

Cost Sharing with Weston Golf and Country Club for Installation of Erosion Control Measures along Weston Creek (Ward 3, Kingsway-Humber)

(City Council on December 14, 15 and 16, 1999, adopted this Clause, without amendment.)

The Works Committee recommends the adoption of the following report (November 12, 1999) from the Commissioner of Works and Emergency Services:

Purpose:

This report seeks the approval to enter into a cost sharing agreement on a dollar for dollar basis not to exceed \$20,000.00 with the Weston Golf and Country Club. This funding will cover the cost of implementing erosion control measures on Weston Creek partially required as a result of the increase in wet weather flows conveyed by the creek due to storm runoff from the City's storm sewers.

Financial Implications and Impact Statement:

\$20,000.00 has been included in the 1999 Water and Wastewater Operating Budget.

Recommendations:

It is recommended that:

- (1) the City enter into a cost sharing agreement with the Weston Golf and Country Club on a dollar for dollar basis not to exceed \$20,000.00 to construct erosion control measures at sections of Weston Creek within the golf course property; and
- (2) the appropriate City officials be authorized and directed to take the necessary action to implement the foregoing.

Background:

The Weston Golf and Country Club has been in operation since 1915 and is located on the west bank of the Humber River, east of Islington Avenue and north of Dixon Road. The golf course is dissected by Weston Creek, which enters the golf course property at its west limit and flows east to discharge to the Humber River. Historically, the entire creek west of the golf course was an open watercourse, which provided drainage to the surrounding undeveloped lands. As the upstream area became developed in the 1950s and 1960s, the creek was piped and buried, however, it remains an open watercourse as it flows through the golf course. With this development of the upstream area, storm sewers were constructed to accommodate the increased storm runoff from the impervious surfaces. These storm sewers discharge to Weston Creek which now receives storm runoff from a drainage area of 100 hectares of which 41 encompass an urbanized drainage area.

Comments:

Sections of Weston Creek within the golf course property have been subjected to erosion, which can be partially attributable to the increased storm runoff the creek is currently required to convey. Recent monitoring in one of the storm sewers discharging to the creek has shown that the storm flows are noticeably greater than the creek's base flow. Even without conducting a hydrologic study, it can be stated that the current storm flows discharged to the creek are greater than those experienced prior to the development of the upstream drainage area. In order to minimize the impact the current storm flows can have on the creek, the upstream area is being examined with the aim of reducing the rate and volume of storm runoff entering the storm sewer system.

Another cause of the creek erosion within the golf course property can be attributed to the actions of the golf course owners. The housekeeping practises and modifications made by the golf course owners have altered the characteristics of the creek to the extent it is susceptible to bank instability and erosion. These actions include:

- cutting the grass short along the creek bank and inhibiting the development of larger plants. This does not provide any attenuation or protection against the increase in flow velocity during runoff events;
- altering the creek alignment. In some areas its is fairly straight with a relatively steep grade which exacerbates the scouring ability of the increased storm flow; and
- construction of ponds adjacent to and at a higher elevation than the creek. This results in saturated soil existing between the pond and creek causing slumping along the creek banks and further inhibiting the resistance to erosion.

Notwithstanding the above-noted practices, the increased storm runoff discharged to Weston Creek from City lands has contributed to the erosion along the creek banks within the golf course property. The former City of Etobicoke recognized this and in 1996 agreed to participate in a cost sharing arrangement with the Weston Golf and Country Club to undertake remedial works in the most severely impacted areas. In June 1997, the former City of Etobicoke made a payment totalling \$17,500.00 to cover 50 percent of the actual cost of the work.

Corrective works are still required to provide bank stabilization and protection against further erosion. It is proposed that the City enter into a cost sharing arrangement with the Weston Golf and Country Club on dollar for dollar basis not to exceed \$20,000.00. This commitment on the part of the City would be without prejudice and contingent on obtaining a signed agreement in a form satisfactory to the City Solicitor and the Commissioner of Works and Emergency Services. The agreement would include provisions stating that this is to be a one-time commitment only and does not bind the City to any future works. It would also require that the Weston Golf and Country Club receive approval from all regulatory agencies prior to commencing any work along the creek or within the Humber River flood plain. It would also recommend that the Weston

Golf and Country Club examine their current practises with the objective of mitigating any activity that reduces the creek's ability to resist further erosion of its banks.

Conclusions:

The increase in storm runoff as a result of the development of the upstream lands has partially contributed to the erosion and bank instability along sections of Weston Creek as it flows through the Weston Golf and Country Club. Other activities under the control of the golf course operators have also been contributing factors. As a result of the dual responsibility, it is proposed that the City enter into a cost sharing agreement with the Weston Golf and Country Club to assist in covering the cost of constructing erosion control measures along Weston Creek within the golf course property. The agreement would be on a dollar for dollar basis with the City's commitment not to exceed \$20,000.00. This proposal is recommended for approval as being within the best interests of the City.

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