

APPENDIX A
Public Consultation Materials

Public Information Centre #1

Public Information Centre #1

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**CLASS ENVIRONMENTAL ASSESSMENT – MASTER PLAN
NOTICE OF STUDY COMMENCEMENT AND
PUBLIC INFORMATION CENTRE #1**

West Don Lands Precinct Planning Area

The Toronto Waterfront Revitalization Corporation in cooperation with the City of Toronto is carrying out a Class Environmental Assessment (EA) Master Plan Study to address water, sanitary servicing, stormwater management, and transportation needs (including provision for transit), for a section of the West Don Lands Precinct Planning Area outside of the area subject to the Don River Naturalization EA. West Don Lands is an 80 acre area located generally east of Parliament Street, south of King Street, west of the Don River and north of the Gardiner Expressway. A separate precinct planning exercise will design new districts of public and neighbourhood spaces along the waterfront. This study is being conducted in accordance with the requirements of the *Municipal Class Environmental Assessment, June 2000*, which is an approved process under the Environmental Assessment Act.

Public consultation is an important element of this study and the broader West Don Lands Precinct Planning process. Consultation on the West Don Lands Class EA Master Plan will take place during the Open House component of the next West Don Lands Public Forum:

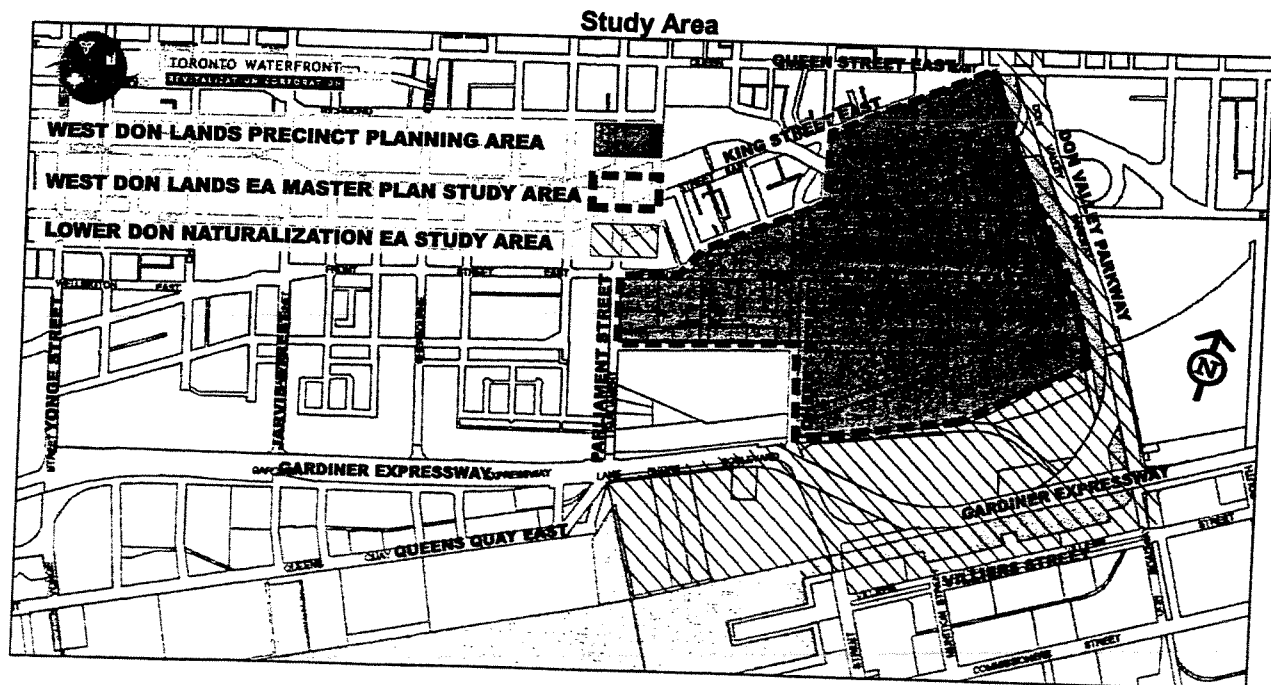
West Don Lands Public Forum

When: Thursday February 12, 2004
Where: Novotel Hotel, 45 The Esplanade, Champagne Ballroom
EA Master Plan Consultation: 5:00 – 7:00 p.m.
Precinct Plan Consultation: 7:00 – 9:30 p.m.

