2.0 PROJECT DESCRIPTION & SCOPE OF PROJECT

2.1 Part B Project Components

The following provides a description of the main project components. Further details of the project activities are presented in **Sections 2.2** and **2.3** (organized by construction and operation activities). **Figure 1** illustrates the project location in plan view, and **Figure 2** provides the typical road cross-section for the proposed works. **Appendix A** includes a set of high resolution aerial photos with the Right of Way, chainages, intersections, culverts, wetlands and watercourses and the overall road footprint. We recommend readers refer to these plates regularly during the review of this document.

The main components of the project are as follows:

Main Terry Fox Drive

The full-width 4 lane roadbed for the ultimate build out will be constructed. A two lane semi-urban section paved surface will be built as part of this project, with short segments built to four lanes (urban sections) in select areas to serve existing or immediately pending growth areas.

The proposed roadway will be four lanes in total, however current traffic volume needs only require two main paved lanes be built at this time, along with the necessary medians, turning lanes, bike lane, sidewalks and recreational pathway. The coarse road base, culverts and shot-rock roadbed for the full-width ultimate section will however, be built now, so that in the future, as future lanes are required, the only additional work will be to provide the final granular road base, pavement, curb and gutters, traffic signals and adjustments to the pavement markings. All environmental impact analysis, mitigation strategies and net effects have been based on the ultimate cross section design of four lanes throughout the entire length. Specifically, this means that the rock cuts made now will provide an adequate opening for the ultimate four lane section. Full length culverts will therefore be constructed now. The storm drains are sized to the ultimate area of imperviousness and all necessary fill through low lying areas will be placed now, so they will be ready for the future four-lanes when they are needed.

Preloading and Floodplain Cut (Carp River Floodplain and Wetlands)

To facilitate the construction of the road it will be first necessary to preload a section of the road through the floodplain and to provide an offsetting cut in the flood plain to compensate for the loss of flood storage. Construction consists of preloading, or surcharging, 560 linear metres (Stn 12+100 to 12+400; 13+225 to 13+475) of new four-lane roadbed (undivided arterial) plus auxiliary lanes totalling a width of a 33.6 m wide roadbed within a 45 m right-of-way which is owned or recently acquired by the City Of Ottawa. The surcharging will require overfilling the roadbed with up to 2.0 m of gravel to increase the weight so the clay below is compressed. Wick drains will speed the removal of water, yet this activity will require a six month preloading period. Within the floodplain, a total of 42,499.89 m^3 of fill will be placed below the 100 year return frequency elevation of 93.5 m. To offset this, a floodplain cut of 50,899.30 m^3 of clay on the opposite bank of the Carp River will be completed at the same time, maintaining a positive balance of more cut than fill at any time. This 18.2 ha area will be restored as a combination of 10 ha of agricultural land and 8.2 ha of wetlands. Little tree clearing is necessary here, so upon receipt of the MVC regulated-fill approvals, these sections will be built first to provide an adequate amount of time for the preload settlement before the final road base is built.

Tree Clearing, Access Road & Creek Realignment

An advanced tree clearing contract and 7 m wide gravel access road will be tendered at the same time for the entire roadway. A temporary access road along the TFD road alignment will be required for the

transport of materials and equipment throughout the corridor. Temporary diversions (2) and corrugated steel pipe culverts will be placed on the watercourses to allow the machinery to cross without causing sedimentation and fish habitat impacts to the creek and so the permanent concrete culverts can be built in the dry. A 250 m long realignment of the East Shirley's Brook will be required where the creek underlies the alignment for a distance of roughly 190 m (Stn 14+900). Part of the alignment (120 m) will be through a new rock cut, with the remaining 130 m constructed through an existing Provincially Significant Wetland (PSW#2). All of the realignment will be built within the Right of Way on land owned by the City of Ottawa. This channel is needed before the main roadway blocks the current creek outlet and will convey water flows into PSW #2 permanently.

