Terry Fox Drive CEAA Screening - Part B Richardson Side Road to Second Line Road Final Report

April 2010

(Appendices under Separate Cover)

Submitted to

Infrastructure Canada and Department of Fisheries and Oceans Canada

Submitted by

City of Ottawa

Project No. 09-1518

Prepared by

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SUMMARY

Project Details	
Name of Project	Terry Fox Drive – Richardson Side Road to Second Line Road
Project Location	City of Ottawa
Proponent	Design and Construction - Municipal (West) Infrastructure Services Department 100 Constellation Cres., 6th Floor, City of Ottawa, ON K2G 6J8
Contact(s)	Steven Stoddard, Senior Project Engineer
EA Details	
Responsible Authority	Infrastructure Canada Fisheries and Oceans Canada
Contact(s)	Tamara Skillen-Haynes Senior Advisor, Environmental Review and Approvals Tel : 613-948-9461 Fax: 613-960-6398 Tamara.Skillen.Haynes@infc.gc.ca
CEAA Trigger	Financial – s. 5(1)(*b*) ; Fisheries Act Authorization s. 35(2)
CEAR Reference	09-01-49614
EA Type Required	Coordinated Screening
EA Commencement	August 19, 2009
Provincial EA Requirement	None
CEAA Determination	
RA Decision under s. 20(1)	s. 20(1)(*a*) – Project is not likely to cause significant adverse environmental effects taking into account the implementation of mitigation measures
Requirements associated with s. 20(1) decision	Yes / No Mitigation (√) / ( ) Follow-up ( ) / (√) Monitoring/reporting (√) / ( )

EXECUTIVE SUMMARY

TERRY FOX DRIVE EXTENSION – PART B
CANADIAN ENVIRONMENTAL ASSESSMENT
SCREENING REPORT

The Terry Fox Drive road extension provides the remaining linkage between previously constructed portions of road within north and south Kanata in the City of Ottawa. The 4.8 km road will be a major arterial, increasing mobility and improving safety for travelers moving between the two parts of the community and parts beyond. As decided through various planning procedures, beginning in the early 1980's at the former City of Kanata, Regional Municipality of Ottawa-Carleton, and updated in the Official Plan Amendments for the City of Ottawa, Terry Fox Drive defines the urban boundary of West Ottawa.

Currently, the project has moved into the final design stage prior to construction. The 1.2 km Part A portion of the project was designed through to final construction drawings and tender-ready in 2005. To allow this less complex, mostly cleared north end to proceed directly to construction, the Part A project was the subject of a separate environmental assessment.

Part B to the south, is 3.6 km long. As part of the review process to secure permits, federal authorizations and other regulatory approvals for Part B, this Canadian Environmental Assessment (CEAA) screening report is intended to review the expected environmental impacts of road construction, identify how some impacts were avoided, propose construction mitigation measures, specify any necessary interim measures and determine the cumulative, net effects of the planned road. The road impacts are assessed against the current baseline conditions, but when reviewing the cumulative effects have also taken into regard the long term mitigative context of the future land developments adjacent to the road.

The South March Highlands have been recognized as having a unique biological diversity, with the province proposing 895 ha of it as a Candidate Provincially Significant Life Sciences Area of Natural and Scientific Interest (ANSI). Within this designation there is a Provincially Significant Wetlands Complex, white-tailed deer wintering yards, significant woodlands, habitat for 12 potential species at risk where the complex topography creates wet depressions, which flow together and constitutes the headwaters of Shirley's Brook, draining east to the Ottawa River. Contrasting this, one third of the roadway lies in the Carp River floodplain, a flat clay plain currently farmed, yet a low lying area which floods seasonally as the Carp flows north to the Ottawa River. Through these two environments, the Municipal Class EA process determined a route that eliminated most impacts to the wetlands, had few water crossings, generally minimized the environmental impacts of the unique ecology within the area, yet allows for the necessary traffic connections within Kanata.

At this time, two-lanes of the proposed four-lane-ultimate cross section will be built to service the current traffic needs of North Kanata. The full width of the 4 lane road base however will be built now, as blasting will be required to grade the road to meet the vertical profile and horizontal alignment requirements. Throughout the 4.8 km of roadway (Part A & Part B), 13 full-length culverts will be built, four of which will be placed in particular locations to allow small wildlife species to migrate underneath the road between their preferred habitats. The remainder will convey water flows, and in most cases will allow fish and other aquatic organisms to migrate along the stream corridors. Storm sewers will be constructed at this time, with municipal water mains and sanitary sewers coming in the future depending on the pace and needs of the future growth. To reduce the impacts to the wetlands and watercourses, advanced-technology Vortechs^{TM} oil & grit separators and 'Enhanced Swale' outlets will be used to treat the road storm runoff.

Part of the proposed road footprint lies within the 100 year flood zone of the Carp River. To offset the storage volume losses, an area of equal volume will be excavated on the opposite bank, compensating for the losses on an elevation by elevation basis. The 18.2 ha piece of lowered land will be restored to 10 ha of farm land, with improved drainage, and 8.2 ha of swamp wetlands within the riparian zone of the River, to be restored as habitat for reptiles, amphibians, small mammals and birds. An additional 2 ha of afforestation along the Carp River will offset losses of forest land cleared along the roadway.

Some small areas of agricultural land within the Carp River floodplain will become bisected by the new road, half of which is planned to be developed, and the other half planned as Open Space. This provides a future opportunity to take these marginal lands out of production, plant trees on them to help restore the floodplain, reducing the effects of air pollution and climate change, provide a western buffer to the residential areas and reduce the incidence of drifting snow along the exposed clay flats.

