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Georgetown-South / Airport Transportation Link Generic Federal EA Information Requirements

Introduction

GO Transit is proposing to improve rail infrastructure in the Georgetown South rail corridor to accommodate increasing demand for commuter rail service between Peel Region and downtown Toronto. Additionally, GO Transit, in cooperation with the Union Pearson Air-Link Group (the private sector proponent for an air-rail link between the Airport and Union Station), proposes to evaluate options for an airport transportation link between Union Station and Pearson International Airport both within and outside of the Georgetown South rail corridor.

Although these two project components are separate and distinct from one another, they are being planned and evaluated together, in recognition that the recommended alternative could result in infrastructure improvements in the same corridor that would accommodate both of the proposed service initiatives. These projects require both Federal and Provincial environmental assessment approval. GO Transit and UPAG have decided to complete an Individual Environmental Assessment (IEA) under the Ontario Environmental Assessment Act for these project components.

The rail infrastructure improvements in the Georgetown South Corridor may include adding additional tracks, widening existing bridge structures, and realigning existing track and signals. Alternatives for the express transportation link are currently under review and could vary from an air-rail link to an express bus system. Alternatives for the express transportation link will be considered both within and outside of the Georgetown South rail corridor. Specific details of the project will be further defined as the analysis moves forward.

Environmental Assessment Process

The Georgetown-South Airport Transportation Link undertaking is proceeding under a coordinated EA process pursuant to the Canada-Ontario Agreement on EA Cooperation (November 2004). As noted above, the undertaking is subject to an Individual EA under the Ontario *Environmental Assessment Act* (OEAA). It is also subject to a federal environmental assessment under the *Canadian Environmental Assessment Act* (CEAA) as a result of federal funding being provided to GO Transit for improvements to the Georgetown South corridor, and the potential need for the project to be permitted by the Canadian Transportation Agency if the Express Transportation Link to the airport is part of the recommended alternative.

The Canadian Environmental Assessment Agency is serving as the Federal Environmental Assessment Coordinator (FEAC). At this stage, Transport Canada, Infrastructure Canada and the Canadian Transportation Agency have been identified as Responsible Authorities for the purpose of the assessment.

In a coordinated EA process, responsible authorities commit to identifying their information needs as early as possible to the proponent. While the conceptual level of project information at the Terms of Reference (ToR) stage limits their ability to provide detailed information requirements, there is an ability to provide generic information that can assist in the development of the ToR.

In this regard, this document was prepared by Transport Canada and the Canadian Transportation Agency, in consultation with the Canadian Environmental Assessment Agency. These generic federal information requirements will be refined and further clarified as the EA process proceeds and more information about the project becomes available.

Section 16 (1) of the Act identifies the factors that need to be considered in an environmental assessment at the screening level:

- 16(1) *Every screening...shall include a consideration of the following factors:*
- (a) the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out;*
 - (b) the significance of the effects referred to in paragraph (a);*
 - (c) comments from the public that are received in accordance with this Act and the regulations;*
 - (d) measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project; and*
 - (e) any other matter relevant to the screening... that the responsible authority... may require to be considered.*

It should also be noted that that the definitions of *environment* and *environmental effect* under the Act are as follows:

"Environment" means the components of the Earth, and includes:

- a) land, water and air, including all layers of the atmosphere;
- b) all organic and inorganic matter and living organisms; and
- c) the interacting natural systems that include components referred to in paragraphs (a) and (b).

"Environmental effect" means, with respect to a project:

- a) any change that the project may cause in the environment, including any change it may cause to a listed wildlife species, its critical habitat or the residences of individuals of that species, as those terms are defined in subsection 2(1) of the *Species at Risk Act*,

- b) any effect of any such change referred to in paragraph (a) on
 - (i) health and socio-economic conditions,
 - (ii) physical and cultural heritage,
 - (iii) the current use of lands and resources for traditional purposes by aboriginal persons, or
 - (iv) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance, or

- c) any change to the project that may be caused by the environment,

When these terms are used in this document their meaning is as defined above. Additional guidance on these elements, including the assessment of cumulative effects, will be provided later in the process.

