BUDGET COMMITTEE – APRIL 14, 2010

PEDESTRIAN LINKAGES IN WEST WOODBRIDGE
FEASIBILITY STUDY
WARD 2

Recommendation

The Commissioner of Engineering and Public Works recommends:

That the City investigate the feasibility of constructing a sidewalk along Highway 27, at a time when the Region of York or CP Rail plan to reconstruct the CP Rail bridge crossing Highway 27.

Contribution to Sustainability

The purpose of the study is to investigate the feasibility of improving pedestrian linkages in the subject area and reducing the need for vehicle use. Each of the proposed options will have its own associated impact on the environment.

Economic Impact

The report as written has no economic impact. However, should Budget Committee choose one of the options approved by CP Rail, the underpass option would cost approximately $7 million, and the overpass option approximately $2.5 million plus land acquisition costs.

Communications Plan

Not applicable at this time.

Purpose

To report to the Budget Committee on the feasibility of the construction of a pedestrian link(s) between Royalpark Way and Martin Grove Road.

Background - Analysis and Options

At its meeting on October 13, 2009, (Item 5, Report No. 42 of the Committee of the Whole), Council directed:

> **"That appropriate staff be directed to conduct a feasibility study with respect to the construction of pedestrian link(s) between Royalpark Avenue and Martin Grove Road.**
>
> **That such direction, once given be referred to the Budget Committee for confirmation as part of the 2010 budget cycle."**

Engineering Services staff conducted a feasibility study, investigating the different options available for improving pedestrian access from Royalpark Way to Martin Grove Road. The need for investigating possible pedestrian links arose from the lack of a sidewalk on Highway 27, which cannot be constructed, as there is insufficient width within the roadway under the CP Rail bridge. Engineering Services staff confirmed with CP Rail and the Region of York that there are no plans to reconstruct the bridge in the foreseeable future. Staff also inquired about a cost-sharing agreement with CP Rail, should the City request that the bridge be reconstructed to facilitate the construction of a sidewalk beneath it. CP Rail advised that their portion of the cost-sharing would be dependent on the assessed condition of the bridge, and the incremental value that would be gained from its reconstruction. Since CP Rail has no plans to carry out any significant capital

works on the bridge in the near future, their contribution to the cost-sharing would be minimal. As a result, staff continued to investigate other options for the construction of pedestrian linkages.

Option 1 – At-grade Pedestrian Crossing

At-grade pedestrian crossings are designated places where only pedestrians (i.e. not vehicles) are permitted to cross railroad tracks. Although such crossings exist, they usually occur on rural area hiking trails, and on railway tracks with low speed or low train traffic. Engineering Services staff proposed the possibility of constructing an at-grade pedestrian crossing along Royalpark Way, however, CP Rail confirmed that such a crossing would not be permitted in this area.

Option 2 – Establishing a New Road / Pedestrian Crossing

The option of extending one of the existing roads to cross the CP Rail tracks, was also considered, providing a new vehicle and pedestrian crossing. One example would be extending the west leg of Panorama Court across the CP Rail tracks at a level crossing, and intersecting with Castlepoint Drive (See Attachment No. 1). This would be a relatively low-cost option, although there would be significant disadvantages such as potential increases in traffic infiltration and increased noise. A new track-level crossing would likely result in trains sounding their whistles whenever they approached. The crossing would also have warning bells, and the new gap in the noise fence would make the noises of the train more intrusive than they are now. Staff contacted CP Rail to evaluate the feasibility of this option. CP Rail stated that they would deny such an application on the basis that vehicular crossings are in close proximity at Langstaff Road. As the primary driver for this roadway extension would be to facilitate pedestrian access, CP Rail would recommend a pedestrian overpass or underpass.

Option 3 – Construct a Pedestrian Underpass

Engineering Services staff were able to obtain a similar feasibility study recently conducted by an engineering consultant for the Town of Milton, which considered the options for a pedestrian underpass or overpass across CP Rail tracks. The study's findings are applicable to this situation, and were used in the evaluation analysis of the underpass and overpass options.