The consultation plan provides many opportunities for the public to participate in the Class EA Master Plan Study process. The purpose of the study is:

“to address the sanitary, water, stormwater, and transportation infrastructure servicing requirements to support the proposed land uses including new and improved parks and public spaces that are proposed as part of the revitalization of the West Don Lands precinct of the Toronto waterfront.”

The February 12, 2004 Open House will focus on seeking input from the public on the opportunity/problem, and alternative solutions. The map shows the approximate limits of the study area.



If you have any questions or wish to be added to the study mailing list, please contact:

Jonathan Gouveia
Lura Consulting
107 Church Street, Suite 400
Toronto, Ontario, M5C 2G5
Phone: (416) 644-1802 Fax: (416) 536-3453 Email: jgouveia@lura.ca



**TORONTO
WATERFRONT JV**

207 Queen's Quay West
Suite 822
Toronto, Ontario M5J 1A7
Tel: (416) 214-1344
Fax: (416) 214-4591

February 2, 2004
95.03002.04.P02

«Title» «FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«Address2»
«City», «State»
«PostalCode»

Dear «Title» «LastName»,

**Subject: Notice of Study Commencement and Public Information Centre #1 (Open House)
Municipal Class Environmental Assessment Master Plan
West Don Lands Precinct Planning Area**

The Toronto Waterfront Revitalization Corporation (TWRC) in cooperation with the City of Toronto is carrying out a Class Environmental Assessment (EA) Master Plan Study to address water, sanitary servicing, stormwater management, and transportation needs (including provision for transit), for a section of the West Don Lands Precinct Planning Area. West Don Lands includes the area located generally east of Parliament Street, south of King Street, west of the Don River and north of the Gardiner Expressway.

The first Open House is planned for February 12, 2004 to provide an opportunity for comment on the problem/opportunity statement, the criteria and the alternative solutions. Please refer to the attached Notice for information regarding the location and time of this Open House.

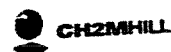
More information on both the Precinct Planning and the Class EA Master Plan is available on the TWRC website: www.towaterfront.ca.

If you have any comments or questions please contact me at (905) 882-4211 ext. 407 or at primel@mmm.ca

Yours truly,
TORONTO WATERFRONT JOINT VENTURE

Lisa Prime, MES, MCIP RPP,
Senior Environmental Planner
Associate

\\Office\GEN\Data\Water Front\Environmental Assessment\West Don Lands EA Master Plan\PIC#1 - Commencement\Letter.doc





TORONTO WATERFRONT
REVITALIZATION CORPORATION

West Don Lands Precinct Planning Environmental Assessment Study Guide

**Municipal Class Environmental Assessment Master Plan
West Don Lands Precinct Planning Area
Toronto Waterfront Revitalization Corporation
and The City Of Toronto**

February 12, 2004

What's Inside...

- EA Project Description
- Study Area Map
- Overview of the 5 Phase Process
- How to Get More Information

The information on comment sheets is collected under the authority of the Environmental Assessment Act and will become public information. All comments will be included in the documentation of the Municipal Class Environmental Assessment Master Plan Report to be prepared and made public at the conclusion of the study. Personal information including addresses and phone numbers will not be disclosed.

The Proposed Project – The West Don Lands Municipal Class EA Master Plan

The Toronto Waterfront Revitalization Corporation, in cooperation with the City of Toronto, is carrying out a Municipal Class Environmental Assessment (EA) Master Plan Study for a section of the West Don Lands Precinct Planning Area.