Table 1 outlines typical project components and activities that would be required to be assessed for the federal environmental assessment. Table 2 provides a list of the factors to be assessed and the scope of those factors pursuant to section 16(1) of CEAA.

Again, as more information becomes available about the project, this information will be refined. It is anticipated that a detailed project description will be submitted once the preferred alternative has been identified, which will allow Responsible Authorities to establish the scope of the project and the scope of the factors to be considered, in consultation with other expert federal authorities.

Table 1 – Project Component Identification

PROJECT PHASE	PROJECT COMPONENTS	
	<i>Core Project Components</i>	<i>Ancillary Works Other Projects and Activities</i>
Construction	<ul style="list-style-type: none"> • Clearing and grading • Cut and fill (including granular extraction); • Construction of temporary rail diversions; • Construction of new rail lines and associated structures, such as road-rail or rail-rail grade separations; • Construction of new or expansion of existing layover facilities and/or maintenance yards; • Construction of new or expansion of existing passenger railway stations, including parking facilities 	<ul style="list-style-type: none"> • Transportation and storage of construction materials; • Use, storage, servicing and maintenance of construction equipment; • Re-direction of traffic; • Access and haul roads; • Waste disposal/site clean-up; • Restoration; • Site security;
Operation / Modification / Maintenance	<ul style="list-style-type: none"> • Operation of temporary rail diversions • Operation of new rail lines and associated structures, including movement of rail traffic • Fuelling and maintenance activities; • Snow removal; • Equipment & infrastructure maintenance and servicing; • Garbage collection; • Vegetation control; 	<ul style="list-style-type: none"> • Operation of passenger railway stations and parking facilities, including vehicular traffic to and from the stations
Decommissioning / Abandonment	<ul style="list-style-type: none"> • Abandonment of service and the removal of any physical works 	<ul style="list-style-type: none"> • Waste disposal/site clean-up; • Restoration;
Accidents and Malfunctions	<ul style="list-style-type: none"> • Potential accidents and malfunctions that could occur in relation to both the construction and operation phases 	
Effects of the Environment on the Project	<ul style="list-style-type: none"> • Potential environmental effects associated with severe weather conditions, during both the construction and operation phases 	

Table 2: Scope of Factors to be Assessed

Factor	Issues to be Examined
Air Quality and Climate	<ul style="list-style-type: none"> • Description of ambient air quality in the study area, drawing from information available from the Ontario Ministry of the Environment Ambient Air Quality Monitoring Station(s) in closest proximity to the project area • Identification of potential effects associated with construction, such as exhaust emissions from operation of heavy equipment and dust generation • Identification of potential effects associated with operations, such as emissions associated with increased rail traffic • Contribution to regional emissions • Comparison of the predicted effects with the MOE Ambient Air Quality Criteria and National Ambient Air Quality Objectives • Identification of related impacts to human health • Description of proposed mitigation measures for the predicted effects • Opinion on the significance of residual effects
Surface Water	<ul style="list-style-type: none"> • Description of existing drainage in the study area, including name, location and characteristics of watercourses; • Identification of potential water quantity and quality effects during construction and operations (e.g., erosion, sedimentation, maintenance chemicals, etc.), including those from spills • Comparison of predicted effects to provincial stormwater management requirements, as well as federal and provincial water quality guidelines, including the Guidelines for Canadian Drinking Water Quality; • Description of the proposed stormwater management plan and other runoff management and treatment/mitigation measures • Opinion on the significance of residual effects
Groundwater	<ul style="list-style-type: none"> • Description of groundwater resources in the study area, including depth of water table and direction of flow, infiltration/recharge and seepage/upwelling zones • Identification of proximity of drinking water wells • Identification of predicted impacts on groundwater resources (quality and quantity), including those from accidental spills • Comparison of predicted effects to applicable federal and provincial water quality guidelines • Identification of predicted alterations to base flow, and associated impacts • Description of proposed mitigation measures • Opinion on the significance of residual effects

