

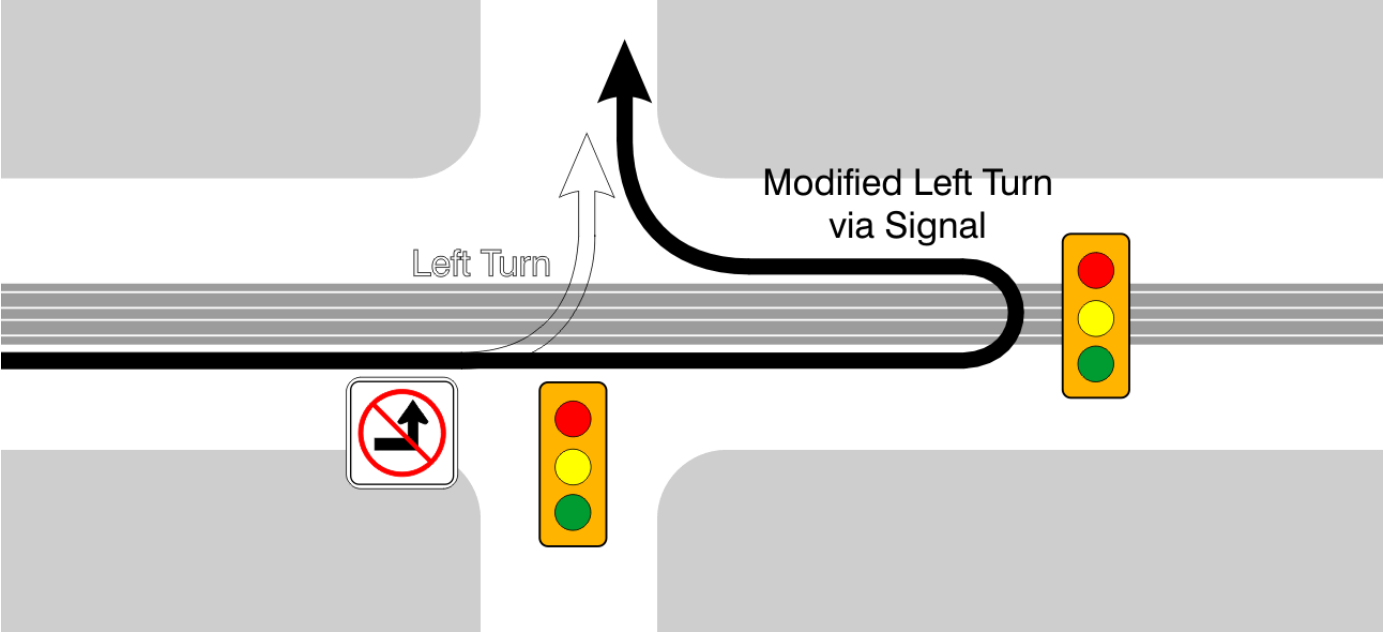
Intersection Modifications

Left turns across the LRT tracks will only be permitted at designated signalized intersections. At several other high volume signalized intersections, left turns will be prohibited and motorists will be required to travel through the intersection to the next signalized intersection to perform a “U” turn and then make a right turn on their return to the intersection. Left turn access to driveways/streets located between traffic signals will be provided at a closest signalized intersection where “U” turns will be permitted to allow motorists to return to their final destination. Intersections where left turns will be prohibited are listed in **Table 1**. **Exhibit E-10** presents a typical plan describing the modified left-turns.

Table 1: Intersections with Prohibited Vehicular Left Turns

Intersecting Street	Left Turns From Eglinton to N/S Street	Left Turns From N/S Street to Eglinton
Martin Grove Road	Prohibited (Re-routed via new roads)	Permitted
Kipling Avenue	Prohibited (Re-routed via U-turn/right turn)	Permitted
Islington Avenue	Prohibited (Re-routed via U-turn/right turn)	Permitted
Royal York Road	Prohibited (Re-routed via U-turn/right turn)	Permitted
Scarlett Road	Prohibited (Re-routed via U-turn/right turn)	Permitted
Jane Street	Prohibited (Re-routed via U-turn/right turn)	Prohibited (Re-routed via U-turn/right turn)
Victoria Park Avenue	Prohibited (Re-routed via Eglinton Square)	Currently prohibited
Pharmacy Avenue	Prohibited (Re-routed via U-turn/right turn)	Prohibited (Re-routed via U-turn/right turn)
Birchmount Road	Prohibited (Re-routed via U-turn/right turn)	Permitted

Exhibit E-10: Typical Plan of Modified Left Turns



Bridge Modifications

In order to accommodate Eglinton Crosstown LRT, three bridge overpasses will require widening, varying from one to six metres on each side. Thirteen bridge underpasses will require minor modifications to accommodate sidewalks, and one underpass, the pedestrian bridge west of Scarlett Road will be removed and replaced with a new traffic signal for surface level pedestrian crossings. The new LRT overpass over Highway 401 will be designed to accommodate double LRT tracks and maintenance access only.

Construction Methods

The Eglinton Crosstown LRT will be constructed using several methods to build the surface (at grade) and underground (underground) segments.

Surface Construction

The surface construction will follow construction methods similar to road construction. The surface section of the LRT will be constructed in stages to minimize traffic impacts during construction. A typical construction sequence for the staged construction of the LRT in the centre of the existing road entails three steps:

- Step 1: Relocate street lighting and utilities, install temporary traffic signals, remove centre islands and install temporary pavement.
- Step 2: Construct road widening and boulevard modifications, relocate utilities from LRT right-of-way where necessary while maintaining traffic in each direction and maintaining access to side streets and entrances.
- Step 3: Construct LRT right-of-way while maintaining traffic in each direction.

Further staging may be required to relocate existing services and utilities out of the LRT right-of-way wherever affected by construction.

Underground Construction

Tunneling

Twin 6 metre diameter tunnels will be constructed using a tunnel boring machine (TBM) for the underground segment between Keele Street and Brentcliffe Road. Powerful circular cutting machines will drill deep below the surface with minimal disruption to traffic and business activities. Excavated material is removed by truck at the temporary staging areas in the vicinity of the portals.

Two temporary work sites to facilitate the tunnel boring operations will be required during the construction phase. One temporary work site will be located near the west portal, west of Keele Road on the south side of Eglinton Avenue. The second temporary work site will be located near the east portal, east of Brentcliffe Road, on the south side of Eglinton Avenue. These areas will be used to store and maintain heavy equipment, stockpile construction materials, store the tunnel liners, launch the tunnel boring machines, and remove and temporarily store tunneling spoils.

Cut and Cover

The cut and cover method will be used to construct stations, portals, and special track work. This method entails four steps:

Step 1: Street lighting and utility poles are relocated. Excavation is initiated. Excavation support systems are installed to shore the excavation site. Underground utilities that are in conflict are either relocated or temporarily suspended. As soon as sufficient excavation has been made, decking, either of wood or pre-cast concrete, is installed so surface activities such as roads can be temporarily reinstated. When half of the street has been excavated and temporarily decked, the process is then conducted on the other half of the street.