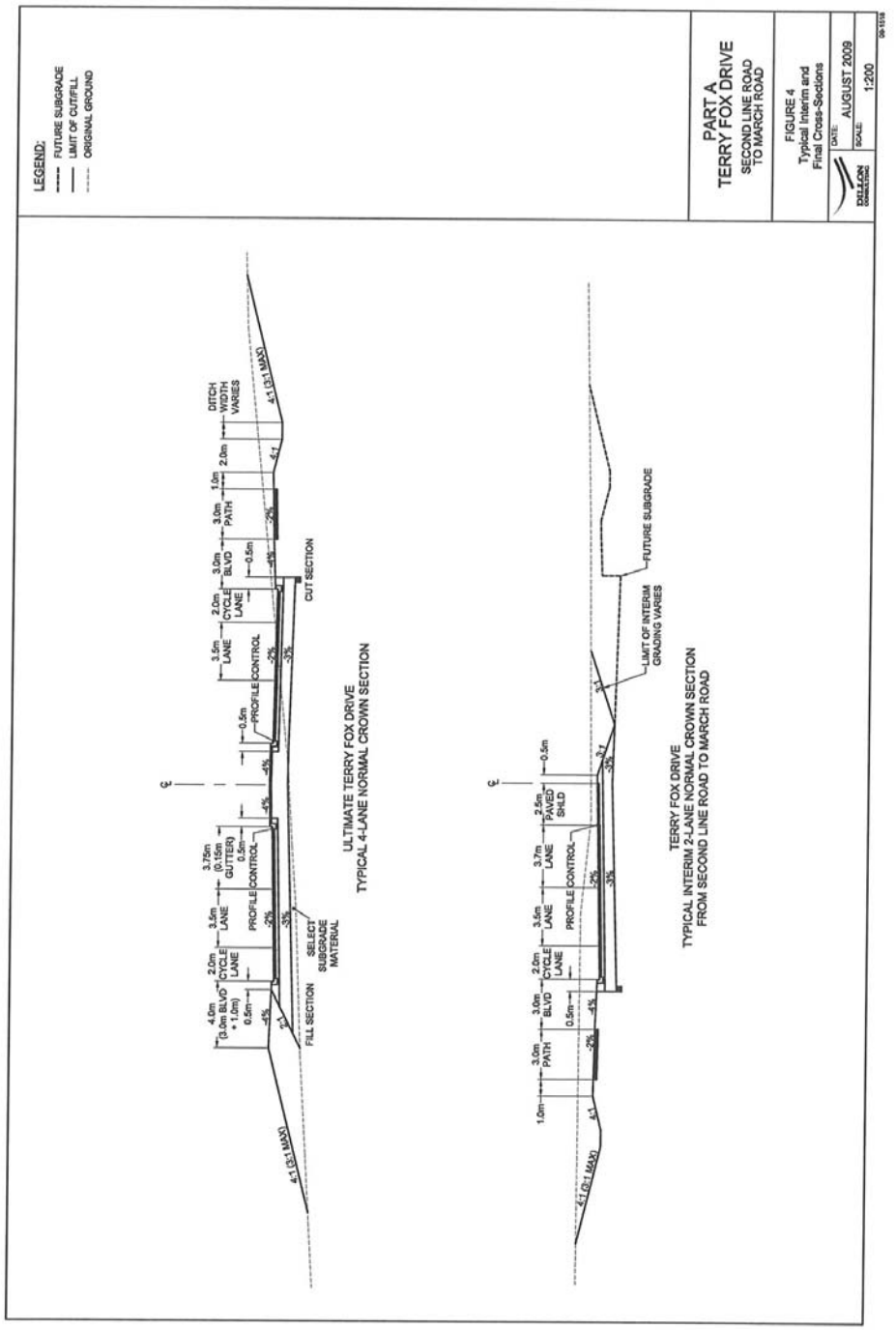
Stormwater Management

Storm water will be handled using a combination of storm sewers, culverts and ditches. The drainage system will consist of precast catch-basins, manholes and roadside ditches. Sediment and erosion control in the ditches will be provided using flow checks, and permanent erosion control will be provided using riprap ditch linings where warranted, based on velocities. Urban sections will be fitted with curb and gutter systems with catch-basins that lead to a buried storm sewer. Storm water collected from the gutters will be treated through Vortechs™ oil and grit separators, installed in at collection specific points. Storm water management includes enhanced treatment for fine particulates in purpose-built swales, storage in roadside ditches as well as some flow being directed to a previously constructed storm water management facility. Storm water in the Part A section drains eastwards from a highpoint at Stn 15+650 into the existing Statewood subdivision SWM ponds. Conversely, the central Part B sections will drain generally westward into the Shirley's Brook system. The stormwater ponds will operate under Provincial Certificates of Approval and be maintained by the City of Ottawa upon assumption from the developer. A stormwater drainage report for both Part A & Part B TFD is available in a separate document (**Appendix B**).

Other Project Components

Other project components include the construction of cycling lanes adjacent to the roadway, clearance of archaeological issues, installation of a wildlife guide wall and fence system to reduce wildlife impacts, traffic control signals, street-lighting, floodplain restoration, landscaping and, in some locations, a 3 m wide recreational pathway/sidewalk.

Figure 2: Typical Road Cross Sections



2.2 Scope of Project

The scope of the project includes the site preparation, construction and commissioning/operation of a public roadway (which includes repairs and maintenance). Drainage and stormwater quality management features are included as part of the project, which will help to protect the environment. Once commissioned, the project will enter the operational phase that will provide public access to this roadway. The project scope also includes the operational phase of the roadway, while it is in use by local residents and the connections to intersections made by adjacent landowners. All known intersections of collector and arterial roads have been allowed for in the design and impact analysis. The operational phase of the project includes the use of the roadway by the public, which includes electrical signals at intersections, snow clearing and de-icing, regular repairs of the road surface and maintenance of the roadway appurtenances. **Table 2-1** summarizes the project components and activities considered in the EA screening.

