NRZ (with min. lot size controls)	Lower density (SUZ4 and LDRZ)	Net capacity
Arthurs Seat			97		**97**
Balnarring		17	114	1	**132**
Balnarring Beach			3		**3**
Baxter	163	140			**303**
Bittern		135	62	166	**363**
Blairgowrie			370	2	**372**
Boneo				60	**60**
Capel Sound		691	6		**697**
Crib Point		221	239		**460**
Dromana	494	687	42	27	**1,250**
Flinders			236	2	**238**
Hastings	1147	1059		23	**2,229**
McCrae		494	85		**579**
Merricks			12	3	**15**
Merricks Beach			6		**6**
Mornington	1462	2215	102	14	**3,793**
Mount Eliza		139	1584	2	**1,725**
Mount Martha		1258	817	32	**2,107**
Point Leo			85		**85**
Portsea			1034	21	**1,055**
Red Hill			64		**64**
Red Hill South			43		**43**
Rosebud	2212	2032	19	57	**4,320**
Rye	705	86	278	30	**1,099**
Safety Beach		699	6		**705**
Shoreham			156	3	**159**
Somers			50		**50**
Somerville	1197	1080	123	24	**2,424**
Sorrento			709		**709**
St Andrews Beach			37	6	**43**
Tootgarook			65	2	**67**
Tyabb		118		27	**145**
Total	**7,380**	**11,071**	**6,444**	**502**	**25,397**

TABLE 20: C219 MORN NET DWELLING CAPACITY BY TOWNSHIP

'Township'	Activity Centres (C1Z, MUZ, PU6Z)	GRZ/NRZ (w/o lot size controls)	GRZ/NRZ (with min. lot size controls)	Lower density (SUZ4 and LDRZ)	Net capacity
Arthurs Seat		2	32	65	**99**
Balnarring		17	114	1	**132**
Balnarring Beach			3		**3**
Baxter	163	140			**303**
Bittern		138	63	70	**271**
Blairgowrie			364	1	**365**
Boneo				60	**60**
Capel Sound		691	6		**697**
Crib Point		221	239		**460**
Dromana	494	549	70	30	**1,143**
Flinders			236	2	**238**
Hastings	1,147	1,059	11	12	**2,229**
McCrae		494	85		**579**
Merricks			12	3	**15**
Merricks Beach			6		**6**
Mornington	1,462	2,215	102	14	**3,793**
Mount Eliza		139	1,587		**1,726**
Mount Martha		1,266	706	132	**2,104**
Point Leo			85		**85**
Portsea			1,032	22	**1,054**
Red Hill			64		**64**
Red Hill South			43		**43**
Rosebud	2,212	2,032	19	57	**4,320**
Rye	705	117	254	20	**1,096**
Safety Beach		699	6		**705**
Shoreham			156	3	**159**
Somers			50		**50**
Somerville	1,197	1,080		147	**2,424**
Sorrento			709		**709**
St Andrews Beach			40	6	**46**
Tootgarook			59		**59**
Tyabb		124		22	**146**
Total	**7,380**	**10,983**	**6,153**	**667**	**25,183**

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