TTC – TWRC

Waterfront Transit Environmental Assessments

Draft Terms of Reference (ToR)

June 2006

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1. INTRODUCTION

The Toronto Transit Commission (TTC) is proceeding with Individual Environmental Assessment (IEA) Studies to identify the transit improvements required to support planned development in the Eastern Waterfront. These Studies are being undertaken in cooperation with the Toronto Waterfront Revitalization Corporation (TWRC) and the City of Toronto. Ultimately the EA Studies will identify a preferred alternative to provide an effective transit network to serve the new waterfront communities comprised of the West Don Lands, East Bayfront and Port Lands precincts.

Transit in the three precincts will be interconnected and will eventually form a continuous system linked to the downtown core, the subway system, the grid of local transit routes in the area and the GO commuter rail system. In response, the TTC as proponent is seeking to conduct three IEAs (one for each precinct). Given that the overall problem statement, network considerations and overall planning process will be similar for the three IEAs, a single EA Terms of Reference (ToR) is being prepared to govern the preparation of each IEA. The ToR will allow each IEA to be completed on its own timeline, which is tied to anticipated development of the various precincts.

The overall objective of each IEA is the identification of feasible and cost effective solutions to the challenges faced in expanding Toronto's transit system through the study area to support planned growth, while minimizing impacts on the environment. An integral component of this transit expansion will be the integration of service through the West Don Lands, the East Bayfront Lands, and the Port Lands.

This ToR outlines what will be studied in the three IEAs to address the information requirements set out in section 6.1(2) of the OEAA. The ToR is being prepared in accordance with Section 6(2)(a) of the OEAA.

The OEAA requires proponents to examine two types of alternatives. The first type consists of "alternatives to the undertaking", which may be thought of as functionally different ways of approaching and dealing with the identified problem or opportunity. For the purposes of this ToR and subsequent EAs, these alternatives will be referred to as "planning alternatives". The second type consists "alternative methods of carrying out the undertaking", which may be thought of as different ways of carrying out a similar activity (i.e. different cross-section designs). For the purpose of this ToR and subsequent EAs these alternatives will be referred to as "design alternatives".

1.1 BACKGROUND

The TWRC, and the City of Toronto have now completed sufficient Precinct Planning and the development of Class EA Master Plans, which allows the Toronto Transit Commission (TTC) to commence Individual Environmental Assessments (IEAs) to define the required transit facilities required to support proposed development in the East Bayfront and West Don Lands. Although the Precinct Plan is not yet complete for the Port Lands precincts, TTC has elected to prepare the

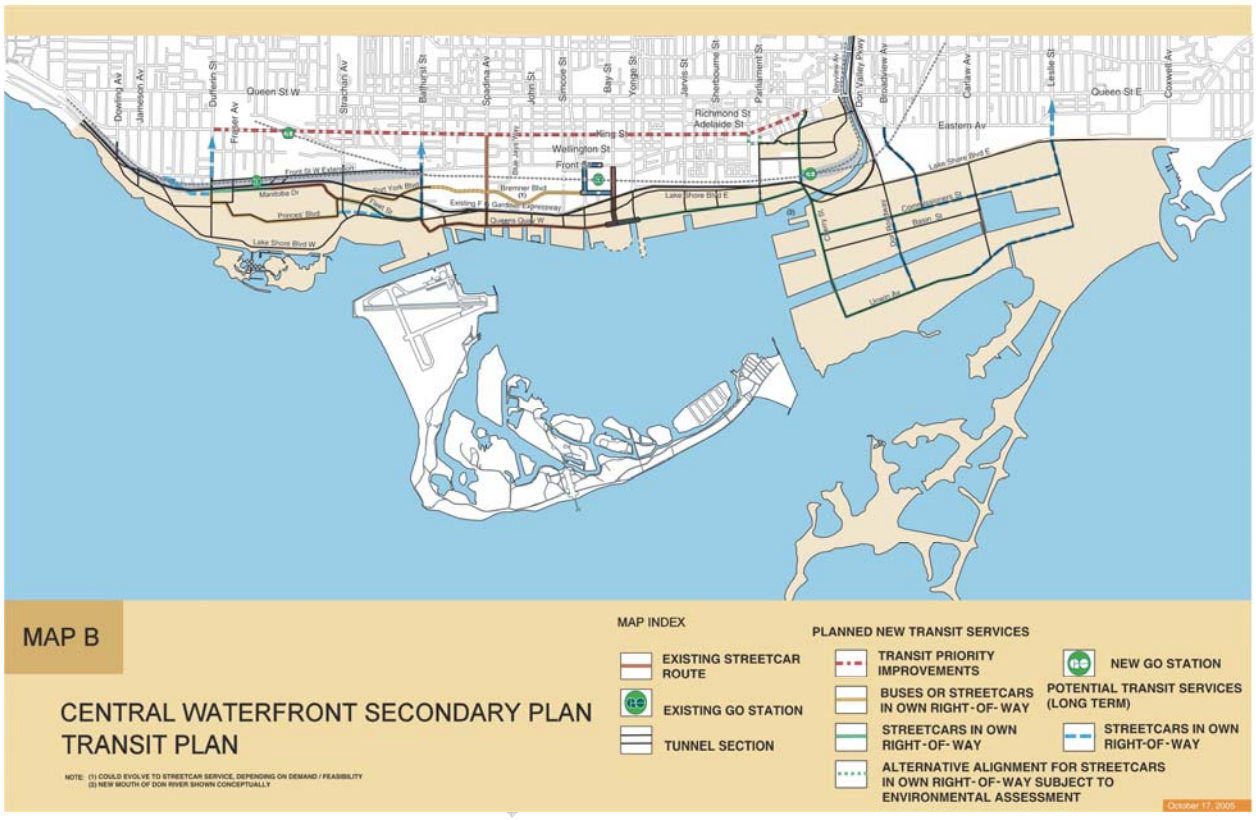
Terms of Reference for the Port Lands, recognizing the potential interrelationship with the two adjacent precincts: the East Bayfront and the West Don Lands.

Sustainable redevelopment and revitalization of these three precincts will require an effective transit system (as well as roads, pedestrian and cycling facilities) to service the large number of planned residential and employment opportunities. While roads will provide some of the transportation capacity in and out of the area, a high transit modal split is absolutely essential to achieve TWRC's and the City's objectives.

The formal framework for achieving these objectives was set out in the Central Waterfront Secondary Plan which was approved by City Council on March 2003 (BY-LAW No. 346-2003). It identifies a transportation strategy to provide a sustainable network in, to and from the waterfront communities with a particular focus on encouraging walking, cycling, transit use and water transportation. A number of policies are noted including:

- A "Transit First" approach will be adopted which provides for the early construction and operation of planned higher-order transit services at an early stage in the development process so that the transit-oriented objectives of the plan are achieved from the outset.
- The provision of the rights-of-way required to accommodate the proposed waterfront transit network over time as shown in Exhibit 1.1. The rights-of-way are to accommodate travel lanes, transit, pedestrian and cycling requirements and are to be refined through further detailed study;
- The existing bus and streetcar network will be extended into the waterfront area providing numerous connections north-south to connect the waterfront with existing nearby communities;
- New streetcar routes will operate in exclusive rights-of-way on existing and proposed streets to ensure efficient transit movement; and
- Waterfront streets will be renamed as "places" with distinct identities; Streets will act as lively urban connections as well as traffic arteries. The needs of motorists will be balanced with efficient transit service and high-quality amenities for pedestrians and cyclists.

Exhibit 1.1 – Secondary Plan – Transit Plan Map



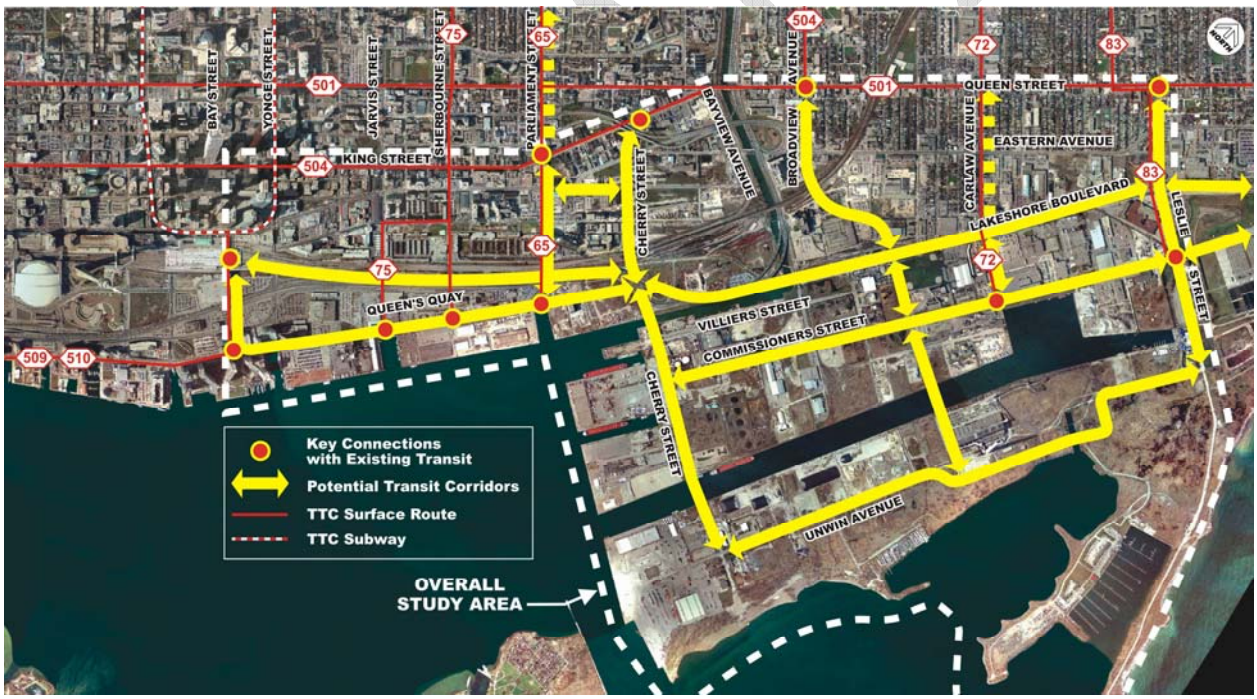
1.2 TOR STUDY AREA

As shown in Exhibit 1.2 below, the primary EA study area extends from Bay Street to Leslie Street, north from Lake Ontario to King Street west of the Don River, and Queen Street east of the Don River. The primary study area encompasses the three precincts: East Bayfront; West Don Lands; and Port Lands. The East Bayfront, West Don Lands, and Port Lands are situated within the Greater Toronto Area, and are located south and east of the downtown core area at the edge of Lake Ontario.

- The East Bayfront precinct is a 36-hectare (90 acre) waterfront area that runs between Jarvis Street on the west and Cherry Street on the east and between the Gardiner Expressway corridor in the north and the lakefront. It is expected to be a community with 6,000 – 8,000 homes, including affordable housing, and related commercial spaces.
- The West Don Lands precinct is a 32-hectare (80 acre) area located generally between Parliament Street on the west, the Don River to the east , Front Street, Eastern Avenue and King Street to the north and Mill street and the railway corridor to the south.

- The Port Lands precinct is a 400-hectare (1000 acre) waterfront area bounded by the Keating Channel/Don River and Lake Shore Boulevard on the north the Toronto Inner Harbour in the west, Ashbridges Bay in the east and Lake Ontario and Tommy Thompson Park to the south.

Exhibit 1.2 – Terms of Reference Study Area



1.3 PREVIOUS STUDIES

As described in more detail below, numerous waterfront and related studies have been conducted or are on-going; these include Precinct Plans and EA Master Plan Studies, Travel Demand Forecasting, Waterfront Transportation Studies, The Gardiner Expressway / Lake Shore Boulevard Scoping and Environmental Assessment, The Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP), , Don Valley Corridor Transportation Master Plan Study, and GO Transit Corridor Studies.

TWRC Precinct Planning and EA Precinct Master Plan Studies

The basic intention behind the precinct planning process is to provide the necessary urban design, planning and development guidance to permit the actual revitalization of individual precincts of the Toronto waterfront. The following precinct plans and implementation strategy plan have been completed or are in progress:

- West Don Lands Precinct Plan/Master Plan – March 2005;
- East Bayfront Precinct Plan/Master Plan – January 2006; and
- Port Lands Implementation Plan – March 2006

Other Waterfront area studies that are relevant to this initiative are noted below.

The Gardiner Expressway / Lake Shore Boulevard Scoping and Environmental Assessment

The TWRC has completed a number of studies over the last few years to examine how to reduce and/or eliminate the impediment to place making posed by the Gardiner Expressway structure. The studies assessed three alternatives, in addition to the "Do Nothing" scenario. The alternatives were intended to provide a movement system that provided adequate automobile access to the city's centre but which also acted as a framework for sustainable city building and waterfront revitalization.

The Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP)

This EA project underway by the TRCA includes the Don's channel from its mouth near Cherry Street to Riverdale Park and all adjacent lands to the river bounded by the CN Railway in the north, Villiers Street in the south, Parliament Street in the west and the Don Valley Parkway in the east. The goal of this projects to develop a preferred design and its associated projected costs to naturalize the mouth and lower reaches of the Don River, and permanently remove approximately 230 hectares of the Port Lands from the Regulatory Floodplain.

Don Valley Corridor Transportation Master Plan Study

The Don Valley Corridor Transportation Master Plan assessed opportunities to improve transportation operations and person-carrying capacity in the Don Valley Corridor. The Study Area encompassed the area bounded by Leslie Street/Bayview Avenue in the west, Steeles Avenue to the north, Victoria Park Avenue to the east and Gardiner Expressway/Lake Shore Boulevard to the south. Improvements cover a wide range of solutions including traffic operations/management enhancements, transit priority, higher order transit services, transportation demand management, local road improvements and commuter parking. The plan includes a recommendation for the eventual provision of a high capacity express bus service from the north into the downtown area via Bayview Avenue and Eastern Avenue.

GO Transit Corridor Studies

GO Transit is in the process of increasing its rail service on the Lakeshore corridor. Capacity to accommodate increased service for both the Lakeshore East and Stouffville Rail services is restricted by the number of available tracks. To remove this operational constraint and improve

overall rail service, it is proposed to construct a third mainline track between Cherry Street and the Scarborough GO Station where the Stouffville service diverts to the north. Therefore, GO Transit is undertaking a Class Environmental Assessment, Federal Environmental Assessment Screening, and a Preliminary Design Study for an additional mainline track on the Lakeshore East GO line from Cherry Street to the Scarborough GO Station.

1.4 OUTLINE OF THE TERMS OF REFERENCE

Due to the interrelated nature of the transit projects in the Eastern Waterfront, it has been deemed appropriate to submit one ToR, which will govern the preparation of all three IEAs. The ToR will allow each IEA to be completed on its own timeline, which is tied to anticipated development of the various precincts.

The preparation, submission, and approval of the ToR are requirements under section 6. (1) of the OEAA prior to commencing an IEA. Once approved by the Ontario Minister of the Environment, the ToR will provide the framework for preparing the IEAs and serve as a benchmark for reviewing the IEAs. It is the first statutory decision by the Minister in the EA planning and approval process.