Steps 2 and 3: Excavation and new construction are completed under the decking. Surface activities continue to operate on the decking.

Step 4: The station box is constructed, and the area above the tunnel is backfilled. When the finished construction is close to the surface, the temporary decking is removed and all surface amenities (e.g. roads and sidewalks) are reinstated.

The construction of at surface structures to be located immediately south or north of Eglinton Avenue, such as main and secondary entrances to underground stations; emergency exit buildings; emergency ventilation shafts; and traction power substations, will involve excavation activities outside the cut and cover construction area.

E.4. EXISTING CONDITIONS, IMPACTS ASSESSMENT AND PROPOSED MITIGATION MEASURES

This section outlines the existing natural, cultural and transportation conditions within the Eglinton Crosstown LRT corridor and identifies potential impacts and mitigation measures. **Exhibit E-11 to Exhibit**

E-14 presents the existing conditions of the natural and cultural environment within the LRT corridor and **Exhibit E-15** presents the existing land uses within the corridor.

Existing Natural Environment

On a regional scale, the topography of the Eglinton Crosstown LRT study area slopes southward towards Lake Ontario. The topography of the study area varies significantly from west to east due to the incision of rivers and streams. The bedrock beneath the study area consists predominantly of blue-grey shale with some limestone, dolostone and siltstone layers or interbeds. Bedrock is expected to be deeper than the maximum depth of excavation/ tunnelling that is proposed.

The general direction of drainage and shallow groundwater flow on a local scale is expected to be towards the closest watercourse. Groundwater flow may also be influenced by utility trenches and other subsurface structures that intersect the water table and can only be confirmed by long-term groundwater monitoring data in the study area. There are several suspected former stream channels that are no longer apparent along the LRT corridor. These buried or channelized features may also be areas requiring further attention from a dewatering perspective.

Natural heritage features located in the study area include natural remnant woodlots, major valleylands, wetland pockets and cultural woodlots and meadows. There are no areas of natural and scientific interest (ANSIs), environmentally sensitive areas (ESAs) or provincially significant wetlands (PSWs) located in the study area. The most significant natural heritage features are associated with the valleylands of the Humber River, West Don River and East Don River. Additional valleyland features are associated with Mimico Creek, Black Creek, Wilson Brook and Massey Creek. The Humber River, Black Creek, West Don River, East Don River and Massey Creek directly support warmwater fish communities in the vicinity of Eglinton Avenue. Wildlife in the study area is typical of urban settings and comprises species that are tolerant of human activity. One endangered species, Butternut, was identified in the study area, but these individuals have been planted.

A detailed emissions inventory for criteria air contaminants and greenhouse gas emissions based on 2004 data was prepared for the City of Toronto. These data show that mobile traffic related sources are a major component in the inventory. Mobile sources, road vehicles, account for 35% of the greenhouse gas emissions in 2004 with 74% of the emissions arising from passenger and other light vehicles. Overall, compared to other communities in southern Ontario, the Toronto area has less frequent poor air quality than Windsor, London or Waterloo; but with its higher population, Toronto has more people potentially affected by poor air quality.

