Planning Proposal to Implement Strathfield Medium Density Housing Strategy

Built form & visual impact testing

26 July 2024

STRATHFIELD COUNCIL

Introduction

This built form and visual impact testing was undertaken by Council staff to help determine the appropriate level of FSR for the proposed medium density housing types in the R2 zone. Various levels of FSR were tested in this study before arriving at the recommended FSR to inform the Planning Proposal.

Having reviewed the supporting documents, it is understood by Council staff that a more aggressive density increase will encourage housing supply, stimulate the market take-up and potentially deliver medium density housing products at a faster pace; however, it presents the risk of overdevelopment and might compromise the amenity of neighbouring residents and future occupants.

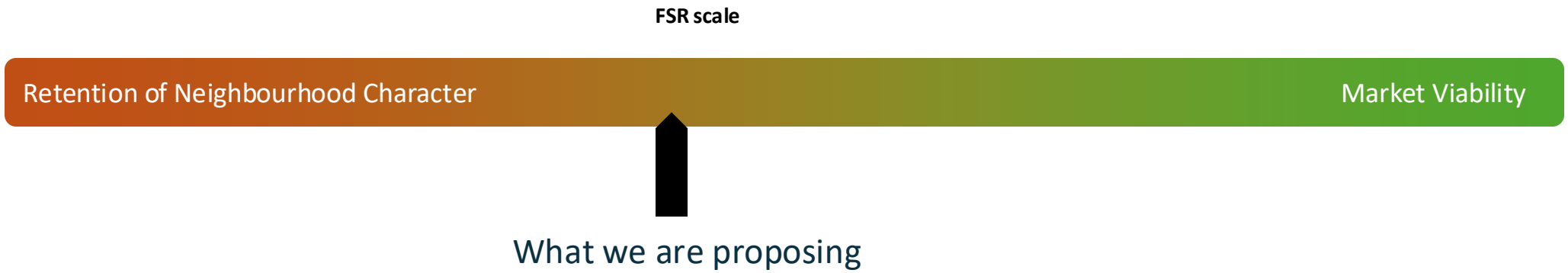
A more conservative approach would expect a steady supply of medium density housing and gradual increase of the housing diversity in the residential neighbourhood, minimising the impact on the existing neighbourhood character.

The test found that an FSR of 1:1 is excessive in an R2 zone and will likely lead to overdevelopment and is not supported.

An FSR of 0.8:1 may be achievable in a built form that consists of two storey with limited additionall floor space in an attic. However, it will require robust DCP controls to ensure that the intended outcome can be satisfactorily delivered by development proposals.

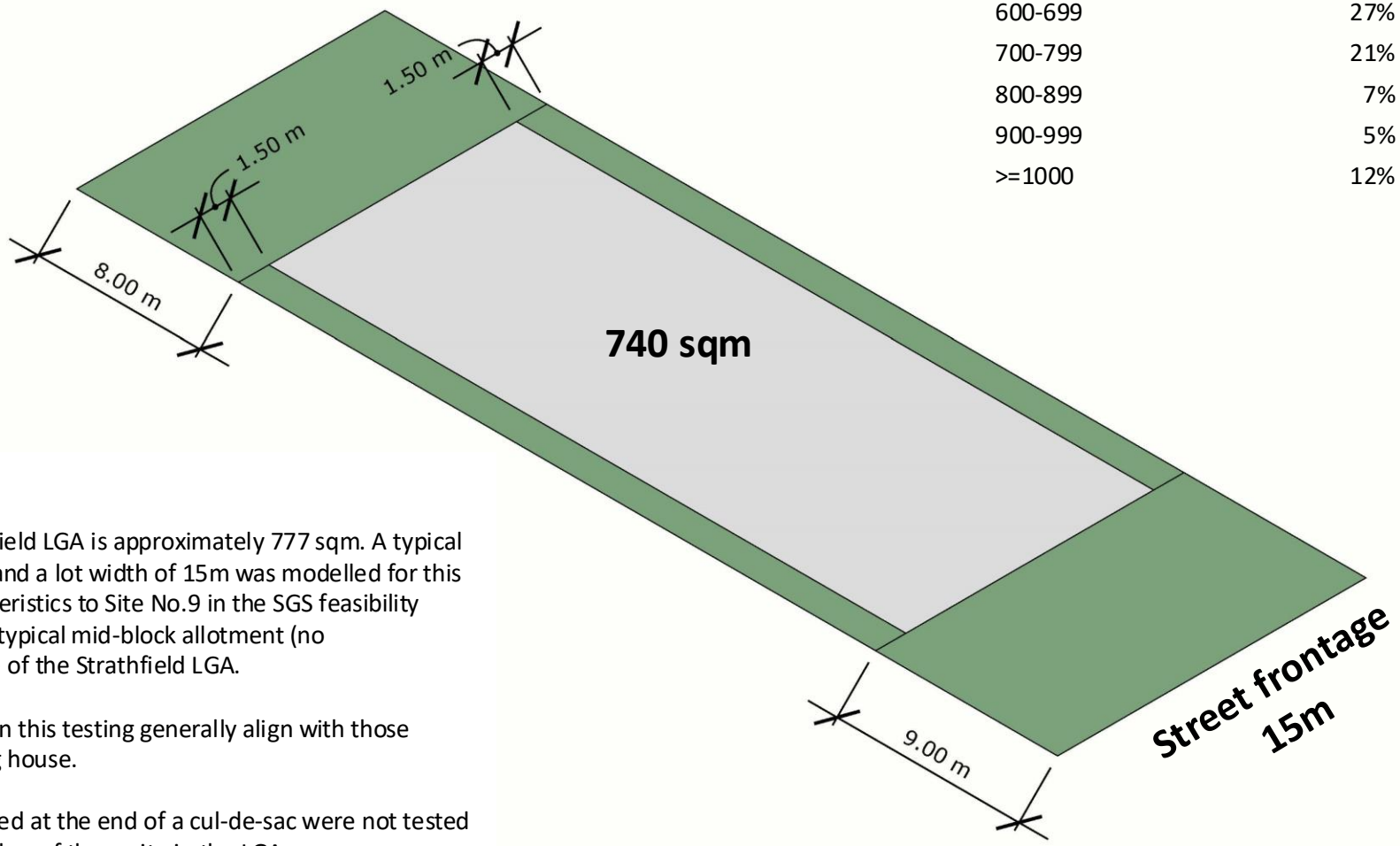
At the end, a moderate increase in the FSR up to 0.65:1 is recommended. This will allow a two storey built form to accommodate various medium density housing types such as dual occupancy, multi dwelling housing and manor house, while offering some incentive to encourage medium density housing over single dwelling development.

