

# ENVIRONMENTAL PROJECT REPORT



**407 TRANSITWAY - KENNEDY ROAD TO BROCK ROAD**

**MINISTRY OF TRANSPORTATION - CENTRAL REGION**

**ASSIGNMENT # 2013-E-0027    G.W.P. 13-20003**

**DECEMBER 2016**



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LIST OF ACRONYMS

AGT	Automated Guideway Transit
ANSI	Areas of Natural and Scientific Interest
AODA	Accessibility for Ontarians with Disabilities Act
BHR	Built Heritage Resources
BMP	Best Management Practice
BRT	Bus Rapid Transit
BSC	Bird Studies Canada
CEAA	Canadian Environmental Assessment Act
CHL	Cultural Heritage Landscapes
CHVI	Cultural Heritage Value or Interest
CN	Canadian National
COSSARO	Committee on the Status of Species at Risk in Ontario
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CP	Canadian Pacific
CPDP	Central Pickering Development Plan
CPTED	Crime Prevention through Environmental Design
CSP	Controlled Surface Pickup
CWS	Canada Wide Standard
dB	Decibel
dB(A)	A-Weighted Decibel
DFO	Fisheries and Oceans Canada
DMU	Diesel Multiple Units

DRT	Durham Region Transit
DTY	Durham-York-Toronto Area Transportation Study
EA	Environmental Assessment
ELC	Ecological Land Classification
EMS	Emergency Medical Services
EPR	Environmental Project Report
ERS	Emergency Response Services
ESA	Endangered Species Act
ETR	Express Toll Route
FPS	Functional Performance Specifications
FWCA	Fish and Wildlife Conservation Act
GGH	Greater Golden Horseshoe
GGHM	Greater Golden Horseshoe Model
Growth Plan	<i>Growth Plan for the Greater Golden Horseshoe (2006)</i>
GTA	Greater Toronto Area
GTAA	Greater Toronto Airports Authority
GTHA	Greater Toronto and Hamilton Area
HIA	Heritage Impact Assessment
HOV	High Occupancy Vehicle
IO	Infrastructure Ontario
ITS	Intelligent Transportation Systems
LOS	Level of Service
LRT	Light-Rail Transit



LRV	Light-Rail Vehicle
LTTS	Long Term Transit Strategy
MBCA	Migratory Birds Convention Act
MESPA	Master Environmental Servicing Plan Amendment
MNRF	Ministry of Natural Resources and Forestry
MOI	Ministry of Economic Development, Employment & Infrastructure
MOECC	Ministry of Environment & Climate Change
MOW	Maintenance of Way
MTO	Ministry of Transportation
NFSSR	Neighbourhood Functional Stormwater and Servicing Reports
NHIC	Natural Heritage Information Centre
NSSP	Non-Standard Special Provisions
OMB	Ontario Municipal Board
OR	Openness Ratio
ORC	Ontario Realty Corporation
PBWP	Parkway Belt West Plan
PIC	Public Information Centre
PPS	Provincial Policy Statement
PPUDO	Passenger Pick-up and Drop-off
PSW	Provincially Significant Wetlands
QEW	Queen Elizabeth Highway
RAP	Reclaimed Asphalt Pavement
RM	Risk Management

ROW	Right-of-Way
RTP	Regional Transportation Plan
SARA	Species at Risk Act
SRT	Scarborough Rapid Transit
SWM	Stormwater Management
SWMF	Stormwater Management Facility
SWMP	Stormwater Management Practices
TAC	Transportation Association of Canada
TDM	Transportation Demand Management
TMP	Transportation Master Plan
TOD	Transit-Oriented-Development
TPAP	Transit Project Assessment Process
TRCA	Toronto and Region Conservation Authority
TRG	Technical Resource Group
TSP	Total Suspended Particulates
TTC	Toronto Transit Commission
TTS	Transportation Tomorrow Survey
TYSSE	Toronto-York Spadina Subway Extension
UGC	Urban Growth Centre
YRT	York Region Transit
YRTP	York Rapid Transit Plan
YRRTC	York Region Rapid Transit Corporation

### GLOSSARY

Addendum	Significant revision to the Environmental Project Report.
Alignment	The arrangement of the continuous transportation facility on the right-of-way, encompassing horizontal plan and vertical profile location, as well as all connections to the existing and surrounding transportation network and surrounding land uses.
Arterial	Major regional roadway, usually with a surface location and alignment.
Automated Guideway Transit (AGT)	A driverless and grade separated transit system, such as airport people movers.
Bus Rapid Transit (BRT)	A transit system operated with steered buses on dedicated lanes of major streets and making stops only at stations along the route and using proof of payment fare collection systems.
Commuter Rail	Transit service operated on the tracks of the intercity railroad system, usually from outlying communities to a central urban core. This is GO Transit Rail in the GTA and beyond. Lines can be owned by private freight railroads or by rail transit agencies, with agreements in place to allow access and operations for either passenger or freight trains.
Conceptual Design	Early arrangement of the transit facility components on the right-of-way, with the goal of showing whether and how the proposed facility will fit into the area required and what advantages and/or challenges it will encounter.
Construction Impacts	Effects that occur during the process of constructing a transportation facility, usually limited in duration (compare with operation and maintenance impacts and footprint impacts).
Crime Prevention Through Environmental Design (CPTED)	A multi-disciplinary approach to deterring criminal behaviour through environmental design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts. As of 2004, most implementations of CPTED occur solely within the built environment. Incorporating CPTED techniques should be considered in the design of pedestrian corridors and all transit facilities to optimize natural surveillance.
Cross-Section	A drawing that shows the vertical dimensions and placement of facilities at a specific location; a “slice” through the facility.