The ToR sets out the minimum requirements and describes the methodology for conducting the EA. The IEA studies will be consistent with the approach and requirements set out in Section 6.1 (2) of the Environmental Assessment Act. The IEAs will include the following components (The following Chapter and Section referenced pertain to this ToR document):

- A description of the purpose of the undertaking (Chapter 2);
- A description of and statement of the rationale for the proposed undertaking (Section 3), alternatives to the undertaking (Sections 6.4, 7.4 and 8.4), and alternative methods for carrying out the undertaking (Sections 6.5, 7.5 and 8.5);
- A description of:
  - The environment that will be affected or might reasonably be expected to be affected, directly or indirectly, by the undertaking, the alternatives to the undertaking, and the alternative methods of carrying out the undertaking (Sections 6.2, 7.2 and 8.2 and Appendix C);
  - The effects that will be caused or that might reasonably be expected to be caused to the environment, by the undertaking, the alternatives to the undertaking, and the alternative methods of carrying out the undertaking (Sections 6.5.5, 7.5.5 and 8.5.5 and Appendix C); and
  - The actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment, by the undertaking, the alternatives to the undertaking, and the alternative methods of carrying out the undertaking (Chapters 13).
- An evaluation of the advantages and disadvantages to the environment of the undertaking (Sections 5.2), the alternatives to the undertaking (planning alternatives)

(Sections 5.1.3 and Appendix C), and the alternative methods (design alternatives) of carrying out the undertaking (Sections 5.1.1, 5.1.2 and Appendix C);

- A description of any consultation about the undertaking by the proponent and the results of the consultation (Chapter 9).

In addition the ToR outlines:

- A preliminary description of the study area and the existing environment;
- A description of the public and agency consultation undertaken during the ToR preparation;
- Other approval requirements; and
- A commitment to carry out compliance monitoring.

The OEAA requires proponents to examine two types of alternatives. The first type consists of "alternatives to the undertaking", which may be thought of as functionally different ways of approaching and dealing with the identified problem or opportunity. For the purposes of this ToR and subsequent IEAs, these alternatives will be referred to as "planning alternatives". The second type consists "alternative methods of carrying out the undertaking", which may be thought of as different ways of carrying out a similar activity (i.e. different cross-section designs). For the purpose of this ToR and subsequent IEAs these alternatives will be referred to as "design alternatives".

As part of these IEAs, the TTC will coordinate Federal and Provincial EA requirements if applicable. Preliminary discussions with Federal Agency have determined it is unlikely that the transit projects in the East Bayfront or West Don Lands will trigger the Canadian Environmental Assessment Act (CEAA). However, there are potential CEAA triggers in the Port Lands. This ToR will not limit the scoping activity that the Federal Authorities will undertake if CEAA is formally triggered.

2. PURPOSE OF THE UNDERTAKINGS

Over the last 30 years, the Toronto Waterfront has been transitioning from a functioning port with a dominant land use of heavy industrial and good handling to a centre of recreational and tourist activity. In lighting of this changing situation, the City of Toronto has developed an overall strategy for future land use development for Toronto's Waterfront. The overall strategy for this development is outlined in the Central Waterfront Secondary Plan.

In order to implement this strategy the City of Toronto and the Waterfront Revitalization Corporation have been developing Precinct Plans for the various areas in the waterfront. These Precinct Plans have been developed or are currently being developed in the eastern section of the central waterfront including the East Bayfront, West Don Lands and the Port Lands.

The following summarize the key land use recommendations of the various Precinct Plans.

East Bayfront

- Total area – approximately 36 hectares (90 acres);
- Land use type – employment and residential functions;
- Population – approximately 10,100 residents;
- Employment – approximately 3,700 employees; and
- Housing targets – approximately 6,300 total units (which includes a minimum of 1260 affordable rental units and 315 low-end-of market units).

West Don Lands

- Total area – approximately 32 hectares (80 acres);
- Land use type – employment and residential functions;
- Population - approximately 11,000 residents (which includes 860 school aged children);
- Employment – approximately 4,400 employees and
- Housing targets – approximately 6,000 total units (which includes a minimum of 1200 affordable rental units and 300 low-end-of market units).

Port Lands

- Total area – approximately 400 hectares (1000 acres)
- Land use type – mixed use (residential, employment, industrial)
- Population - approximately 32,900 residents; and
- Employment – approximately 24,700 employees.

As a result of this future development a significant demand for both inbound and outbound traffic will result. As noted previously, in order to accommodate these demands on the proposed and existing transportation network without significantly increasing vehicular capacity the Council of the City of Toronto has adopted among other things, a "transit first" policy to service the revitalization of the lands within the Waterfront Secondary Plan area.

Therefore, the overall purpose of the undertakings embodied in this Terms of Reference is:

To determine the transit facilities appropriate to serve the long term residential, employment, tourism and waterfront access needs in the study area while achieving the City's and TWRC's objectives for land use, design and environmental excellence.

These Environmental Assessments will build on the land use planning work completed, as well as on the Class EA Master Plans prepared for the precincts.

3. SYSTEM PLAN

The following describes the existing overall transit system as it relates to the eastern part of the central waterfront from an Inter-Regional (macro) to Local (micro) level, and includes a description of the proposed transit network within the study area based on planning conducted to date, as well as estimated future transit demand to, from and through this area.

3.1.1 Overall City Transportation Network

The City's overall transportation network relies on an elaborate infrastructure comprised of roads (supporting cars, and buses) and rails (supporting streetcars, subways and GO transit). At some locations within the City, streetcars operate in mixed traffic sharing the road with other modes of travel, while in other locations(for instance, along Spadina Avenue south of Bloor Street), streetcars operate in a semi-exclusive right-of-way (Spadina Avenue).

It is anticipated that similar infrastructure will support the forecasted travel patterns to, from and through Toronto's Eastern Waterfront based on the following three types of travel:

- Inter-Regional (from/to locations within the GTA);
- Intra-Regional (from/to locations within the City of Toronto); and
- Local (from/to locations within the study area).

3.1.2 Existing Connections to the Waterfront

- Inter-regional travel (from the outlying Regions to the City of Toronto) generally utilizes the GO Transit and Provincial Highway network. In addition to the GO Transit and Provincial Highway network, intra-regional travel utilizes the TTC subway and Scarborough LRT network, as well as arterial roads. Local travel presently associated with the study area relies on public transit and the automobile.

3.1.3 Existing Travel Demand

Existing inter-regional and intra-regional travel patterns to the GTA are addressed in the following reports:

The Transportation Tomorrow Survey (2001, 1996 & 1986 Summaries)

Conducted on behalf of 19 local, regional, provincial and transit operating agencies in the greater Toronto and surrounding areas, this document summarizes among others, trips coming into and leaving an area, travel purpose, distance travelled and travel mode choice.

The Toronto Official Plan (OP)

The Toronto Official Plan (Chapter 9, page 2), notes that the GTA is forecast to grow by 2.7 million residents and 1.8 million jobs by the year 2031. The forecast allocates 20% of the increase in population and 30% of the increase in jobs to Toronto.

As further noted, in a mature city like Toronto, the emphasis must be directed towards a more efficient use of the available road network to move people, by making transit, cycling and walking increasingly attractive alternatives to car use. Chapter two has identified a number of principles to be used in the generation of sustainable transportation options including the following:

- Promoting land use development and urban form that lead to fewer and shorter trips (by achieving a more intense, mixed use pattern of development);
- Improving access to public transit for all Torontonians that is competitive with the cost and convenience of using a car for most personal travel; and
- Instituting planning, traffic engineering and street design practices that encourage walking and cycling.

3.1.4 Future Travel Demand

The City of Toronto developed a series of travel demand forecasts for road, transit and other trip making to / from and within the Waterfront as part of the planning of the Central Waterfront Secondary Plan adopted by Council in April 2003. The Waterfront Transportation Plan embodied in the Central Waterfront Secondary Plan was developed to meet the travel demand needs of Waterfront through, in large part, an emphasis on the role that transit plays in meeting those demands.

These forecasts will be refined by staff on a more detailed basis as part of this Environmental Assessment process to provide a comprehensive series of forecasts of transit, vehicular and other (pedestrian / bicycle) trip making for the East Waterfront areas being considered as part of this Environmental Assessment.

The travel demand forecasts will be used in the detailed evaluation of planning and design alternatives developed and considered as part of this Environmental Assessment. This includes the evaluation of corridors and technologies (Planning Alternatives) for new transit infrastructure and location and right-of-way features (Design Alternatives) in the context of the selected corridors and technology.

The refined travel demand forecasts will reflect current planned population and employment levels within the EA study area and in the Waterfront Area more generally. Current population forecasts and employment levels for the Precincts within the EA study area are as follows:

- **East Bayfront**

  Population – approximately 10,100 residents
  Employment – approximately 3,700 employees

- **West Donlands**

  Population - approximately 11,000 residents
  Employment - approximately 4,400 employees

- **Port Lands**

  Population - approximately 32,900 residents
  Employment - approximately 24,700 employees

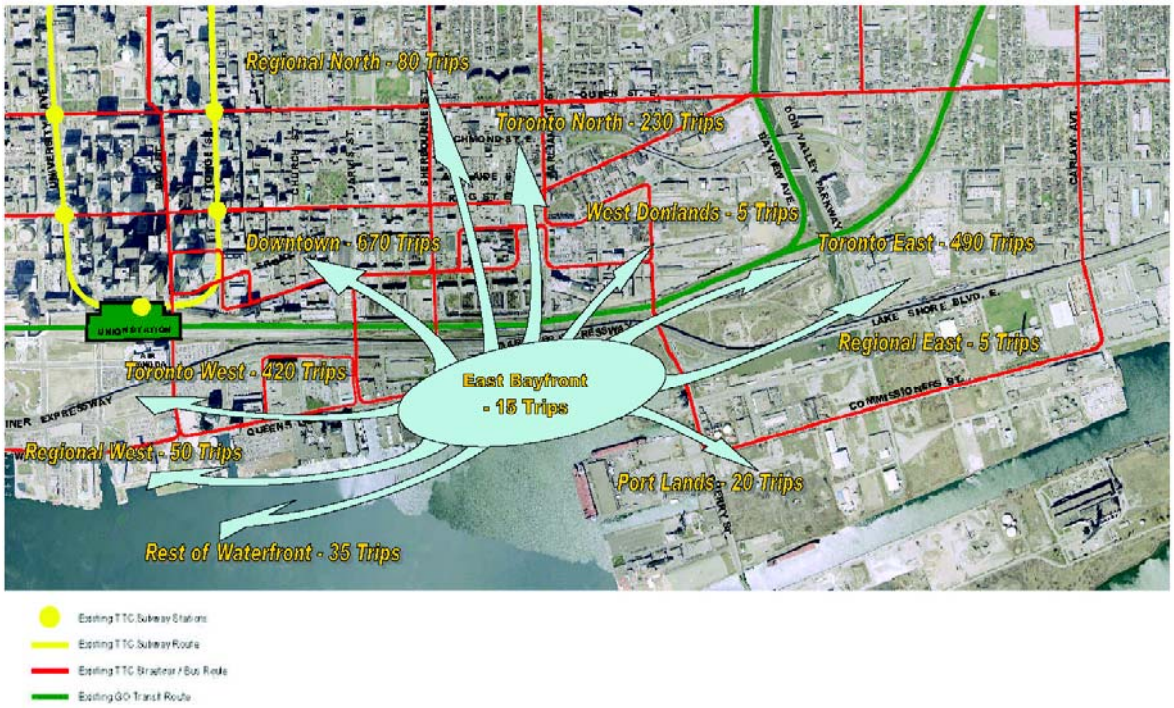
For the purposes of this ToR and in defining the Planning Alternatives to be considered as part of the Environmental Assessment Studies, preliminary outbound transit travel pattern forecasts have been developed for each of the three Waterfront East areas (East Bayfront, West Donlands and the Port Lands).

These preliminary forecasts are illustrated graphically on the following three figures for each of East Bayfront, West Donlands and Port Lands areas. These forecasts provide a preliminary and general outline of the number of person trips made by transit in each case to the various parts of the City of Toronto and beyond during the morning peak period.

The total number of outbound transit person trip from the three Waterfront East areas being considered is, based upon this preliminary travel demand information, in the order of 11,195 trips. It is assumed and expected that over 40 percent of all Waterfront area trips will be made by transit.

The information provided on these figures will be refined further as part of this Environmental Assessment process and is subject to change.

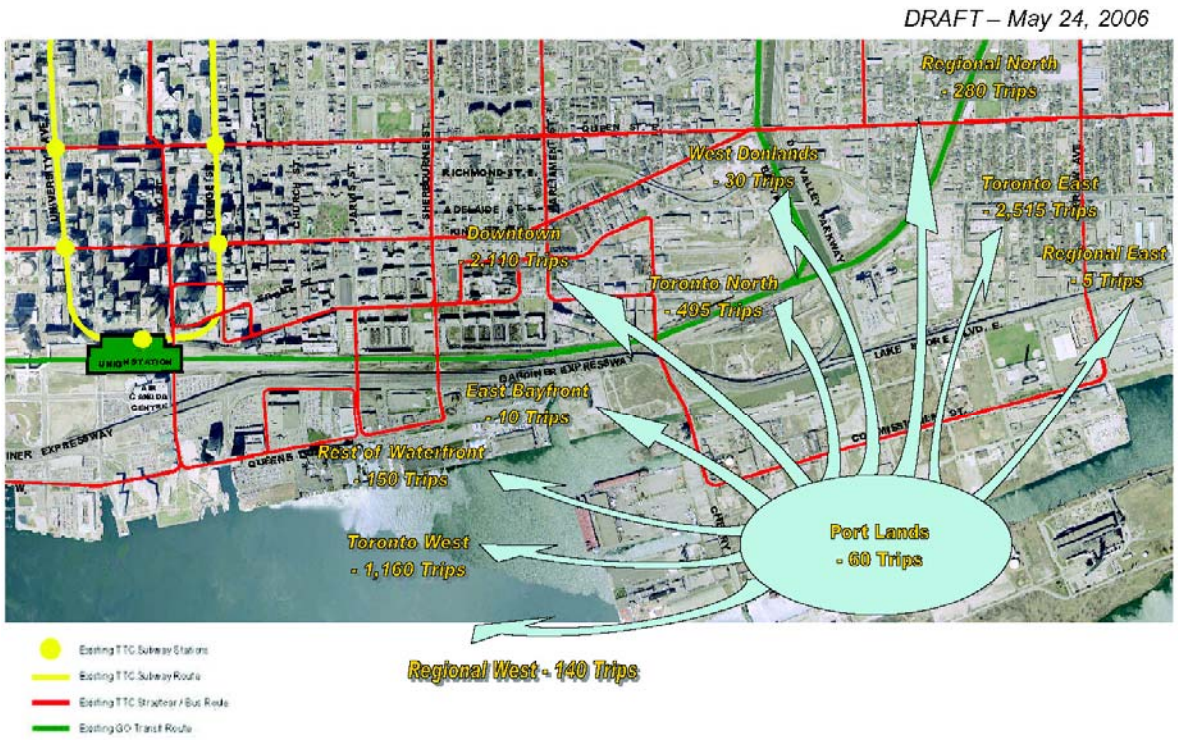
DRAFT – May 24, 2006



East Bayfront Precinct:
Travel Patterns and Transit Volumes (Morning Peak Period, Outbound)

DRAFT – May 24, 2006

West Donlands Precinct:
Travel Patterns and Transit Volumes (Morning Peak Period, Outbound)



