

Noise Mitigation

Pros & Cons of Committed Mitigation Measures and Noise Mitigation Options

COMMITTED MEASURES	PROS	CONS
Quiet Pavement	<ul style="list-style-type: none"> Provides benefits for the whole community Mitigates noise at the noise source Does not impact village atmosphere Provides 3 to 4 decibel reduction in noise Less noise during wet conditions 	<ul style="list-style-type: none"> None
Speed Reduction	<ul style="list-style-type: none"> Provides benefits for the whole community Mitigates noise at the noise source Does not impact village atmosphere Provides 1 to 2 decibel reduction in noise 	<ul style="list-style-type: none"> Requires improved enforcement of speed

NOISE MITIGATION OPTIONS	PROS	CONS
Split Grade Wall	<ul style="list-style-type: none"> Provides benefits for both sides of highway No property or terrain impacts Enhances village atmosphere by providing landscaped median with noise mitigation Assists with speed reduction 	<ul style="list-style-type: none"> Effectiveness generally limited to less than 2 decibels which is not easily noticeable
Roadside Wall (east side)	<ul style="list-style-type: none"> No property or terrain impacts Able to achieve 3 to 4 decibels at isolated locations 	<ul style="list-style-type: none"> Limits and in some cases may remove roadside landscape options Takes away from traffic calming where landscaping on the side of the roadway is eliminated To be most effective, sidewalk solutions will be between the wall and the slope May require sound absorptive facing at some locations to avoid increased noise levels on opposite side of roadway due to reflections Only effective at few locations Not continuous at exit ramps May impact existing roadside vegetation
Upslope Wall (east side) where feasible	<ul style="list-style-type: none"> Able to achieve noticeable 4 decibels at isolated locations Closer to receiver (can be more effective) Imposes fewer constraints on traffic calming measures and less impact on village atmosphere 	<ul style="list-style-type: none"> Will require removal of natural trees and vegetation Will be more visible from homes Not effective where homes are on steep slopes More complicated and expensive foundations
Residential Options in lieu of walls	<ul style="list-style-type: none"> Efficiency gained by placement closer to the receiver Unobtrusive (fits in surroundings) No impact to village atmosphere No impact to traffic calming Depending on the condition of existing windows there is a potential to achieve in the order of 5 decibels of benefit inside a home plus a similar benefit from balcony screening 	<ul style="list-style-type: none"> May not be as effective for homes with newer windows Disruption to homeowner May only reduce noise on balcony or portions of interior Options may not benefit whole yard Less permanent a solution for the community May lead to a feeling of being closed in; effective only if windows are closed
Residential Options where no wall solution is feasible	<ul style="list-style-type: none"> Same as above 	<ul style="list-style-type: none"> Same as above

If a combination of walls provides the best mitigation option, then this will be advanced for consideration. As an alternate to noise wall options, the residential option is presented. If none of the wall options offer any benefits in performance, the residential option remains.

During detailed design consultation, refinement of options will be undertaken. These refinements will further review individual homes with respect to view impacts, visual impacts, disruption to existing trees and screening, wall texture and colour, and noise reduction benefits.