It will also encourage development proposals to be lodged via the Development Assessment (DA) pathways rather than as Complying Development under the Codes SEPP 2008.



Built form testing

Row Labels	% of Total Lots in R2 Zones
<500	16%
500-599	12%
600-699	27%
700-799	21%
800-899	7%
900-999	5%
>=1000	12%



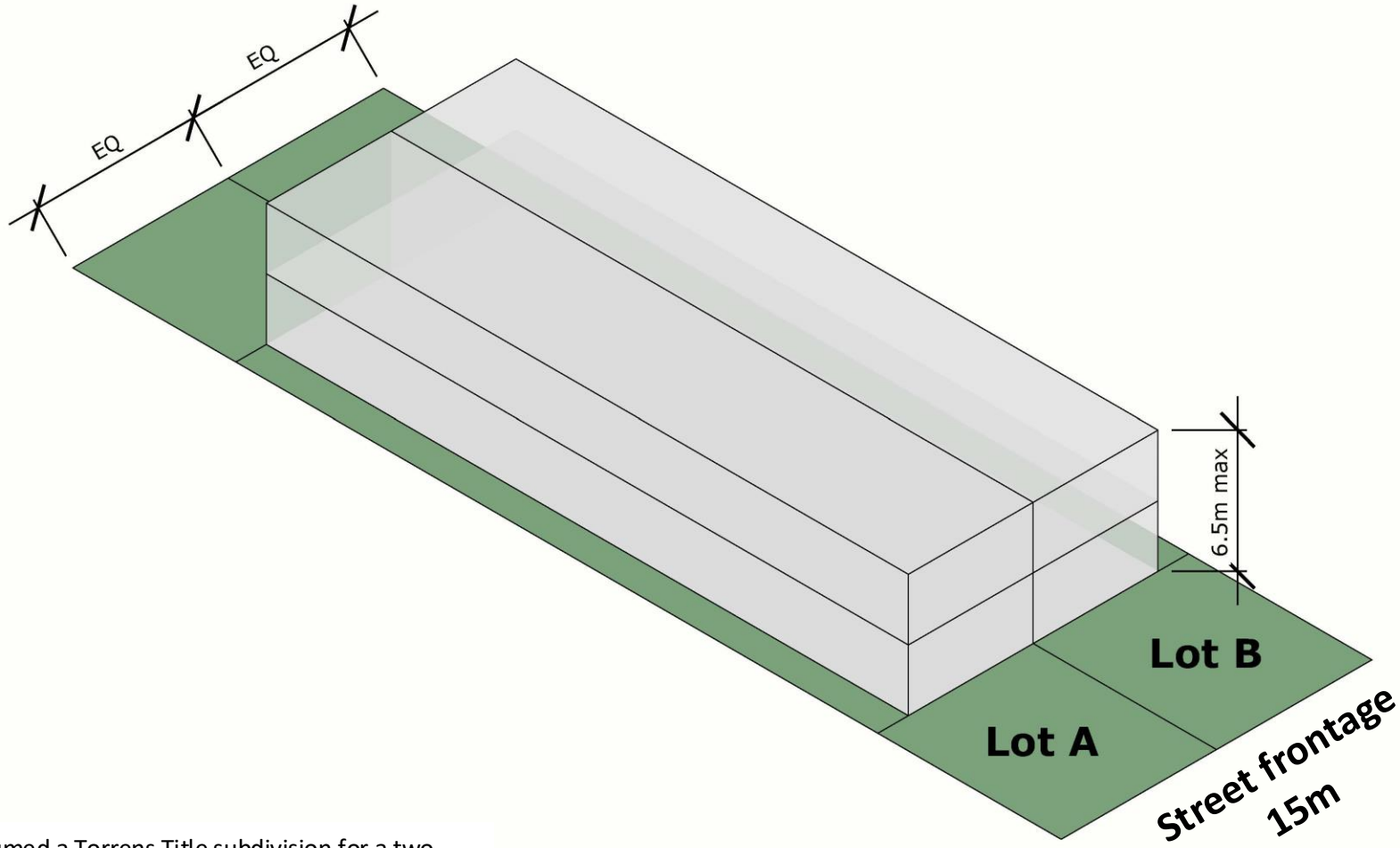
Assumptions

The average lot size in Strathfield LGA is approximately 777 sqm. A typical site with an area of 740 sqm and a lot width of 15m was modelled for this analysis. It has similar characteristics to Site No.9 in the SGS feasibility testing. The site represents a typical mid-block allotment (no amalgamation) in the R2 zone of the Strathfield LGA.