Exhibit E-11: Natural and Cultural Environment – Existing Conditions

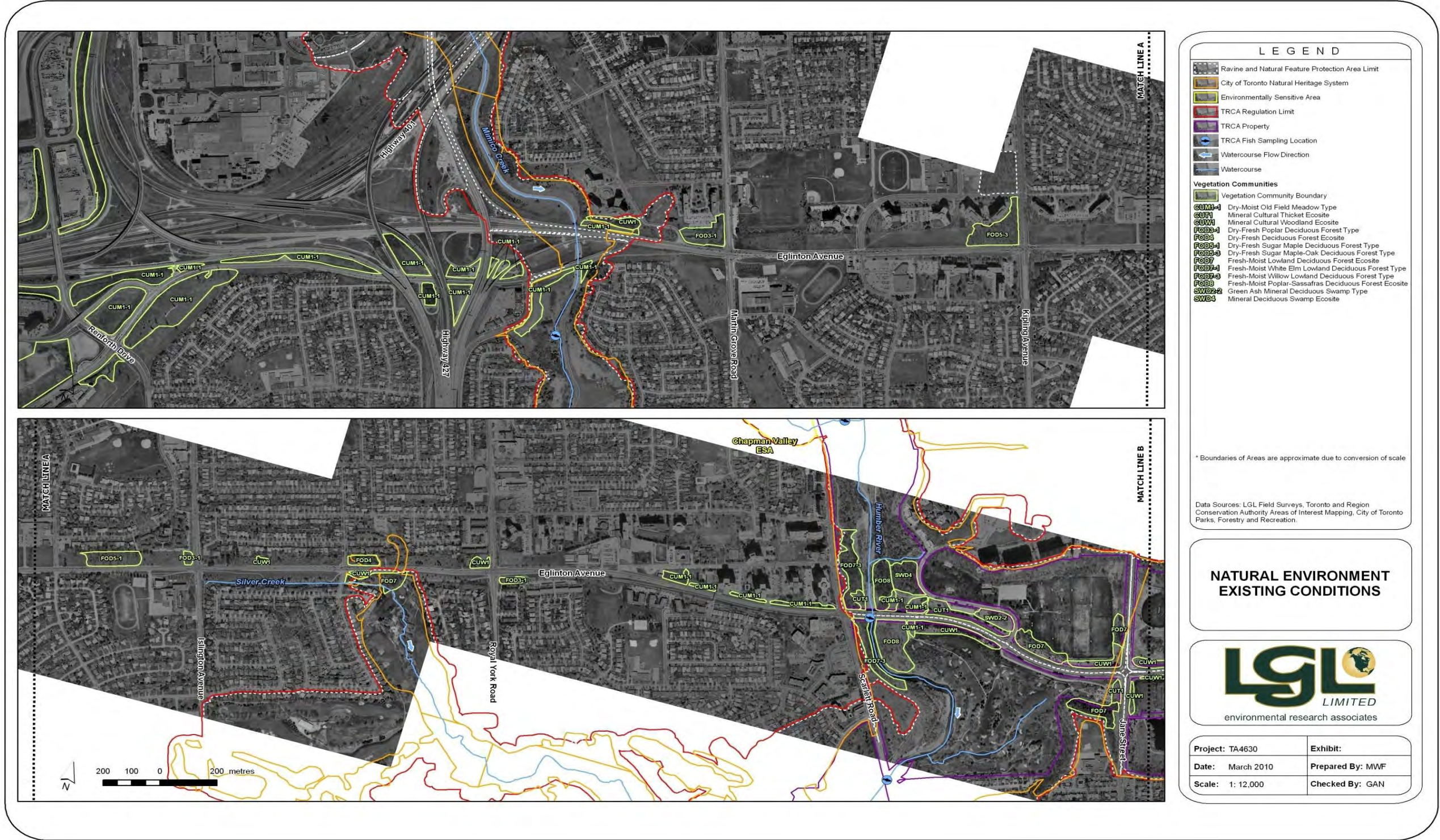


Exhibit E-12: Natural and Cultural Environment – Existing Conditions

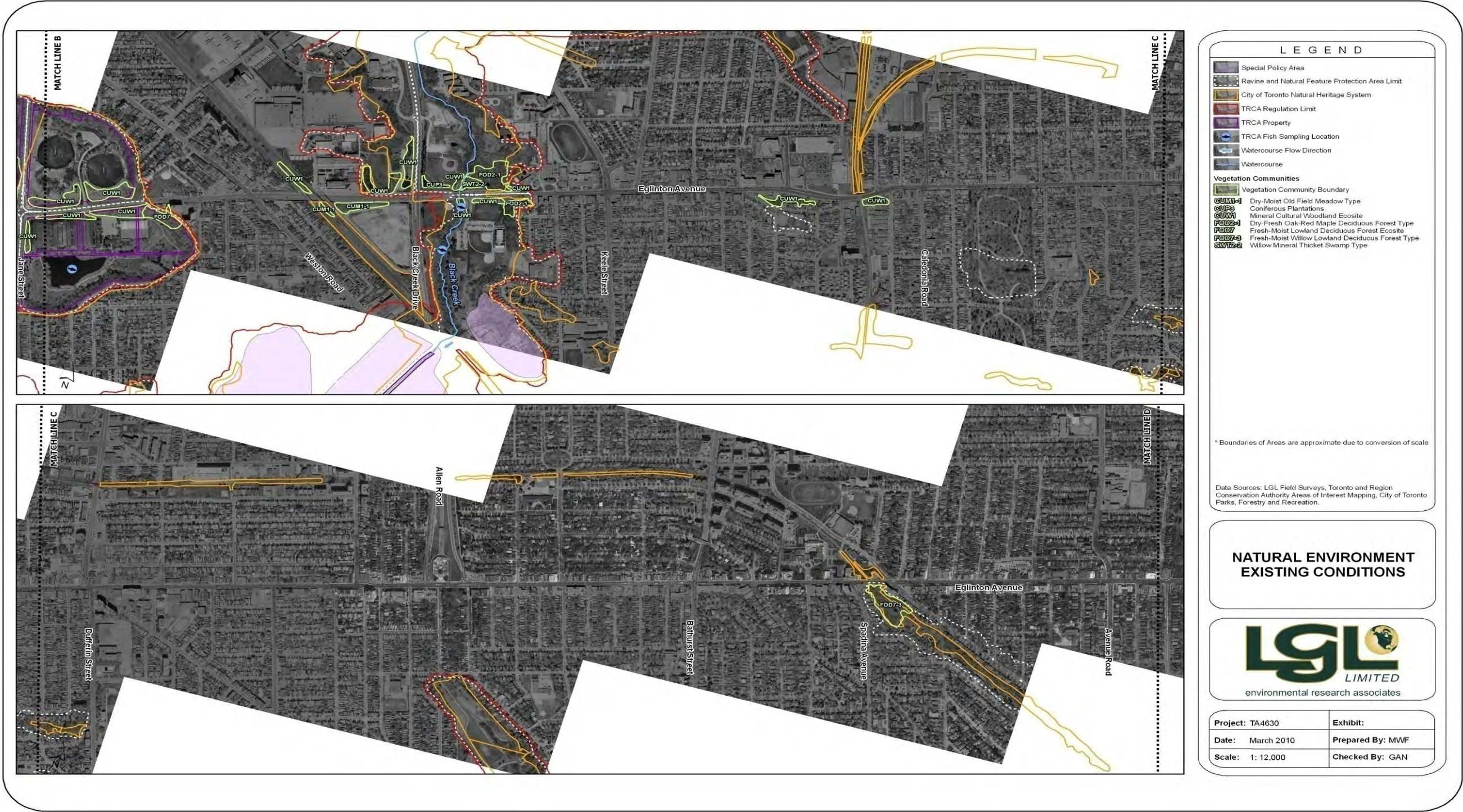


Exhibit E-13: Natural and Cultural Environment – Existing Conditions

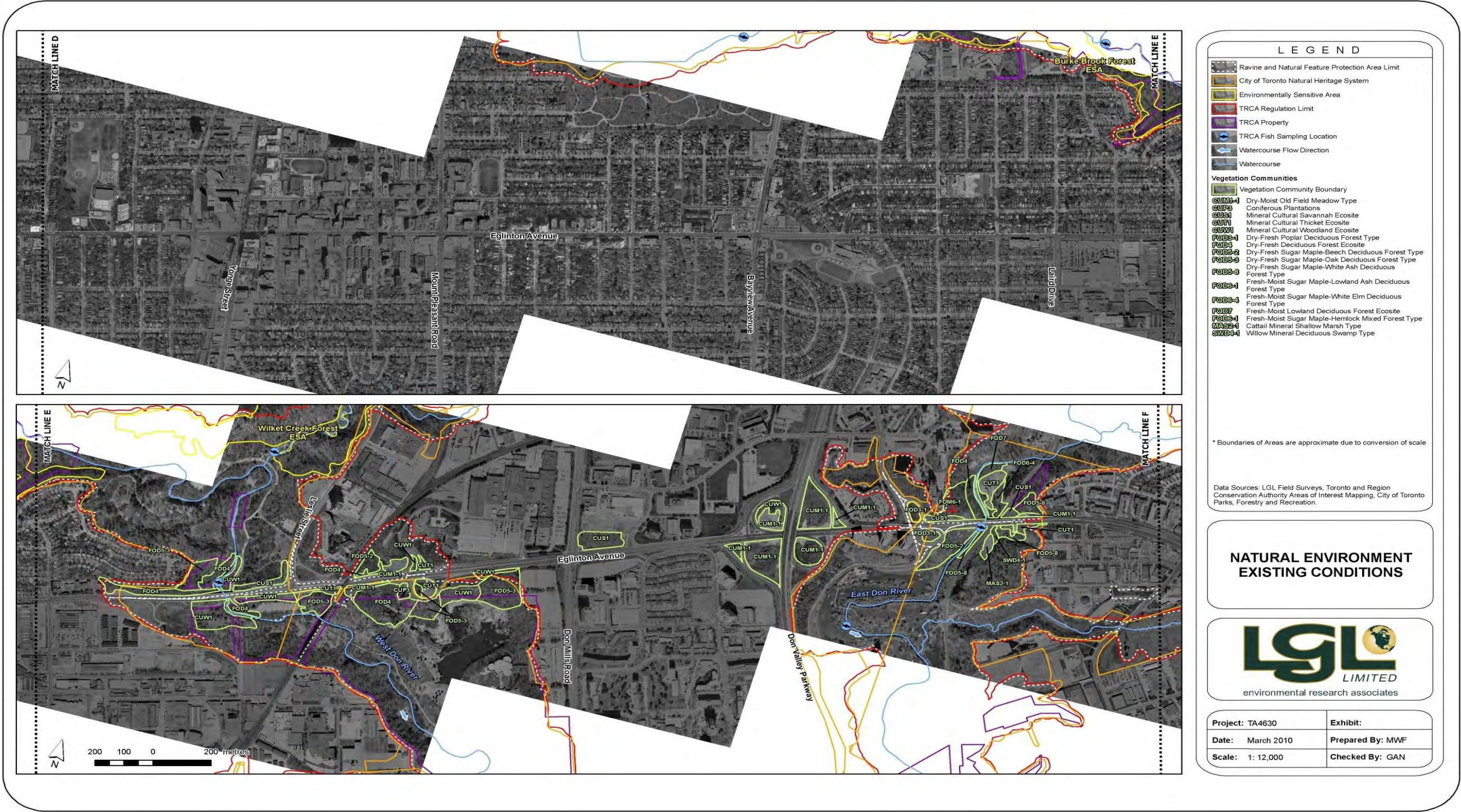
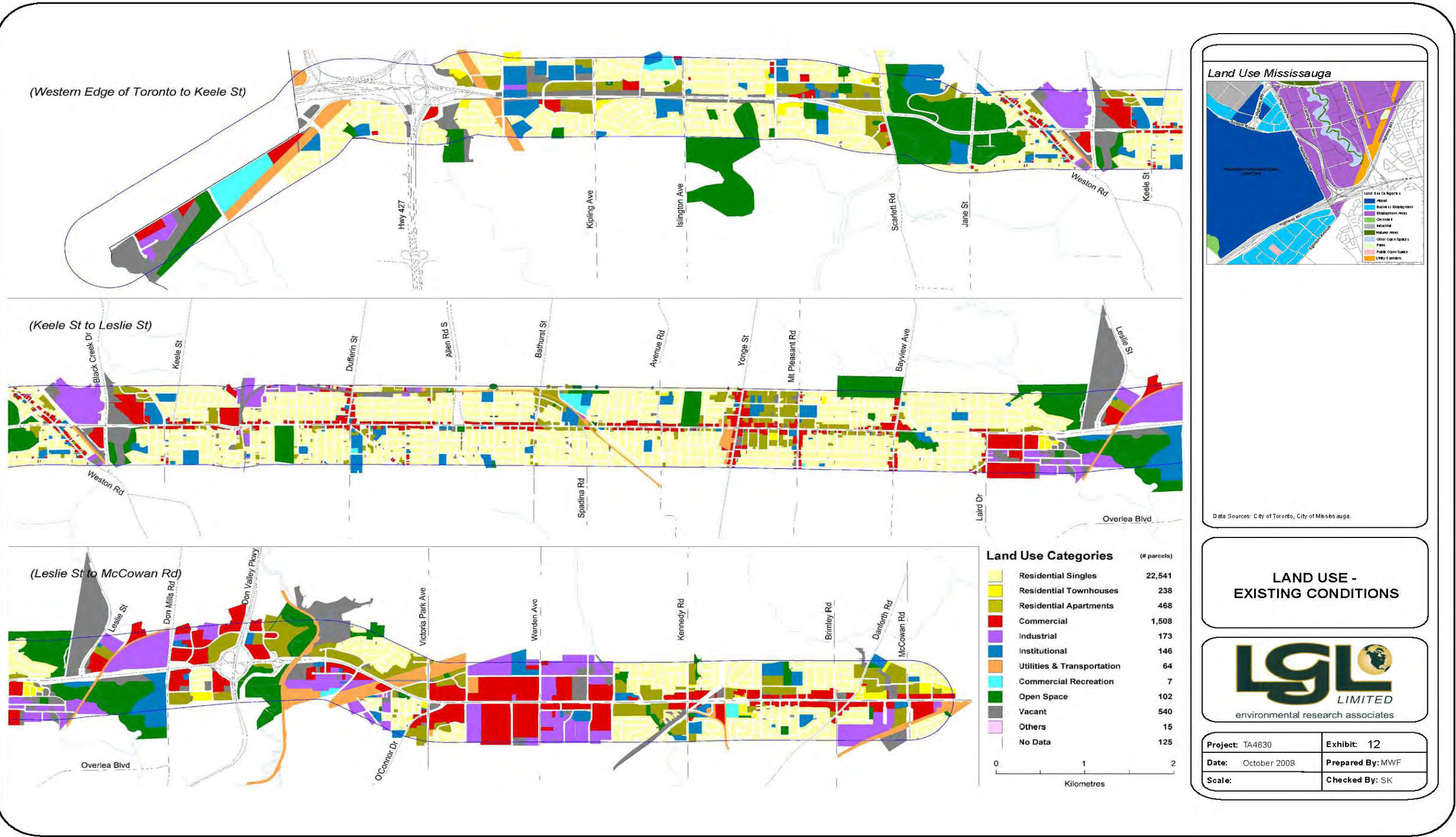


Exhibit E-14: Natural and Cultural Environment – Existing Conditions



Exhibit E-15: Existing Land Uses



The average daytime measured sound levels along Eglinton Avenue range from 69 to 73 dBA at a distance of 14 to 20 metres from centreline. At the same setbacks, the average night time sound levels range from 63 to 67 dBA. No vibration sensitive operations have been identified to date.

Existing Socio-Economic Environment

The predominant land uses along the Eglinton Crosstown LRT corridor are high-rise residential and commercial with greater concentration of: office and industrial use on the west; low-rise residential between Bayview Avenue and Laird Drive; commercial and industrial between Victoria Park Avenue and Birchmount Road. Institutional uses (e.g. schools and libraries) and Open Space uses (e.g. parks and recreation centres) are found distributed throughout the corridor.

