

April 14, 2004



FILE No. - P06

COUNCIL ATTACHMENT 1

Mr. Denis Kelly
Regional Clerk
The Regional Municipality of York
17250 Yonge Street
Newmarket, ON L3Y 6Z1

RE: **STATUS REPORT ON THE RODICK ROAD/HIGHWAY 407
OVERPASS CONSTRUCTION PROJECT (5.10, 7.5, 8.0)**

Dear Mr. Kelly:

This will confirm that at the meeting of Council held on April 13, 2004, Clause 2 of Report No. 18, was approved as follows:

"That the Engineering Department report entitled " Status Report on the Rodick Road/Highway 407 Overpass Construction Project" dated March 29, 2004 be received;

And that the Region of York be requested to provide funding for the project in the amount of one-third of the capital cost of the project in accordance with Regional policies regarding funding of 400 Series Highway overpasses;

And that the Mayor and Clerk be authorized to enter into an Agreement with 407 ETR for the construction and maintenance of the proposed Rodick Road/Highway 407 overpass structure and related works to the satisfaction of the CAO and Town Solicitor;

And that a contingency amount of \$20,000 be authorized to cover the potential cost of 407 ETR technical auditor's review, permit administration and inspection fees to be funded from the Engineering Department's approved 2002 Capital Budget (account # 083-5350-4731-005);

And that the Engineering Department be authorized to increase the detailed design fee to Marshall Macklin Monaghan Limited by a maximum amount of \$75,000 excluding GST to cover the cost of additional design services required to address fisheries habitat issues and the redesign of the Beaver Creek crossing structure to be funded from the Engineering Department's approved 2003 Capital Budget (account # 083-5350-4731-005);

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And that the balance of the fund in account # 083-5350-4731-005 in the amount of \$6,205,000 be applied to the construction of the project;

And that in the event that an acceptable agreement on a revised fee for construction inspection and contract administration services cannot be reached with the existing consulting firm engaged on the project, the Engineering Department be authorized to pre-qualify three consulting engineering firms for the provision of these services during the construction of the project and to request detailed proposals from these pre-qualified firms."

Yours sincerely,



Sheila Birrell
Town Clerk

Copy to: John Livey, CAO
Catherine Conrad, Town Solicitor
Alan Brown, Director of Engineering
Allan Arbuckle, Manager of Infrastructure & Capital Works
Barb Cribbett, Treasurer

REPORT TO TRANSPORTATION COMMITTEE

TO: Mayor and Members of Council

FROM: Alan Brown, Director of Engineering

PREPARED BY: Allan Arbuckle, Manager of Infrastructure & Capital Works

DATE OF MEETING: 2004-March-29

SUBJECT: Status Report on the Rodick Road/Highway 407 Overpass Construction Project

RECOMMENDATION:

THAT the Engineering Department report entitled "Status Report on the Rodick Road/Highway 407 Overpass Construction Project" dated March 29, 2004 be received,

AND THAT the Region of York be requested to provide funding for the project in the amount of one-third of the capital cost of the project in accordance with Regional policies regarding funding of 400 Series Highway overpasses.

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AND THAT the balance of the fund in account # 083-5350-4731-005 in the amount of \$6,205,000 be applied to the construction of the project.

AND THAT in the event that an acceptable agreement on a revised fee for construction inspection and contract administration services cannot be reached with the existing consulting firm engaged on the project, the Engineering Department be authorized to pre-qualified three consulting engineering firms for the provision of these services during the construction of the project and to request detailed proposals from these prequalified firms.

PURPOSE:

The purpose of this report is to provide Council's with an update on the status of the Rodick Road/Highway 407 overpass construction project structure. In particular, this report will provide information on the current status of property acquisitions, agreement negotiations, approvals and project scheduling.

BACKGROUND:

The extension of Rodick Road from Highway 7 southerly to Esna Park Drive has been identified in a number of studies including the Markham Official Plan, the Markham Transportation Planning Study and the Markham Centre Study as a key component of the long-range plan to improve Markham's transportation network. The completion of this important transportation link requires the extension of Rodick Road from YorkTech Drive to Miller Avenue and includes the construction of an overpass at Highway 407.