As land is developed nearby, the internal forest conditions and vegetative communities along Terry Fox Drive through the South March Highlands will be converted to edge habitats, as a fringe along the outer edge of the urban environment. An edge management planting plan is being developed along the northern side of the road to buffer the cleared edge of trees and mitigate the effects of clearing on the trees and wildlife habitats and to mitigate the impact of the developing land on the wildlife.

A realignment of the East Shirley's Brook will be required to avoid direct road impacts to fish habitats. A short 250 m diversion will be built within the road right of way, to offset the enclosure of 190 m of the creek beneath the roadway. Straddling the rail line, two provincially significant wetlands exist, of which 0.99 ha will be removed as the road alignment passes through. The impacts on the wetlands have been reduced as much as possible through careful route planning and into the final design phases of the provincial and federal environmental assessments.

Species at risk are an important consideration in the routing, design and consideration of Terry Fox Drive.

Butternut is a federally endangered species of tree that is being fatally affected by a fungal disease in some parts of Canada. Within close proximity to the Terry Fox Drive alignment, 179 butternut trees were found by a OMNR approved specialist, many in three concentrated clumps within the Part A piece of the project. Although 109 are diseased and may be cleared, of the remainder that are less disease-affected and retainable, six are small enough to be transplanted, 23 will need to be cleared and 20 may be effected by the nearby road construction. A further 21 will remain where they are, unaffected. Overall, through a proposed agreement with the Ministry of Natural Resources and partnership with local gene conservation organizations, 602 seedlings will be planted to offset the losses, either along the road alignment or in the nearby Monaghan forest within City limits.

Three specimens of American ginseng, also a federally endangered plant were found along the alignment. This species is quite prone to poaching for the commercial trade so their locations are kept confidential. Unfortunately, they must be removed from their natural habitat, and will be transplanted to a similar habitat at another location outside of the planned urban area. Through a proposed agreement with MNR, seed and seedlings of American ginseng will be used to reproduce this species within its natural habitat to help re-establish the population, previously thought to have been extirpated.

Four specimens of Blanding's turtle, a third species at risk which is listed federally as threatened, have been found within the area of the proposed Terry Fox Drive since 1999. Although their habitat is not currently protected under the provincial Endangered Species Act, harming an individual is prohibited. Although the road alignment was routed to miss open water, which is the preferred over-wintering habitat for Blanding's turtles, there is a potential for an animal to be disturbed or killed during construction. To

protect the species at risk and other species of wildlife and flora, the City will provide contract staging, direction and training to reinforce the commitment to protect the species found in the unique habitats of the South March Highlands.

Indications of breeding activity of the Western Chorus frog have been confirmed in one unit of wetland that will be altered and one other piece of wetland that is in close proximity to the road. Although not currently listed as federally threatened, the Western Chorus Frog is expected to be listed in the near future so the project has taken a pro-active approach to protecting some amphibian habitats that will benefits several of these sensitive species that were found in the area.

Many species of wildlife, including the species at risk noted here, may be prone to the risk of road kill if they attempt to cross the road while traffic is busy. To minimize this risk to the wildlife of the South March Highlands, the entire roadway where it travels through forested sections will be secured with a specialized series of wildlife guide walls, terrestrial culvert passageways and wildlife guide fencing. This extensive system of barriers will be of benefit to both the turtles, small mammals, meso-mammals and amphibians, as well as create a barrier to the public to increase the safety factor of the road.

The improvements to mobility and safety will be significant. New intersections with signals are being built at Richardson's Side Road, Kanata Avenue, Second Line, Goulbourn Forced Road and at Innovation Drive. They will improve the safety and efficiency of the arterial road system for the former City of Kanata, linking commuters with Highway 417 to the south. As the residential developments come on line in the future, three new intersections have been allowed for to access the new communities. Depending on the pace of growth in the Ottawa region, it may be expected that the four-lane ultimate cross section will be constructed sometime around 2020. By then, community recreational pathways and city-wide bicycle trails will criss-cross the newly developed lands and Terry Fox Drive, stitching together the fabric of the community.
As the project is quite challenging and will benefit the larger community objectives of the Kanata area, federal and provincial stimulus money was sought to assist the City of Ottawa in funding the project. The request for financial assistance from Infrastructure Canada triggered a federal screening under the *Canadian Environmental Assessment Act*. The request to provide an authorization under the *Fisheries Act* for the relocation of the East Shirley's Brook watercourse also triggered a federal environmental assessment. Initiated on August 19, 2009, the project environmental assessment was posted to the Canadian Environmental Assessment Registry with a Notice of Commencement for the "Terry Fox Drive Extension Part B: Richardson Side Road to Second Line Road".

Route planning and deciding on the preliminary design elements for the 4.8 km Terry Fox Drive has been occurring for a long time, through the Provincial Class Environmental Assessment process for municipal undertakings. This environmental assessment is based on that past information, as well as newer studies.

This assessment found that the road construction would result in direct and indirect effects on forests, wetlands, fish habitats, floodplains and five listed species at risk. Through extensive consultation with the regulatory agencies and federal authorities, and identification of mitigative measures, including fencing the majority of the project to avoid impacting wildlife, the assessment concluded that the environmental effects on all valued environmental components could be mitigated through available technologies and the application of Best Management Practices, such that no significant adverse environmental effects are anticipated. When cumulative effects are considered in the context of the growing community which Terry Fox Drive will serve, the long term effects were deemed to be acceptable and not significant.

The following chapters introduce the project as well as document the study process and scope.

Chapter 1: Introduction
Chapter 2: Scope of the Project
Chapter 3: Study Process
Chapter 4: Public and Agency Consultation