The setback controls applied in this testing generally align with those applicable to a single dwelling house.

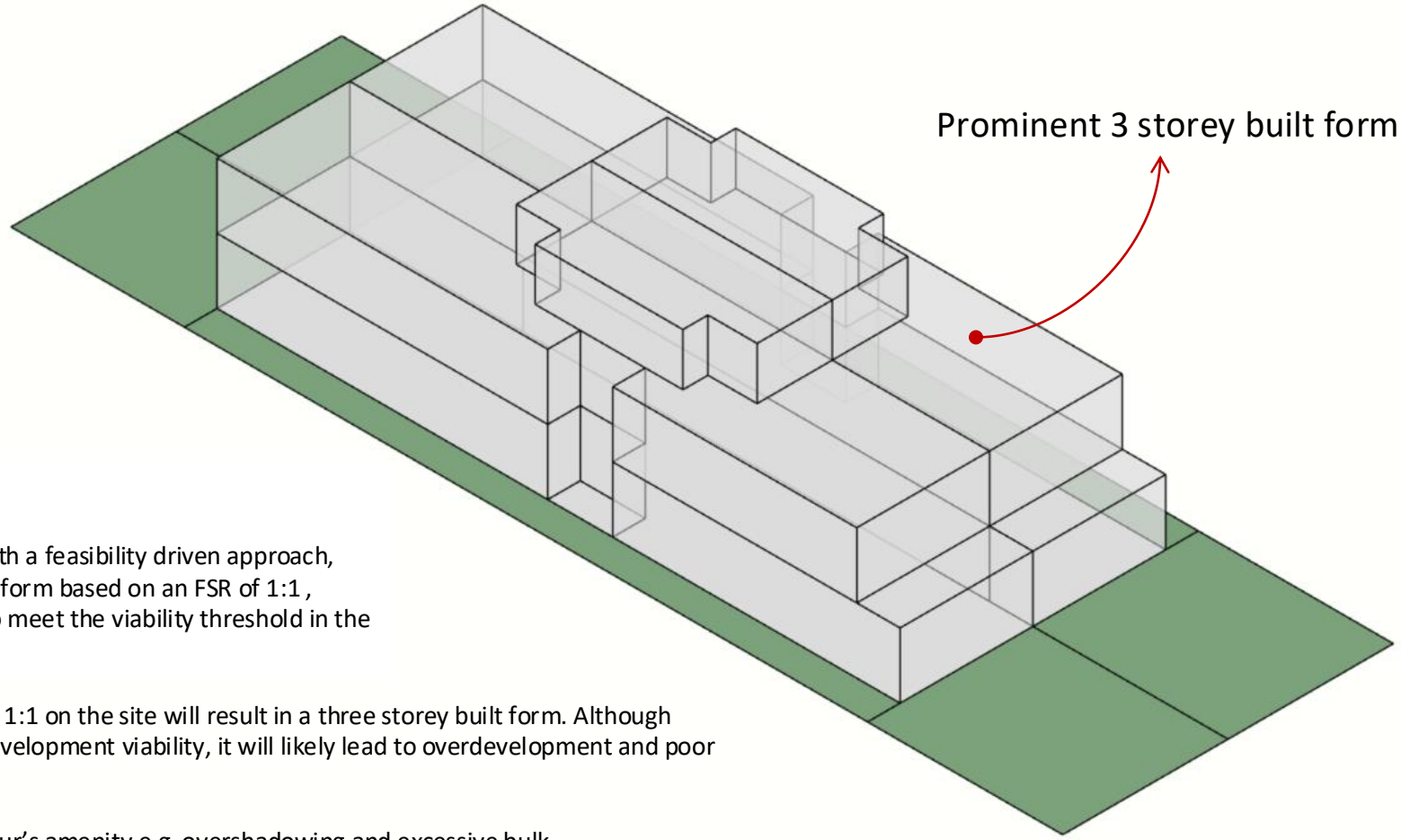
Sites with rear access or located at the end of a cul-de-sac were not tested as there are very limited number of these site in the LGA.

Built form testing



The built form testing has assumed a Torrens Title subdivision for a two – storey dual occupancy development, as illustrated by the building envelope on this page.

