

# 1 Noise Mitigation Measures

As the ECRTN goals are exceeded, in the northwest of the subject site, and as building envelopes are proposed in this area the following potential mitigation measures are identified.

The following mitigation measures are only an example of potential options, detailed noise modeling is required to determine exactly what mitigation measures will be required to achieve the ECRTN goals. The modelling will be done at the time the applicant lodges a specific Development Application or Construction Certificate for the buildings in this stage of the project..

Some general mitigation measures that may address the potential road traffic noise impacts for future residences are:

- ▶ Noise barriers in the form of a fence or earth mound at the property boundary. Barriers are most effective when located as close as possible to either the noise source or receiver and when they block the line of sight between the source and receiver. A noise barrier should also be sealed and extend down to or below the ground level. These barriers may be a feature of the highway upgrade to be provided by the RTA, however this will not be known until later in the highway planning & design process;
- ▶ Spatial separation between the noise source and noise-sensitive areas, with intervening areas such as access roads, car parks, gardens, commercial areas and maintenance areas;
- ▶ Through appropriate site planning such as placing the proposed residential structures to utilise the structures themselves to act as noise barriers between the noise source and exterior living areas, potential outdoor noise impacts may be substantially reduced;
- ▶ Building design utilising insulation, glazing and sound absorbing materials in building construction; and
- ▶ Building design locating less sensitive noise areas such as the garage, bathroom, laundry, and the kitchen closer to the noise source shielding the more sensitive areas such as the bedrooms, living rooms, and studies.
- ▶ Due to the close proximity of adjacent resorts and residential receivers, the applicant will provide a site specific Construction Noise and Vibration Management Plan prior to construction activities commencing.