
REPORT TITLE: Private Noise Wall Conversion Program Review and Update

FROM: Kealy Dedman, Commissioner of Public Works

RECOMMENDATIONS

- 1. That the Commissioner of Public Works and/or their designate be authorized to update the Private Noise Wall Conversion Policy (WC30-04) and corresponding program to include the following service level changes:**
 - **Modification of the Policy’s current prioritization criteria to add consideration for noise levels;**
 - **Expansion of the program to include consideration of areas currently having no noise walls;**
 - **Modification of the Policy to include the conversion of private noise walls that are adjacent to other Agency lands that are not highways and where the main source of noise is confirmed to be a regional road; and**
- 2. That through the 2023 Budget, a permanent full-time equivalent Project Manager be added to undertake the recommended increased service level; and**
- 3. That through the 2023 Budget, \$1 million be added annually to the existing conversion program to support the increased service level and staffing request outlined in the report of the Commissioner of Public Works, listed on the May 26, 2022 Regional Council agenda titled “Private Noise Wall Conversion Program Review and Update”.**

REPORT HIGHLIGHTS

- On September 9, 2021, Regional Council requested an overview of local and Regional noise wall programs in Peel, along with a review of the existing Private Noise Wall Conversion Policy.
- Currently there are three ways in which new noise walls abutting Regional roads can be constructed: under the Private Noise Wall Conversion Policy (WC30-04), through road widening projects, and through stand-alone noise wall installations under the *Local Improvement Act*.
- Although the Policy strives to provide a fair and consistent approach, the Region has received various requests to broaden eligibility for the program. As a result, options for increased service levels are presented in this report. It is staff’s recommendation that the Policy and program be adjusted to include:
 - The addition of noise level as part of the prioritization criteria
 - Locations that currently have no noise walls

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- Locations affected by Regional road noise that are adjacent to other Agency lands that are not highways
 - The recommended increased service level would result in an additional financial obligation for the Region totaling \$1 million annually for the remainder of the program over 26 years. This funding would provide for the required capital investments as well as the staffing resources necessary to undertake the level of service changes.
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DISCUSSION

1. Background

The Private Noise Wall Conversion Policy (W03-04) came into effect on October 13, 2016 and established a Private Noise Wall Conversion Program. The Program identified 37 kilometres of private noise wall that met the criteria outlined in the Policy to be converted to Regional noise walls over 30 years.

To date, the policy has provided a clear and consistent approach for the replacement of private noise walls based on public safety and asset condition criteria. However, public response to the program has been mixed, and various requests have been registered with the Region to increase service levels. The current Program scope includes the conversion of existing private noise walls but excludes consideration of adding noise walls where they do not currently exist. Prioritization is strictly based on noise wall condition in consideration of public safety. While this approach provides for “just in time” replacement of noise walls over the duration of the program, prioritization does not take into account the degree of noise in setting priorities. Public and Councillor feedback indicates a desire to expand the scope of the program to address these and other program limitations.

On September 9, 2021, a Petition was received by Regional Council from property owners of De Rose Avenue in Caledon requesting that their private noise wall be replaced to better address noise ahead of its current placement in the long-term capital replacement program. Council requested that the matter be referred back to staff to provide an overview of local and Regional noise wall programs in Peel, along with a review of the existing Private Noise Wall Conversion Policy and Program service levels.

Subsequently, on November 11, 2021, a Motion was submitted by Councillor Dhillon for the replacement and extension of a private noise wall to address noise levels affecting 34 properties with back, side, and front yards along Mayfield Road in Brampton. Staff were directed to complete a noise study for the area and provide results and recommendations to Regional Council for consideration.

The purpose of the following report is to address Council’s request of staff to provide an assessment of the Regional noise wall program. Reviews and technical analyses relating to De Rose Avenue and Mayfield Road noise wall requests are currently underway and will be brought back to Council at a future date.

2. Region of Peel - Current State Program Summary

Currently, new noise walls can be constructed under the following three circumstances:

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a) Private Noise Wall Conversion Program and Policy

The Region's Private Noise Wall Conversion Program (Policy WC30-04) identifies private noise walls that meet specific criteria set out in the Policy for replacement at the Region's full cost. The scope of the program includes conversion of noise walls on private property with back or side yards adjacent to Regional roads. The private noise walls are reconstructed onto the property line abutting Regional property and become regional assets.