Areas of archaeological potential were identified during Stage 1 Archaeological Assessment. However, no significant archaeological artifacts were discovered during the Stage 2 Archaeological Assessment. One cultural heritage landscape, the Richview Cemetery, is located on the south side of Eglinton Avenue between the lanes of Highway 427. Several other built heritage features and cultural heritage landscapes were found along the LRT corridor.

A review of historical records identified several areas to have known soil or groundwater impacts from previous and current operations:

- Eglinton Avenue and Black Creek Drive, Former Kodak Manufacturing Plant (now vacant);
- Eglinton Avenue and Gabian Way (east of Keele Street);
- Eglinton Avenue, east of Allen Road;
- Eglinton Avenue and Yonge Street; and
- TTC Yard, Bus Terminal and Subway Station.

Two intersections have or had a high concentration of gas stations and are consequently regarded as having high potential for environmental impact:

- Eglinton Avenue and Avenue Road; and
- Eglinton Avenue and Oriole Parkway, west of Yonge Street.

There are a number of large diameter utilities and pipelines within the road rights-of-way throughout the extent of the LRT corridor. There are also numerous large chambers throughout, with the majority located at the major intersections. In addition, there is an extensive system of minor storm sewers and combination storm/sanitary sewers within the LRT corridor. Similarly, there are watermain located along Eglinton Avenue from 150 mm diameter up to 600 mm diameter.