Table 2-1 – Project Components

Project Phase	Project Components	
	Core Project Components	***Ancillary Works and Activities***
Construction	• Site preparation for a four lane roadway including preloading of a section of the roadway; • Realignment of a 190 m section of East Shirley's Brook; • Construction of new roadway (two lane to be initially constructed but road bed being prepared for a future 4-lane roadway); • Carp River floodplain cut and restoration as a constructed wetland and farm fields; • Dry wildlife passage culverts with armourstone guide walls and guide fencing; • Construction of a new pedestrian pathway/sidewalk; • Construction of stormwater management features; • Landscaping and planting,	• Survey layout and confirmation; • Vegetation clearing and grubbing of the root-zone; • Temporary construction laydown areas; • Excavation of soil, peat and bedrock; • Use of explosives to excavate rock; • Installation of traffic control signals, road signs and street lighting; • Construction, installation or modification of stormwater management structures; • Disposal of waste materials; • Ramping and guide-walls on either side of wildlife culverts to ensure use by wildlife ; • Use and storage of construction vehicles and equipment; • Transportation and storage of construction equipment to and from the project site; • Use of explosives to excavate rock; • Reuse of wetland donor soils.
Interim Environmental Mitigation	• Temporary two lane roadway construction until four lanes are required.	
Operations/ Modifications	• Minor repairs as necessary; • Sediment, debris and snow removal from the roadway; • General cleaning and maintenance activities; • Modifications and maintenance that may be required.	• De-icing and treating stormwater runoff; • Periodic cleanout of oil and grit catch-basins; • Monitoring of environmental compensation.
Decommissioning/ Abandonment	• Rehabilitation of the connector road to Goulbourn Forced Road once construction is completed.	• Restore floodplain cut to agricultural and wetland uses.

2.3 Construction Activities

Physical works and activities associated with the construction phase are discussed in the following sections.