Municipal Class EA Master Plans integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The Municipal Class EA process enables the planning of municipal infrastructure to support existing and future land use, to be undertaken in accordance with an approved procedure under the Ontario Environmental Assessment Act, designed to protect the environment.

The West Don Lands Precinct Planning Process will design new districts of public and neighbourhood spaces for the area. *The West Don Lands Municipal Class EA Master Plan* will address water, sanitary servicing, stormwater management, the provision of a utility corridor, and transportation needs (including provision for transit), for a section of the West Don Lands Precinct Planning Area outside of the area subject to the Lower Don Naturalization and West Flood Protection EA Study. Coordination of *The West Don Lands Municipal Class EA Master Plan* with the precinct planning process ensures that land use planning and EA process decisions are integrated for a best overall design of a fully integrated community.

The Study Area

The West Don Lands Precinct includes the area generally located east of Parliament Street, south of King Street, west of the Don River and north of the Gardiner Expressway.

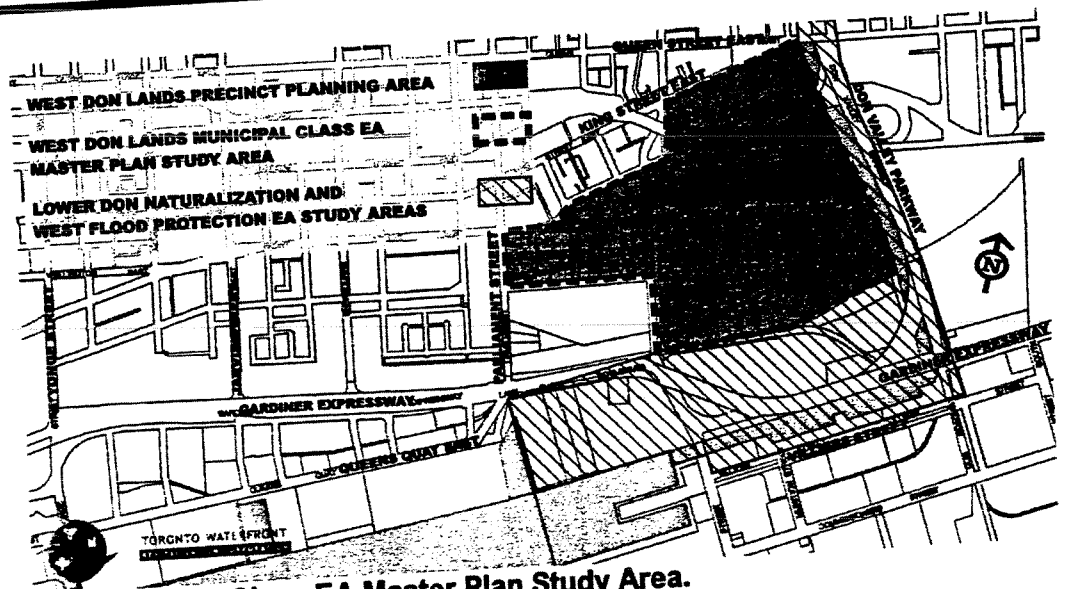


Figure 1 - The Class EA Master Plan Study Area.

Guide to the Municipal Class EA Master Plan Process

Overview of the Five Phases

The five phases of the Municipal Class EA process are summarized as follows:

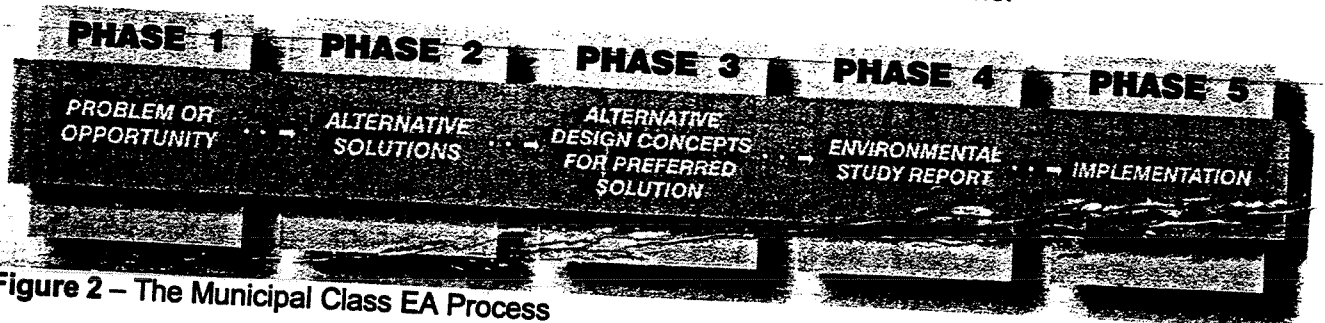


Figure 2 – The Municipal Class EA Process

Types of Projects

The West Don Lands Municipal Class EA Master Plan process will cover the requirements of both Schedule B and Schedule C projects.

Schedule B projects generally include improvements and minor expansions to existing facilities. These projects have some potential for adverse environmental impacts, and consultation with those who may be affected is required. Examples of Schedule B projects include: the installation of traffic control devices, smaller road-related works or the addition of new stormwater retention ponds. These kinds of projects require completion of Phases 1 and 2 of the Municipal Class EA process.

The West Don Lands Municipal Class EA Master Plan Report may also include Phases 3 and 4 for certain Schedule C projects, such as larger projects involving road-related works, construction of underpasses or overpasses, or construction of new sewer systems. Schedule C projects generally include the construction of new facilities and major expansions to existing facilities.

Once complete, *The West Don Lands Municipal Class EA Master Plan Report* will be filed and made available for review by the public and any public agency that expressed interest in the study. Requests to the Minister of Environment for a Part II Order (to require an Individual EA) are possible only for specific projects identified in the Master Plan, not the Plan itself.

Opportunity Statement - Phase 1 of the Municipal Class EA Process

"To address sanitary, water, stormwater, and transportation infrastructure servicing requirements to support the proposed land uses including new and improved parks and public spaces that are proposed as part of the revitalization of the West Don Lands Precinct of the Toronto waterfront."

Special Issues

Elements of the waterfront revitalization not included as part of this project include the future of the Gardiner Expressway and the Lower Don Naturalization and West Flood Protection EA Study.

Guide to the Municipal Class EA Master Plan Process – Continued

Phase 2 of the Municipal Class EA Process - Alternatives Considered

Alternative solutions to address the opportunity statement will be evaluated using environmental and socio-economic criteria.

For Schedule B projects, alternatives to the project will be assessed to comply with the Class EA. For Schedule C projects, both alternatives to the project and alternative design solutions (Phase 3) will be considered.

Once public and agency input has been considered, a preferred approach will be finalized.

Assessment Criteria

Through the study, a range of environmental issues will be addressed and mitigation measures to minimize potential adverse impacts will be considered. This process will include assessment criteria based on the following categories of consideration:

- Technical
- Natural Environment
- Socio-Economic Environment
- Opportunity for Revitalization
- Feasibility and Cost

These criteria will be customized by the technical teams to address different types of infrastructure.

Phase 3 of the Municipal Class EA Process - Design Criteria

Alternative designs for the preferred alternatives will be developed and assessed using criteria based on the same categories of consideration identified in Phase 2. These evaluations will be presented at a future public consultation session.

Next Steps

Public consultation on *The West Don Lands Municipal Class EA Master Plan* will continue. The next opportunity for comment will focus on design alternatives. *The West Don Lands Municipal Class EA Master Plan Report* will be prepared once the preferred design alternatives are selected (at the end phase 3).