Cut/Fill Sections	Places where existing land will need to be moved away (cut) or added to (fill) to allow a transportation alignment to be constructed according to accepted standards for uphill or downhill grades.
Decibel (dB)	A unit of measurement of loudness as detected by the human ear and measured at designated receptors.
A-Weighted Decibel (dBA)	A-weighted decibel is an expression of the relative loudness of sounds in air as perceived by the human ear. The decibel values of sounds at low frequencies are reduced compared with unweighted decibels, in which no correction is made for audio frequency.
Detail Design	The exact engineering calculations and application of standards to locate and design all aspects of the arrangement of transit facility components, including the solution to technical conflicts and application of all standards to the design of the facility.
Embankments	Built-up earth support structures, on which the transportation runningway (roadway or rail track) is constructed, usually in fill situations.
Environmental Assessment Act	The provincial law that governs the process of environmental clearance of transportation plans and projects.
Floodplain	The width of a watercourse and its banks and other areas, the location and measurement of which is determined by the theoretical or practical extent of probable flooding at a set intensity (“the hundred year flood, the five year flood”).
Footprint Impacts	Environmental effects consisting of the permanent displacement or loss of existing environmental features resulting from the placement of a transportation facility (compare with construction impacts or operations and maintenance impacts).
Fully Grade Separated	A characteristic of transit facilities that eliminates crossings and intersections along a transportation alignment. Examples include subway lines, elevated sections of guideways, and of course, expressways and freeways.
Greenfield	An undeveloped area of land.

Headway	Separation between transit vehicles on a schedule, usually measured in minutes (or seconds). The inverse of frequency, measured in number of vehicles per hour. Headway of five minutes is equivalent to a frequency of 12 trips per hour.
Heavy Rail Transit	Grade separated transit, usually powered by electricity delivered by a third rail. Subways are the main example.
High Occupancy Vehicle (HOV)	An automobile, van, or bus, usually with at least one more passenger beyond the driver (2+) or even more (3+).
High Occupancy Vehicle Lanes	Specially built or marked highway lanes for the permanent or time-related use of HOVs only.
Intermodal Facility	A station or stop where differing types (or modes) of transportation meet and exchange passengers, such as bus/rail stations, park and ride locations, transitway and city bus connections.
Level of Service (LOS)	A measure of the performance of highway sections or of intersections, based on their technical capacity and on the level of congestion.
Light Rail Transit (LRT)	Rail transit system operating on dedicated tracks or guideways, usually on the street surface but also underground or overhead and making stops only at more widely spaced stations with platforms and other equipment. Electric power is provided by overhead wires.
Maintenance of Way (MOW)	Repair and maintenance of runningways, (tracks, lanes, fixed facilities) and equipment not associated with transit vehicles.
Mobility Hub	A term used in Greater Toronto Area (GTA) transportation planning to designate intermodal facilities and transit oriented development.
NASHYD	Hydrologic Modelling Software command.
Operations and Maintenance Facility (O&M Facility)	A yard and/or shop where transit vehicles and other equipment are stored, fuelled, washed and repaired.
Operations and Maintenance Impacts	Effects that arise from the normal operation of a transportation facility for the life of the facility (Compare with footprint impacts and construction impacts).
Plan View	Drawing that shows the horizontal dimensions and placement of facilities at a specific location; the “map” of the facility (contrast with profile).

Platform	The horizontal area from which passengers’ board or alight transit vehicles at stops or stations.
Public Information Centre (PIC)	Open house or in person consultation opportunity for input by the public on matters concerning the project.
Profile	Drawing that shows the vertical dimensions and placement of facilities at a specific location; the “relief” of the facility (contrast with plan view).
Proof of Payment (POP)	Self-administered fare system, where patrons need only to show valid tickets to official inspectors, when requested.
Provincial Policy Statement (PPS)	Document that enumerates the official goals of the Province of Ontario regarding goals of planning. The planning tools for implementing the PPS are contained in the document, “Places to Grow,” and in local Official Plans, which must be in substantial correlation with the provincial programs.
Right-of-Way (ROW)	The property on which a transportation facility is built and operated; the legal boundaries of the transportation facility.
Risk-Based Cost and Schedule Analysis	Workshops to identify significant opportunities and risks to the overall project cost and project schedule, and also serve to rank the most critical risks and means of avoiding them and to exploit critical opportunities.
Route	The general direction of a transportation facility, showing connections at ends and intermediate points.
Runningway	Similar to transitway, the surface lanes or tracks on which transit vehicles operate.
Staging	The sequence of steps in construction of a transportation facility, concerning time scheduling as well as processes, such as traffic lane closures.
Station	Facility on the transitway where vehicles stop to board and discharge passengers. Consists of platform(s), access paths and equipment for use by passengers.
Station Node	The collection of transportation and land use facilities that together support each other.

STNDHYDs	Hydrologic Modelling software command.
Transit Oriented Development (TOD)	Land uses (buildings, businesses, residences, etc., that are enabled by and support transportation systems at station nodes.
Transit Project Assessment Process (TPAP)	The streamlined environmental assessment process used by Ontario Ministry of Environment for transit projects. Corresponds to Ontario Regulation 231/08, Transit Projects And Greater Toronto Transportation Authority Undertakings.
Transit Projects Regulation	Ontario Regulation 231/08.
Transitway	Facility, either roadway lanes or rail tracks, reserved for the use of transit vehicles only.
Urban Growth Centre	Localities designated by Ontario.
Value Engineering	Review of preferred alignment and facilities with a view to reducing capital costs of a facility, measuring savings and balancing capital and operating costs over the life cycles of the proposed alternative solutions.
Water Table	The top of the zone of permanent soil saturation. The water table may rise or fall seasonally, or it may be drawn down by removal of water.
Watershed	The area and complete width of a drainage basin, usually named after the watercourse that flows through it.

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