ADDITIONAL SHADOW ANALYSIS

Elsternwick - Urban renewal south

BACKGROUND

Throughout the Elsternwick Structure Plan community consultation process, overshadowing has been consistently identified as a key community concern. This was particularly evident with the proposed 'urban renewal south' area around existing car yards west of the railway line.

In response to this community concern, further preliminary shadow analysis has been undertaken. This has assisted in informing where taller buildings could be developed in the future without resulting in unreasonable overshadowing and where buildings should transition down to residential areas.

This further analysis, along with community feedback has informed the recommendations in the Plan that will be presented to Councillors on 27 February 2018. Recommendations in the plan include a reduction in the scale of development on the car yard sites, compared to both 'option I' and 'option 2' presented in the final stage of consultation in 2017.

ANALYSIS

The shadow analysis assessed built form against the following overshadowing parameters:

- > To ensure no overshadowing of residential areas between 9am and 3pm at the September Equinox (22nd of September).
- > To ensure Open Space Strategy protection requirements are met no overshadowing of proposed public open space for a minimum of 5 hours at September Equinox and 3 hours at Winter Solstice (23rd of June).

The attached analysis demonstrates that the proposed Structure Plan meets these parameters and can achieve no overshadowing of residential areas between 9am and 3pm at the September Equinox.

This includes:

- > Properties nearby in Alexandra, Oak and Elm Avenues and Marmara Drive.
- > Properties across the railway line along St James Parade in Elsternwick.
- > Properties in the City of Bayside across Nepean Highway.

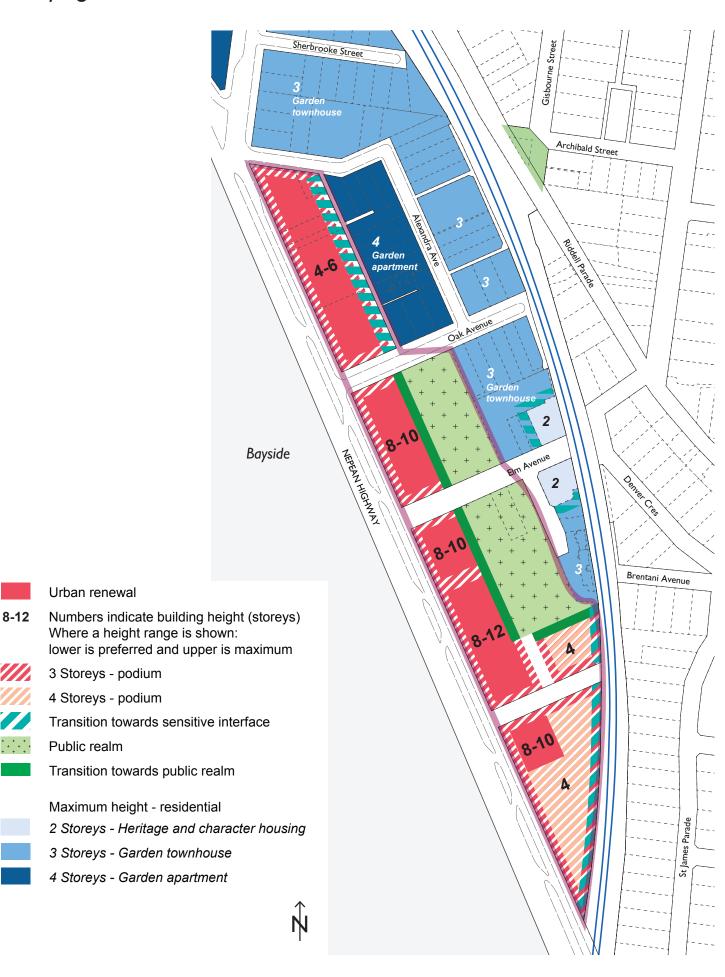
The September Equinox is the standard measure that is used in Victoria to determine overshadowing impacts towards residential areas. This is because it represents the middle point, between the worst case shadow scenario (winter) and the best case shadow scenario (summer).

Although not required from a policy perspective, officers have also undertaken a winter solstice analysis to gain an understanding of the potential impact when shadows are at their longest. The result is minimal impact during the measured timeframes.

STRUCTURE PLAN

Elsternwick - Urban renewal south

- refer page 55 of Elsternwick Structure Plan



SHADOW ANALYSIS

Equinox - 9AM

Elsternwick - Urban renewal south



Equinox - IOAM



Equinox - IIAM



Equinox - 12PM



Equinox - IPM



Equinox - 2PM



Equinox - 3PM



SHADOW ANALYSIS

Elsternwick - Urban renewal south



Winter - IOAM



Winter - IIAM



Winter - 12PM



Winter - IPM



Winter - 2PM



Winter - 3PM