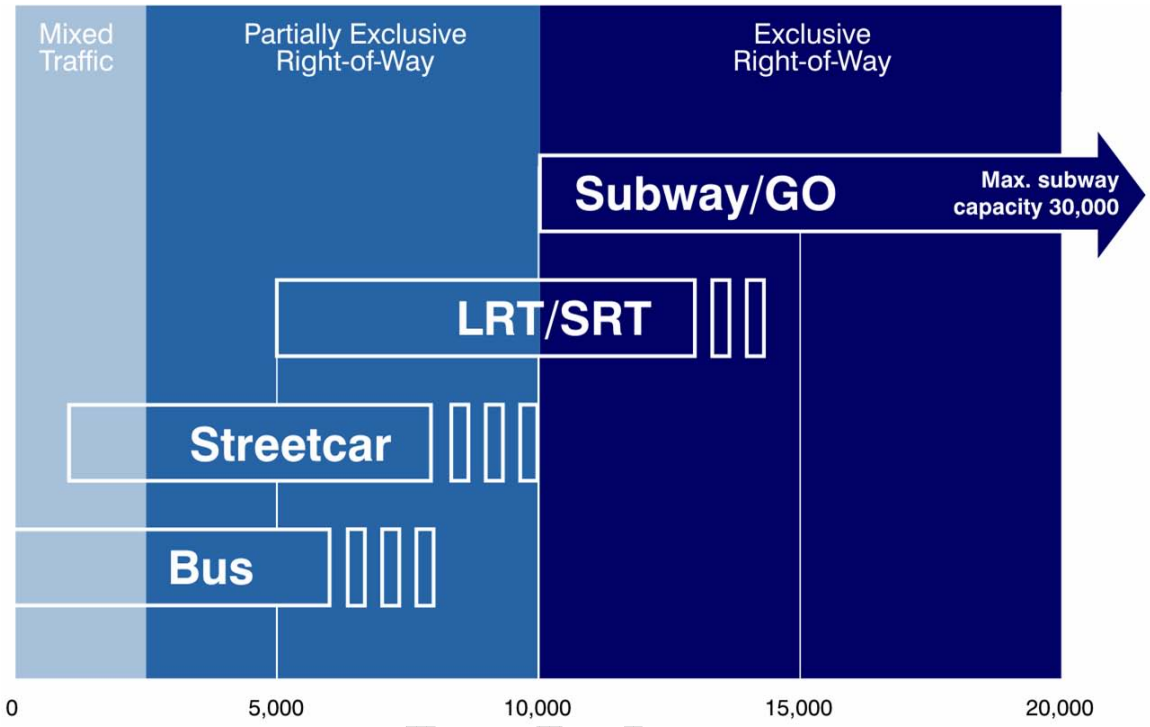
Port Lands Precinct:
Travel Patterns and Transit Volumes (Morning Peak Period, Outbound)

3.1.5 Proposed Waterfront Transit Network

Fundamentally the transit facilities in the overall study area must connect with each other and with the rest of the existing and proposed future TTC network.. As previously noted, the overall objective of each environmental assessment is the identification of feasible and cost effective solutions to the challenges faced in expanding Toronto's transit system through the study area to support planned growth, while minimizing impacts on the environment. During the development of the East Bayfront and West Don Lands Class EA Master Plans and Precinct Plans, on a broad scale, proposed street grids and transit routes have been identified. The proposed conceptual transit network and the updated ridership for that network will be developed during the Planning Alternatives phase of the study and included as an early chapter in each EA report.

The chart below illustrates the typical range of demand that can be accommodated by different transit technologies.

Exhibit 3.1



The initial demand estimates for a transit facility serving the waterfront does not require a Subway service. Travel demand forecasts may limit technology options for each of the three EA's as discussed below.

4. THE PLANNING PROCESS

The EAs will describe and identify the potential natural, social, economic and cultural environmental effects of the preferred undertaking and alternatives. In general, the identification of potential environmental effects will include an inventory or profile of existing conditions, a prediction of the effects for each alternative, identification of impacts and mitigation measures, and an evaluation of advantages and disadvantages.

Two types of alternatives are required to be examined to meet the requirements of the OEAA: these include planning alternatives (alternatives to the undertaking) and design alternatives (alternative methods of carrying out the undertaking). These alternatives are fundamentally different in scope and nature. Planning alternatives consider a number of different approaches to deal with a given problem or opportunity and once an approach has been decided upon, the design alternatives look at different ways of applying the chosen approach.

To generate and assess these two types of alternatives, the EA will involve several steps as outlined in Exhibit 4.1 following. The first phase will focus on the purpose and rationale for the undertaking, the identification and assessment of planning alternatives and selection of the

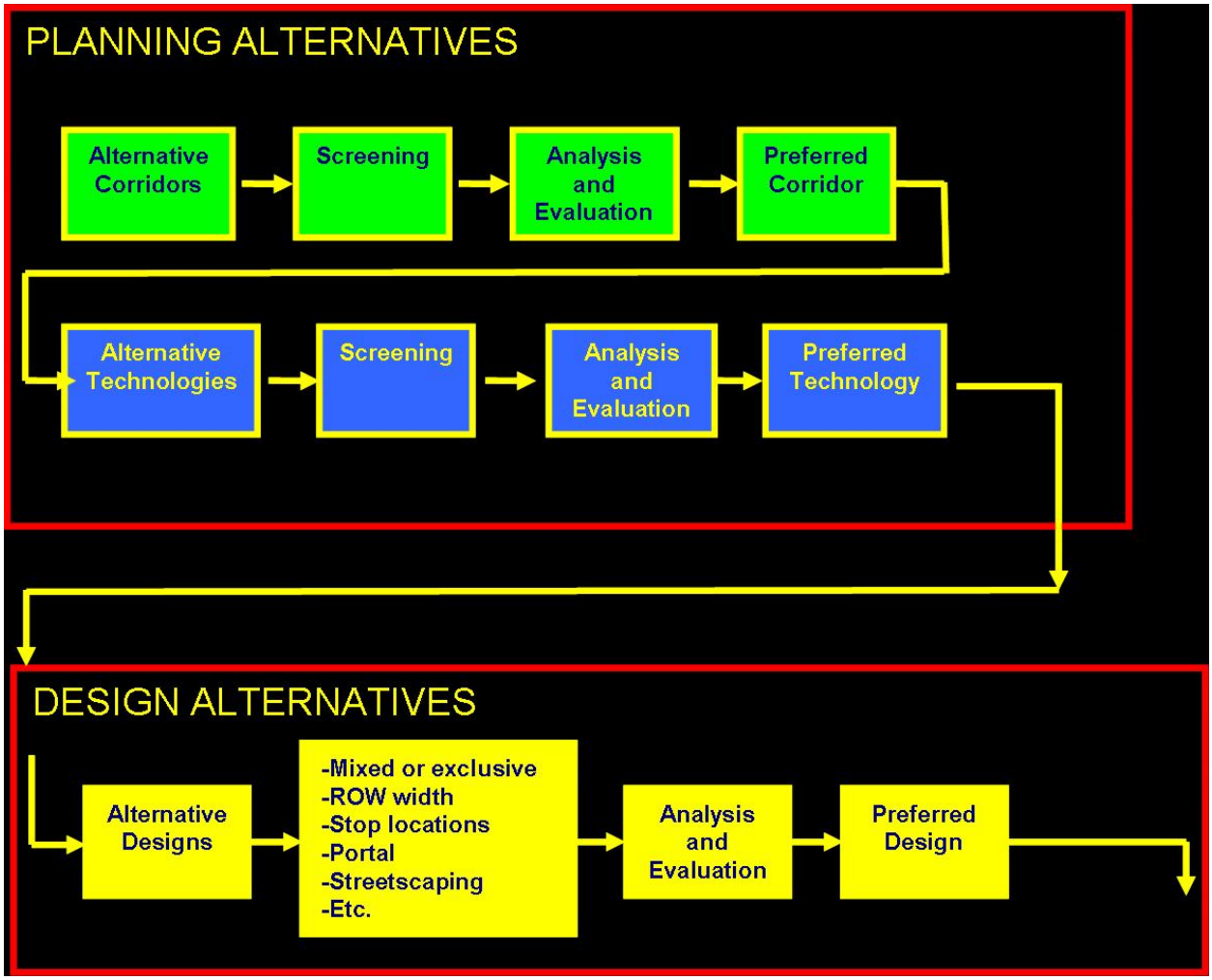
preferred planning alternative. The second phase of the EA will involve the generation and assessment of design alternatives and selection of a preferred alternative.

The planning framework is based on a phased sequence of decision-making in which these two types of alternatives are assessed at an increasing level of detail as they become more focused. In the initial stages (planning alternatives), when the size, location or type of facility is not yet known, less detailed criteria are used (see Appendix C for criteria) for the evaluation. At this stage impact assessment will be conducted at a more general and strategic level, based primarily on secondary source information. At the design alternative phase, when it becomes more difficult to differentiate between alternatives, more detailed information is required (see Appendix C for criteria).

Once a preferred alternative design is selected, more focused data will be collected. This process of collecting additional environmental data as the project becomes more focused ensures that current information is sought and used throughout the study process.

Potential effects to be studied include positive and negative effects. Chapters 6, 7, 8 and Appendix C outline the specific factors to be examined for planning alternatives and design alternatives. During the EA, the Proponent will work closely with the affected agencies and the public to refine issues/concerns and to develop acceptable measures for resolving concerns.

Exhibit 4.1 – EA Flow Chart



5. KEY CONSIDERATIONS IN GENERATING PLANNING AND DESIGN ALTERNATIVES

When considering the development of the possible transit infrastructure alternatives in the study area a number of fundamental considerations will be applied to the development of these alternatives. These include but are not limited to the following:

- Develop the new transit infrastructure required to encourage transit use and reduce auto dependence
- Develop new infrastructure in accordance with TTC, Toronto and TWRC design criteria/guidelines
- Provide for full accessibility to the disabled community;
- Minimize street and right-of-way (ROW) widths.
- Provide new transit facilities within a five 5 minute walk of the majority of the residents and businesses of planned waterfront developments

- Establish transit network connections to integrate the recommended services with the existing transit system in accordance with an integrated systems plan;
- Utilize existing infrastructure to the extent possible - taking advantage of existing and planned transportation corridors may reduce impacts to the natural, social and economic environment;
- Avoid, or where this is not possible, minimize impacts to natural systems with particular emphasis on natural features, functions, systems and communities; and
- Maximize the use of "Green" transit technology;

5.1 ANALYSIS AND EVALUATION OF ALTERNATIVES

As discussed above, each transit EA will have to assess planning and design alternatives. Within the list of planning alternatives, preferred corridors and technologies will be selected. Design alternatives will focus on location within the selected corridors and right of way features in the context of the selected technology. The analysis and evaluation of all alternatives will be subject to an initial screening, followed by a more thorough evaluation.

5.1.1 Screening of Planning Alternatives

The EA Act requires a proponent to consider all reasonable alternatives. For the purposes of this ToR and the subsequent EA's, all alternatives must be able to address key project objectives as identified in key approved planning documents (see section 1.3) and consistent with the proponent's policies and standards. The preliminary screening criteria for planning and design alternatives have been developed in consultation with key stakeholders and agencies, as well as the public. This ToR will allow for additional refinements to the screening criteria (documented in Appendix C) during the individual EA's.

Therefore, all alternatives listed in this ToR as well as others that may be suggested during the EAs must satisfy all screening criteria. Only those alternatives that meet these minimum project requirements will be subjected to further analysis.

5.1.2 Evaluation of Planning Alternatives

After the various planning alternatives are generated, the alternatives which pass the initial screening process will be carried to the evaluation stage. The advantages and disadvantages of the various alternatives will be compared based on criteria that address all facets of the environment. As part of the consultation process for this ToR, preliminary criteria and indicators have been developed (see Appendix C). Similar to the screening criteria, this ToR will allow for additional refinements to the criteria and indicators during the individual EA's. Any changes and the rationale for the change will form part of the EA's documentation.

The actual assessment process will entail the identification of advantages and disadvantages of the various alternatives under consideration. At this stage, each environmental feature is examined to determine the extent of impact, based on specific measures that will address each indicator. Net impacts will be identified; these refer to the effects on the environment that remain after standard mitigation measures have been applied to reduce the extent of the impact.

5.1.3 Evaluation of Design Alternatives

This stage builds upon the information obtained from the impact assessment stage and involves a comparative analysis of the advantages and disadvantages of the alternatives considered to select a preferred alternative. At this stage, the relative importance of the environmental features is determined. A "Do Nothing" scenario will be carried forward to represent a base case for comparison to the preferred alternative.

The evaluation of alternatives is an integral component of the EA. A sound evaluation process is based on five key principles:

- The evaluation of alternatives must be comprehensive and systematic;
- The process must be rational and understandable;
- The results must be replicable;
- The data must be traceable; and
- The entire activity must be participatory, with broad input from the public, stakeholders, regulatory agencies, municipalities, etc.

The Ontario Ministry of Environment recommends that the evaluation approach should be clearly described and government ministries, municipalities, agencies, First Nations and the public should be asked for their comments early in the EA study. The method(s) used to predict net environmental effects and evaluate advantages and disadvantages should clearly identify the relative differences and key impact trade-offs.

A Reasoned Argument (or Trade-Off) method will be used to identify a preferred alternative. The Reasoned Argument (Trade-Off) evaluation component will provide a clear presentation to stakeholders of the key trade-offs between the various evaluation factors and the reasons why one alternative is preferred over another. During the EA study, the decision making process will be clearly documented to support a traceable process and to ensure that it is understandable to those who may be affected by the decisions.

This method highlights the differences in net effects associated with the various alternatives. Based on these differences, the advantages and disadvantages of each alternative are identified. The relative significance of the impacts is examined to provide a clear rationale for the selection of a preferred alternative. The rationale that favours the selection of one alternative over all others will be derived from the following sources:

- Government legislation, policies and guidelines;
- Municipal policy (i.e. Official Plans);
- Issues and concerns identified during consultation with ministries and agencies, municipalities, ratepayer and interest groups and the general public (including input obtained through the weighting of the relative level of importance of evaluation criteria); and,
- Project Team expertise.

The rationale will be documented clearly and concisely in a format that can be easily understood by all stakeholders.

5.2 ASSESSMENT OF THE UNDERTAKING AND DEVELOPMENT OF MITIGATION

As part of the identification of potential impacts, mitigation measures will be identified to offset predicted negative environmental effects that have been identified for the undertaking and its alternatives. The identification of mitigation measures will be developed in the context of relevant technical guidelines. As this process will be iterative as alternatives are developed and evaluated, opportunities to avoid or minimize impacts will be integrated wherever feasible.

Appropriate technical and economically feasible mitigation measures will be developed for specific characteristics and sensitivities of the environmental features and the related significance (e.g. magnitude, duration, certainty) of the potential impact. Such measures may include, but are not limited to:

- Avoidance measures i.e. design options to minimize impacts to or caused by construction and operations;
- Protection of water quality through appropriate facility routing and drainage design; and
- Identification of the recommended construction timing window, staging of work, etc.

Mitigation measures will be developed in consultation with appropriate agency staff and stakeholders to confirm the environmental analyses, issues and impacts, and subsequently to review the impact assessment and mitigation measures. Mitigation measures will also include recommendations for a monitoring program.

6. ENVIRONMENTAL ASSESSMENT WORK PLAN – EAST BAYFRONT

6.1 STUDY AREA

The East Bayfront study area extends from Bay Street in the west to Cherry Street in the east and encompasses the area between the Gardiner Expressway to the north and Lake Ontario in the south as shown in Exhibit 6.1.