The objective of the Noise Wall Conversion Program is to replace all existing private noise walls along Regional roads (roughly 37 km of walls) over a 30-year period at an estimated cost of \$81 million. Projects are prioritized based on noise wall condition, determined through inspections conducted every three years. This approach aims to replace private noise walls before end of life when they could pose safety concerns, and before local residents would need to invest private funds to replace them. Maintenance of private noise walls remain the responsibility of the property owner until such time they are replaced and assumed by the Region. Details of completed, active, and upcoming projects within the next three years are included in Appendices I and II.

The noise wall conversion projects are 100% funded by tax-supported regional reserves and delivered through one dedicated, contract Project Manager position.

Since the start of the program, private noise walls protecting 159 properties have been replaced. An additional 662 properties are scheduled for conversion to 2024. Staff caution that notifications for these projects have been shared with residents and preparations are underway; for that reason, any changes to the current program service levels or the prioritization criteria should take these commitments into account.

b) Major Capital Improvements

Noise walls are added to new locations through major capital improvement projects such as road widenings when future noise levels are predicted to be in excess of 60db over a 16-hour window from 7am to 11pm. These works are not considered part of the Private Noise Wall Conversion Program, but rather apply current engineering standards to major capital projects where future noise levels require this infrastructure. Noise walls built through this avenue are funded partly through development charge reserves and partly through tax-based reserves. Project schedules are driven by the Long Range Transportation Plan.

c) *Local Improvement Act*

The *Local Improvement Act* provides an opportunity for Regional residents to apply for new infrastructure projects such as watermain, sanitary sewer or noise wall projects near or next to private property. These projects are paid, in whole or in part, by the property owners who benefit from them. From time-to-time residents have inquired about the use of the *Local Improvement Act* to obtain a new noise wall where none exists today, and where no road widening works are planned. In these cases, residents are advised that they can initiate an application for new noise walls with the support of at least two-thirds of the benefiting property owners and that costs are shared 50-50 between the residents and the Region, consistent with Regional Policy and the *Local Improvement Act*.

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3. Overview of Local Municipal Noise Wall Policies

As outlined below, there are various approaches to the replacement of private noise walls among the local municipalities. A comparison of local municipal approaches shows that the Region's current policy provides a service level that is lower than Mississauga's, but higher than Brampton and Caledon's.

Table 1: Funding Practices for the Replacement of Private Noise Walls

City of Mississauga	<ul style="list-style-type: none">• Private Noise Wall Conversion Program in place since 2009 includes 100% City funding for the replacement of private noise walls based on condition. City funding is subject to Council approval.• Recently, the installation of new noise walls where they currently do not exist was approved along arterial and major roads based on future traffic conditions. These upgrades are funded 50% by Development Charges and 50% by City tax reserves.
City of Brampton	<ul style="list-style-type: none">• Does not have a Private Noise Wall Conversion Program.• Through the <i>Local Improvement Act</i>, property owners can petition for the replacement of deteriorated private noise walls with 75% paid by tax reserves and 25% paid by the property owners. City funding is subject to Council approval and availability of funding.
Town of Caledon	<ul style="list-style-type: none">• Does not have a Private Noise Wall Conversion Program.

4. Challenges with Peel's Current Levels of Service

As mentioned above, various requests from residents have been received by the Region to increase service levels for the noise wall program. The most common requests are to:

- Revise the criteria to include prioritization on the basis of noise levels; this would require periodic noise testing across the Region to compare noise impacts between neighbourhoods, and further require an acceleration of the program to keep pace with rehabilitation projects for noise walls reaching end of life.
- Create a more equitable Noise Wall Conversion Program by expanding eligibility to include the addition of new noise walls in residential areas along Regional roads where noise walls do not exist today, and where no road widening works are planned that could otherwise provide this infrastructure. Staff estimate the addition of approximately 7 km of noise walls would address this need.
- Expand the program to include noise wall conversion or new noise walls installations along 'window streets' where homes front or side onto a local road that is parallel to a Regional road. Currently, the Program limits noise wall conversions to homes directly backing or siding onto Regional roads (i.e. intended to protect backyard outdoor living areas).
- Expand the program to include noise walls on private property that protect from Regional road noise, but back onto other Agency lands (i.e. public utility agencies, provincially or locally owned lands). The current program converts privately-owned noise walls to

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publicly-owned noise walls provided they can be moved from private property onto adjacent Region-owned lands.