How to Get More Information

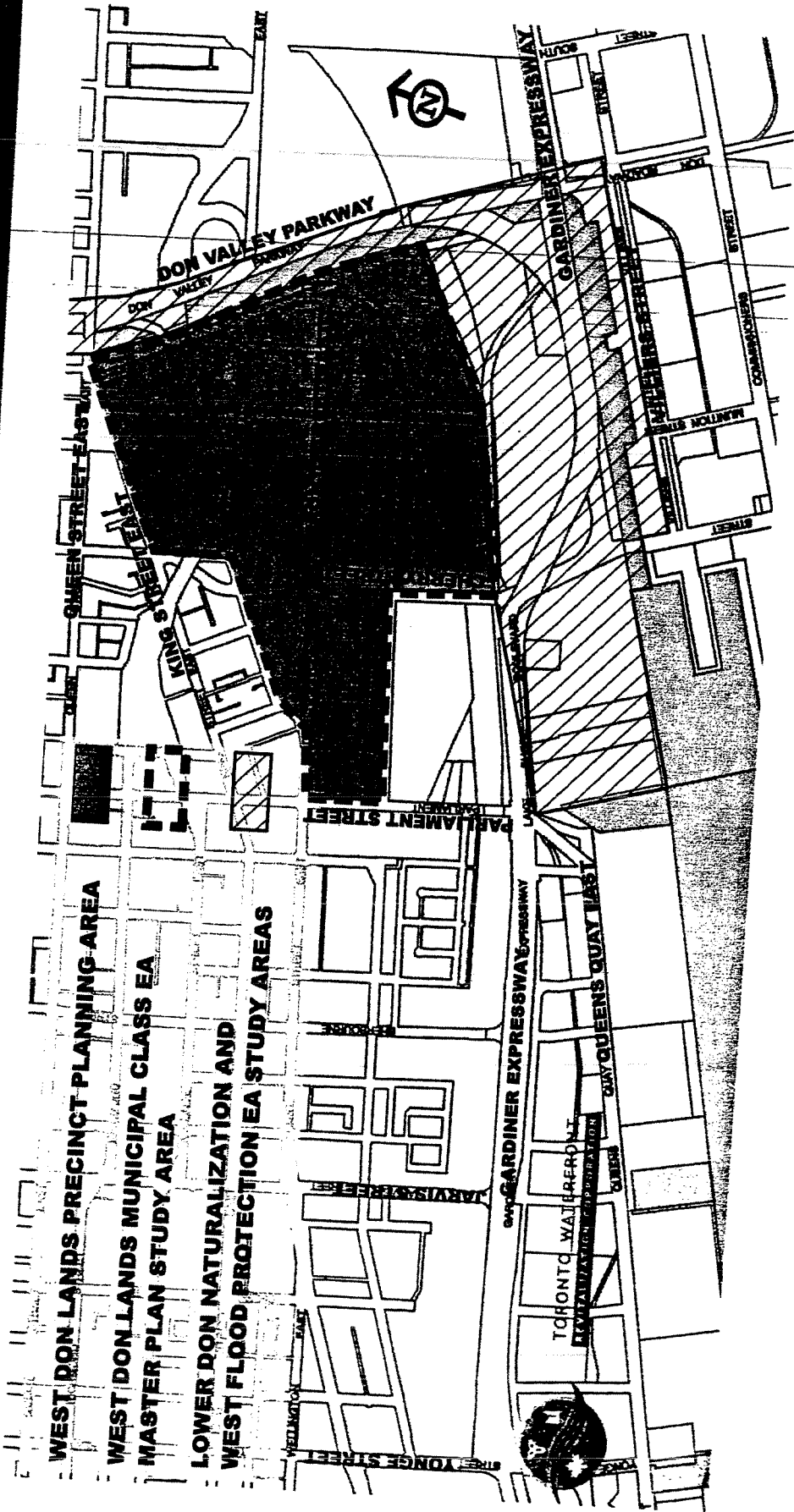
Information requests or questions may be directed to:

Jonathan Gouveia
Lura Consulting
107 Church Street, Suite 400
Toronto, Ontario M5C 2G5
Phone: (416) 644-1802
Fax: (416) 536-3453
Email: jgouveia@lura.ca

Additional information will also be regularly updated on the TWRC Website: www.towaterfront.ca

The information on comments sheet is collected under the authority of the Environmental Assessment Act and will become public information. All comments will be included in the documentation of the Municipal Class Environmental Assessment Master Plan Report to be prepared and made public at the conclusion of the study. Personal information including addresses and phone numbers will not be disclosed.