2.3.1 Site Preparation

This activity includes tree clearing, topsoil stripping and earth / rock grading. A layout will be completed by a certified Ontario Land Surveyor (OLS) including lay-down areas, turnarounds and access roads. As blasting is required a dedicated explosives storage and preparation area will be established in a safe location by the contractor. Where butternut trees lie close to the grading limit, consideration for reshaping the side slopes in order to save individual trees will be undertaken as an additional form of mitigation by a Certified Arborist in consultation with the Project Engineer, City officials, Contractor and Contract Administrator.

2.3.1.1 Vegetation and Topsoil Removal

For new road construction/widening, trees and all vegetation will be removed and topsoil and organic materials removed, within the roadway grading footprint. Generally, the top 25 cm of topsoil will be stripped, but in the upland locations, the depth of topsoil over bedrock may be less than this. It is expected that stripping 85,000 m^3 of topsoil from the entire length will be required. Organic soils (peat) will be stripped from the wetland crossings to a depth sufficient to prepare the new road bed using shot rock. These depths have been determined through the geotechnical field work conducted during the spring of 2009 by Golders Associates Ltd.

Trees valuable as lumber will be removed for their commercial value, while all other woody materials will be shredded for mulch to be used during the landscaping. It is noted that while this activity will be done where possible, however, the project study area is within the area designated under the *Emerald Ash Borer Infested Place Order for the City of Gatineau, in the Province of Quebec and the City of Ottawa, in the Province of Ontario*, issued by the Minister of Agriculture and Agri-Food under subsection 15(3) of the Plant Protection Act. As such, all mulch will need to be reused on site or composted in the municipal composting program to limit the spread of this pest.

2.3.1.2 Earth Grading, Rock Excavation and Blasting

Earth grading will be completed to accommodate the roadway platform and well as new ditching. Bedrock will need to be removed in certain cut areas using drilling machines, explosives and heavy construction machinery. Explosives will be used as part of the blasting operations, in areas where the rock cannot be excavated with an excavator. Parts of the Shirley's Brook realignment will require rock cutting by blasting.

A total of 48,000 m^3 of Granular B gravel and pre-weathered crust clay is estimated to be required as preload for the roadbed fill in two locations between Stn. 12+100 to 13+600 in the vicinity of Richardson's Side Road, parallel to the Carp River. Approximately 50,900 m^3 of silty clay will be removed from the floodplain cut compensation area at the same time – this material is deemed to be unsuitable for road construction as engineered fill and will be removed from the site for disposal as clean fill. Excess Granular B will be reused elsewhere on the project once the settlement has ceased.

The use of blasting for rock excavation is dependent upon the competency of the rock. Golders Associates Ltd. (Golders) has determined it is generally a gneiss-granite that is somewhat porous. The contractor will determine whether or not blasting will be required for the construction of the proposed road and creek alignments. Blasts must be designed to limit ground vibration and air concussion below provincial guidelines, which are set to prevent damage to wells and structures. Blasting will be monitored

for ground vibration and air concussion, both close to the blast site and at the closest structures. Few people currently live in the area so complaints of noise disruptions are expected to be minimal.

2.3.1.3

There is a good distance of separation from the Carp River, so parallel heavy duty silt fencing will address most issues for a large part of the roadway construction. The potential for sedimentation of local watercourses primarily exists at the road crossing of the west tributary of Shirley's Brook, at the level crossing in between two PSW's, during the installation of the new culvert under the railway and where the east branch of Shirley's Brook will be filled to build the road bed. These areas are relatively concentrated in a small area, so sediment and erosion controls will be addressed specifically for this area on the final design drawings.

2.3.2 Roadway Construction

Crushed shot rock and recycled materials from local operations will be used for the embankment fill to meet the roadbed pre-grade elevations. Granular materials from local pits will then be used to prepare the road-base, prior to placing hot mix asphalt. Granular fill quantities will be supplemented with approved recycled materials used to replace materials brought from borrow pits or quarries. These volumes will not likely be known until the various contracting bids are received, but would be expected to range between 15-30% of the granular fill volume.