Appendix III provides illustrations of these circumstances.

5. Service Level Options and Proposed Direction

a) Private Noise Wall Conversion Program Options

Staff have reviewed options to expand the current level of service with the goal of creating a fair and equitable program.

Option A: Current Private Noise Wall Conversion Program

This option would maintain the current Policy and Program service levels where private noise walls that back or side on to Regional roads are reconstructed onto the property line abutting Regional right-of-way and become regional assets, prioritized based of public safety and asset condition criteria

Option B: Add Noise Level Considerations, Locations with No Noise Mitigation, and Locations that Do Not Directly Abut Regional Lands

This option expands the program in three ways. First, it would incorporate noise levels into the prioritization criteria. Noise walls that are in good condition, but associated with neighbourhoods experiencing high Regional road noise, could be considered for conversion if replacement of the existing walls would appreciably reduce noise levels. New prioritization criteria that considers both condition and noise would need to be developed in a manner that is fair and consistent and ensures that walls in good condition are only replaced if noise levels could be adequately reduced. It should be understood that in many cases, the existing noise walls are built to appropriate standards and therefore replacing them, even with higher walls, may not substantially reduce noise. In those cases, the existing walls would remain in place until condition triggered their replacement.

Second, it would include consideration of residential areas with back or side yards adjacent to regional roads currently without noise walls. These locations, totaling approximately 7 kilometres, are illustrated in Appendix II. It is anticipated that noise levels at these locations will exceed most locations with existing noise walls and therefore would be programmed as soon as projects currently underway, specifically the projects programmed to 2024 are completed.

Finally, it includes scenarios where existing private noise walls are adjacent to other Agency lands that are not highways (i.e. buffer blocks) and where the main source of noise is confirmed to be a regional road. Currently, the Policy specifies that noise walls “located on private property adjacent to Regional Roads will be rebuilt and relocated onto the property line abutting Regional Property”. This proposed Option B would expand the program to include walls abutting other Agency lands and involve a cost to negotiate the necessary property interests required by the Region with abutting land owners to secure rights of entry and maintenance for the noise walls.

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Option C: Undertake Option B and Add 29km of ‘Window Street’ Areas

‘Window Streets’ refer to locations where homes front or side on to a local road that is parallel to a Regional Road. This option would add 29km of new noise wall installations to the program. Currently in this scenario, backyards are considered to be protected from excessive noise by the homes themselves. In addition, the building code aims to protect front and side areas inside the home from noise with features such as windows with multiple panes.

While staff have received requests for noise walls along window streets, it would be challenging to find a suitable location for the new walls. If the walls were constructed along the Regional roadway, the neighbourhood would no longer have easy access to pedestrian or cycling facilities on the Regional road, often needed to access transit. In many locations this would mean a significant detoured route to get to the transit stops or sidewalks along the Regional roadway.

Table 2 provides a comparison of these service level options.

Table 2: Private Noise Wall Conversion Program Options

	Option A (Current Service Level)	Option B	Option C
Level of Service:	<ul style="list-style-type: none"> Converts existing private noise walls to public noise walls. Allows for addition of net new noise walls through the regular capital program or the use of the <i>Local Improvement Act</i>. 	<ul style="list-style-type: none"> Option A, and: Adds noise level considerations to the current program. Adds 7 kilometres of residential areas with side or back yards adjacent to regional roads, having no noise walls currently. Adds locations with private noise walls that protect from Regional road noise, but abut other Agency’s lands. 	<ul style="list-style-type: none"> Option A, B, and: Adds 29 kilometres of ‘window streets’ (homes fronting or siding a local street that is parallel to a Regional road).
Prioritization Criteria:	Prioritization based on combination of: <ul style="list-style-type: none"> Condition of walls & public safety Coordination with regular capital program 	Prioritization based on combination of: <ul style="list-style-type: none"> Condition of walls & public safety Coordination with regular capital program Noise level 	Prioritization based on combination of: <ul style="list-style-type: none"> Condition of walls & public safety Coordination with regular capital program Noise level
Noise Wall Length:	37 km	44 km	73 km
Total Cost:	\$81M	\$81M + \$1M annually for 26 years (\$107M)	\$81M + \$3.5M annually for 26 years (\$171M)

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b) Proposed Direction

Staff recommend service level option B from Table 2 as the most equitable, and best balance of cost vs benefit to the residents of Peel. This option:

- Addresses public feedback regarding consideration for noise levels as part of project prioritization.
- Makes the program more equitable by addressing areas without noise walls rather than focusing exclusively on the conversion of existing private noise walls.
- Provides protection for outdoor living areas in back and side yards, but avoids the substantial cost increase associated with providing protection to homes fronting or siding on local roads.