Along the north and south sides of Eglinton Avenue, there are Hydro towers west of Martin Grove Road and west of the Highway 427 overpass. Toronto Hydro has poles located along the roads within the LRT corridor and has an extensive system of buried conduit throughout, with large underground chambers at numerous major intersections. Hydro One Networks Inc (Ontario Hydro) has a 115 kV transmission line crossing Eglinton Avenue just east of Yonge Street. Rogers and Telus utility plants are located in shared buried conduit and Enbridge Gas has 100 millimetres and 150 millimetres gas main throughout the LRT corridor. There are also gas mains crossing Eglinton Avenue at various intersections. Bell Canada has an extensive conduit system along Eglinton Avenue, with double conduit systems at a number of locations as well as crossing ducts at intersections.

Existing Transportation System

A number of TTC bus routes and Mississauga Transit bus routes serve along and intersect the Eglinton Crosstown LRT corridor. Also, two TTC subway lines cross Eglinton Avenue with subway stations located on Eglinton Avenue. Three GO rail services, GO Georgetown, GO Barrie and GO Richmond Hill also cross Eglinton Avenue with no existing stations on Eglinton Avenue.

Most Eglinton Avenue intersections along the LRT corridor operate over their overall respective capacities during the weekday AM peak hour and PM peak hour. The Don Valley Parkway east ramp terminal intersection operates near to its capacity with a high delay during the weekday AM peak hour and operates over capacity during the weekday PM peak hour.

The Humber River, West Don River and East Don River are considered navigable, while the navigability of Mimico Creek, Black Creek, Wilson Brook and Massey Creek are being confirmed with Transport Canada.

Impact Assessment and Mitigation

The environmental effects for the Eglinton Crosstown LRT are classified as follows:

- Displacement of Existing Features by the Eglinton Crosstown LRT Facilities – Permanent impacts to existing features located within the footprint of the Eglinton Crosstown LRT as they are physically altered to accommodate the Eglinton Crosstown LRT facility.
- Construction Impacts – Temporary impacts, occurring only during construction activities.
- Operations and Maintenance Impacts – Ongoing and long-term impacts occurring during operations and maintenance activities.

These impacts and proposed measures to mitigate any negative effects are summarized below.

Displacement of Existing Features by the Eglinton Crosstown LRT Facilities

The Eglinton Crosstown LRT will result in impacts on private property, including businesses and residences. A total of 45 full permanent takings are required to accommodate road widening, station entrances, emergency exit buildings and other surface buildings.

The City of Toronto (on behalf of TTC) would acquire these properties and provide compensation through either a negotiated settlement or, in the event that expropriation is required, in accordance with the *Ontario Expropriation Act*.

TTC and the City of Toronto are committed to the following process/principles for these impacted properties:

- Early notification to property owners;
- Ongoing meetings and discussions with property owners concerning property impacts to minimize property takings and identify mitigation measures;
- Further investigations of alternative site locations and configurations for surface facilities; and
- Uniform and equitable treatment, in accordance with the *Ontario Expropriation Act*.

During the EA process, partial takings have been identified for a further 43 private properties. These include underground easements and surface facilities such as station entrances. TTC and the City of Toronto will conduct a Property Protection Study during the design of the Eglinton Crosstown LRT, which will determine detailed property requirements, including temporary construction easements. The acquisition of these properties will follow the same principles described above in this section.

Other features located within the footprint of the Eglinton Crosstown LRT that may be affected include:

- Five parks/parkettes including St. Hilda's parkette, Ben Nobleman Park, Chaplin parkette, North Toronto Community Centre (located within Eglinton Park) and Howard Talbot Park will be affected by fire ventilation shafts, station entrances, emergency exit buildings or traction power substations. The preferred location, configuration and design of these LRT facilities will be determined in consultation with City of Toronto Parks, Forestry and Recreation division.
- Approximately 1.357 hectares of vegetation communities will be displaced by road and bridge improvements. The impacts on vegetation will be mitigated to the extent possible through avoidance, minimizing the extent of vegetation removals, protecting vegetation to remain and restoring vegetation that is removed. Several Butternut trees, listed as "endangered" will be transplanted into protected areas.
- Built heritage features (including buildings over 40 years of age) and cultural landscapes will be displaced or altered at Keele Street, Oakwood Avenue, Yonge Street, Mount Pleasant Road and Bayview Avenue. Sympathetic alterations of buildings and landscapes, or documentation prior to removal, will be considered in consultation with City of Toronto Heritage Preservation Services.
- TRCA regulated areas, including Mimico Creek, Humber River, Black Creek, Silver Creek, West Don River, East Don River, Wilson Brook and Massey Creek will be affected by Eglinton Crosstown LRT facilities. Eglinton Crosstown LRT facilities will be designed and located, where feasible, to minimize effects on flooding. A permit under the Ontario Regulation 166/06 – Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses will be secured from the Toronto and Region Conservation Authority.
- Six properties have known soil or groundwater contamination and three properties have suspected soil or groundwater contamination. A Phase 1 and 2 Environmental Site Assessment will be conducted for these properties if acquisition is required. Contaminated soils and groundwater will be managed in accordance with provincial legislation and regulations.
- A number of large diameter utilities and pipelines conflict with the Eglinton Crosstown LRT. These utilities will be relocated prior to construction, where necessary. The location of all plant, potential conflicts and the relocation strategy will be confirmed with service providers.
- No known archaeological sites will be displaced by Eglinton Crosstown LRT facilities.
- No harmful alteration of fish habitat is anticipated from the Eglinton Crosstown LRT facilities.

Construction Impacts

The runningway will be tunnelled through underground sections. As a result, impacts are predicted to be negligible. Stations and special track work areas will be constructed by cut-and-cover method. Station entrances, emergency exit buildings, emergency ventilation shafts, and traction power substations will be constructed following standard at surface construction methods with excavation activities for connection to the underground sections. Bridge modifications will not involve in-water construction work.

Measures will be implemented during construction to avoid, minimize or mitigate adverse environmental impacts including:

- Erosion and sedimentation control measures will be implemented to prevent the potential migration of sediments off site;
- Best management practices will be implemented to prevent the potential release of dust and other airborne pollutants off site;
- Good housekeeping practices will be implemented to prevent the potential migration of mud and litter off site;
- The temporary work site located at the west portal will be flood-proofed to prevent the potential release of any deleterious substance to Black Creek during a regional storm event;
- Underpinning will be implemented to minimize the potential for building settlement/structural stress due to tunnelling, piling and dewatering, where necessary;
- The soccer field and surrounding portions of Keelesdale Park that will be used as a temporary work site will be re-instated following construction;
- Traffic management will be implemented to reduce the potential for disruption of existing vehicle circulation patterns due to road and lane closures and temporary traffic detours and diversions;
- Bike and pedestrian management will be implemented to reduce the potential for disruption of existing pedestrian circulation and safety due to road diversions and detours;
- Decking will be installed at cut-and-cover excavations to minimize the duration of disturbance;
- Truck haul of construction materials, equipment and tunnelling spoils will be limited to major access roads to avoid neighbourhoods;
- Noise and vibration control measures will be implemented to prevent the potential disturbance from construction equipment and activities to nearby receptors; and
- Impacts to local business operations due to:
 - modified vehicle and pedestrian circulation patterns;
 - reduced visibility of store fronts and signs; reduction in on-street parking;
 - less convenient access to off-street parking; and,
 - customer inconvenience due to temporary construction debris, noise and dust; will be managed as required.
- Measures will be implemented during construction to maintain navigation clearances and safety for vessels.