STUDY AREA



WEST DON LANDS PRECINCT PLANNING AREA

WEST DON LANDS MUNICIPAL CLASS EA
MASTER PLAN STUDY AREA

LOWER DON NATURALIZATION AND
WEST FLOOD PROTECTION EA STUDY AREAS

GARDINER EXPRESSWAY

TORONTO WATERFRONT
REVITALIZATION CORPORATION

QUAY QUEENS QUAY EAST

GARDINER EXPRESSWAY

DON VALLEY PARKWAY

QUEEN STREET EAST

KING STREET EAST

PARLIAMENT STREET

JARVIS STREET

YONGE STREET



OPPORTUNITY STATEMENT

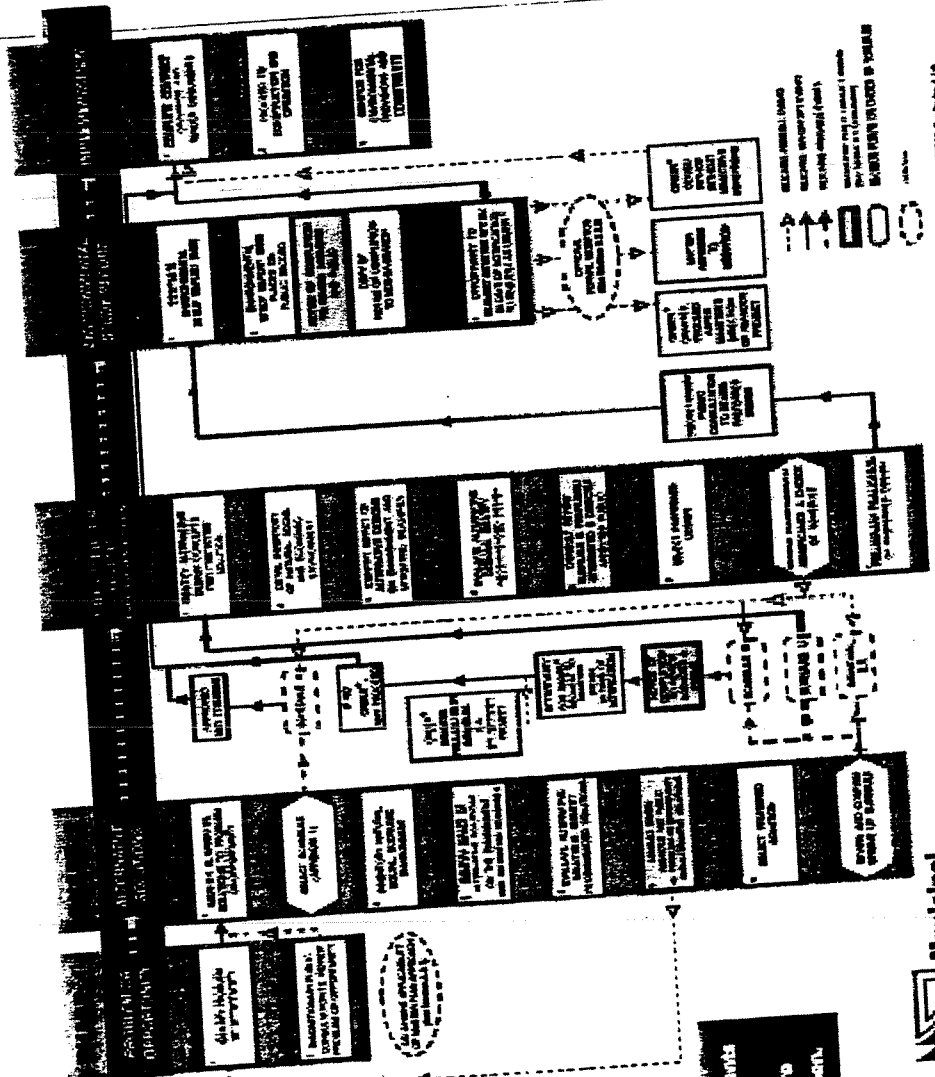
“To address sanitary, water, stormwater and transportation infrastructure servicing requirements to support the proposed land uses including new and improved parks and public spaces that are proposed as part of the revitalization of the West Don Lands Precinct of the Toronto Waterfront”.