Feasibility driven approach – FSR 1:1



Scenario 1 – FSR 1:1

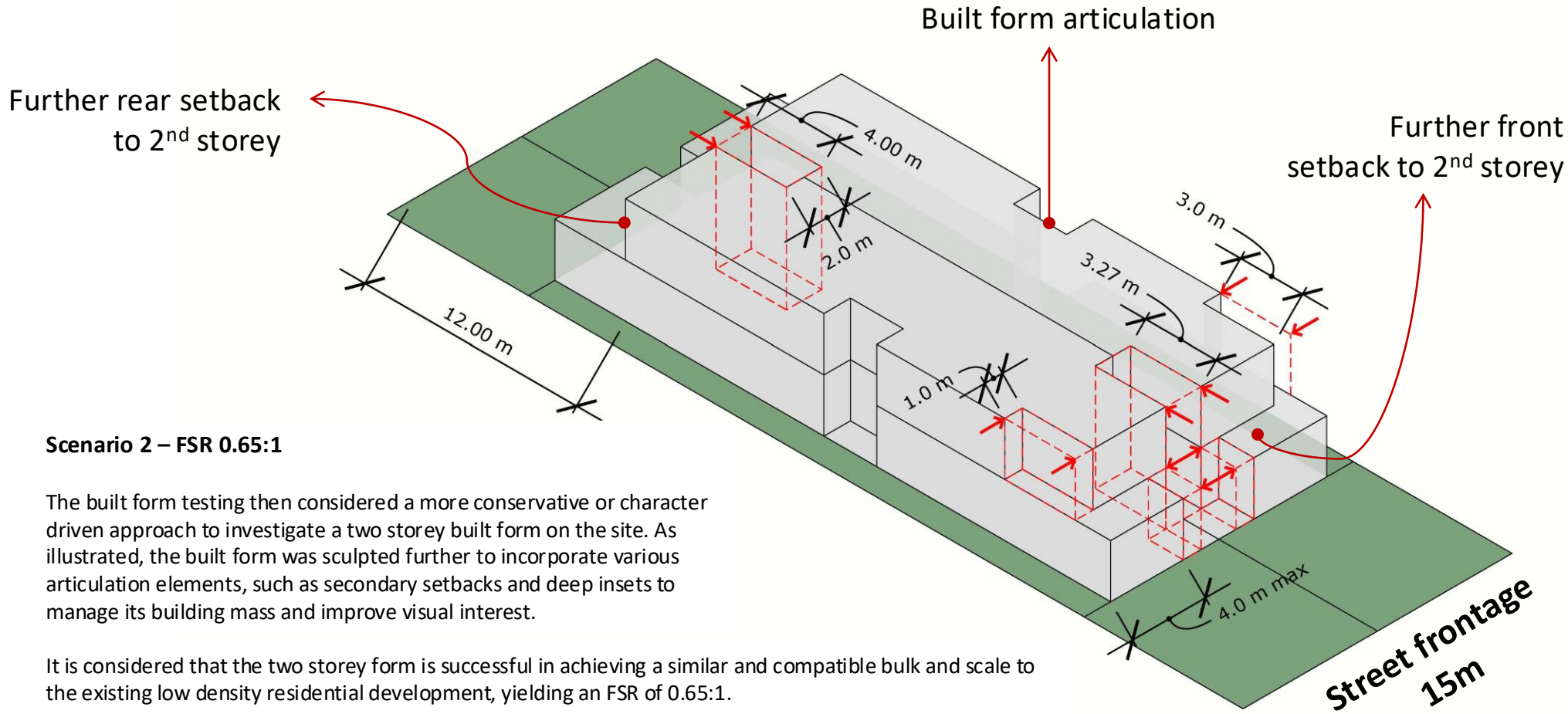
The built form testing began with a feasibility driven approach, investigating the resulting built form based on an FSR of 1:1 , which is the density required to meet the viability threshold in the current market conditions.

The result shows that an FSR of 1:1 on the site will result in a three storey built form. Although such a density could achieve development viability, it will likely lead to overdevelopment and poor design outcomes, including:

- Adverse impacts on neighbour's amenity e.g. overshadowing and excessive bulk.
- Compromised internal amenity for future occupants.
- Built form incompatible with the existing character of the low density neighbourhood.

Therefore, a density at an FSR of 1:1 is not supported for reasons outlined above.

