As part of the Wanneroo Road and Ocean Reef Road Interchange project, noise walls will be constructed in various locations to reduce traffic noise for local residents.

What are noise walls and how do they reduce traffic noise?

A noise wall is a structure built between the road and a residential property to reduce traffic noise for the resident. The sound waves from the road are forced to travel around the edges of the walls, reducing the noise. The level of noise reduction achieved through the installation of noise walls is dependent on a number of factors, including length and height of the wall. Typically noise walls can reduce road traffic noise by approximately 5 to 10 decibels.

Why do noise walls need to be installed?

Noise modelling has identified the need to install walls near some residential properties to reduce traffic noise from the Wanneroo Road and Ocean Reef Road Interchange. The walls will be built in accordance with the noise level limits required by the Western Australian Planning Commission (WAPC) Road and Rail Noise Policy (State Planning Policy 5.4).

To comply with State Planning Policy 5.4, noise levels cannot exceed 60dBA during the day or 55dBA at night (average). Once the project has been completed, monitoring will be undertaken to confirm that these noise levels have been achieved.

How high will the noise walls be?

The height of the noise walls will vary between approximately 2.4m and 4.5m.

What will the noise walls look like?

The noise walls will be concrete panels and steel posts.

The residential side of the wall will be a painted finish in a neutral tone. The side of the wall visible from the road will also be painted. A public artist has been appointed to work with the project team and the Construction Reference Group to decide on colour palettes and patterns.

If a wall is located on a residential property boundary and its height needs to exceed 3m in order to achieve compliance with noise limits, an acrylic panel will be added above 2.7m. These panels still reduce noise, but have the benefit of letting in light. All walls will have an anti-graffiti coating applied on the side facing the road.
Where will the noise walls be located?

The noise walls will be installed in various locations along Wanneroo Road and Ocean Reef Road, between the road and residential properties.

The location of the walls has been based on extensive noise modelling, which takes into consideration a range of factors including predicted traffic volumes at the interchange in 2041. The distance of the walls from residential properties is dependent on the road design and the available space in the road reserve.

Contact us

If you have any questions or concerns, you can contact the project’s Community and Stakeholder Engagement Manager, Louise Richardson, on 138 138 or at louise@lraa.com.au

More project information is also available at https://project.mainroads.wa.gov.au/home