Exhibit 6.1 – East Bayfront Study Area

6.2 DESCRIPTION OF THE EXISTING ENVIRONMENT

A Precinct Plan has recently been developed for the East Bayfront area extending between Lower Jarvis Street and Cherry Street east of downtown Toronto. Its northern boundary is formed by the main line rail corridor serving Union Station. The westerly portion of the East Bayfront Precinct was the subject of a recent Class EA Master Plan exercise.

Secondary source environmental research has been undertaken during the course of preparing the EA ToR. The following summarizes the notable environmental features in the broader area.

6.2.1 Existing Land Use

Lands within the East Bayfront study area are currently utilized for a variety of commercial and industrial uses.

The Redpath Sugar plant is located just west of the Jarvis Street Slip and just outside the Precinct plans area although a rail spur serving the plant runs along the south side of Queens Quay East through the Precinct area.

Approximately half of the lands in the study area are owned by the City of Toronto Economic Development Corporation (TEDCO). The remainder are privately owned parcels of land. In general terms the lands located to the south of Queens Quay East are owned by TEDCO while those to the north and east of Queens Quay East are under private ownership.

6.2.2 Existing Transit

TTC

The Toronto Transit Commission (TTC) currently provides bus and streetcar service to the East Bayfront study and adjacent areas. A brief description of the key TTC services within the East Bayfront Precinct area is given in the following.

- **Route 97 - Yonge**

This route currently travels along Yonge Street and ends on Queens Quay West while returning via Front Street. The short section travel along Queens Quay West is the only section that travels through the East Bay Front area.

- **Route 75 – Sherbourne**

This bus service runs along Sherbourne Street and loops at its southern end within the study area using Lower Jarvis Street, Queens Quay East and The Esplanade. It provides a connection to the Bloor-Danforth subway line that runs east-west along Bloor Street East. Buses run every 11 or 12 minutes during the peak rush periods.

- **Route 6 – Bay**

This bus service loops from central Toronto along Queen Street East and Lower Jarvis Street to the western portions of the study area. From downtown Toronto these services run along the Bay Street urban clearway to the Dupont subway station on the Yonge-University-Spadina subway line. Buses run every 5 to 8 minutes during peak rush periods.

- **Route 72A – Pape**

This limited service route runs from the Pape Subway station on the Bloor-Danforth subway line to Union Station via Cherry Street. Buses run approximately every 13 to 14 minutes in the morning and afternoon rush periods.

- **Routes 509/510 – Harbourfront LRT**

This streetcar services runs from Union Station south in tunnel under Bay Street and then turns west an comes to the surface in a partially exclusive right of way in the centre of Queens Quay West. The streetcars run west to the CNE grounds and north along Spadina to the Bloor Danforth subway.

GO Transit

GO Transit's Lakeshore East and Stouffville services operate along the main rail-line running along the northern study area boundary. The nearest station is Union Station within downtown Toronto.

6.2.3 Existing Roads

The Major transportation connection in terms of roads within the East Bay Front are the Gardiner Expressway, Lake Shore Boulevard, Queens Quay East, Yonge Street, Bay Street, Sherbourne Street, Jarvis Street and Parliament Street. The first three roads mentioned provide an east west connection to its neighbouring lands while all others provides access through the north south direction.

The Don Valley Parkway is a highway, which provides connection to the North end of the City of Toronto via the 404 and is considered a major transportation connection.

6.2.4 Existing Road Network

Descriptions of the key streets and roadways in the East Bayfront study area is provided in the following sections.

Expressways

- **Gardiner Expressway**

The Gardiner Expressway is an east-west oriented, basic 6-lane elevated roadway running along the northern boundary of the East Bayfront study area. The Gardiner Expressway is one of the principal roadways providing regional access to central Toronto and links to the Queen Elizabeth Way (QEW) west of the City, as well as the Don Valley Parkway and Lake Shore Boulevard East east of Don River. It carries high traffic volumes and operates as a controlled access, free-flow, facility with access ramps at Lower Jarvis Street and Lower Sherbourne Streets. The posted speed limit is 90 km/h.

Major Arterial Streets

- **Lake Shore Boulevard East**

Lake Shore Boulevard East is an east-west oriented, basic 6-lane divided roadway that runs through the East Bayfront study area parallel to, and either beneath or to the south of, the Gardiner Expressway. Lake Shore Boulevard East carries relatively large volumes of traffic. Lake Shore Boulevard East connects with each of the main north-south streets serving the East Bayfront Precinct area (Lower Jarvis Street, Lower Sherbourne Street, Parliament Street and Cherry Street) at a series of signalized intersections. The posted speed limit is 60 km/h.

Minor Arterial Streets

- **Queen Quay East**

Queens Quay is an east-west oriented, basic 4-lane roadway (approximate pavement width of 19.0 metres) that runs parallel to Lake Shore Boulevard across central Toronto. Queens Quay connects from Lake Shore Boulevard West at Stadium Road just west of Bathurst Street, runs across the downtown and through the East Bayfront study area, before and connecting back to Lake Shore Boulevard East at Parliament Street at Small Street. Queens Quay East has a basic 25.0 to 27.44-metre right-of-way through the Precinct area. The posted speed limit is 50 km/h.

The Harbourfront Streetcar runs, at-grade, along Queens Quay West linking between Union Station and the Bathurst Street / Manitoba Drive loop within Exhibition Place. The connection to Union Station is provided via a tunnel running beneath Bay Street. The tunnel portal is located just west of Bay Street on Queens Quay West.

An operational industrial rail spur line runs along the south side of Queens Quay East and serves the Redpath Sugar plant located just west of the Jarvis Street slip. There are also a number of disused rail spur crossings of Queens Quay East. There are also on-street bicycle lanes provided in each direction on Queens Quay East as well as the multi-use Martin Goodman Trail that runs adjacent to the rail spur on the south side of the street.

- **Lower Sherbourne Street / Sherbourne Street**

Lower Sherbourne Street and Sherbourne Street is a north-south oriented, basic 3 / 4 lane roadway that extends from Queens Quay East northwards to just north of Bloor Street East. Lower Sherbourne Street has a basic 20.0 metre right-of-way within the Precinct and an approximate 14.0 metre wide pavement. There are on-street bicycle lanes provided in each direction on both Lower Sherbourne and Sherbourne Streets. The posted speed limit is 450 km/h.

- **Parliament Street**

Parliament Street connects with Queens Quay East within the East Bayfront study area at Small Street and extends to Lake Shore Boulevard East as a 4-lane facility with on-street bicycle lanes. It then extends northwards from Lake Shore Boulevard East as a basic 2-lane roadway to Bloor Street East. The existing Parliament Street right-of-way within the study area is 25.0 metres with pavement width 19.0 metres. The posted speed limit is 40 km/h.

- **Lower Jarvis Street / Jarvis Street**

The section of Lower Jarvis Street south of Lake Shore Boulevard East and within the East Bayfront Precinct area is a 4-lane collector street with a 20.0 metre right-of-way

(approximate pavement width of 14.0 metres). The intersection of Queens Quay East and Lower Jarvis Street is signalized. The posted speed limit is 50 km/h. Lower Jarvis Street extends northwards from Lake Shore Boulevard East as Jarvis Street to Bloor Street East.

6.2.5 Bicycles and Pedestrians

Pedestrian Sidewalks

Sidewalks are provided on all existing public streets within the study area except in a few instances including, notably, on the south side of Queens Quay East. Pedestrians walking on the south side of Queens Quay East are able to use the multi-use Martin Goodman Trail but are required to cross to the north side of Queens Quay East at Richardson Street, without the benefit of any formal crossing facilities, in order to proceed further west.

North-South Pedestrian Connections Beneath the Rail-Line

Sidewalk connections are provided on either side of the north-south streets that run below the mainline rail corridor. The sidewalks are located behind structural elements supporting the bridge structures and are separate from the road travel lanes. These facilities are widely regarded as inhospitable. Several studies have suggested the need to improve the quality of these pedestrian facilities.

On-Street Bicycle Lanes

On-street bicycle lanes are provided in both directions on Queens Quay East and Lower Sherbourne Street.

Off-Road Multi-Use Facilities

Part of the Martin Goodman Trail, a major multi-use off-road pathway, runs along the south side of Queens Quay East and connects to trail systems running into the Port Lands, north along the Don Valley corridor and eastwards on the north side of Lake Shore Boulevard East.

A minor multi-use off-road pathway connects along the north side of Lake Shore Boulevard East between Parliament Street to Cherry Street.

6.2.6 Industrial Rail Spur Lines

There are a number of heavy rail industrial spur lines within the study area; however, only one line is currently in use. All tracks are owned and controlled by the City of Toronto Economic Development Corporation (TEDCO).

Redpath Sugar Rail Spur

An operational industrial rail spur line serving the Redpath Sugar (Tate and Lyle) plant runs along the south side of Queens Quay East through the study area. Based upon general observations the Redpath rail spur is used on an occasional basis for the transportation of refined sugar and liquid sugar.

The Redpath rail spur is serviced from the TEDCO Keating rail yard located to the east of the Don River. The spur runs generally along the south side of the Gardiner Expressway from the TEDCO Keating Yard and crosses Lake Shore Boulevard East near the Cherry Street (north) signalized intersection as it enters the study area.

There is a second track running parallel to the main spur. This track serves as a siding facility for the Redpath Sugar plant and is used for rail car storage and shunting purposes.

Rail activity on the entire TEDCO system serving the Port Lands and waterfront areas is controlled such that only one train is within the system at any one time for rail safety reasons. Both the Canadian National (CN) and Canadian Pacific (CP) rail companies provide service on the TEDCO system with CN providing service during the morning and CP during the afternoon. Both CP and CN provide service to Redpath Sugar.

Disused Rail Spurs – North of Queens Quay East

There are two disused rail spur crossings of Queens Quay East that link to the main Redpath Sugar spur line. One is located just west of Lower Jarvis Street while the second is located near the Queens Quay East / Lake Shore Boulevard East / Parliament Street intersection. These lines will be eliminated with development of the East Bayfront Precinct.

Queens Quay East Cross Sections from East Bayfront Class EA Master Plan

A road plan for the Precinct is illustrated in Appendix B (Exhibit 8-21 extracted from the January 2006 Class EA Master Plan report). The road plan illustrates proposed cross-sections for new and improved road linkages within the Precinct including the four primary and secondary recommended cross-section arrangements for Queens Quay East.

The configuration of Queens Quay East is to be confirmed as part of this study. A summary of the proposed alternate arrangements developed and evaluated as part of the Class EA Master Plan is provided in the drawings shown in Appendix B These plans will be used as input and to inform this EA study

6.2.7 Natural (Terrestrial) Environment

The natural environment within the East Bayfront study area has been described in the East Bayfront Class EA Master Plan. This report notes that the area is an extensively developed environment - an urban brownfield site containing some buildings occupied by industrial or commercial uses, with large areas of underused sites. There is negligible vegetation, with no other features of natural environmental significance. The Toronto waterfront is an extensively

developed environment. There are a number of significant natural areas including Tommy Thompson Park and the Toronto Islands, however the majority of the current landscape has been developed.

6.2.8 Natural (Aquatic) Environment

As documented in the East Bayfront Class Ea Master Plan, aquatic habitat associated with the site consists of the Don River and Lake Ontario. The Don River originates north of Major Mackenzie Drive in the Region of York eventually discharging into Lake Ontario through the Keating Channel locate east of Cherry Street. Located south of the study area is the Lake Ontario shoreline and to the west is the Toronto Inner Harbour. As a result of urbanization and shoreline alteration, diversity of aquatic habitat in the vicinity of the East Bayfront is limited.

6.2.9 Socio-economic Environment

Approximately half of the lands in the East Bayfront are owned by the City of Toronto Economic Development Corporation (TEDCO). The remainder are privately owned. Land use is governed by the Central Waterfront Secondary Plan, and includes Parks and Open Space, Development Areas, and Existing Use Areas.

6.2.10 Cultural Environment

The main heritage feature is located at 95 Queens Quay East – the Redpath Sugar Refinery. The Refinery contains a museum used to display the history of the sugar industry and is used as an educational resource for school children and the general public.

There is no apparent current use of the lands by First Nations for traditional purposes.

6.3 DESCRIPTION OF THE FUTURE ENVIRONMENT

Future population and employment

Population - 13,000 residents (which includes 900 school aged children);

- Employment – 8,000 employees (to be accessible by public transit); and
- Housing targets – 6,300 total units (which includes a minimum of 1260 affordable rental units and 315 low-end-of market units).

Land use proposed in the precinct plan

- Total area – approximately 36 hectares (90 acres);
- Land use type – employment and residential functions;

Further investigations, including secondary source reviews and field investigations will occur during the EA to inventory the existing environment as defined by the OEAA.

6.4 PLANNING ALTERNATIVES (ALTERNATIVES TO THE UNDERTAKING)

6.4.1 Description and Statement of Rationale for Alternatives

As noted previously, the primary purpose for this EA Study is :

- To determine the transit facilities appropriate to serve the long term residential, employment, tourism and waterfront access needs in the study area while achieving the City's and TWRC's objectives for land use, design and environmental excellence.

As part of the East Bayfront EA study there are a number of planning alternatives that can be considered in arriving at a recommended alternative. These will be compared to a "do nothing" alternative that must also be considered in the process.

In the case of the provision of transit services, in the "do nothing" alternative it is assumed that the TTC will to provide transit services to the area based on its normal service standards utilising the proposed street system without the construction of any transit-specific facilities. In this way the "do nothing" alternative is, in effect, a "business as usual" alternative. The "do nothing" alternative includes the provision of bus services into the area as continuations of existing routes and the introduction of a new bus route on Queens Quay connecting to Union Station through the downtown street system. It is assumed that the frequency of service provided on these routes will reflect the actual passenger demand for the service based on the TTC normal financial standards.

In addition to the "do nothing" alternative there are both corridor and technology options to consider as part of the "planning alternatives".

Corridors

With respect to corridors there are a limited number of east-west options in the study area. In order to serve this east-west community and connect it to the existing (and future) transit network at both the east and west ends there are two possible corridors:

1. Queens Quay East and
2. Lake Shore Boulevard

The Queens Quay East corridor bisects the future development in the precinct and provides the most direct service to and from existing and future development. It also allows for a connection to the existing streetcar tunnel under Bay Street.

The Lakeshore corridor is on the extreme northern edge of the study area and, while providing only limited direct service to existing and future development in the East Bayfront area, it allows for a possible bypass route for transit riders passing through the study area. As part of the public consultation for this Terms of Reference, it was agreed that the Lakeshore corridor will be retained as one of the options to be considered during the EA study for use as a possible bypass of the East Bayfront development area.

As a result the corridor options that will be considered in the East Bayfront EA study include:

1. One transit facility along the Queen's Quay East corridor and

2. One transit facility along the Queen's Quay East corridor to provide local service to and from the overall study area and a second transit facility to provide an express bypass route for those riders passing through the study area with origins and destinations elsewhere.

Technologies

There are also a number of technology options that could be considered in the study corridor. These include the following:

1. Conventional Bus Service on existing roads (the "do nothing" alternative);
2. Bus Service on a dedicated right-of-way (primarily on the surface);
3. Conventional Streetcar Service on existing roads;
4. Streetcar Service on a dedicate right-of-way (primarily on the surface); and

As discussed in section 3 of this ToR, a fully grade separated facility such as a subway is not required to service the anticipated level of demand associated with waterfront revitalization and will not be considered further in the East Bayfront EA study. However, recognizing the system connectivity that the East Bayfront will provide for both the West Don Lands and the Port Lands, the accumulative travel demand is anticipated to exceed that which can be accommodated by buses in mixed traffic. In that regard it is anticipated that transit in a partially exclusive right of way will be required for a single transit facility. For the corridor option considering transit facilities on both Queens Quay East and Lake Shore both buses and streetcars will be considered for each corridor depending on the volume of riders estimated for the through versus local facilities

As a result it is proposed that the following planning alternatives will be further considered and evaluated for the East Bayfront EA and will be carried forward for consideration.