Pedestrian underpasses have the advantage of having minimal visual impact to the surrounding area, but tend to have high construction and maintenance costs. The Town of Milton's Feasibility Study estimated the construction cost of tunneling under the CP Rail line at over $7 million. Underpasses in low traffic areas tend to have security concerns and associated maintenance costs for drainage pumps, graffiti removal, litter removal, etc. There may also be a perception by pedestrians that underground tunnels are not safe, that may result in some pedestrians avoiding them, despite the presence of lighting and security cameras.

Option 4 – Construct a Pedestrian Overpass

Pedestrian overpasses are preferred by CP Rail. They have the advantage of requiring fewer security measures and less maintenance, however, there are several issues to consider. Since CP Rail requires that the pedestrian bridge be elevated 7.0 metres above the railway, the structure would be very large, and would have a significant visual impact in this residential area. The "footprint" of the bridge would also be significant, and would require the purchase of property. Aside from the bridge crossing itself, the structure would require steps and accessibility ramps on both sides of the tracks. Property may be available if the structure can occupy a portion of McClure Meadows Park on the south side of the track. The City would need to purchase or expropriate property from several homeowners on Royalpark Way before the overpass could be built. Adjacent homeowners may lose privacy with pedestrians having an elevated view of their backyards. The cost of a pedestrian overpass would be approximately $2.5 million, which does not include land acquisition costs.

Both the underpass and overpass options would require an Environmental Assessment in order to comply with the Environmental Assessment Act. The study would need to be carried out by a qualified consultant, and would consider all options, their costs, and the impacts to the local community and environment. Public Consultation would also play a vital role in selecting the preferred alternative. Once a preferred alternative is selected, a more accurate estimate of the cost could be determined.

A preferred alternative was not submitted to the Budget Committee for the 2010 Capital Budget as the feasibility study and comments from CP Rail could not be gathered in time for the submission.

Relationship to Vaughan Vision 2020/Strategic Plan

This project is consistent with Vaughan Vision 2020, particularly the values of "Fairness", "Inclusivity" and "Transparency".

This report is consistent with the priorities previously set by Council.

Regional Implications

Not Applicable.

Conclusion

CP Rail has advised that they will not approve any new at grade crossing of their tracks and that a pedestrian overpass would be their preferred option.

As shown on the attached map, there is currently a pedestrian crossing of the railway on Langstaff Road. If a pedestrian overpass was to be constructed somewhere on Royalpark Way, it would serve a limited number of homes which would be expected to generate a small number of pedestrians. The City does not currently have a source of funding for the significant expenditure required to construct either a pedestrian over or underpass.

It is recommended that the City investigate the feasibility of constructing a sidewalk along Highway 27, at a time when the Region of York or CP Rail plan to reconstruct the bridge.

Attachments

1. Location Map

Report prepared by:

Colin Cassar, C.E.T., Senior Engineering Assistant, ext. 3112
Tom Ungar, P. Eng., CHRP, Design Engineer, ext 3110