Character driven approach – 0.65:1



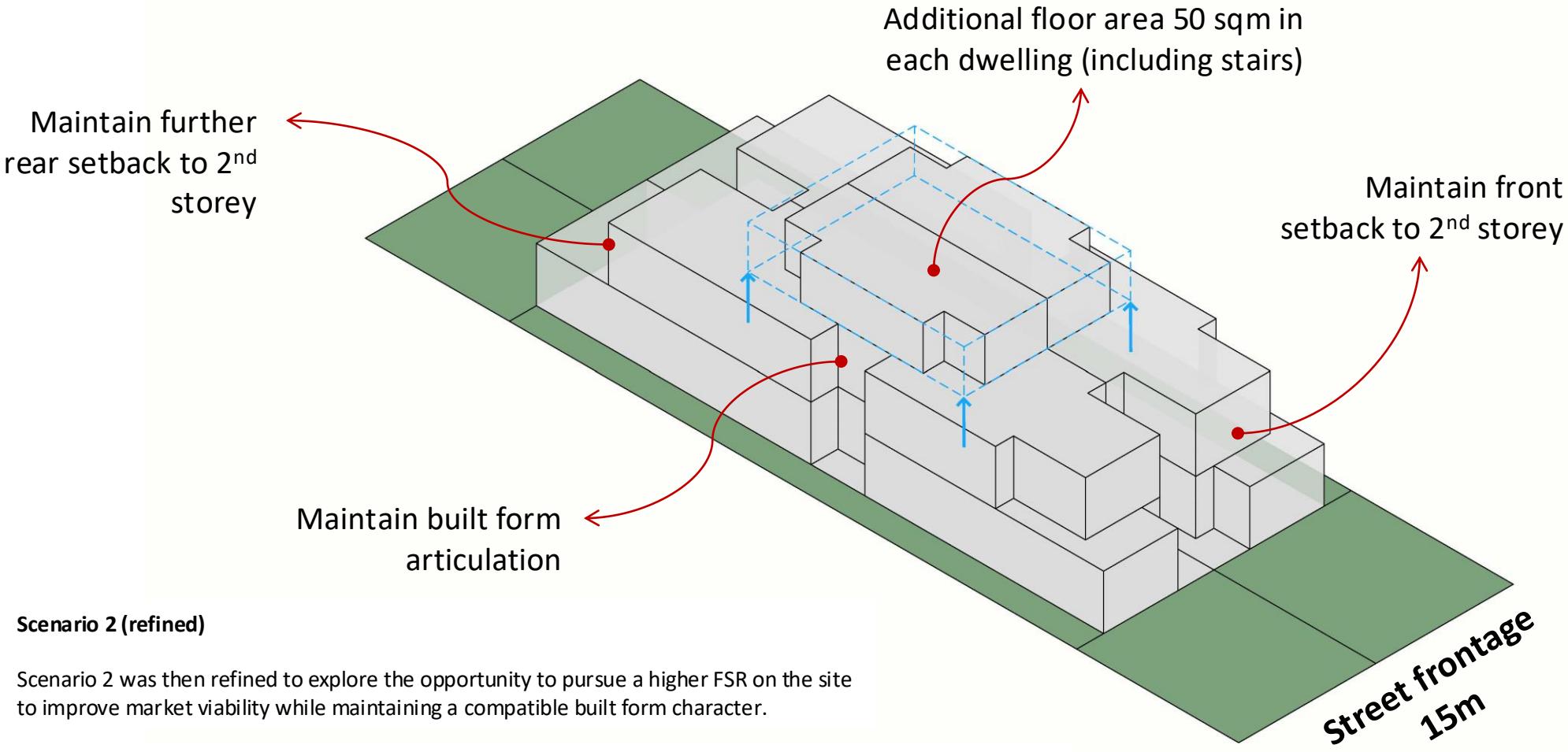
Scenario 2 – FSR 0.65:1

The built form testing then considered a more conservative or character driven approach to investigate a two storey built form on the site. As illustrated, the built form was sculpted further to incorporate various articulation elements, such as secondary setbacks and deep insets to manage its building mass and improve visual interest.

It is considered that the two storey form is successful in achieving a similar and compatible bulk and scale to the existing low density residential development, yielding an FSR of 0.65:1.

Such a density is comparable to the FSR proposed under the Low & Mid-Rise Housing Reforms and the floor space achievable under the Codes SEPP 2008. It will also allow for a higher FSR than that is permitted for a single dwelling development to provide an incentive for medium density housing development. However, the FSR of 0.65:1 sits well below the market viability threshold.

Built form refinement



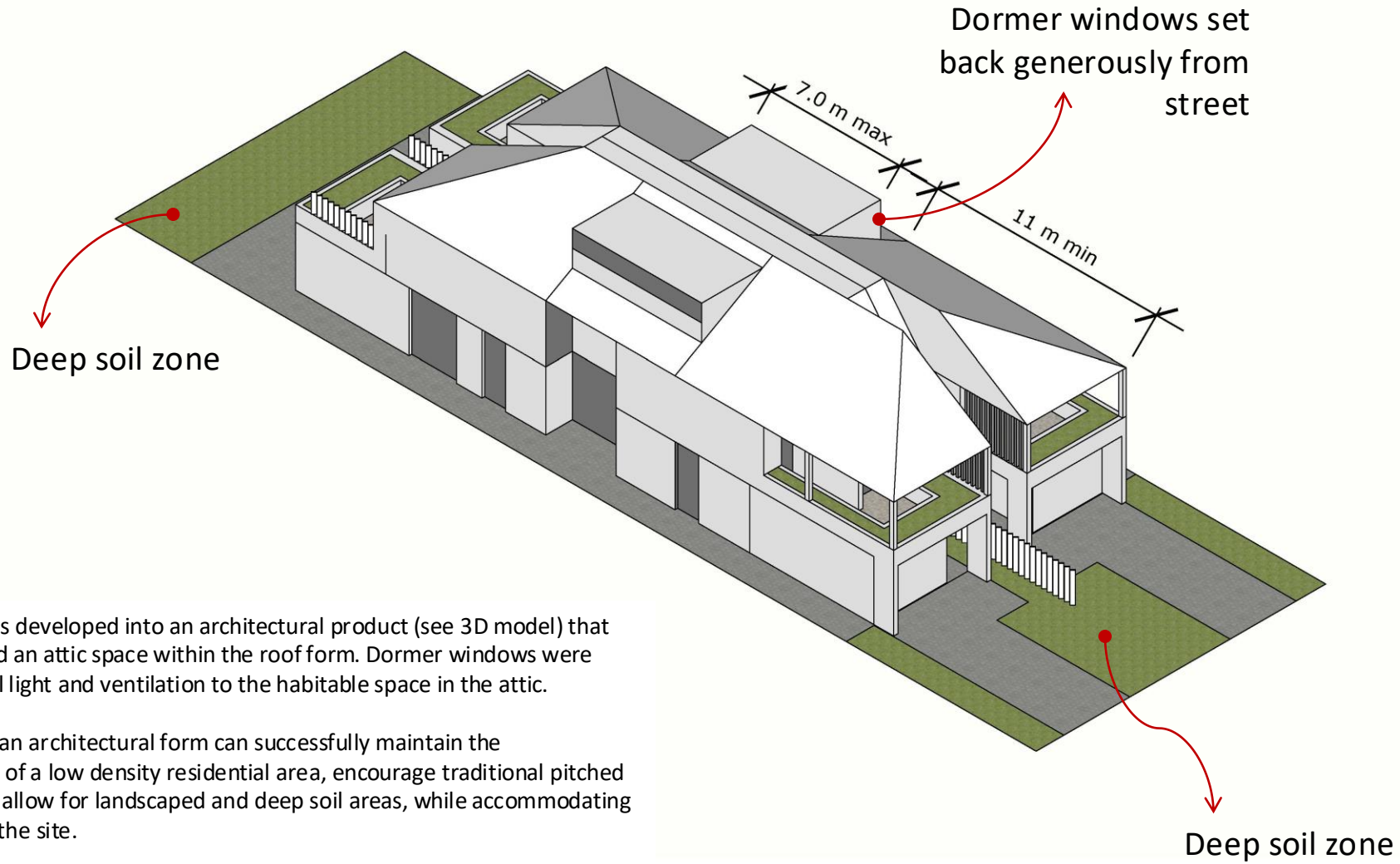
Scenario 2 (refined)