Mitigation methods will include detailed engineering studies and ongoing management and monitoring of construction activities.

Operations and Maintenance Impacts

Measures will be implemented during operations and maintenance to avoid, minimize or mitigate adverse effects including:

- Stormwater run-off from Eglinton Crosstown LRT facilities will be treated using stormwater management practices;

- Noise generated by LRT vehicles and by bus terminal operations will be attenuated, if required, to meet MOE standards;
- Vibration generated by LRT vehicles and by bus terminal operations will be attenuated, if required, to meet MOE standards;
- Air emissions generated by bus terminal operations will be attenuated, if required, to meet MOE standards;
- Traction power stray current will be controlled using isolated and insulated power supplies; and,
- Traffic safety and operations will be maintained through the use of right in-right out entrances, road diversion at Martin Grove Road, left hand turns at minor intersections and provision for U-turns in the vicinity of major intersections where left hand turns will be removed.

E.5. CONSULTATION PROCESS

A consultation program was conducted under the Transit Project Assessment process as specified under Ontario Regulation 231/08. Key components of the consultation program included consultation with agencies, the public and the aboriginal community, and public review of the Environmental Project Report.

Consultation with Agencies

The following stakeholder agencies were actively engaged (through meetings and/or email and letter correspondence) during the Transit Project Assessment process:

- City of Toronto (City Planning, Emergency Medical Services, Fire Services, Heritage Preservation Services, Parks Forestry and Recreation, Police Services, Transportation)
- Greater Toronto Airports Authority
- Hydro One
- Metrolinx
- Ministry of the Environment (Environmental Assessment Approvals Branch, Noise and Vibration Section; Central Region, Air Quality, Water Resources and Technical Support Sections, Toronto District Office, Halton-Peel Regional Office)
- Ministry of Transportation
- City of Mississauga
- Toronto District School Board
- Toronto Parking Authority
- Toronto and Region Conservation Authority
- GO Transit

Additional consultation with external agencies included notification of Public Open Houses #1, #2, #2A and 3 through e-mail messages. Each external agency was also sent a Notice of Commencement via e-mail message. Furthermore, a stakeholder agency workshop was held on January 8th, 2010 to solicit comments

from government review and technical agencies in advance of the issuance of the draft Environmental Project Report. Table 2 shows the Federal and Provincial agencies that were notified.

Table 2: Contact with External Agencies

Federal Agency	Provincial Agency
Canadian Environmental Assessment Agency Canadian Transportation Agency Indian and Northern Affairs Canada Department of Canadian Heritage Environment Canada Department of Fisheries and Oceans Infrastructure Canada Industry Canada Health Canada Transport Canada Transport Canada - Ontario Region	Ministry of Aboriginal Affairs Ministry of Agriculture, Food and Rural Affairs Ministry of Citizenship and Immigration Ministry of Culture Ministry of Municipal Affairs and Housing Ministry of Natural Resources Ministry of Public Infrastructure Renewal Ministry of the Attorney General Ministry of Tourism and Recreation Ontario Realty Corporation Ministry of Government and Consumer Services Ministry of Education Ministry of Community and Social Services
Utilities	Transportation Stakeholders
Bell Canada Enbridge Gas Distribution Enbridge Pipelines Rogers Cable Sarnia Products Pipeline Company, Inc. Sun-Canadian Pipeline Company, Inc. Toronto Hydro Trans-Northern Pipeline	Canadian National Railway Canadian Pacific Railway VIA Rail Toronto Cycling Committee Toronto Pedestrian Committee
	Other Stakeholder
	Conseil Scolaire de district Catholique Centre-Sud

Consultation with the Public

The public consultation process included:

- three rounds of public open houses;
- formal notices in the Toronto Star, City Centre Mirror, North York Mirror, East York Mirror, Etobicoke Guardian and Scarborough Mirror;
- bulk mailings to local residents to announce the open houses;
- mailings to BIAs and ratepayers groups;
- a project website;
- dedicated 24/7 phone line (416-392-6900);
- dedicated fax line (416-392-2971);
- dedicated TTY line (416-397-0831);
- dedicated e-mail address (eglintontransit@toronto.ca);
- dedicated postal address through the City’s Public Consultation Unit; and

- Notice of Commencement.

Public open house #1 was held in six locations on August 14, 19, 25, 27 and September 4 and 22, 2008. Public open house #2 was held in six locations on June 15, 17, 18, 23, 24 and July 29, 2009. Another public open house (#2A) was held on September 2, 2009 at the Etobicoke Olympium specific to the extension of the Eglinton Crosstown LRT to Pearson International Airport. A total of approximately 1,700 persons have attended public open houses held to date. The third round of public open houses was held on November 23, 24, 25, 26 and December 2, 8 and 10, 2009.

A total of 691 persons attended public open house #1. A total of 904 persons attended public open house #2. A total of 139 persons attended public open house #2A and a total of 860 persons attended public open house #3.

Public notices were mailed to 73,000 properties across the study area via Canada Post bulk mail delivery on July 22nd, 2008 to inform residents of public open house #1. A similar number of notices were distributed by bulk mail the week of May 25, 2009 to inform area residents of public open house #2 and the week of November 11, 2009 to inform area residents of public open house #3.

Address mail was sent to local Business Improvement Area (BIA) and ratepayers group representatives prior to each public open house. Address mail was also sent to all members of the public who signed up for the project mailing list prior to public open house #2. Address mail was also sent to all landowners for whom potential property impacts were identified prior to public open house #2.

The specific Eglinton Crosstown LRT webpage was created on July 15, 2008 at: http://www.toronto.ca/involved/projects/eglinton_crosstown_lrt/index.htm. Major links to the page were provided from both www.toronto.ca/involved and www.toronto.ca/transitcity. Notice of Commencement under Ontario Regulation 231/08 was issued on November 16, 2009 and appeared in the Toronto Star, City Centre Mirror, North York Mirror, East York Mirror, Etobicoke Guardian and Scarborough Mirror.

Consultation with Aboriginal Communities

As per the City of Toronto and Indian and Northern Affairs Canada (INAC) protocol for First Nations consultation for EAs, INAC Specific Claims, Litigation Management and Resolution, and Comprehensive Claims are required to be notified of all of EAs conducted by the City of Toronto and no written response is expected unless there are issues with the project as proposed (Note: none have been identified to date).

The aboriginal consultation process included notifying the following of public open houses #1, #2, #2A and #3 and the Notice of Commencement:

- INAC Specific Claims;
- INAC Litigation Management and Resolution;
- INAC Comprehensive Claims;
- Ontario Ministry of Aboriginal Affairs; and
- Mississaugas of the New Credit First Nation.

Following recent guidance received from the Ministry of Environment, Aboriginal Consultation process, the bands involved in the Williams Treaty were notified of public open house #3 and the Notice of Commencement individually.