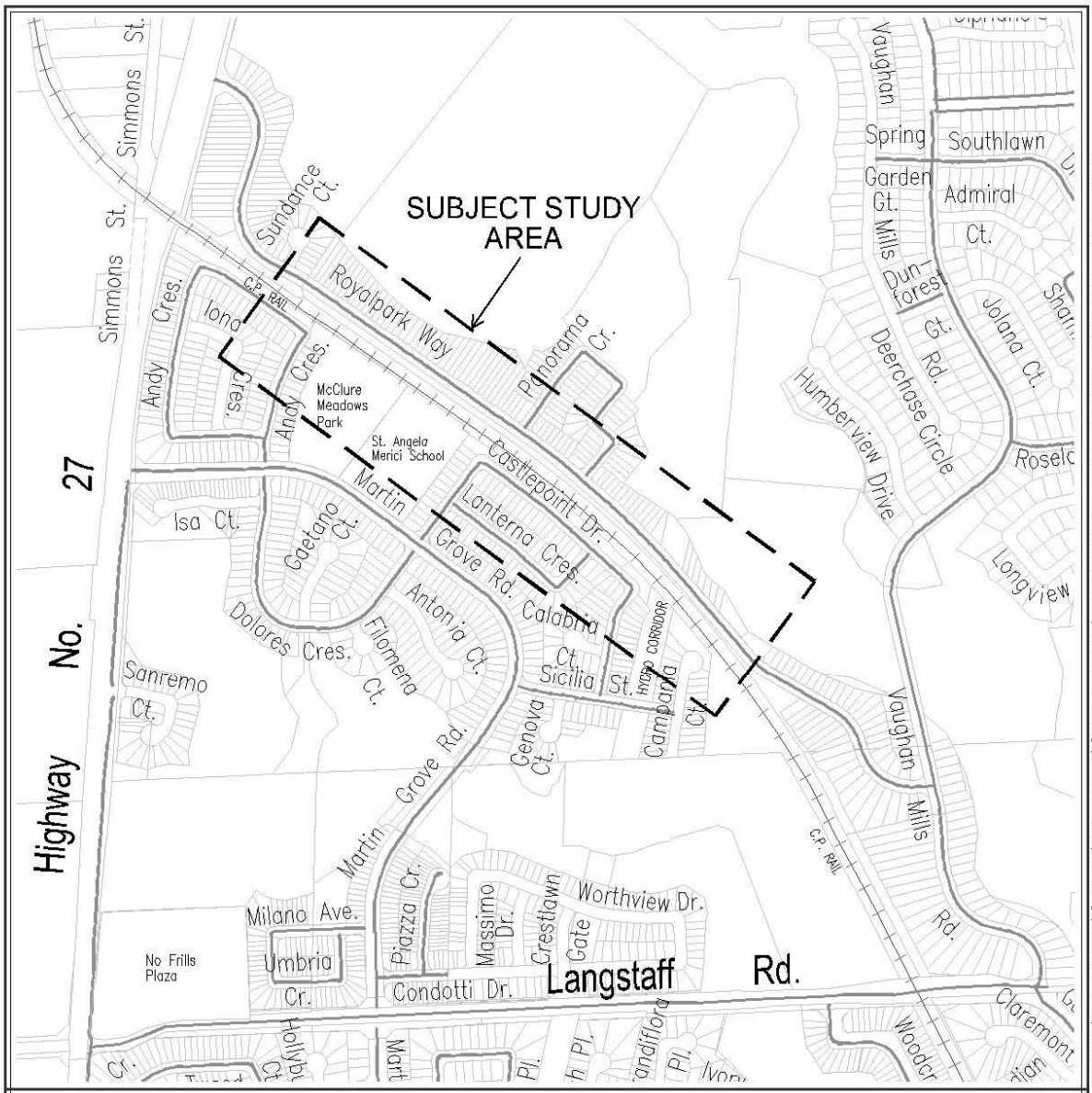
Respectfully submitted,

Bill Robinson, P. Eng.
Commissioner of Engineering and Public Works

Jack Graziosi, P. Eng., M. Eng.
Director of Engineering Services

CC:mc

LOCATION PLAN



PEDESTRIAN LINKAGES IN WEST WOODBRIDGE

FEASIBILITY STUDY

LEGEND

EXISTING SIDEWALKS

NOT TO SCALE

CITY OF VAUGHAN – ENGINEERING SERVICES

DRAFTSPERSON: G.S.

Drawing name: O:\Engineering Services\Design Services\Design Drafting\$ENGSERV\DOLIN CASSAR\$2009 Attachments\pedestrian linkages in west woodbridge_feasibility study_attachment.dwg