MASTER PLAN - NEXT STEPS

- We will confirm our choice of alternative solutions based on public and agency input.
 - We will propose the design alternatives.
 - A second public consultation session will be planned to provide an opportunity for comment on the design alternatives.
 - We will then select a preferred design.
 - The EA Master Plan Report will be prepared.
-

MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS

Note: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



This flow chart documents the EA Process. Public Consultation forums are highlighted in light green.



**Municipal
Engineers
Association**

Source: Municipal Engineers Association 2000



MASTER PLAN

The Toronto Waterfront Revitalization Corporation in cooperation with the City of Toronto is carrying out a Municipal Class Environmental Assessment (EA) Master Plan Study for the West Don Lands Precinct Planning Area.

Municipal Class EA Master Plans incorporate infrastructure requirements for existing and future land use with environmental assessment planning principles.

The Municipal Class EA Master Plan will address:

- Water;
 - Sanitary servicing;
 - Stormwater;
 - Utility corridors; and
 - Transportation alternatives (including provisions for transit).
-

EVALUATION CRITERIA

Evaluation Component	Rationale / Definition
Natural Environment	The expected impact on terrestrial habitat, surface water quality, aquatic habitat, soil stability, aesthetics and landscaping.
Socio-Economic Environment	Issues related to access to private property, archaeological and cultural heritage resources, employment activity, noise, and vibration.
Opportunity for Revitalization	The extent to which the alternative supports the planning and urban design goals of the Waterfront revitalization.
Feasibility and Cost	Cost and capability to adequately service the study area.
Technical	Discipline specific.

Public Information Centre #2

Public Information Centre #2

CLASS ENVIRONMENTAL ASSESSMENT – MASTER PLAN PUBLIC INFORMATION CENTRE #2

West Don Lands Planning Area

The Toronto Waterfront Revitalization Corporation in cooperation with the City of Toronto is carrying out a Class Environmental Assessment (EA) Master Plan Study to address water, sanitary servicing, stormwater management, and transportation needs (including provision for transit), for a section of the West Don Lands Planning Area, outside of the area subject to the Don River Naturalization EA. The EA process is being coordinated with a concurrent precinct planning exercise to design new communities in the West Don Lands.

The West Don Lands is a 32 hectare area generally east of Parliament Street, south of King Street, west of the Don River and north of the Gardiner Expressway.

This study is being conducted in accordance with the requirements of the *Municipal Class Environmental Assessment, June 2000*, an approved process under the Environmental Assessment Act. The Master Plan will address Phases 1 to 4 of the Municipal Class EA process addressing requirements for Schedule B and some C projects.