E.6. COMMITMENTS TO FUTURE WORK

During the Transit Project Assessment, the TTC and the City of Toronto have worked closely with key stakeholders to address and resolve all issues or concerns identified. However, not all issues can be addressed within the context of a Transit Project Assessment since the design of the Eglinton Crosstown LRT has been prepared at a conceptual level and further details are required to finalize property requirements, planning initiatives, construction issues and permits/approvals. The following sections present the TTC's and City of Toronto's commitments to future action during preliminary and detail design.

Consultations

The TTC will consult with the public, property owners and stakeholder agencies (including emergency service providers) during the design of the Eglinton Crosstown LRT alignment, stops/stations, bus terminals and ancillary facilities. Specifically, the TTC will:

- Develop a public consultation plan, which will include a strategy for public participation during design and addressing community issues/concerns during construction of design; and
- Consult with City of Toronto emergency service providers (including fire, police and emergency medical services) on the design of the surface LRT stops and runningway.

Property Acquisition

The City of Toronto and the TTC will proceed with property acquisition (including permanent property requirements and temporary construction easements) as follows:

- The TTC will conduct a Property Protection Study during the early stages of the design;
- The City of Toronto and the TTC will continue property negotiations with the Greater Toronto Airports Authority (Pearson International Airport lands), Canadian National Railways, the Ministry of Transportation, Hydro One Networks Inc., Ontario Realty Corporation, the Toronto and Region Conservation Authority, the City of Mississauga, the Toronto District School and the Toronto Catholic District School Board for publicly-owned property;
- For privately-owned properties within the City of Toronto, the City of Toronto will acquire property by negotiation or expropriation, as required; and
- For privately-owned properties located within the City of Mississauga (west of Renforth Drive), the City of Toronto will secure the required property interests by negotiation or expropriation as required and will coordinate the property acquisition activities with the City of Mississauga.

Planning and Design Initiatives

The TTC, City of Toronto and the City of Mississauga will undertake the following planning and design initiatives:

- The TTC will work with the City of Toronto to ensure that selected locations for station entrances, vent shafts, traction power substations (and Emergency Exit Buildings) meet established urban design and community planning policies and guidelines, limit impact, and provide opportunities for enhancements of the sites and pedestrian access;

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|---|---|
| <p>b) The TTC will work with the City of Toronto and the City of Mississauga to ensure that short- and long-term cycling amenities are incorporated into the Eglinton Crosstown LRT facility designs, in accordance with prevailing City policies and design standards;</p> <p>c) The TTC and the City will “conduct an early planning review of the Eglinton/Oakwood station node, where the Toronto Parking Authority is currently exploring a joint venture development” (refer to Section 1.8);</p> <p>d) The TTC will incorporate City of Toronto and City of Mississauga urban design criteria into the design of Eglinton Crosstown LRT facilities. Specifically, the TTC and the City of Toronto will undertake an Urban Design Study to identify characteristics of the existing and planned context along the corridor;</p> <p>e) The TTC will work with the City of Toronto and the City of Mississauga to ensure that the pedestrian environment at surface stops and underground stations meets established urban design and community planning policies and guidelines;</p> <p>f) The City of Toronto and the TTC will work with the Greater Toronto Airports Authority (GTAA) to select a preferred alignment and stop(s) at Pearson International Airport as part of a special study;</p> <p>g) The TTC will complete a separate Transit Project Assessment, under the Scarborough RT Conversion and Extension Project, to confirm the alignment of the Eglinton Crosstown LRT from the intersection of Kennedy Road into Kennedy Station;</p> <p>h) The TTC will work with Metrolinx to ensure that appropriate interface opportunities with GO Transit rail lines are protected for in the vicinity of Black Creek Drive/Weston Road, Caledonia Road and Leslie Street;</p> <p>i) The TTC and the City of Toronto will conduct further traffic analyses for nine key intersections where left turn prohibitions are to be implemented (Martin Grove Road, Kipling Avenue, Islington Avenue, Royal York Road, Scarlett Road, Jane Street, Victoria Park Avenue, Pharmacy Avenue and Birchmount Road) to support fast and reliable LRT service and to encourage transit-oriented development in the Eglinton Avenue corridor;</p> <p>j) The TTC will implement public art in accordance with prevailing TTC Corporate Policy; and</p> <p>k) The City of Mississauga will amend its Official Plan to include a rapid transit corridor from Eglinton Avenue West and Commerce Boulevard to Pearson International Airport via Commerce Boulevard, Convair Drive and Silver Dart Drive.</p> | <p>c) Develop traffic, parking, transit, cycling and pedestrian management strategies to be included in construction contract documents;</p> <p>d) Analyse cut and cover construction sites further with the objective to minimize impacts including: reducing width of station box construction by refinement of station platform width and tunnel diameter; alternate methods of excavation support for cut and cover locations; use of mining methods at critical locations; and development of comprehensive pedestrian and traffic management plans;</p> <p>e) Develop utility, pipeline and municipal servicing relocation plans with service providers (including but not limited to Bell Canada, Enbridge Gas Distribution, Trans-Northern Pipelines, Rogers Cable, Sun-Canadian Pipelines, Toronto Hydro, Toronto Water, Enersource and the Region of Peel;</p> <p>f) Develop emergency response plans with emergency service providers to maintain fire, police and emergency medical services during construction;</p> <p>g) Prepare and implement arborist reports, tree protection plans, edge management and streetscape plans;</p> <p>h) In consultation with TRCA, City of Toronto and City of Mississauga, determine areas where compensation for vegetation loss will be required; determine quantity and type of species to be used; and, identify sites where restoration efforts would be maximized;</p> <p>i) Undertake Designated Substances Surveys for any buildings or structures which require demolition and to reflect the findings in construction contract documents;</p> <p>j) Develop procedures for disposal of excavated materials, including excess soils, in accordance with Ministry of the Environment requirements;</p> <p>k) Prepare and implement a Soil and Groundwater Management Strategy, including water treatment methods, which results in discharge water quality complying with prevailing TRCA and City of Toronto water guidelines and requirements; and contaminated soils management, in accordance with environmental legislation, regulations and guidelines;</p> <p>l) Prepare an erosion and sedimentation control plan, which complies with prevailing TRCA, City of Toronto and City of Mississauga water guidelines and requirements;</p> <p>m) Undertake buildings, structures, and railway protection and monitoring;</p> <p>n) Prepare Cultural Heritage Evaluation Reports and/or undertake Heritage Impact Assessments at select sites to address City of Toronto Heritage Preservation Services and City of Mississauga Local Municipal Heritage Committee requirements. In the City of Toronto, cultural heritage resources of “heritage interest” but not on the Municipal Register, will be screened to assess local significance and whether to proceed through to the Heritage Impact Assessment process.;</p> <p>o) Undertake stray current protection (if applicable) and monitoring for pipelines and other utilities;</p> <p>p) Manage brownfield sites in accordance with Ontario Regulation 153/04 and Ontario Regulation 511/09 once it comes into force;</p> |
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Construction Issues

The TTC will conduct further research and analysis for the construction of the Eglinton Crosstown LRT, including, but not limited to the following activities:

- a) Prepare a monitoring plan in accordance with subsection 9.2.8 of Ontario Regulation 231/08 to verify the effectiveness of mitigation measures;
- b) Include noise, vibration and air quality monitoring and mitigation measures and construction site maintenance/upkeep requirements in construction contract documents;

- q) Conduct a Phase 1 and 2 Environmental Site Assessment for any areas of existing contamination prior to property acquisition for the Eglinton Crosstown LRT and consult with MOE as appropriate;
- r) Conduct a Stage 2 archaeological assessment for properties with archaeological potential that could not be assessed during the Transit Project Assessment; and
- s) For lands under TRCA ownership, conduct archaeological investigations in accordance with TRCA and Ministry of Culture requirements.