1. Do Nothing (accommodate future travel demand with bus service and the road network as identified in the Transportation Master Plan);
2. Streetcars in a partially exclusive right-of-way in the Queens Quay east corridor for the corridor option that only considers Queens Quay East and
3. A combination of buses and/or streetcars in exclusive lanes and/or mixed traffic for the corridor options that considers local transit service on Queens Quay East and express bypass service in the Lake Shore Boulevard corridor.

Both options 2 and 3 above will be evaluated in the context of various possible network configurations including:

- direct service from Queens Quay West to Queens Quay East
- a streetcar connection from Union Station to Castle Frank station via Queens Quay and Parliament Street
- express transit service from Union Station to the Port Lands and the south-east part of the City

6.4.2 Assessment of Planning Alternatives

Planning alternatives will be generated and assessed with specific regard for the "Key Considerations" described in Chapter 5. Planning alternatives will be compared to the "do nothing" approach and the preferred corridor and technology option(s) will be selected for generation of design alternatives. A preliminary set of proposed evaluation criteria are provided in Appendix C. It is expected that these criteria will be refined through the public consultation process during the study.

6.5 DESIGN ALTERNATIVES (ALTERNATIVES METHODS OF CARRYING OUT THE UNDERTAKING)

6.5.1 Overview

Alternative methods are essentially different ways to accommodate the undertaking within a chosen corridor. With respect to accommodating streetcars within the Queens Quay east corridor there are a significant number of location and operational issues to consider in arriving at various alternative designs. Those issues include:

1) The location of streetcar line within road allowance;
2) Location of underground entrance (portal);
3) Location of Redpath railway spur;
4) Connection to Cherry and Port Lands;
5) Overall width of the right-of way noting Council direction to consider ways to minimize the width of the right of way;
6) Location of transit stops;
7) Streetscaping and public realm design; and
8) Configuration of the underground loop under Bay Street.

6.5.2 Assessment of Design Alternatives

Alternative designs will be developed, and refined, for one or more preferred corridor/technology combinations identified through the assessment of planning alternatives described in section 6.4. This will be done with specific regard for the "Key Considerations" described in Chapter 5. Alternative designs will be evaluated and recommendation for construction of transit facilities (if any) will be developed based on a formal set of evaluation criteria. A preliminary set of proposed criteria are provided in Appendix C and it is expected that these criteria will be refined through the public consultation process during the study.

7. ENVIRONMENTAL ASSESSMENT WORK PLAN – WEST DON LANDS

7.1 STUDY AREA

The West Don Lands study area is located within the City's Ward 28 and is defined as the lands east of Parliament Street, south of King Street, west of the Don River and north of the Gardiner Expressway. The West Don Lands is a large precinct of approximately 80 acres; development will need to be implemented over a number of years, with full build-out taking approximately fifteen years. According to the West Don Lands Precinct Plan, the focus of initial development will include the area south of Front Street and east of Cherry Street (Division 1). The EA Study Area for the West Don Lands including identification of the precinct boundaries is provided in Exhibit 7.1.

Exhibit 7.1 – West Don Lands Study Area

7.2 DESCRIPTION OF THE EXISTING ENVIRONMENT

Secondary source environmental research has been undertaken during the course of preparing the EA ToR. The existing environment has previously been documented in the West Don Lands Class EA Master Plan (March 2005). The following summarizes the notable environmental features in the broader area.

7.2.1 Existing Transit

The TTC operates several bus and streetcar routes adjacent to and through the West Don Lands as noted below (to be confirmed):

- **Route 65 - Parliament**

  Provides bus service between the castle Frank subway station of the Bloor-Danforth subway line and the downtown line via front Street. The Parliament (65D) provides extended service during the summer along Mill Street and Eastern Avenue;

- **Route 72A – Pape**

  Provides bus service between Union Station and Pape Station via Commissioner Street through the Port Lands. In the West Don Lands this route uses Cherry Street from the Port Lands to Mill St., Mill St between Cherry St. and Parliament St. and Parliament St between Mill St and Front Street.

- **Route 143 - Downtown Beach Express**

  Express bus service along Queen Street through the Beaches community across the Don River to Eastern Avenue Diversion and Front Street. There are no stops neat the West Don Lands;

- **Route 504 - King Streetcar**:

  Connects the north edge of the West Don Lands to downtown Toronto. To the east, the King streetcars cross the Don River on the Queen Street bridge to Broadway Avenue where they connect to Broadview station on the Bloor-Danforth subway line;

- **Route 503 - Kingston Road Streetcar:**

  Operates on Kingston Road, Queen Street and King Street between Victoria Park Avenue and York Street; and

- **Route 508 - Lake Shore Streetcar:**

  Provides service on King Street from Long Branch, through the downtown area to Parliament Street.

7.2.2 Existing Roads

As noted in the West Don Lands Class EA Master Plan, the West Don Lands is well connected in the east/west direction, however it is poorly connected in the north/south direction. Most east/west streets in the West Don Lands penetrate Downtown to the west; however, only Cherry

Street to the south and Sumach Street and Bayview Avenue to the north connect to neighbourhoods beyond the site. Because the West Don Lands are essentially vacant, the existing transportation patterns are primarily regional; that is, most on-site traffic is through-traffic, and is not destined to, or originating from, the site itself, but rather to the Downtown. Furthermore, as noted in the Mater Plan document, Eastern Avenue is the most important commuter route as it collects travellers from the Don Valley Expressway and the east side of Toronto. Bayview Avenue is another important commuter route, as it collects travellers from the north and distributes them to Front Street, Mill Street, or circles them back to Queen or King Streets.

In response to the Precinct Plan all roads within the West Don Lands are being reconstructed and, in many instances, along a new alignment.

7.2.3 Natural (Terrestrial) Environment

The West Don Lands precinct study area is an extensively developed environment including roads, a rail corridor, and industrial, commercial and residential buildings. Furthermore, as part of a flood protection initiative, the current land form is undergoing extensive change (major earthworks). As a result there are no terrestrial environmental features of significance that occur in this area.

7.2.4 Natural (Aquatic) Environment

There are no watercourses traversing the West Don Lands. At the eastern boundary of the study area is west of the Don River, which originates in York Region and discharges into Lake Ontario via the Keating Channel. According to the Master Plan, aquatic habitat in the Lower Don River adjacent to the West Don Lands has been heavily impacted by urbanization throughout the watershed.

7.2.5 Socio-economic Environment

The majority of the lands in the West Don Lands are owned by the Province of Ontario and managed by the Ontario Reality Corporation (ORC). There are only a few privately owned parcels of land. Land use designations are derived from the City of Toronto Central Waterfront Secondary Plan, defined by the West Don Land Precinct Plan.

7.2.6 Cultural Environment

There is no apparent current use of the lands used by First Nations for traditional uses (West Don Lands Class EA, page 38).

7.3 DESCRIPTION OF THE FUTURE ENVIRONMENT

Future population and employment

Population - approximately 11,000 residents (which includes 860 school aged children);

- Employment – approximately 4,400 employeezs; and
- Housing targets – 6,000 total units (which includes a minimum of 1200 affordable rental units and 300 low-end-of market units).

Land use proposed in the precinct plan

- Total area – approximately 32 hectares (80 acres);
- Land use type – employment and residential functions;

Further investigations, including secondary source reviews and field investigations will occur during the EA to inventory the existing environment as defined by the OEAA.

7.4 PLANNING ALTERNATIVES (ALTERNATIVES TO THE UNDERTAKING)

7.4.1 Description and Statement of Rationale for Alternatives

As noted previously, the primary purpose for the West Don Lands EA Study is:

- **To determine the transit facilities appropriate to serve the long term residential, employment, tourism and waterfront access needs in the study area while achieving the City's and TWRC's objectives for land use, design and environmental excellence.**

As part of the West Don Lands EA study there are a number of planning alternatives that can be considered in arriving at a recommended alternative. These will be compared to a "do nothing" alternative that must also be considered in the process.

In the case of the provision of transit services, in the "do nothing" alternative it is assumed that the TTC will to provide transit services to the area based on its normal service standards utilising the proposed street system without the construction of any transit-specific facilities. In this way the "do nothing" alternative is, in effect, a "business as usual" alternative. The "do nothing" alternative includes the provision of bus services into the area as continuations of existing routes and the introduction of a new bus routes. It is assumed that the frequency of service provided on these routes will reflect the actual passenger demand for the service based on the TTC normal financial standards.

In addition to the "do nothing" alternative there are both corridor and technology options to evaluate.

Corridors

With respect to corridors there are a number of possible options in the study area that will serve the existing and future development and provide connections north to the King streetcar service and beyond, south to connect to the future Port Lands development and south and west to connect to a new transit facility(s) serving the East Bayfront. The potential corridors that will be considered as part of the West Don Lands EA include:

1. Cherry Street from the crossing of the Keating Channel north to King Street East
2. Cherry Street from the crossing of the Don River north to Front Street, west to Parliament Street and north to King Street, and
3. Parliament Street from Queens Quay East north to King street

4. Parliament Street from Queens Quay East north to King street and continuing north to provide a link to the Bloor Danforth subway
5. A combination of services on Parliament and Cherry Streets

These corridors will be considered in the context of various possible network configurations including:

- A rerouting of the existing 504 KING streetcar service from the Yonge Subway to operate through the study area directly to Broadview Station;
- a service operating on King Street from the Yonge Subway through the study area which, ultimately, extends into the Port Lands via Cherry Street; and
- a streetcar connection from Union Station to Castle Frank Station via Queens Quay and Parliament Street

Technologies

There are also a number of reasonable technology options that could be considered within the various study corridors.

These include:

1. Conventional bus service on existing roads (do nothing alternative);
2. Bus Service on a dedicated right-of-way (primarily on the surface);
3. Conventional Streetcar Service on existing roads;
4. Streetcar Service on a dedicate right-of-way (primarily on the surface); and

As discussed in section 3 of this ToR, a fully grade separated facility such as a subway is not required to service this level of demand and will not be considered further in the West Don Lands EA study.

7.4.2 Assessment of Planning Alternatives

Planning alternatives will be generated and assessed with specific regard for the "Key Considerations" described in Chapter 5. Planning alternatives will be compared to the "do nothing" approach and the preferred corridor and technology option(s) will be selected for generation of design alternatives. A preliminary set of proposed evaluation criteria are provided in Appendix C. It is expected that these criteria will be refined through the public consultation process during the study.

7.5 DESIGN ALTERNATIVES (ALTERNATIVES METHODS OF CARRYING OUT THE UNDERTAKING)

7.5.1 Overview

It should be noted that the following sections represents the minimum number of considerations for identifying the advantages and disadvantages of transportation alternatives. This listing is subject to refinement and modifications based on input received during the EA.

Alternative methods are essentially different ways to accommodate the undertaking within a chosen corridor. With respect to whichever corridor is chosen as the preferred corridor there are a number of design and operational issues that have to be considered. Those issues include:

1) Mixed traffic or exclusive right-of-way
2) Location of facility within right-of-way
3) The overall width and design of the right-of way
4) Location of transit stops
5) Connection to Queens Quay , Port Lands and the TTC system to the north
6) Streetscaping and public realm design

7.5.2 Assessment of Design Alternatives

Alternative designs will be developed, and refined, for one or more preferred corridor/technology combinations identified through the assessment of planning alternatives described in section 6.4. This will be done with specific regard for the "Key Considerations" described in Chapter 5. Alternative designs will be evaluated and recommendation for construction of transit facilities (if any) will be developed based on a formal set of evaluation criteria. A preliminary set of proposed criteria are provided in Appendix C and it is expected that these criteria will be refined through the public consultation process during the study.

8. ENVIRONMENTAL ASSESSMENT WORK PLAN – PORT LANDS

8.1 STUDY AREA

The Port Lands is a 400 hectare (1000 acre) waterfront area bounded by the Keating Channel/Don River and Lake Shore Boulevard in the north, the Toronto Inner Harbour in the west, Ashbridges Bay in the east and Lake Ontario and Tommy Thompson Park in the south. The EA Study Area for the Port Lands including identification of the precinct boundary is provided in Exhibit 8.1.

Exhibit 8.1 – West Don Lands Study Area

8.2 DESCRIPTION OF THE EXISTING ENVIRONMENT

Secondary source environmental research has been undertaken during the course of preparing the EA ToR. The following summarizes the notable environmental features in the broader area.

8.2.1 Existing Transit

The TTC currently operates three bus services through the Portlands area and they are as follows:

- **Route 72 - Pape**:

  Provides bus service between Pape Subway station and Union Station via Commissioners Street through the Port Lands. This route travels along Carlaw Avenue into the Port Lands, then along Commissioners Street and proceeds north from Cherry Street.

- **Route 83 - Jones**:

  Provides service into Port Lands from Donlands subway station by moving along Jones Avenue, venturing into the Portlands area via Leslie street, then moving along Commissioners Street. This route then makes returns through the same route by turn around in a loop on Commissioners street.

- **Route 172 - Cherry Street**:

  Provides bus service into Port Lands via Union Station in which it travels down Cherry Street and returns through the same way by turning around on the south end of Cheery Street.

- **Route 504 - King Streetcar**:

  Connects the north edge of the West Don Lands to downtown Toronto. To the east, the King streetcars cross the Don River on the Queen Street bridge to Broadway Avenue where they connect to Broadview station on the Bloor-Danforth subway line;

- **Route 503 - Kingston Road Streetcar:**

  Operates on Kingston Road, Queen Street and King Street between Victoria Park Avenue and York Street; and

  Routes 501/502 – Queen Street Streetcar:
  Operates on Queen Street from the Humber Loop in the west to Victoria Park Avenue in the east.

8.2.2 Existing Roads

Commissioners Street, Cherry Street and Leslie Street are the major roads, which services the Port lands area. Only Cherry Street and Leslie street provides access to the neighbouring areas while Commissioners Street provides a connection between the two aforementioned. Other minor streets such as Unwin Avenue and Villier Street are for local access into facilities.

8.2.3 Natural Environment

Natural areas adjacent to the study area include the Don River Valley System, Tommy Thomson Park (Leslie Street Spit) and the Toronto Islands located to the south of the study area. Considerable change will occur to the location and form of the natural environment in response to the Don Mouth Naturalization and Port Lands Flood Protection Project

8.2.4 Socio-economic Environment

The Port Lands comprise a mix of existing land uses including industrial (paper manufacturing, material recovery facilities, construction supplies and film studios), municipal services (works yards, TTC bus garage and Toronto Hydro) and recreational uses (both parklands as well as entertainment – restaurant/nightclubs).

North of Lake Shore Boulevard, the land use transitions from industrial/ commercial to predominantly residential.

8.2.5 Cultural Environment

The existing cultural landscape of the Port Lands is marked by many years of inactivity and minimal development, although parts of the formerly industrial area are now vacant and awaiting redevelopment.