Scenario 2 was then refined to explore the opportunity to pursue a higher FSR on the site to improve market viability while maintaining a compatible built form character.

A partial third storey was considered, adding approximately 50 sqm to each dwelling or a combined 100 sqm floor space on the development site. All the articulation and secondary setbacks in Scenario 2 were maintained to minimise the impact of bulk and impacts on neighbours.

The above built form will result in an FSR of approximately 0.8:1.

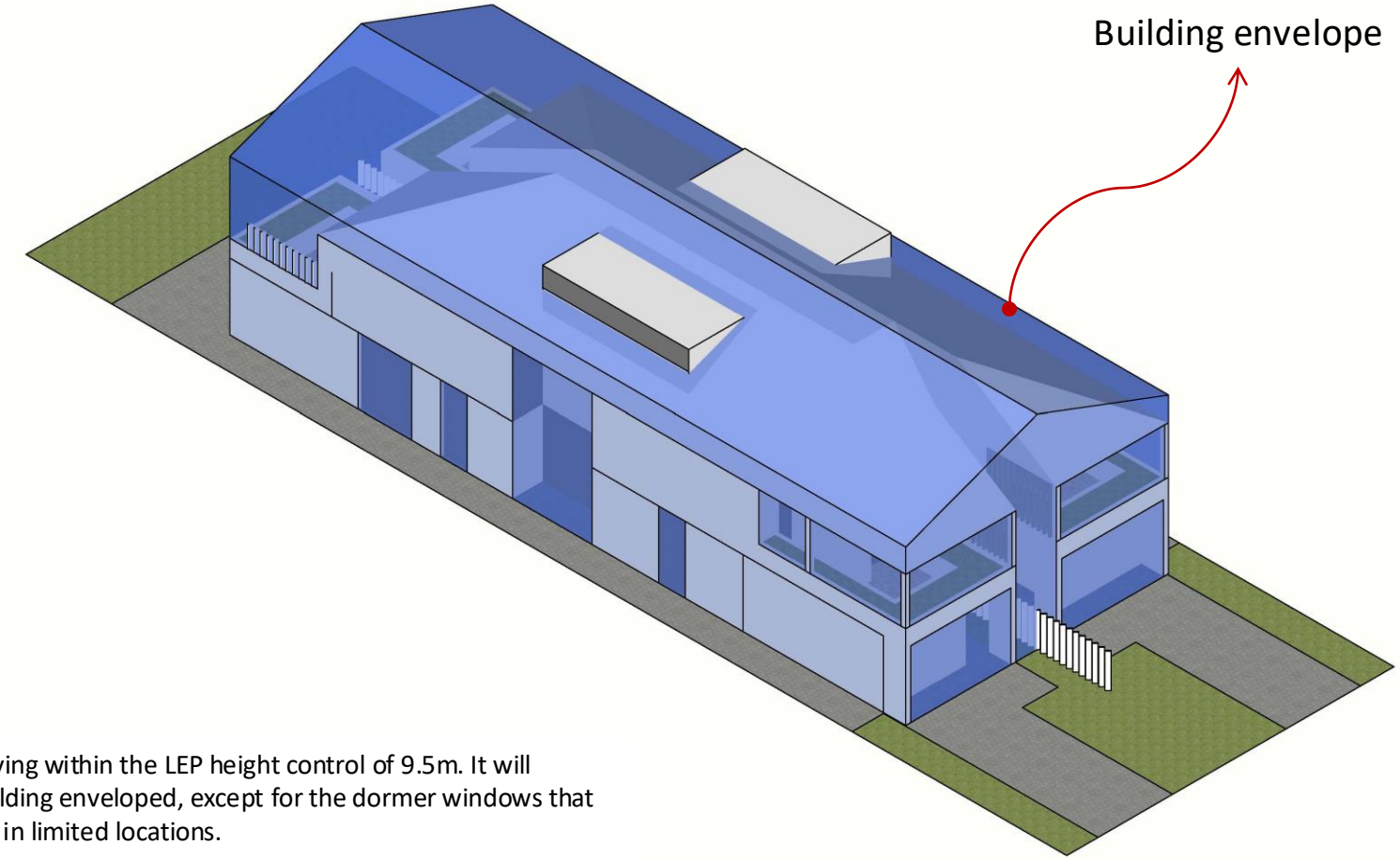
Architectural outcome – Dual Occupancy



The refined built form was developed into an architectural product (see 3D model) that has a two storey scale and an attic space within the roof form. Dormer windows were utilised to provide natural light and ventilation to the habitable space in the attic.

It is considered that such an architectural form can successfully maintain the neighbourhood character of a low density residential area, encourage traditional pitched roof form vernacular and allow for landscaped and deep soil areas, while accommodating additional floor space on the site.

Testing against built form envelope