Permits and Approvals

The TTC will secure necessary permits and approvals for the implementation of the Eglinton Crosstown LRT, including, but not limited to:

- a) Planning approvals (including Site Plan Approval) for all above-grade structures and facilities (through the City of Toronto or the City of Mississauga);
- b) Park access permits (through the City of Toronto) for access to parks for construction and staging activities;
- c) Building permits for the stations, emergency exit buildings and traction power substations (through the City of Toronto or the City of Mississauga);
- d) Navigable Waters Protection Act approval (through Transport Canada) at the Humber River, West Don River and East Don River;
- e) Permit(s) to Take Water (from the Ministry of the Environment) (for locations where dewatering exceeds 50,000 litres per day);
- f) Ontario Regulation 166/06 (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses) permits (through TRCA) for work within regulated areas including Mimico Creek, Silver Creek, Lower Main Humber River, Black Creek, West Don River, East Don River, Wilson Brook and Massey Creek;
- g) Stormwater management, in accordance with City of Toronto, City of Mississauga, TRCA and MOE requirements;
- h) Sewer discharge approvals, in accordance with Region of Peel, City of Mississauga, City of Toronto and TRCA requirements;
- i) Railway Crossing Agreements at the Weston Subdivision, Mactier Subdivision, Newmarket Subdivision, Belleville Subdivision and Bala Subdivision (through CN Rail, CP Rail or Metrolinx);
- j) Pipeline Crossing Agreements,as required;
- k) Permits and/or approvals for a new bridge crossing Highway 401 and modifications to the Highway 401/427 interchange and the Highway 427 ramps (through the Ministry of Transportation Corridor Management Office);

- l) Certificate of Approval for Air Quality in accordance with the Environmental Protection Act (through MOE);
- m) Permits for construction within the existing road allowances (through the City of Toronto and City of Mississauga); and
- n) Highway Alteration By-law approval for alterations to Eglinton Avenue (through the City of Toronto).
- o) Permits and approvals for tree protection and removal/injury (through TRCA, the City of Mississauga and the City of Toronto as applicable);
- p) Assure that applicable Ontario Energy Board approvals are obtained for utility relocations; and
- q) Comply with City of Toronto Ravine and Natural Feature Protection By-law, as applicable.

Noise and Vibration Protocols

The TTC will conduct additional noise and vibration studies as required, in accordance with existing MOE/TTC protocols.

Canadian Environmental Assessment Act Determination

TTC submitted a CEAA Project Description to the Canadian Environmental Assessment Agency (CEA Agency). The CEA Agency has circulated the Project Description to relevant federal agencies to determine if there is a need for an environmental assessment and which federal agencies may have a responsibility or interest. Most of the federal agencies have not identified a trigger; however, Transport Canada, Department of Fisheries and Oceans and Canadian Transportation Agency may still identify a trigger under the *Navigable Waters Protection Act, Fisheries Act or Canada Transportation Act*, once project design has advanced. If required, TTC will conduct an environmental screening to secure a determination under the *Canadian Environmental Assessment Act*.

Municipal Approvals

Toronto City Council

At its meeting of November 30, 2009, Toronto City Council approved a report from the Toronto City Manager which included the following recommendations:

In addition to amendments to Section 0, City Council approved the following motions:

- a) “Local Councillor(s) be consulted during the prepartation of property protection sutdies, and as part of the property acquisition process for temporay construction easements.
- b) No specific discussion on the deferral of the construction of “any stops” will occur with Metrolinx without first consulting the local Councillor(s) well in advance of that consideration.
- c) The deferral of the construction of any stops shall not occur without the TTC seeking approval of City Council.

- d) City Council request the TTC to have the Eglinton Crosstown LRT connection from Martin Grove Road to Pearson International Airport and the Etobicoke-Finch West LRT connection from Humber College to Pearson International Airport evaluated together as the Transit City Light Rail Network, and that evaluations of options include maintenance and operating costs from a network perspective as evaluation criteria.
- e) City Council requests the TTC to consider full property acquisitions for use as secondary station accesses, not solely for fire vents, where practical.
- f) The City Manager and TTC staff report back on a truck operations plan including appropriate highway signage, in conjunction with the design for the Eglinton LRT.
- g) The TTC be requested to provide detailed analysis on truck movements prior to completion of the final design.
- h) City Council requests the TTC to expedite the implementation of the Eglinton Crosstown LRT and that the City Manager be requested to report to the TTC on any impediments or specific issues that need to be resolved in order to eliminate delay.”

These City Council-approved motions are included in this chapter of the Environmental Project Report as a commitment to future action.

City of Mississauga General Committee

At its meeting of December 3, 2009, the City of Mississauga General Committee (a Committee of City of Mississauga Council) endorsed the City of Toronto and the Toronto Transit Commission' (TTC) Eglinton Crosstown Light Rail Transit (LRT) Project from Kennedy Station to Pearson Airport, specifically the alignment in the City of Mississauga on Eglinton Avenue and Commerce Boulevard with a new crossing of Highway 401 as part of LRT connection to Toronto Pearson International Airport. In addition, the Committee approved the recommendations that staff:

- a) “report back to General Committee at the appropriate time on the official plan amendment needed to support the Airport transit connection.
- b) That staff be directed to facilitate information meetings with the landowners and the business community.”

These Committee-approved recommendations are included in this chapter of the Environmental Project Report as a commitment to future action.

Addendum Process

The TTC will prepare an addendum if significant changes to the project occur after the Notice of Completion is issued in accordance with Section 15 of the Transit Projects Regulation, including:

- Preparation of an addendum to the Environmental Project Report;
- Preparation of a Notice of Addendum to the Environmental Project Report; and,
- Distribution of the Notice of Addendum to relevant stakeholders and the Ministry of the Environment.

Upon resolution of the alignment on the Airport Lands with the GTAA and Metrolinx, the TTC and the City of Toronto will proceed with amending the Environmental Project Report under the Provincial process if required.

E.7. ADDENDUM PROCESS

TTC will prepare an addendum, if changes to the project occur after the Notice of Completion is issued, in accordance with Section 15 of the Transit Projects Regulation, including:

- Preparation of an addendum to the Environmental Project Report;
- Preparation of a Notice of Addendum to the Environmental Project Report; and
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Upon resolution of the alignment on the Airport Lands with the GTAA and Metrolinx, TTC and the City of Toronto will proceed with amending the Environmental Project Report under the Provincial process if required.