The Sustainability Framework provides guidelines to promote and protect cultural resources, including creating cultural and heritage destinations and creating a strong public image. The TWRC will be responsible for implementing and monitoring these activities. Unique issues for the Port Lands to be considered include:

- Providing information about the historical development of the Port Lands;
- Educational and interpretive opportunities though streetscape public realm design; and
- Preservation and adaptive reuse of the buildings that are the industrial heritage of the Port Lands.

Major recreational facilities in the Port Lands will evolve in three potential classes: Regional Sports Facilities; Commercial Sports Facilities with a city wide or regional base and Local Recreational facilities that support mixed use development within the Port Lands or within the individual precincts.

8.3 DESCRIPTION OF THE FUTURE ENVIRONMENT

Future population and employment

- Total area – approximately 400 hectares (1000 acres)
- Land use type – mixed use (residential, employment, industrial)
- Population - approximately 32,900 residents; and
- Employment – approximately 24,700 employees.

8.4 PLANNING ALTERNATIVES (ALTERNATIVES TO THE UNDERTAKING)

8.4.1 Description and Statement of Rationale for Alternatives

As noted previously, the primary purpose for this EA Study is :

- To determine the transit facilities appropriate to serve the long term residential, employment, tourism and waterfront access needs in the study area while achieving the City's and TWRC's objectives for land use, design and environmental excellence.

As part of the Port Lands EA study there are a number of planning alternatives that can be considered in arriving at a recommended alternative. These will be compared to a "do nothing" alternative that must also be considered in the process.

In the case of the provision of transit services, in the "do nothing" alternative it is assumed that the TTC will to provide transit services to the area based on its normal service standards utilising the proposed street system without the construction of any transit-specific facilities. In this way the "do nothing" alternative is, in effect, a "business as usual" alternative. The "do nothing" alternative includes the provision of bus services into the area as continuations of existing routes and the introduction of a new bus route on Unwin and Lake Shore Boulevard.. It is assumed that the frequency of service provided on these routes will reflect the actual passenger demand for the service based on the TTC normal financial standards.

In addition to the "do nothing" alternative there are both corridor and technology options to consider as part of the "planning alternatives".

Corridors

With respect to corridors the Port Land EA will have to address both north-south and east-west corridors in order to provide transit service to the majority of the Study Area (recognizing the vast size of the Port Lands precinct). The Lake Shore corridor is on the northern edge of the precinct, allows for a possible bypass route for cars, trucks and transit riders passing through the study area.

The Port Lands EA will connect to the East Bayfront and the West Don Lands precincts in the general vicinity of Cherry Street and Lake Shore / Queens Quay. Possible northerly connections via Broadview, Carlaw and Leslie Street will also be considered.

Technologies

There are also a number of technology options that could be considered in the study corridor. These include the following:

1. Conventional Bus Service on existing roads (the "do nothing" alternative);
2. Bus Service on a dedicated right-of-way (primarily on the surface);
3. Conventional Streetcar Service on existing roads;
4. Streetcar Service on a dedicate right-of-way (primarily on the surface); and

As discussed in section 3 of this ToR, a fully grade separated facility such as a subway is not required to service this level of demand and will not be considered further in the Port Lands EA study.

As a result it is proposed that the following planning alternatives will be further considered and evaluated for the East Bayfront EA and will be carried forward for consideration.

1. Do Nothing (accommodate future travel demand with the road network as identified in the Transportation Master Plan);
2. Conventional Bus Service on existing roads;
3. Conventional LRT/Streetcar Service on existing roads;
4. Bus Service on a dedicated right-of-way (primarily on the surface);
5. LRT/Streetcar Service on a dedicate right-of-way (primarily on the surface); and
6. Fully Grade Separated Transit Facility (i.e. subway or elevated people mover).

It is possible that more than one of these planning alternatives will be carried forward to the alternative design phase of the study.

8.4.2 Assessment of Planning Alternatives

Planning alternatives will be generated and assessed with specific regard for the "Key Considerations" described in Chapter 5. Planning alternatives will be compared to the "do nothing" approach and the preferred corridor and technology option(s) will be selected for generation of design alternatives. A preliminary set of proposed evaluation criteria are provided in Appendix C. It is expected that these criteria will be refined through the public consultation process during the study.

8.5 DESIGN ALTERNATIVES (ALTERNATIVES METHODS OF CARRYING OUT THE UNDERTAKING)

8.5.1 Overview

It should be noted that the following sections represents the minimum number of considerations for identifying the advantages and disadvantages of transportation alternatives. This listing is subject to refinement and modifications based on input received during the EA.

Alternative methods are essentially different ways to accommodate the undertaking within a chosen corridor. With respect to accommodating streetcars within the Port Lands corridor there are a significant number of location and operational issues to consider in arriving at various alternative designs. Those issues include:

1) Mixed traffic or exclusive right-of-way
2) Location of facility within right-of-way
3) The overall width and design of the right-of way
4) Location of transit stops
5) Connection to Cherry, and East Bayfront/West don Lands; and
6) Streetscaping and public realm design.

8.5.2 Assessment of Design Alternatives

Alternative designs will be developed, and refined, for one or more preferred corridor/technology combinations identified through the assessment of planning alternatives described in section 6.4. This will be done with specific regard for the "Key Considerations" described in Chapter 5. Alternative designs will be evaluated and recommendation for construction of transit facilities (if any) will be developed based on a formal set of evaluation criteria. A preliminary set of proposed criteria are provided in Appendix C and it is expected that these criteria will be refined through the public consultation process during the study.

9. EA CONSULTATION PLAN

Consultation is an integral component of the Environmental Assessment process. The purpose of the consultation program is to provide input to assist the Project Team in making decisions throughout the IEA process. Consultation provides opportunities for two-way communication with interested stakeholders. Consultation activities also enable the identification of potentially significant environmental issues early in the decision making process and ensure that they are given appropriate consideration. The consultation program for the three IEAs is based on the following principles:

- All reasonable efforts will be made to ensure that potentially affected or interested parties are given the opportunity to participate in the consultation process;
- Stakeholders may provide input at any time during the study; however, structured opportunities for input will occur at key study stages;
- The Project Team will constructively address input received during the consultation process;
- The Project Team will make reasonable efforts to resolve concerns; and
- Consultation plans and process will be sufficiently flexible to permit responses to new issues that may arise as the study proceeds.

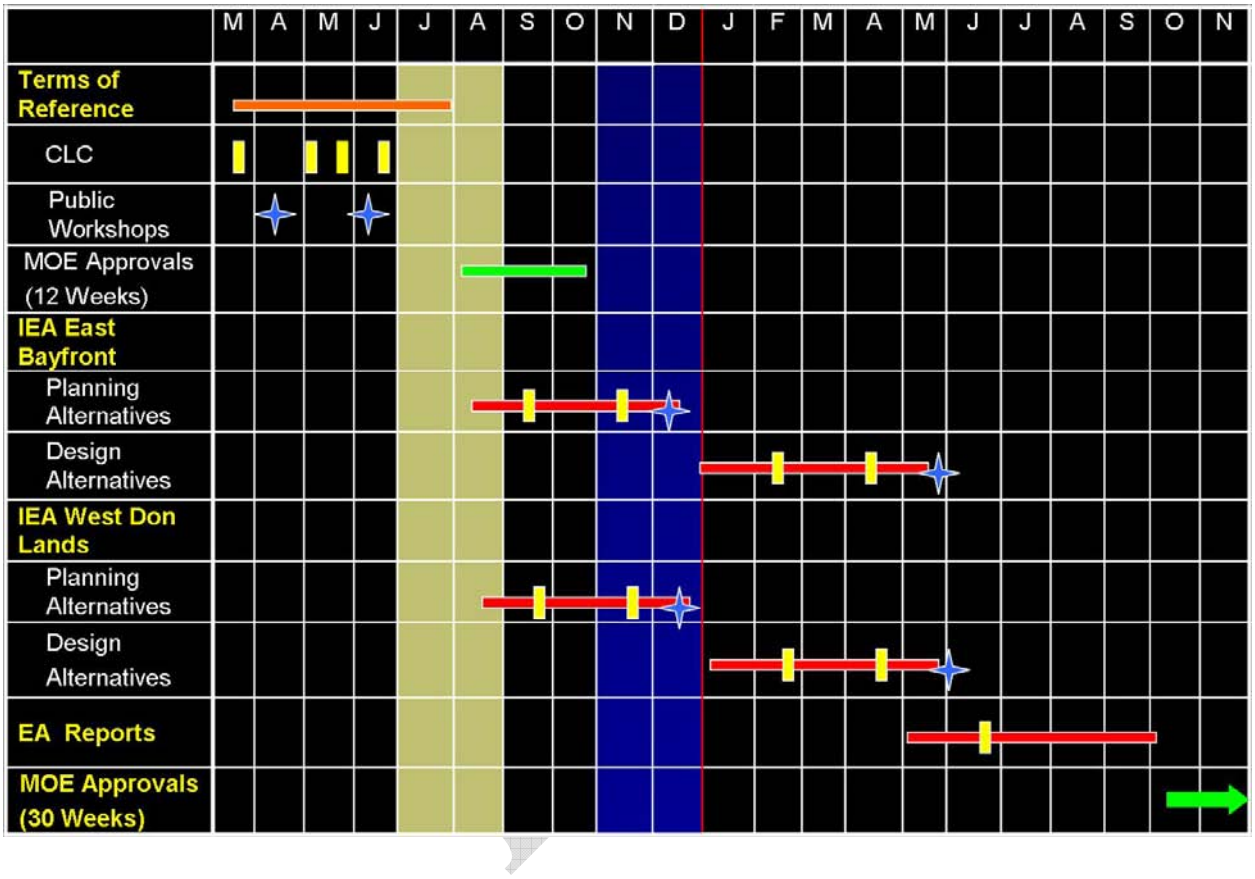
Various forms of consultation will take place throughout the different study steps. Consultation activities may not necessarily be limited to that described in this section. The Project Team may consider additional enhancements to the IEA consultation plan if deemed to be of value to the Studies.

The purpose of this chapter is to present the proposed plan for stakeholder consultation during the three IEAs. Stakeholders can be defined as any individual or group who has an interest in the study, who could be affected by the study or who can provide pertinent information regarding the study. Generally stakeholders include public/interest groups, regulatory agencies, First Nations and area municipalities. The stakeholders consulted in preparation of this ToR will form a starting point for establishing stakeholder contact lists during the three IEAs. A list of stakeholders consulted in preparation of this document is provided in the Consultation Record (under separate cover).

9.1.1 Preliminary Study Schedule

A preliminary study schedule for the Terms of Reference and for the Individula Eas for East Bayfront Transit and West Don Lands Transit is shown below in Exhibit 9.1.

Exhibit 9.1 - Preliminary Study Schedule



9.1.2 Overall Process for Stakeholder Consultation During the IEAs

Consultation with affected parties is an essential part of the IEA process and provides a mechanism for the proponent to define and respond to issues.

It is recognized that the identification and resolution of issues during each of the following stages of the IEAs will be a challenge. To this end, the public and agency / municipal consultation process outlined in this section is focused on facilitating meaningful dialogue with stakeholders to identify and address study issues as they arise so that the Project Team can make informed decisions. Various consultation tools and approaches (including meetings, presentations, etc.) will be utilized to identify and discuss study issues raised by stakeholders.

9.1.3 Public Consultation During the IEAs

The public has a major role and responsibility in determining the success of a public consultation program. The extent to which the public participates, the issues they raise and how such issues are resolved all influence the effectiveness of the consultation process. The proposed consultation plan encourages proactive communication, which will allow comments and views of the public to assist the Project Team in the decision making process.

Public Notification

The first component of the Public Consultation Plan will be to develop contact lists, which will include interested individuals, ratepayer groups, recreational groups, business groups, etc. located in the study area. The mailing list developed during the ToR will be the starting point for this stakeholder list. These stakeholders will be notified by letter/email of project activities including study start-up, Public Workshops, and follow-up activities (as appropriate). In addition, the Project Team will publish newspaper advertisements for each round of Public Workshops and the formal Environmental Assessment Reports submission

During the IEAs, additional notification tools and techniques will be considered and utilized where appropriate.

Public Workshops and Follow-up Activities

During the IEAs, it is proposed that two rounds of workshops will be held to coincide with the study steps depicted in the exhibit in Section 8.5.3. These workshops will be supplemented by follow-up activities where appropriate. Each round of workshops will include individual events held throughout the identified study area. The precise locations/venues and timing of each workshop will be determined during the IEAs based on project needs/issues and the availability of venues.

The first workshop will focus on obtain input on:

- The generation and evaluation of planning alternatives
- The generation of design alternatives
- A summary of the advantages and disadvantages of the various design alternatives
- Input on the preliminary analysis to assist in the selection of a preferred design alternative

The second Workshop will focus on obtain input on:

- The evaluation of design alternatives
- The preferred design alternative
- Possible refinements to the preferred design alternative
- Opportunities to mitigation potential adverse impacts of the preferred design alternative

Follow-up consultation activities will be held as necessary throughout the studies. It is expected that these activities will be very helpful to facilitate additional dialogue and attempt to resolve any outstanding concerns and issues during the process. Follow-up activities will be arranged to address specific project issues and concerns as they arise. The format of these activities will be flexible to reflect the type of Project Team - stakeholder interaction required to address a particular issue but could include stakeholder group meetings, kitchen table meetings, presentations, site walks, surveys, and other.

Summary Reports for workshops, follow-up activities and other consultation events will be prepared and posted on the project website in a timely manner.

Project Web Site

The Toronto Waterfront Revitalization Corporation (TWRC) has established a project website which will be maintained throughout the course of the IEAs. The website will host pertinent and up-to-date information regarding the project such as: notices of study commencement, notices of public events, project documents for information/review and the project process/schedule.

9.1.4 Community Liaison Committee During the IEAs

A Community Liaison Committee (CLC) was established to assist in the preparation of this ToR. The CLC will continue to function during the IEA studies to provide additional input to assist the Project Team's decision-making process. It is envisioned that four rounds of meetings will be held with the CLC to assist in the each IEA study. The following summarize the issues to be discussed at each CLC meeting:

CLC #1

- The generation of planning alternatives
- A summary of the advantages and disadvantages of the various planning alternatives
- Input on the preliminary analysis to assist in the selection of a preferred planning alternative

CLC #2

- The evaluation of planning alternatives
- The preferred planning alternative
- The generation of design alternatives
- A summary of the advantages and disadvantages of the various design alternatives
- Input on the preliminary analysis to assist in the selection of a preferred design alternative

CLC #3

- The evaluation of design alternatives
- The preferred design alternative
- Possible refinements to the preferred design alternative

CLC #4

- Possible refinements to the preferred design alternative
- Opportunities to mitigation potential adverse impacts of the preferred design alternative

9.1.5 Regulatory Agency and Municipal Consultation During the IEAs

Government agencies and other departments within the City of Toronto provide valuable input related to compliance issues (laws, regulations, policies and programs) and other areas of concern within their jurisdiction. These groups can offer valuable input and professional expertise and are often knowledgeable regarding local issues and can assist in the identification of local interest groups that should be consulted.

A Technical Advisory Committee (TAC) was established to assist in the preparation of this ToR. The specific agencies and City departments included on the TAC is outlined in the Consultation Record. Consultation with the TAC will involve reviewing, commenting and providing input to the environmental assessment studies, the technical analysis and the ongoing comment/input to the consultation process. TAC meetings will be held to coincide with key study stages/milestones. Additional meetings will be held with individual agencies during the IEAs as required to assist in agency specific issues.