Surface and Subsurface Geology and Soils	<ul style="list-style-type: none"> • Description of surface and subsurface geology and soils in the study area • Identification of predicted effects on surface and subsurface geology from the project • Description of proposed mitigation measures • Opinion on the significance of residual effects
Vegetation, Vegetation Communities and Wetlands	<ul style="list-style-type: none"> • Description of vegetation and wetlands in the study area • Identification of predicted impacts of the project during construction and operations, including vegetation removal and any relevant operational considerations • Identification of disturbance to vegetation from edge creation (sunscald, wind-throw, light penetration, rain shadow, etc.) • Identification of disturbance to vegetation from drainage modifications, including changes in groundwater levels • Description of proposed mitigation measures • Opinion on the significance of residual effects
Fish and Fish Habitat	<ul style="list-style-type: none"> • Description of presence of aquatic life and their habitat in study area • Identify impacts of construction and operations on fish and fish habitat • Description of proposed mitigation and/or compensation, with reference to the principle of “No Net Loss” of fish habitat, consistent with DFO’s Policy on the Management of Fish Habitat • Opinion on the significance of residual effects
Wildlife, Wildlife Habitat and Migratory Birds	<ul style="list-style-type: none"> • Description of migratory birds and wildlife species and their habitat, including species that may only use the study area on a seasonal basis • Identification of predicted effects of the project, during construction and operations • Description of proposed mitigation measures, including measures that will be put in place to ensure compliance with the Migratory Birds Convention Act and its regulations • Opinion on the significance of residual effects
Species of Special Concern	<ul style="list-style-type: none"> • Identification of the presence of species of concern (local, regional, national), including those species listed under the <i>Species at Risk Act</i> (SARA) or the presence of their residences or critical habitat • Consideration of the requirements of SARA • Identification on whether or not the project activities may have an adverse environmental effect on any species of concern • Description of proposed mitigation measures • Opinion on the significance of residual effects
Noise and Vibration	<ul style="list-style-type: none"> • Description of the community and neighbourhood characteristics, including land uses, to facilitate an understanding of the project area • Description of ambient noise levels in the study area; results should be reported with a day-night split

	<ul style="list-style-type: none"> • Identification of noise sensitive receptors, including schools, daycares, hospitals and seniors' residences; • Identification of predicted noise and vibration impacts resulting from the use of heavy construction equipment during construction, including the predicted worst-case 1-hour sound level • Identification of predicted noise and vibration levels during operations; noise predictions should be presented for both daytime and nighttime periods; • Comparison of predicted noise and vibration levels to relevant protocols • Description of proposed mitigation measures • Opinion on the significance of residual effects
Socio-economic	<ul style="list-style-type: none"> • Description of heritage and archeological resources in the study area • Identification of any indirect socio-economic effects that may result from a project impact on the environment, including potential impacts on cultural and archaeological, heritage, and current use of lands and resources for traditional purposes by aboriginal persons • Identification of any predicted effects on navigability • Description of proposed mitigation measures • Opinion on the significance of residual effects
Contaminated Sites and Waste Management	<ul style="list-style-type: none"> • Description of waste materials (e.g., construction waste, garbage, sewage and hazardous waste) that will likely be generated during construction and operations phases of the project • Identification of procedures for transporting, handling and disposal of waste materials • Identification of effects the project may have, including those from contaminated sites • Identification of the containment, disposal or remediation methods (including environmental effects) for contaminated soils/materials; or a description of the options that will be considered and the decision framework that will be used to select the most appropriate method • Description of the proposed mitigation/remediation measures • Opinion on the significance of residual effects
Human Health Effects	<ul style="list-style-type: none"> • Identification of potential effects on human health that may occur as a result of the environmental effects of the project; specific attention should be paid to potential human health effects in relation to air quality, noise, and contaminated sites • Description of the proposed mitigation/remediation measures • Opinion on the significance of residual effects