An Environmental Assessment was completed for the project in June of 1996 and work on the detailed design of the project, the acquisition of properties, the development of a management plan to deal with contaminated soils, the negotiation of agreements and the securing of approvals for the project has been ongoing since 1999. The construction of the Rodick Road extension requires the acquisition of a road allowance from a number of properties, the most critical of which are the ORC lands north of Highway 407 and the Magna International lands to the south of the highway.

An initial request to enter the property to conduct testing necessary to complete the project design was made to Magna International in August of 1999. Magna refused this and all subsequent requests to conduct testing on the property and insisted that the Town purchase their entire 8.9 ha. property rather than the 0.60 ha. required for the road allowance. Although the property required for the road construction was expropriated in June of 2002, Magna continued to deny access to the lands resulting in an Ontario Municipal Board Hearing in August of 2002 which granted the Town access to the site. Magna's refusal to negotiate the transfer of the required road allowance and their refusal to allow Town staff and the Town's consultants access to the property to carry out required testing has delayed the implementation of this project by approximately three years. While the Town now owns the land required for the road construction, negotiations to resolve compensation are ongoing.

Delays to the start of the construction have also resulted from the need to resolve a number of jurisdictional and procedural issues between the Ministry of Transportation and the 407ETR consortium relating to the impact of the Rodick Road extension on the construction of the future Highway 407 transitway and the impact of the proposed construction on the existing and future operations of Highway 407, from changes in the requirements of Toronto & Region Conservation regarding a proposed crossing of Beaver Creek and modifications to the project design to accommodate a possible future YRTP transitway on Rodick Road.

The acquisition of properties and the negotiation of approvals have now been completed to the extent that construction of the project will be tendered on March 30, 2004 with construction to start in early June pending final resolution of fisheries habitat issues with the TRCA and the execution of

an agreement with 407 ETR regarding the construction and maintenance of the overpass structure.

DISCUSSION:

Property Acquisition

The acquisitions of a total of 13 parcels of land were required to construct the overpass and related roadworks. To date 12 of the parcels have been acquired from 3 separate landowners including Magna International (by expropriation), Hydro One Networks and the Ontario Realty Corporation. The acquisition of the remaining parcel of land, owned by ORC, is currently under discussion and is expected to be completed in the near future.

Required Approvals

Approvals for the Rodick Road/Highway 407 overpass project are required from the following agencies;

Agency	Approvals Required
Toronto & Region Conservation	- stormwater management and drainage works including stormwater pond retrofit designs - Beaver Creek crossing designs - Fisheries habitat compensation plans - Construction dewatering plans
Provincial Ministry of Transportation	- Design approval relating to the impact of the proposed works on the future Highway 407 transitway corridor - permits required to construct road, watermain and sewer works on MTO lands.
407 ETR	- technical approval of all works on lands leased to 407 ETR - safety audits of construction plans adjacent to travelled lanes of the highway
Provincial Ministry of the Environment	technical approval of the design of sanitary sewers, watermains and stormwater drainage works.
Region of York	- technical approval of all works over and adjacent to the YDSS, - approval of design works to accommodate the option of future YRTP transit
Hydro One Networks	approval of all works proposed under or adjacent to existing and proposed hydro distribution lines and towers

Discussions with and submissions to each of these agencies has been ongoing for a number of months and it is anticipated that all approvals will be in place prior to the start of construction.

407 ETR Issues

During initial contacts with the Ministry of Transportation regarding this project, engineering staff were advised that there was considerable uncertainty at the provincial government level regarding the respective rights and responsibilities of the MTO and the operators of Highway 407 (407 ETR) in respect to the review and approval of new construction projects in the Highway 407 corridor. Although the preliminary engineering design work for the overpass structure was completed and submitted in 2001, the MTO and 407 ETR were not in a position to provide comments until the outstanding internal issues were resolved.