Involvement with federal agencies is only anticipated to be required for the Port Lands IEA as no CEAA triggers or issues of federal jurisdiction are anticipated for the East Bayfront or West Don Lands IEAs (however, a representative of the Canadian Environmental Assessment Agency will be invited to the TAC meetings for these studies to determine an appropriate course of action if a CEAA trigger arises). The purpose of this consultation is to identify issues of federal jurisdiction, effectively address Canadian Environmental Assessment Act (CEAA) requirements during the EA process and coordinate provincial and federal approvals.

9.1.6 First Nations Consultation During the IEAs

(To be developed based on the results of consultation undertaken during the ToR)

10. CONSULTATION DURING THE PREPARATION OF THE TOR

To assist in preparing this ToR a number of consultation activities were undertaken including:

- (the actual ToR consultation activities will be documented here and in an appendix for the final ToR)

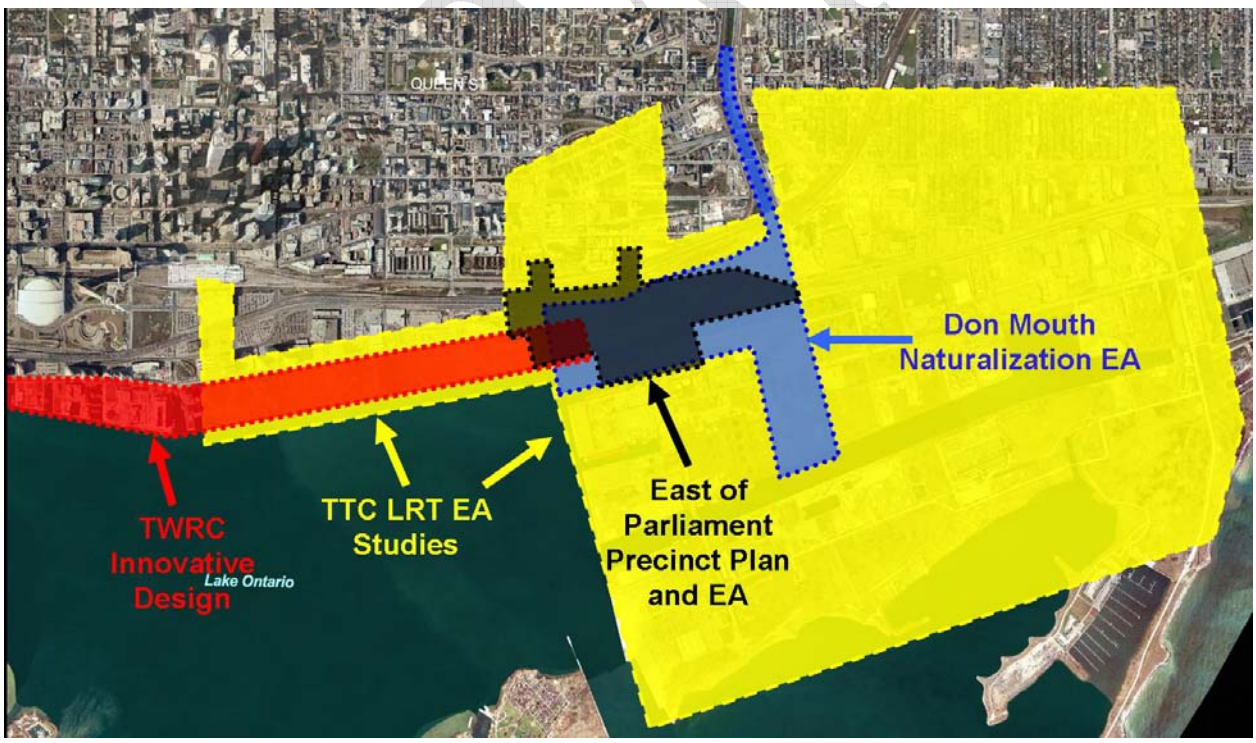
To facilitate the review of the draft ToR, copies were provided to all members of the Community Liaisson Committee, posted on the project website, and made available at a public workshop.

Details of the results of these consultation activities are included in Volume 2 – Consultation Record.

11. COORDINATION WITH CONCURRENT STUDIES

In addition to the transit EAs there are a number of other studies either in progress or about to be. These studies generally cover the area of the waterfront as shown in Exhibit 11.1 below. These key studies overlap the Transit Ea study areas and the results and progress of each study has to be taken into consideration in informing all of the other studies. The Terms of Reference for the Don Mouth Naturalization EA have just been submitted for Ministry of the Environment approval. The Innovative Design Competition for Queens Quay and the waters edge has just been awarded and will have an impact on the overall public realm and corridor right of way. The East of Parliament Precinct Plan and EA study has not yet been awarded but is expected to be in progress at the same tine as the transit EAs and will have an impact on the road alignment s in the Parliament Precinct.

Exhibit 11.1 – Concurrent Studies



12. OTHER APPROVALS REQUIRED

It may not be possible to address all approval requirements at the time of seeking OEAA approval. A number of subsequent approvals may require detail design and process information that is not available at the time of OEAA approval. TTC is committed to obtaining the necessary approvals at the appropriate time in the implementation phase.

The agencies responsible for issuing approvals will be consulted during the study to ensure that their interests and requirements are properly addressed. This will minimize the complications at

the time of approval, thus providing reasonable assurance that the approvals will be obtainable. The following approvals may be required:

- Municipal Official Plan amendment and zoning bylaw changes if needed.
- Water taking permit from MOE
- Sewage and water approvals, under the Ontario Water Resources Act.
- Municipal Noise bylaw amendments/exemptions if required during construction.
- Municipal building permits.
- Utility Approvals (Bell, Hydro etc.)
- Environmental Protection Act approvals for wastes generated
- Railway Approvals
- Federal Permits (Fisheries approvals, Navigable Waterways authorization, CTA approvals etc.) – Potentially required for the Port Lands IEA.
- TRCA approvals ("Fill, Construction, Alteration to Waterways" permit and DFO authorization).

12.1 PROCESS FOR AMENDING THE UNDERTAKING FOLLOWING EA APPROVAL

As part of the IEAs, an amending procedure will be developed to deal with changes to the preferred alternative that may occur following the approval by the Ontario Minister of the Environment. The amending procedure will:

- Define minor changes and major changes;
- Outline how the proposed changes will be examined;
- Detail the stakeholder consultation to be undertaken when considering the changes;
- Outline the documentation requirements; and
- Outline public review requirements.

The intent of the amending procedure is to allow changes to occur which address future conditions without having to submit an additional Environmental Assessment. The amending procedure could also be used to address alignment and station location issues if these could not be resolved during the Environmental Assessment.

12.2 CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) COORDINATION

The requirements of CEAA are triggered if a project is a federal project, requires federal land, is funded by a federal agency, or requires an approval by a federal agency. At this point in time the only project that may trigger CEAA is the Port Lands IEA. Potential triggers for that project

include Navigable Waters Protection Act Permits, Fisheries Act Permits, and approval by the Canadian Transportation Agency. No CEAA triggers or issues of federal jurisdiction are anticipated for the East Bayfront or West Don Lands IEAs (however, a representative of the Canadian Environmental Assessment Agency will be invited to the TAC meetings for these studies to determine an appropriate course of action if a CEAA trigger arises).

For the Port Lands IEA it is recognized that permits will not be obtained at this stage as typically detail design information would be required. Instead, if required, the CEA Screening will include enough information on potential impacts, mitigation measures and conceptual compensation strategies to allow the federal agencies to decide whether the project is likely to result in significant adverse environmental effects.

The provision of a project description with sufficient detail to allow federal authorities to determine whether they are likely to be triggered or have expert advice to offer is a crucial first step in obtaining input and direction from the federal authorities. This will be accomplished as early in the process as possible by consultation with the Canadian Environmental Assessment Agency likely following the selection of the preferred "alternative to" the undertaking. Federal authorities will be requested to participate according to their policies of "in until out". That is, federal authorities that may be triggered will participate in the assessment process in advance of a formal trigger.

Many of the requirements of CEAA are similar to the requirements of the Ontario Environmental Assessment Act. The key differences under CEAA are the requirements for:

- An analysis of the effects of the environment on the project;
- An analysis of effects of accidents and malfunction;
- All environmental effects that may result from the various phases of the project (construction, operations, modification, abandonment and decommissioning);
- An analysis of the effects of a project related environmental change on the current use of land and resources for traditional purposes by aboriginal persons;
- A determination of the need for and requirements of a follow-up program;
- An analysis of the likelihood of significant adverse environmental effects; and,
- A cumulative effects assessment.

The scope of work that is proposed to be undertaken to meet the requirements of the OEAA should be sufficient to provide the information to address the above issues. However, it must be recognized that it is the Responsible Authorities that determine the appropriate scope of assessment required for a screening under CEAA. Therefore, some additional work may be required based on consultation with the authorities.

As part of the Port Lands IEA, the City will attempt to coordinate Federal and Provincial EA requirements. The overall objective is to coordinate the technical and consultation requirements of both Acts to minimize duplication. Documentation will also be coordinated as much as possible. It should be noted that this ToR will not limit the scoping activity that the Federal Authorities will undertake once CEAA is formally triggered.

13. MONITORING

TTC is committed to the preparation of a compliance monitoring strategy and schedule during the preparation of the IEA studies, to measure impacts such as noise, water quality and air quality effects associated with the construction and operation of the undertaking. The monitoring strategy will be developed in consultation with the Environmental Assessment and Approvals Branch of the MOE. The proponent must comply with the terms and conditions as well as the commitments identified in the IEAs and report to MOE on how the compliance has been achieved.

The framework for the monitoring strategy may include, but not be limited to, the following elements:

- Compliance monitoring and effects monitoring;
- A plan for implementation of mitigation and contingency measures;
- Long-term post construction monitoring and contingency measures and agreed upon triggers for employing contingency plans;
- Provisions for monitoring water quality and quantity, air quality, and soils;
- Provisions to ensure compliance with IEA commitments (e.g. an independent environmental inspector, compliance committee, contract specifications) to ensure that all environmental standards and commitments for both construction and operation work are met; and
- Details on monitoring and reporting relationships.

Baseline information on existing environmental conditions is a critical part of the monitoring strategy and will therefore be emphasized in the IEAs.

The IEAs will describe how the proponent will achieve compliance (e.g. technical agencies approval and satisfy public interest) and how the compliance will be reported. The proponent or its contractor will be required to obtain all permits from regulatory agencies (e.g. MOE, TRCA, MNR, DFO, Navigable Waters Protection) prior to construction and will ensure compliance with all permits conditions throughout the work.

14. DOCUMENTATION

To provide a clear, understandable and traceable planning process, the information gathered in preparation for and during the study will be documented as follows:

1) Various working and technical papers will document the inventory and analysis of existing and planned future conditions (including identification of data sources, methodology, and their limitations) and the public/agency input into it.

2) Environmental Assessment Reports (IEA Reports) will document the following:

- Executive Summary (including list of technical reports and a map showing the location of the preferred undertaking);
- Purpose and Rationale for the Undertaking;
- Evaluation of Planning Alternatives;
- Evaluation of Design Alternatives;
- The environment that will be affected;
- The proposed mitigation measures;
- The consultation undertaken; and,
- Commitments to future action, including external approvals known to be required.

The IEA Reports will be submitted to the Minster of the Environment for a decision on approval. The Minister of the Environment will then initiate a formal public and government review of the IEA Reports to assist in making a decision on whether to approve the undertaking.

Reference copies of the IEA Reports will be made available at local libraries, City Hall, City and the MOE Regional and/or District office.

APPENDIX A

GLOSSARY OF TERMS

Alternative to the Undertaking (Planning Alternatives)

In the context of the Environmental Assessment Act, alternatives to the undertaking are functionally different ways of addressing an identified problem or opportunity. For example, Alternatives to the Undertaking to address the transportation need would include: road improvements, transit improvements, and the "Do Nothing" alternative. For the purpose of this ToR and subsequent EA these types of alternatives will be referred to as planning alternatives.

Alternative Methods of Carrying out the Undertaking (Design Alternatives)

Once a preferred "alternative to" a transportation problem has been identified (e.g. rapid transit), alternative methods of carrying out the undertaking may include bus or rail technology in addition to different locations. For the purpose of this ToR and subsequent EA these types of alternatives will be referred to as design alternatives.

Bus Rapid Transit (BRT)

Bus Rapid Transit refers to the operation of buses in a partially-exclusive right-of-way, to provide a quality of service comparable to other "rapid transit" services with respect to speed and reliability. Typically BRT services are physically separated from parallel auto travel lanes, are provided with signal priority at intersections and have defined passenger platforms often with shelters and fare collection equipment. BRT can also include such things as automated passenger information systems and system "branding" initiatives.

Class Environmental Assessment

A Class Environmental Assessment is an environmental assessment carried out in accordance with the procedures identified in a "Parent" Class Environmental Assessment that has been approved by the Ontario Minister of the Environment. If the project follows the process outlined in the "Parent" Class Environmental Assessment it is considered pre-approved and does not require formal approval from the Ontario Minister of the Environment. Currently there is no "Parent" Class Environmental Assessment for municipal transit projects. As such, municipal transit project must be undertaken as Individual Environmental Assessments.

Canadian Environmental Assessment Act (CEAA)

A Federal Act, which came into force in 1995 (amended in 2003), requiring projects where the Government of Canada has decision-making authority to undertake an Environmental Assessment to determine whether the project is likely to result in a significant adverse environmental effect. CEAA is "triggered" if a Federal Authority is the proponent for the project, provides land, provides funding or is required to provide an approval.

The Federal Authority that "triggers" CEAA is referred to as the "Responsible Authority" and has the responsibility to ensure that an environmental assessment is undertaken prior to exercising its duty.

The Canadian Environmental Assessment Agency has the legal obligation to coordinate the CEAA process when an EA is also required under another jurisdiction. The Canadian Environmental Assessment Agency role is to facilitate coordination and co-operation among Federal, Provincial and Municipal Agencies.

Consultation Process

The process during the course of the planning study, in which the proponent consults with various agencies, groups, and the general public, in order to identify and attempt to resolve any concerns or issues before formal submission to the Ontario Ministry of the Environment.

"Do Nothing" Alternative

One way of demonstrating the benefits of a recommended undertaking is to compare the advantages and disadvantages of the undertaking against the status quo or "Do Nothing" alternative. In the context of a transportation project, the "Do Nothing" alternative would mean that only normal operations, maintenance and repairs of existing facilities would be carried out, however, no major improvements or undertakings would be initiated.

Environment

The Ontario Environmental Assessment Act defines the environment as:

(a) air, land or water,

(b) plant and animal life, including human life,

(c) the social, economic and cultural conditions that influence the life of humans or a community,

(d) any building, structure, machine or other device or thing made by humans,

(e) any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from human activities, or

(f) any part or combination of the foregoing and the interrelationships between any two or more of them,

in or of Ontario;

Environmental Assessment Report (EAR)

A report documenting the planning process carried out by the proponent, following the requirements of the Environmental Assessment Act. Once the Report is approved by the Minister of the Environment, no additional approval of the proposed undertaking is needed under the Ontario Environmental Assessment Act.

Light Rail Transit (LRT)

Light Rail Transit is the operation of streetcar/tram-style rail vehicles in a partially- or fully-exclusive right-of-way. Typically LRT systems have protected passenger platforms or stations and have a high degree of priority through intersections when operating in a partially-exclusive right-of-way. The term "light rail" refers to the fact that streetcar/tram-type vehicles are significantly lighter than the "heavy rail" cars typically used in subway and commuter rail systems. Streetcar/tram type vehicles can be operated in single units or in multiple car trains however multiple car trains typically require a greater degree of exclusivity along the right-of-way in which they operate.