Once the road bed is completed to grade, Granular A and Granular B will be imported from local aggregate producers and used to build up the compacted road base. Volumes will be refined as the detailed design progresses.

Concrete will be used for structural elements, hydraulic culverts, curbs and gutters. Depending on the successful contractor's approach, we expect that a temporary concrete batch plant may be established on site. The concrete will require a source of good quality (potable) water to maintain the quality of the mix. No potable water supplies are available on site. We therefore expect that no water from on-site resources will be required.

The main road lanes will be surfaced with asphalt. Paving will consist of 130 mm of asphalt. There are numerous asphalt plants within the Ottawa region, and the City expects that the contractors will identify one of these plants to be used as a source for paving materials. The location is therefore not currently known as it will be up to the contractor to choose the most cost effective producer. The asphalt will be hauled in to the site using dump trucks travelling local roads, which may require a noise and traffic plan to be submitted by the contractor.

The roadsides and support slopes will be fine graded with a standard lift of topsoil. Topsoil stripped during the earlier operation will be stockpiled and reused. The available volume of topsoil will be balanced with the amount needed so that no topsoil remains to be hauled away or supplied from offsite. Hydroseeding of finished topsoiled surfaces and landscaping will be completed as soon as possible after completion of surface preparation, subject to the timing restrictions related to seasonal temperatures.

2.3.3 Construction of New Pedestrian Pathway/Sidewalks

New sidewalks and trails will be routed along the urban sections of Terry Fox Drive. In the ultimate 4-lane configuration proposed, sidewalks would be built along both sides of the roadway. The excavation and subgrade for the new pedestrian pathways and sidewalks will be undertaken as part of the overall road construction activity noted above, for those pieces indicated as urban section (i.e. with curb and gutters, no ditches). Redi-mix concrete will be used for all curbs, gutters and minor structures as noted above. The recreational pathway will be surfaced with asphalt.

2.3.4 Stormwater and Drainage

The drainage system will consist of precast catchbasins, manholes, Vortecs™ treatment systems, enhanced swales and roadside ditches. Storm water management includes storage in roadside ditches as well as some flow being directed to a previously constructed storm water management facility. Storm water in the Part A section drains eastwards from a highpoint at Stn 15+650 into existing SWM ponds, the central Part B sections will drain generally westward into the Shirley's Brook system and the south westerly portion of Part B will drain to the Carp River system.

Storm water will be handled using a combination of curbs, gutters, catch basins, storm sewers, and culverts prior to the treatment systems. An urban section (curb and gutter to storm sewers) will be used on the pieces abutting the urban boundary, while the outside of the roadway abutting natural areas will use ditching to maintain separation from existing surfaces to watercourses until treatment can occur. Sediment and erosion control in the ditches during construction will be provided using flow checks and appropriate lining materials or harder rip rap ditch linings where warranted, based on velocities. Permanent erosion control and 'in-stream' treatment will be provided using vegetation and gravel-lined sediment traps in enhanced swales and integrated into the wetlands using small micro-drainage channels where practical. Treated water will be outlet to the receiving waters via the constructed enhanced swales integrated into several of the wetland features or local drainage patterns. A complete storm water management report is included in **Appendix B** and summarized in **Chapter 7**.

2.3.5 Wetland Crossings

There are three planned crossings of wetlands by the roadway, two of which (PSW#1 and PSW#2) are within the South March Highlands Provincially Significant Wetland (PSW) Complex. One small non-significant 'other' wetland in the Carp River Floodplain will also be crossed. A fourth part of the wetland complex (PSW #4) lies within 70 m of the centerline, so special protective steps will be taken to ensure it is not impacted, either directly or indirectly by changing the nearby drainage patterns or by fracturing the surrounding bedrock during use of explosives. Stripping of high-carbon, organic wetland soils will be required for a total of three areas within the project limits, these soils will be reused in the creek restoration works, constructed wetlands and wherever possible in the landscaped areas. More details on the wetland impacts are detailed in **Chapter 6**.