The development is capable of staying within the LEP height control of 9.5m. It will predominantly stays within the building enveloped, except for the dormer windows that will protrude outside the envelope in limited locations.

Visual impact testing – dual occupancy

Dormer windows not visible from street frontage

Visual impact from immediate public domain

When viewed from the public domain immediately outside the development, the dormer windows will not be visible from this view angle.

The presentation of the development is similar to any typical two storey dual occupancy dwellings.

Visual impact testing – dual occupancy

Visual impact from opposite of street

When viewed from the public domain on the opposite side, the dormer windows will only be partly visible due to the generous setback from the street. However, they will not significantly contribute to the building bulk and appear as an obtrusive element in the building silhouette. They would stay quiet in the streetscape and add visual interest to the built form.

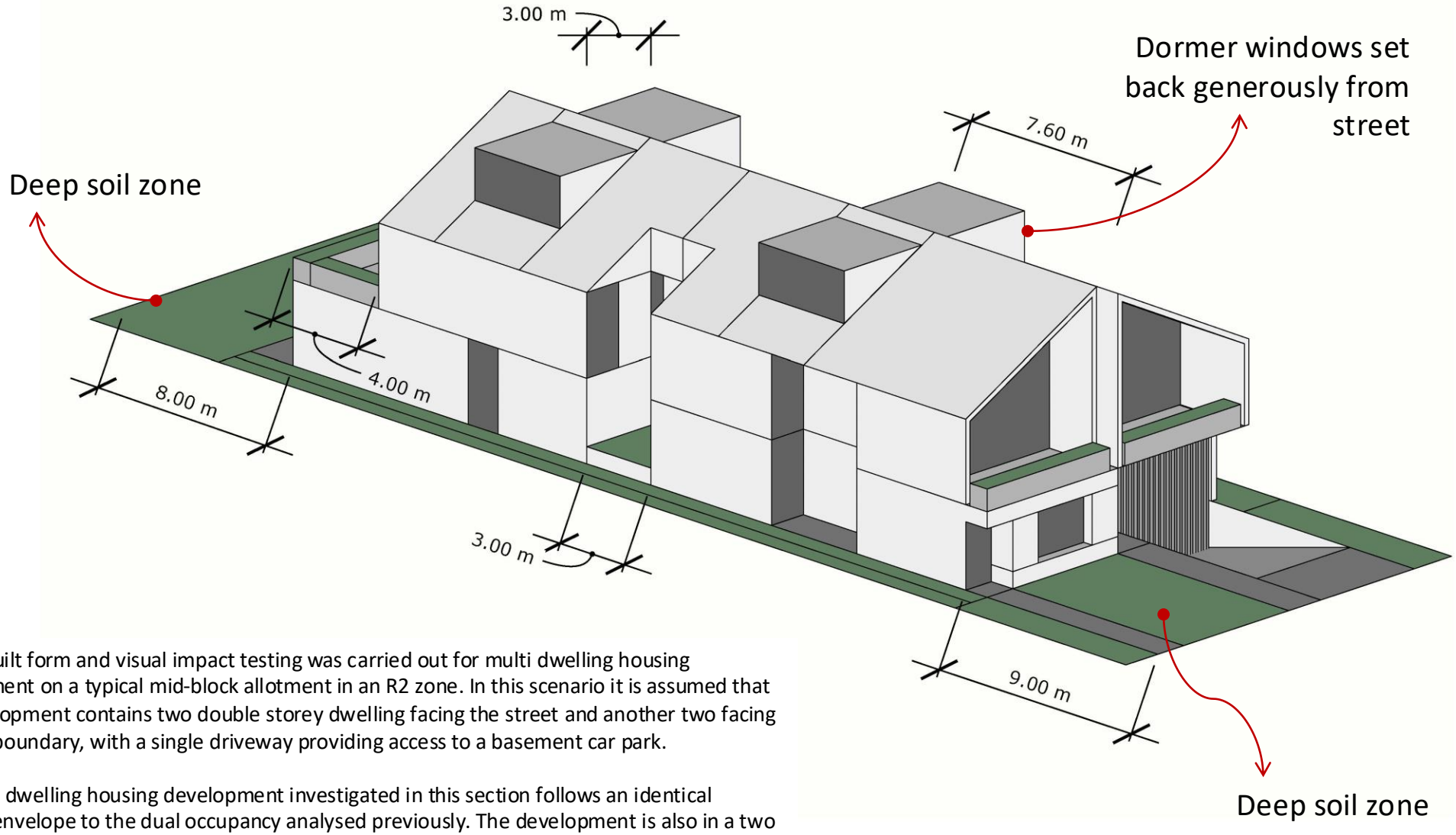
Visual impact testing – dual occupancy

Collage showing typical streetscape of a low density residential area in Strathfield LGA

Visual impact from opposite of street (cont.)