Staff were advised in December 2003 that the MTO and 407 ETR had reached an agreement regarding the responsibilities of each party and had established procedures for the review and approval of construction proposals in the 407 corridor. In summary, 407 ETR must agree in principle with the proposed construction works and is responsible for the review and approval of the engineering designs. The Town must also enter into an agreement with 407 ETR which addresses issues such as;

- the impact of the proposed construction on existing Highway 407 operations and maintenance.
- ownership of the overpass structure
- responsibilities and costs of future maintenance of the overpass structure and related roadworks within the highway corridor.
- letter of Credit requirements and payment of fees
- scheduling of work

A draft copy of the Agreement has been received and staff is currently negotiating to finalize the terms and conditions of this agreement. This draft agreement includes a requirement that the ownership of the bridge, when completed, will be transferred to 407 ETR and that the Town will be responsible for the annual maintenance of the structure. Although the issue of compensation for lost tolling revenues resulting from construction activities associated with the Rodick Road project are not included in the current draft of the agreement and no formal request has been made by 407ETR to include this compensation, this requirement may be brought forward by 407 ETR as a part of the final agreement conditions.

Ministry of Transportation Issues

Although the review and approval of the engineering designs and the preparation of a legal agreement is the responsibility of 407 ETR, the MTO, as the owners of the highway, must also review and approve the proposed works and must issue a permit for any works which lie within the highway right-of-way. The Ministry's approval and the issuing of Permits will only occur after the 407 ETR approval is received.

The Ministry is also responsible for ensuring that the construction of the Rodick Road extension will not adversely impact the future development of the 407 Transitway facility which is proposed to be constructed within a corridor located south of Highway 407 and north of Miller Ave. A number of issues relating to this future transitway including access to properties, the grading of approach overpass embankments and the depth of servicing have been extensively reviewed with

the Ministry and have been resolved.

Toronto Region Conservation Issues

Beaver Creek, a tributary of the Rouge River, crosses Rodick Road approximately 150 metres to the north of Highway 407. The need to construct a crossing of the creek in conjunction with the construction of the 407 overpass structure was identified in the 1996 Environmental Assessment for Rodick Road and this creek crossing was shown in the Environmental Study Report(ESR) for the project as 3 box culverts.

The initial designs for the Beaver Creek crossing were prepared by the Town's consultant based on the box culvert concept presented in the approved ESR. Meetings to discuss these designs were held with Toronto & Region Conservation Authority staff in 2001. During these discussions, TRCA staff provided advice pertaining to the design of the culvert and the corresponding fisheries habitat compensation which would be required. On the basis of these discussions, final designs for the creek crossing and habitat compensation were prepared and these designs, together with a permit application were submitted to the TRCA for approval.

In response to the submission of the permit application, TRCA advised that a box culvert crossing of the creek was not acceptable and that a bridge structure spanning the creek was required. In light of the TRCA's previous position regarding the use of box culverts and the considerable additional cost associated with the construction of a bridge structure, estimated at an additional \$2 million, engineering department staff objected to the TRCA requirement and have been negotiating with TRCA staff since December of 2003 in an attempt to find a solution acceptable to both parties. As a result of these negotiations, an agreement in principle has now been reached which provides for the construction of large open footing culverts instead of a bridge structure. While the installation of this type of culvert is more expensive than the original box culvert proposal, it is considerably less expensive than the bridge structure favoured by TRCA staff. The engineering design drawings and specifications will be revised to reflect this change and staff is requesting authorization of additional design fees to cover this redesign work. The consultant has submitted an upset limit estimate of these additional fees which total approximately \$ 75,000. Staff has reviewed this estimate and is concerned that these fee estimates are disproportionately high given the extent of work required. Staff is continuing to negotiate these fee increases with the consultant but is requesting approval of the upset amount to avoid delaying the tendering of the project.

Engineering Department staff will continue to negotiate a final agreement for the creek crossing and fisheries compensation plans with TRCA.