2.3.6 Shirley's Brook Realignment

A realignment of the east tributary of Shirley's Brook is necessary to avoid constructing multiple, permanent culverts while placing fill for the road bed between Stn 14+775 and 14+900. A 250 m long connector of the existing east Shirley's Brook will be required to move the creek away from the roadbed and maintain flows through PSW #2. The intent is to realign the Brook, entirely within the road Right of Way on the Cities land, and to avoid altering the channel on the KNL Lands until a later date. An 1800 X 1200 mm concrete culvert would be placed at Stn 15+350 to convey the watercourse north to south underneath the road from PSW #3. Two smaller 1800 X 900 mm concrete culvert placed at 15+150 and 14+810 used primarily for wildlife passage will convey the small rivulets and seeps originating north of the road.

Following the directives of an Ontario Municipal Board hearing (1983), the wetlands designated as provincially significant that fall within the urban boundary, should not have been designated significant, following the 1987 evaluation by the OMNR. The OMB decision predates and therefore appears to supersede the designation of the PSW and ANSI of the South March Highlands. For now, these wetlands, significant or otherwise, are regulated by the Mississippi Valley Conservation and a permit will be required for any alterations. The east Shirley's Brook tributary will be realigned towards the west flowing into wetland PSW#2 as it presently does.

Additional information on the creek realignment, the effect on existing fishery resources and the fish habitat implications of the proposed works are detailed in **Chapter 8**. A federal authorization under the Fisheries Act will be required to undertake this work under the direction of the Department of Fisheries and Oceans.

2.3.7 Installation of Traffic Control Signals, Road Signs and Street Lighting

Traffic control signals, road signs and street lighting will be installed in conjunction with the final stages of roadway construction.

2.3.8 Temporary Construction Laydown Areas

Temporary lay down areas will be required for use by the contractors, to stockpile materials, erect construction management trailers and park equipment. These will be on an as needed basis within the right-of-way on lands owned by the City or on private property with the permission of the land owners. No additional forest lands will be removed to create lay-down areas during construction.

2.3.9 Disposal of Waste Materials

Disposal of waste materials includes surplus or unsuitable excavated materials, solid non-hazardous construction waste and waste debris from clearing activities.

At this time, there are no known toxic or hazardous materials to be used in the construction of the Project. No toxic or hazardous waste sources (including former or currently operation landfill or hazardous waste sites) have been identified through the environmental screening assessment. However, during a Phase I Environmental Site Assessment completed by Golder Associates (Dillon 2000), a site with surface waste (tires, automotive scraps, empty paint and oil cans etc.) was identified at Stn 16+100 near the intersection with Second Line Road. This area will be cleaned up prior to road construction with waste material disposed of in a licensed waste disposal facility following Ontario Regulation 347 procedures.

2.3.9.1 Waste from Clearing Activities

Organics stripped from the roadbed will be recycled for use as finishing topsoil. Trees will be cleared and harvested for lumber of commercial value (subject to the *Emerald Borer Infested Place Order*). Excess wood debris will be shredded and used for mulch in the project landscaping. No excess rock is expected to be generated. Excess native clay generated will be air-dried and used to line the bottom of the stormwater ponds, to inhibit contamination of the groundwater table, or as clay plugs along storm drain bedding.

2.3.9.2 Excavated Materials

Although an objective of the design will be to minimize rock cut and provide an equal cut/fill balance, the necessary timing may require the excess be removed offsite for use elsewhere in the City.

2.3.9.3 Solid Non-Hazardous Construction Waste

Solid waste will be collected on site and either recycled where possible, or disposed of in a licensed waste facility.

2.3.10 Dewatering Activities

Some temporary surface water dewatering of excavations may be required. Where needed, the discharge water will be treated or clarified in temporary sediment control ponds or through suitable filtration technologies before release as identified in the sediment and erosion control plans that will be prepared as part of the detailed design drawings.