Mitigation

Actions taken to reduce the effects of another action. If a particular alignment alternative, for example, has negative impacts then the proponent is obliged to attempt to identify any reasonable ways of reducing these impacts.

Ontario Environmental Assessment Act (OEAA)

An Ontario Act proclaimed in 1975 which requires project proposed by a provincial or municipal body to be subjected to a defined planning process which requires the proponent to document need, look at a full range of reasonable alternatives, and assess the impacts to the environment. The first step in the Environmental Assessment process is to prepare and obtain approval of a Terms of Reference.

Proponent

The body proposing to undertake a project and who is, therefore, required by law to prepare an environmental assessment in accordance with the Environmental Assessment Act.

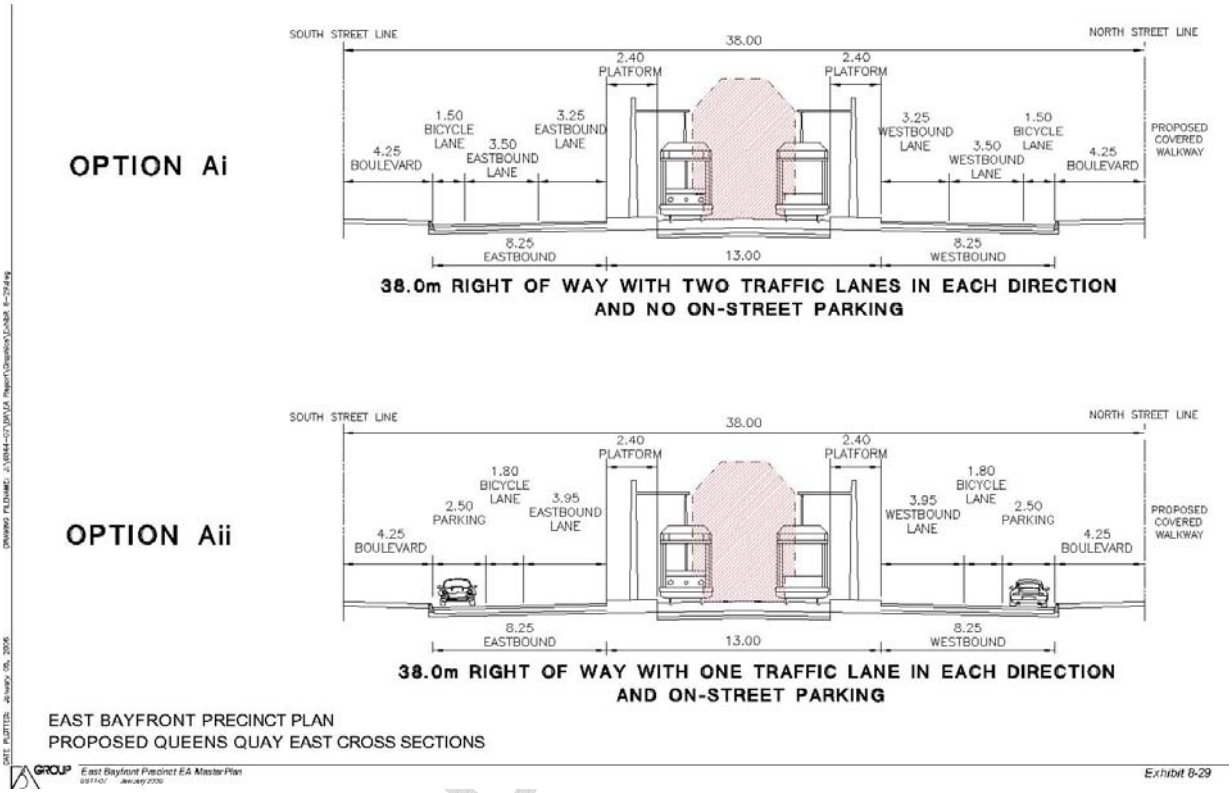
Rapid Transit Service

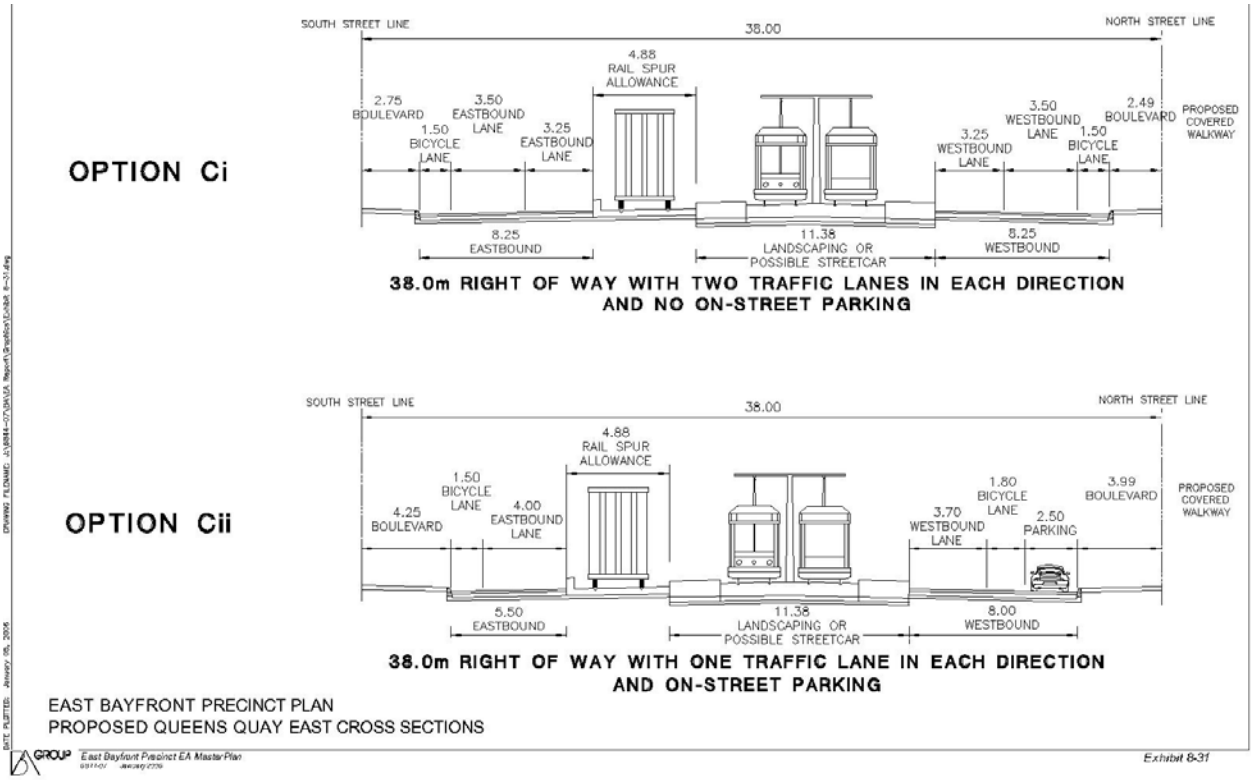
Rapid Transit Service is transit service on an exclusive or semi-exclusive right of way, which allows transit vehicles (bus or rail) to travel more quickly than would be possible in mixed traffic.

APPENDIX B

QUEENS QUAY ROW RECOMMENDATIONS FROM EAST BAYFRONT PRECINCT PLAN

Proposed Rights-of-Ways for Queens Quay from East Bayfront Precinct Plan





APPENDIX C

EVALUATION CRITERIA

Criteria for Assessing PLANNING Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Planning Indicators [1] "The degree to which the alternative…"**
LAND USE		
Local population / employment growth in the study area	Must be capable of accommodating travel demand from forecasted development.	Supports future road and transit capacity requirements for forecasted development.
City, TWRC and Provincial Policies	Must meet City's Official Plan Policies and Principles.	Supports the City's Secondary Plan and EA Master Plan objectives. Supports the TWRC's Precinct Plan and Sustainability Framework. Supports Provincial growth management plans, policies, and objectives.
URBAN DESIGN		
Streetscaping		**(Considered during evaluation of Design Alternatives).**
Width of transportation facilities		**(Considered during evaluation of Design Alternatives).**
Public spaces and the pedestrian realm		**(Considered during evaluation of Design Alternatives).**
TRANSPORTATION		
Auto dependence	Must provide transit service quality at least as good as comparable communities (such as the St. Lawrence neighbourhood).	Maximizes non-auto (transit, pedestrian and cycling) modal split for trips to, and within, the study area. Maximizes non-auto (transit, pedestrian and cycling) modal splits for trips through the study area.
Transit	Must provide transit service to majority of future inhabitants within 500m of transit. Must be able to connect to other planned Waterfront Precincts at boundaries of study area.	Provides attractive transit service (reliability, speed, few transfers). Maximizes population and employment within 300m of transit. Provides flexibility and adaptability for staging and expansion by preserving opportunities for existing and future connections. Provides for transit travellers wishing to travel through the study area but who are not destined for locations in the study area.
Vehicles		Provides for local auto access Provides for auto travellers wishing to travel through the study area but who

[1] Indicators are to be refined based on public comment during the ToR and the IEA

Criteria for Assessing PLANNING Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Planning Indicators [1] "The degree to which the alternative…"**
		are not destined for locations in the study area. Connects to other planned Waterfront Precincts at boundaries of study area..
Barrier Free Design	Must a*ccommodate people with mobility difficulties*	**(Considered during evaluation of Design Alternatives).**

Criteria for Assessing PLANNING Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Planning Indicators [1] "The degree to which the alternative…"**
Cyclists		**(Considered during evaluation of Design Alternatives)**
Pedestrians		**(Considered during evaluation of Design Alternatives).**
Emergency vehicle operations		**(Considered during evaluation of Design Alternatives).**
SOCIO-ECONOMIC ENVIRONMENT		
Automobile use in and through area		Minimizes through auto travel on local roads.
Tourism and waterfront access		Provides transit stop access to attractions.
Existing and future businesses		Affects existing properties Encourages commercial activity Minimizes adverse effects to Redpath freight rail spur. Minimizes interference with rail service on the CN operations at the Cherry Street crossing. Maximizes services within 300 m of concentrated commercial activity within precinct plans. Minimizes EMI adverse effects (after construction)
Existing and future residences		Affects existing properties Minimizes noise adverse effects (after construction) Minimizes vibration adverse effects (after construction)
NATURAL ENVIRONMENT		
Air Quality		Minimizes adverse effects to Air Quality
Aquatic habitats		**(Considered during evaluation of Design Alternatives).**
Vegetation		**(Considered during evaluation of Design Alternatives).**
Water quality		**(Considered during evaluation of Design Alternatives).**

Criteria for Assessing PLANNING Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Planning Indicators [1] "The degree to which the alternative…"**
CULTURAL ENVIRONMENT		
Built Heritage Features		Minimizes built heritage features affected.
Cultural Landscapes		Minimizes cultural landscapes affected.
Archaeological Features		Minimizes archaeological features affected.
First Nations peoples and activities		Minimizes adverse effects to lands and resources used for traditional purposes.
COST		
Capital Costs		Minimizes construction and transit vehicle acquisition costs.
Property acquisition		Minimizes property acquisitions.
Operating Costs		Minimizes the net operating cost.

Criteria for Assessing DESIGN Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Design Indicators** 2 **"The degree to which the alternative…"**
LAND USE		
Local population / employment growth in the study area	In Accordance with Design Standards	Supports future road and transit capacity requirements for forecasted development.
City, TWRC and Provincial Policies		Supports City's Secondary Plan, EA Master Plans and standards for transportation planning and design. Supports TWRC's Sustainability Framework including car free zones, and Design Excellence objectives. Supports Central Waterfront Design Competition Results.
URBAN DESIGN		
Streetscaping		Supports sustainable landscaping / urban forestry
Width of Transportation facilities		Minimizes right-of-way width.
Public spaces and the pedestrian realm		Maximizes potential to enhanced public spaces and cultural opportunities including public art opportunities. Supports potential for sidewalk enhancement / improvements
TRANSPORTATION		
Auto dependence		Maximizes non-auto (transit, pedestrian and cycling) modal split for trips to, and within, the study area. Maximizes non-auto (transit, pedestrian and cycling) modal splits for trips through the study area.
Transit		Provides attractive transit service (reliability, speed, few transfers) Maximizes population and employment within 300m of transit. Provides flexibility and adaptability for staging and expansion by preserving opportunities for existing and future connections.

[2] Indicators are to be refined based on public comment during the ToR and the IEA

Criteria for Assessing DESIGN Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Design Indicators** 2 **"The degree to which the alternative…"**
	In Accordance with Design Standards	Provides feasible transit operations at connecting points (i.e. King Street, Union Loop etc.). Provides for transit travellers wishing to travel through the study area but who are not destined for locations in the study area. Maximizes safety
Vehicles		Connects to other planned Waterfront Precincts at boundaries of study area. Provides access to blocks at identified intersections in precinct plans. Maximizes safety Provides for auto travellers wishing to travel through the study area but who are not destined for locations in the study area.
Barrier Free Design		Provides barrier free access (Part of Design Standards).
Cyclists		Provides connections to future cycling networks Provides for on-street and off-street cycling facilities as identified in the Secondary Plans and Precinct Plans. Maximizes safety
Pedestrians		Minimizes intersection waiting and crossing times. Maximizes cross-street access by minimizing crossing distance. Minimizes distance from transit stops to centres of interest. Accommodates safe and pleasant pedestrian sidewalks of a sufficient width as identified n the Precinct Plans Provides Waterfront and Don Valley trail connections. Maximizes safety
Emergency vehicle operations		Minimizes emergency response time.
SOCIO-ECONOMIC ENVIRONMENT		
Automobile use in and through area		Minimizes through auto travel on local roads.
Tourism and waterfront access		Provides transit stop access to attractions.
Effect on existing and future businesses		Affects existing properties

Criteria for Assessing DESIGN Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Design Indicators** 2 **"The degree to which the alternative…"**
		Affects parking for existing businesses. Provides delivery and loading access. Minimizes adverse effects to Redpath freight rail spur. Minimizes interference with rail service on the CN operations at the Cherry Street crossing. Minimizes EMI adverse effects (after construction)
Effects on existing and future residences		Minimizes adverse effects on existing residences (number of residences directly affected). Minimizes noise adverse effects (after construction) Minimizes vibration adverse effects (after construction)
NATURAL ENVIRONMENT		
Air Quality		Minimizes adverse effects to Air Quality.
Aquatic habitats		Minimizes adverse effects to aquatic habitats.
Vegetation		Minimizes adverse effects to vegetation.
Water quality		Maximizes potential for stormwater quality control. Minimizes adverse effects to existing stormwater facilities.
CULTURAL ENVIRONMENT		
Built Heritage Features		Minimizes Built heritage features affected.
Cultural Landscapes		Minimizes Cultural landscapes affected.
Archaeological Features		Minimizes Archaeological features affected.

Criteria for Assessing DESIGN Alternatives		
Criteria	**Required Minimum "The alternative…"**	**Possible Design Indicators** 2 **"The degree to which the alternative…"**
First Nations peoples and activities		Minimizes adverse effects to land and resources used for traditional purposes.
COST		
Capital Costs		Minimizes construction and transit vehicle acquisition costs.
Property acquisition		Minimizes property acquisitions.
Operating Costs		Minimize the net operating cost.