As discussed on the previous page, the visibility to the dormer windows is limited when viewed from the street. The presentation of the development remains highly similar to any typical two storey dual occupancy dwellings.

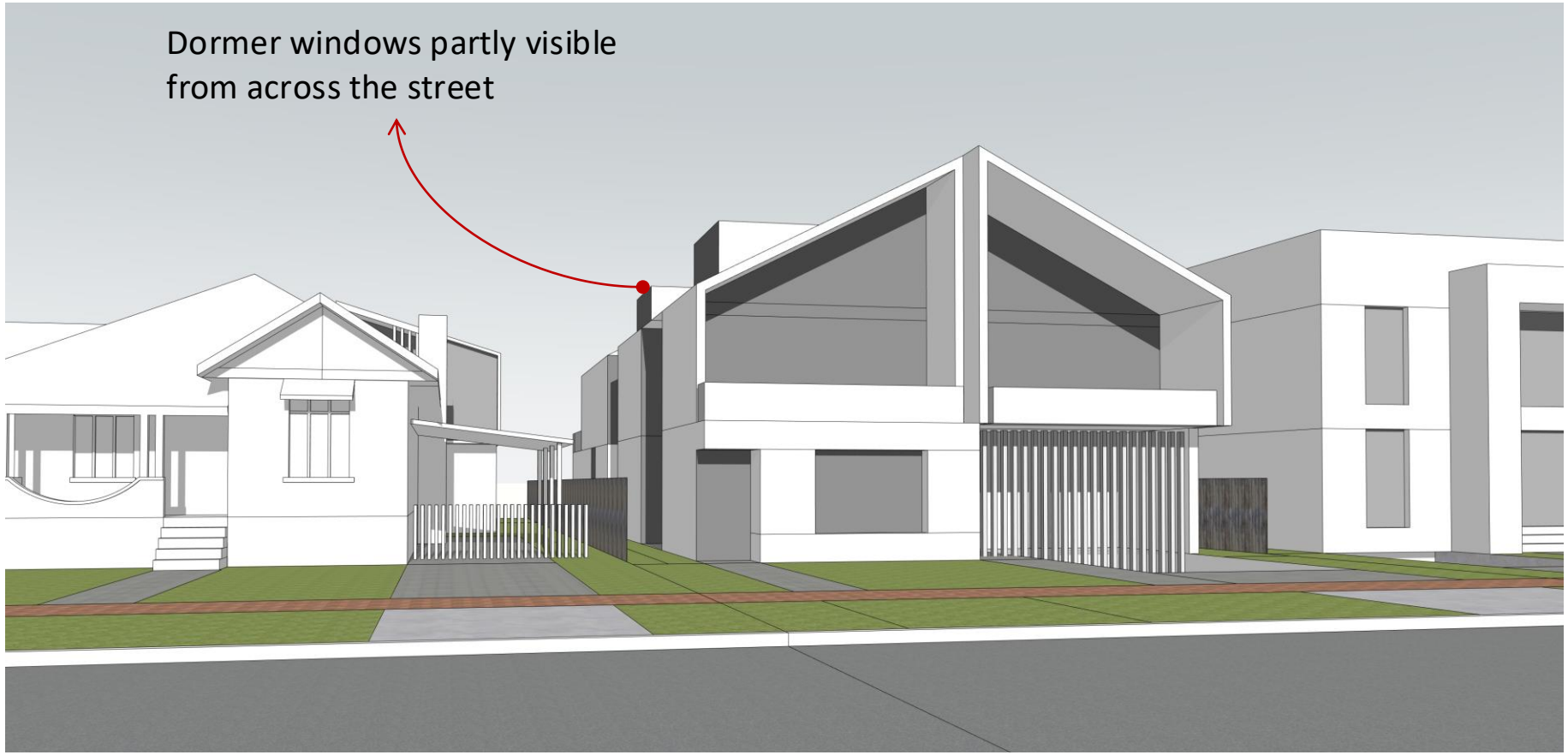
Architectural outcome – multi dwelling



Similar built form and visual impact testing was carried out for multi dwelling housing development on a typical mid-block allotment in an R2 zone. In this scenario it is assumed that the development contains two double storey dwelling facing the street and another two facing the rear boundary, with a single driveway providing access to a basement car park.

The multi dwelling housing development investigated in this section follows an identical building envelope to the dual occupancy analysed previously. The development is also in a two storey scale with separate attic spaces within the roof form for additional habitable areas.

Visual impact testing – multi dwelling



Visual impact from opposite of street

The multi dwelling housing development achieves a similar outcome to dual occupancy in terms of visual impacts, as shown on this and the next page. It is considered that the presentation of the development is compatible with the existing character of the low density residential areas.

Visual impact testing – dual occupancy