2.3.11 Site Restoration

Except for the two specific areas of habitat restoration (East Shirley's Brook realignment, Floodplain cut compensation), the areas impacted by the proposed works will be restored with topsoil and seed, hydro-mulching or sod applied. Where slopes are steep or overly long, such as in deep fill areas, the slopes will have additional coverage using rolled erosion control products, such as straw aeromat, extruded wood excelsior matting or coir cloth. All products will be selected to be photodegradable and biodegradable so that no residual plastic products remain following the grow-in period. In some areas, soil bioengineering will be used to accelerate the growth of woody plants to help anchor soils on the slopes. Overall, Best Management Practices (BMP's) will be used to prevent soil erosion and control sediment run off during construction.

Landscaping plans will be developed to revegetate the various intersections, at-grade railway crossing and storm water management features. Wherever practical, mitigation for Species at Risk will be included as an objective of the landscaping program.

2.3.12 Use and Storage of Construction Vehicles and Equipment

Heavy construction equipment will be used in all sections. Drilling and blasting equipment will be required in many areas of new alignment and in the excavation of the creek realignment valley.

Vehicles used in subgrade construction typically include excavators, bulldozers, rollers, trucks, and graders. Most of these vehicles operate on diesel fuel and require some form of daily maintenance. The vehicles typically operate continuously for 12-hour shifts. Truck traffic during subgrade construction will primarily be confined to on-site operations and to transportation of material for cut and fill operations. Some truck traffic will occur off-site to travel to borrow and/or disposal sites.

Vehicles typically used in base and pavement construction include pneumatic tire and steel drum rollers, graders, trucks, and asphalt concrete pavers. We expect few traffic issues in the day-to-day construction, as there are few residents living in the area of construction, so the majority of the machines will be floated in once and removed when their work is complete.

2.3.13 Transportation and Storage of Construction Materials

Construction materials will be transported to the site by vehicles as noted above. Any storage of construction materials will be within the ROW or temporary laydown area at the south-western end of the project site. Any materials with the potential for generating sedimentation will be stored following the Sedimentation and Erosion control plan for the project.

2.3.14 Dust Control

Dust control will be required that will include wetting of aggregate storage areas, blasting zones, haul roads and the sweeping of external roadways. Minimizing the quantity of soil or aggregate stockpiles at the project site will also reduce wind-generated dust emissions. Access to the project site will generally be limited to either end of the project, so that good control over mud tracked onto the streets may be achieved. Portable wheel washer systems are available commercially and should allow good control over mud and dust tracking.

2.3.15 Erosion and Sediment Control

The highest potential for erosion occurs during the grubbing and grading operations, particularly around water. The emphasis of erosion and sediment control in construction projects is to prevent erosion rather than treat sediment. Key principles of erosion and sediment control will be applied including; keep clean water clean, minimize amount of exposed soil, minimize time of exposure of soil, keep sediment on site,

avoid steep slopes and have a contingency plan and the resources for emergencies. The "National Guide to Erosion and Sediment Control on Roadway Projects" by the Transportation Association of Canada (TAC) contains a synthesis of Canadian and international practice and numerous Best Management Practices (BMPs) for project planning, site management, erosion control and sediment control. Measures appropriate to Terry Fox Drive will be used including;

- Disposal of excavated material; surplus material; and construction debris away from watercourses and ditches;
- Directing water from the construction site or that accumulated in excavations to settling ponds or adjacent vegetated areas away from watercourses;
- Stabilization of roads and disturbed areas during and as soon as practical following construction in the vicinity of watercourses; and,
- Slope stabilization prior to area being brought to final grade in areas of high erosion potential.

A complete sediment and erosion control plan will be prepared for work near wetlands/drainage.

2.4 Operational Activities

Operational phase activities are discussed below including repairs, debris removal, maintenance and modifications.