Region of York Issues

1) Protection of Existing Services

The existing York-Durham trunk sanitary sewer crosses the proposed extension of Rodick Road approximately 100 metres south of Highway 407 and the construction of the bridge embankments could potentially impact the sewer. The Region requested that special protection measures be incorporated into the design and this issue has now been resolved and the approval of the Region has been received.

2) Future Rapid Transit

The Region requested that the design of the Rodick Road project be modified to accommodate a possible future rapid transit corridor on Rodick Road. These modifications, which have been incorporated into the final project design, include the relocation of proposed watermain and stormwater drainage works to alignments which will accommodate the future widening of the overpass structure and approach embankments for transit use. The Region has agreed to fund the cost of this design and construction work.

3) Funding of Overpass Construction

The Region of York will provide funding under the Regional Development Charge By-law for one third of the capital cost of constructing new overpass structures over 400 series highways providing that the area municipality has included these structures in the local DC By-law. In the case of the Rodick Road overpass, the construction of this project is included in the existing Town Wide development charge. Staff is recommending that a request to provide this funding be made to the Region.

Schedule

The current schedule for the project is:

- tender call – March 30, 2004
- tender award recommendation to Finance & Administrative Committee – May 17, 2004
- Construction start – June 7, 2004
- Construction complete (road open to traffic) – May 6, 2005

The scheduled opening date of the Rodick Road/ Highway 407 overpass and related roadworks has been established to coincide with the proposed start date of construction of the widening of Warden Avenue from Highway 407 to Highway 7 being undertaken by York Region. The opening of the Rodick Road extension will provide a alternate north-south route between Highway 7 and 14th Avenue which will assist in relieving anticipated traffic delays on Warden Avenue resulting from the Region's reconstruction work. Discussions between Town and Region engineering staff regarding the coordination of the schedules for these two projects will continue as work progresses on each project.

Construction Supervision and Contract Administration Services

In June of 1999, Council authorized the retention of the consulting firm of Marshall Macklin Monaghan Ltd to carry out the detailed design of the Rodick Road – Highway 407 overpass project. In addition to the detailed design work, the consultant also provided a fee proposal for the provision of construction supervision and contract administration services which was accepted by Council with the condition that final authorization for the consultant to proceed with this phase of the project was subject to Council's approval of the funding.

The fee quotation for construction supervision and contract administration services submitted in 1999 was based on the completion of the construction of the project by December 2002 and an estimated construction value of approximately \$6.6 million. In the ensuing five year period, the scope and cost of work to be included under the construction contract has changed significantly to the extent that the construction supervision and contract administration fees approved in 1999 are no

longer appropriate. Staff has identified two appropriate methods of obtaining updated fee proposals for these services:

1. Negotiate a revised fee with the existing consulting firm
2. Solicit competitive proposals from other qualified consulting firms. Given the size, short delivery time and complexity of the Rodick Road - Highway 407 overpass project, staff is recommending that potential consultants for this assignment be prequalified and that proposals be requested from a maximum of three firms who have demonstrated ability and resources to completed this type of project.

Staff has initiated discussions with the current consultant regarding a revised fee but is requesting Council's authorization to request proposals for other qualified consultants if an acceptable agreement cannot be reached with Marshal Macklin Monaghan by April 9th 2004.

FINANCIAL CONSIDERATIONS:

The additional costs for design modifications to accommodate future transit facilities have been identified and will be funded entirely by the Region of York. The costs for design modifications to the Beaver Creek crossing will be funded from the existing capital budget for the Rodick Road/Highway 407 overpass project.

The amount of the Region's contribution towards the construction of the overpass structure will be established once the tender for the project is awarded.

BUSINESS UNITS CONSULTED AND AFFECTED:

The Legal Services Department and the Finance Department has reviewed this report.