Furthermore, the current Policy specifies that noise walls “located on private property adjacent to Regional Roads will be rebuilt and relocated onto the property line abutting Regional Property”. The current Policy can exclude scenarios where the private noise walls are adjacent to other Agency lands that are not highways (i.e. buffer blocks) and where the main source of noise is confirmed to be a regional road. It is proposed that moving forward, the Policy be updated to include these scenarios.

RISK CONSIDERATIONS

Option B expands the current Program at an incremental cost of \$26 million over the next 26 years. While this new financial commitment addresses public feedback for increased service levels and makes the program more equitable, it also puts additional pressure on capital reserves and diverts resources away from other Regional priorities.

Should Council proceed with Option B, there is a reputational risk associated with delaying projects currently scheduled to 2024, as communications and commitments have already been extended to property owners. To manage this risk, it is recommended that the Region proceed with the current project schedule to 2024, with additional locations added based on available capacity.

FINANCIAL IMPLICATIONS

Should Council decide to proceed with the increased service level outlined in option B, Peel’s financial obligation for the noise wall program will increase by \$1 million annually. This capital increase will be included in the 2023 10-year Capital Budget and Plan with the remainder to be added annually as the capital plan advances. Staff will bring forward these adjustments to the budget for Council’s consideration as part of the 2023 Budget.

Implementation of Option B will also require the addition of a permanent full-time equivalent Project Manager through the 2023 Budget to implement the increased service level. Current service levels for the Noise Wall Program are delivered by a single project manager, with capital spending at a rate of \$1.1 million per year. The new service level proposes an additional \$1.0M per year, driving the need for an additional project manager. The current project manager delivers projects at a rate of roughly 675m of noise wall per year. With the new service level, both positions will need to deliver at a rate of 1.6Kms per year (combined) to complete the program within the 30 year timeframe. This delivery rate is significantly lower than other capital projects due to the unique challenges of the work. Some of these challenges include the following:

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- Many property owners hesitate to provide the Region with permission to enter their property for the purpose of constructing the project. For example, on November 11, 2021, Council directed staff to undertake a noise study along Mayfield Road in response to community support for a noise wall. Despite considerable effort, permissions have yet to be obtained in full.
- While noise walls are a continuous asset, each property presents different challenges, such as the removal of sheds, play structures and other backyard amenities installed too close to, or even attached to existing walls/fences in the project area.
- Aside from the projects themselves, running the program requires significant customer service efforts to address resident inquiries regarding eligibility, complaints, petitions, compensation requests etc. This will also increase under the new service level which will noise level monitoring at all locations on a regular basis.

Overall, the rate of program delivery by the existing project manager provides a good basis for estimating the level of resourcing required to deliver the new service level.

CONCLUSION

The Private Noise Wall Conversion Policy (W03-04) and corresponding program strive to provide a fair and consistent approach for the replacement of private noise walls based on public safety and asset condition criteria. However, various requests have been received from Councillors and the Public for a more equitable program. As a result, several options for broadening the program's eligibility are presented in the subject report. It is staff's recommendation that the Policy and Program be expanded to include: locations that currently have no noise walls, noise levels as prioritization criteria, and locations affected by Regional road noise that are adjacent to other Agency lands that are not highways.

The recommended increased service level would cost the Region an additional \$1 million annually for the remainder of the program over 26 years. This funding would provide for the required capital investments as well as the staffing resources necessary to undertake the level of service changes.

APPENDICES

Appendix I: List of Completed, Active, and Upcoming Projects to 2024 under Peel's Private Noise Wall Conversion Program

Appendix II: Map of Completed, Active, and Upcoming Projects to 2024 under Peel's Private Noise Wall Conversion Program

Appendix III: Examples of Scenarios which Are Not Eligible for Conversion under Peel's Private Noise Wall Conversion Program

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A handwritten signature in black ink, appearing to read "Kealy Dedman". The signature is fluid and cursive, with the first name "Kealy" written in a larger, more prominent script than the last name "Dedman".

Kealy Dedman, Commissioner of Public Works