2.4.1 Minor Repairs

Minor repairs to pavement such as crack filling, line painting, pot hole repair, re-surfacing or shoulder and structures or to lighting or signage, occurs on an intermittent and as necessary basis following scheduled maintenance review.

2.4.2 Sediment, Debris and Snow Removal

Sediment and debris removal occurs on an occasional basis as needed related to specific events.

Winter maintenance is primarily snow removal and ice control to ensure the required level of service and the safety of road use. This combines ploughing with the application of sand or road salt (sodium chloride) or other compounds to melt ice. The rate of salt application varies with the number of storms during the winter, the frequency and duration of frost conditions, and the personal judgement of the drivers of salt trucks. Compounds to melt ice, like urea, are being experimented with by the City of Ottawa in an effort to reduce the amount of salt used. Due to the very cold winters experienced in Ottawa, sand is often the application of choice.

Since a federal environmental assessment on road salt concluded that road salts are “toxic” to the environment, as defined under the Canadian Environmental Protection Act (CEPA), federal and provincial governments are currently developing management instruments to reduce the impacts of road salts on the environment. One of the federal government initiatives was the development of the Code of Practice for the Environmental Management of Road Salts. Snow removal for this project follows the City of Ottawa initiatives including Salt Management/Snow Disposal Plan.

2.4.3 Monitoring of Mitigation Measures

Long term monitoring of the mitigation measures employed in the construction of this roadway will be implemented by the City in the post-construction years. This will include ongoing research in the use of various chemical or physical treatments to maintain ice-free conditions on the roadway during winter. The monitoring will include accurate locations of wildlife roadkill, so that information on the location of

wildlife crossings can be updated, new signage employed, or additional wildlife passage culverts installed as deemed necessary. The frequency of use of the new wildlife culverts will be monitored with electronic data-loggers to track whether animals are using the passageways so that the effectiveness of these structures may be improved. The agreements for Species at Risk that will be prepared by the OMNR, are likely to specify the long term care of Butternut and American Ginseng to support the recovery of these plant populations.

2.4.4 General Cleaning and Maintenance Activities

General maintenance activities include the upkeep of ditches through weed control and re-ditching; and, mowing of shoulders and brush cutting of back slopes. Control of vegetation along roads is required to prevent the encroachment of trees and shrubs into the roadway and to maintain sight distances. In addition, control of noxious weeds is required where there is potential for spread from the ROW to cultivated or pasture land.

2.4.5 Modifications

No modifications to the current design are anticipated.

2.5 Project Construction Schedule

The proposed project schedule is outlined below.

- ***Preloading and Floodplain Compensation***

  Commencing mid April 2010, the preloading or surcharging is expected to take 6 months to achieve adequate settlement. This is to be completed, by September- October, 2010.

- ***Tree Clearing, Access Road & Creek Realignment***

  A small gravel access road will be constructed on an existing small forest road, so the area can be penetrated for the 250 m creek realignment, watercourse temporary diversions, tree clearing and blasting program. Commencing in April 2010, the work for the creek realignment needs to be ready to be brought on line by July 1, 2010. This allows for the restrictive period of Mar 15 – June 30 to protect warm water fish during their spawning period. As the work is off-line and in the dry, the major excavation and constructions works may proceed outside of the timing window, but the in-water connections must be made afterwards. The tree clearing work must be completed outside of the May 1 – July 31, period for the protection of migratory birds that may be breeding in the willow thickets of the wetland.

- ***Main Terry Fox Drive***

  Construction of the main road bed and road base, paving and the intersection at Richardson's Side Road is to be initiated in April 2010 and completed by March 2011. The Part A portion of the project began in February 2010 as approvals were completed.

Preparation of detailed design drawings is currently underway and preparation of technical specifications will follow prior to tendering. Phasing of the work has yet to be determined and will be subject to the timing of approvals considering the compressed time schedule. All property owners have been informed of the project scope. Ongoing communication with stakeholders and the responsible authority throughout the design and construction stages will be completed.