ATTACHMENTS:

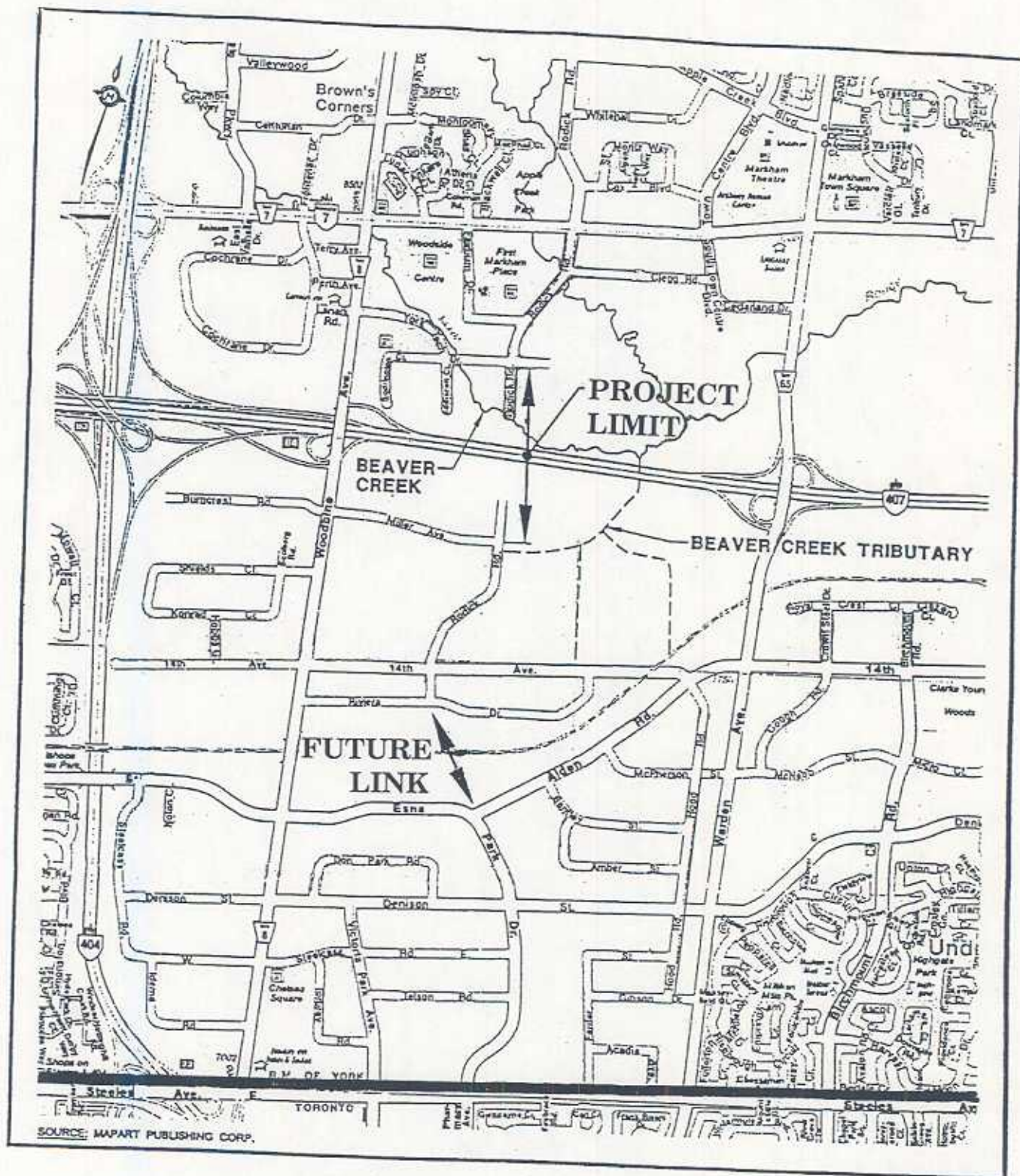
"A" Site Location



Alan Brown, C.E.T.
Director of Engineering



Jim Baird, M.C.I.P., R.P.P.
Commissioner of Development Services



Rodick Road Overpass Town of Markham