The second consultation on the West Don Lands EA Master Plan will take place during the Open House component of the next West Don Lands Public Forum:

West Don Lands Public Forum

When:

May 6, 2004

Where:

55 Mill St., Distillery District (Stone Distillery Room)

EA Master Plan Consultation:

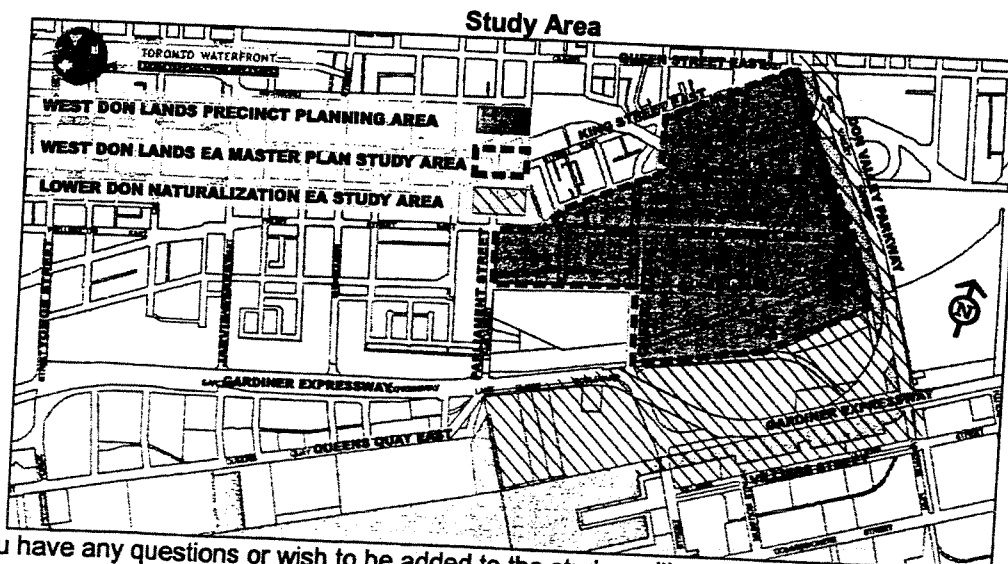
5-7 p.m. (open house)

Precinct Plan Presentation:

7-9:30 p.m. (presentation)

This Open House will seek public input on the design details for the preferred alternatives for Schedule C projects. Subject to comments received, we will finalize the preferred alternative designs and prepare an Environmental Assessment Master Plan Report, which will be placed on public record for a minimum 30 day review period.

The map shows the approximate limits of the study area.



If you have any questions or wish to be added to the study mailing list, please contact:

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TORONTO WATERFRONT



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April 22, 2004
95.03002.04.P02

«Title» «FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«Address2»
«City», «State»
«PostalCode»

Dear «Title» «LastName»,

**Subject: Public Information Centre #2
Class Environmental Assessment Master Plan
West Don Lands Planning Area**

The Toronto Waterfront Revitalization Corporation (TWRC) in cooperation with the City of Toronto is carrying out a Class Environmental Assessment (EA) Master Plan Study to address water, sanitary servicing, stormwater, and transportation alternatives (including provision for transit), for a section of the West Don Lands Planning Area.

A second Open House is planned for May 6, 2004 to provide an opportunity for comment on the design alternatives for Schedule C projects. Please refer to the attached Notice for information regarding the location and time of the second Open House.

More information on both the Precinct Planning and the EA Master Plan is available on the TWRC website: www.towaterfront.ca.

If you have any comments or questions please contact me at (905) 882-4211 ext. 407 or at primel@mmm.ca

Yours truly,
TORONTO WATERFRONT JOINT VENTURE

Lisa A. Prime, MES, MCIP RPP
Environmental Approvals

A JOINT VENTURE



The Toronto Waterfront Revitalization Corporation in cooperation with the City of Toronto is carrying out a Municipal Class Environmental Assessment (EA) Master Plan Study for the West Don Lands Planning Area.

Municipal Class EA Master Plans incorporate infrastructure requirements for existing and future land use with environmental assessment planning principles.

The Municipal Class EA Master Plan will address:

- Water;
- Sanitary servicing;
- Stormwater;
- Utility corridors; and
- Transportation alternatives (including provisions for transit).

MUNICIPAL CLASS EA PROJECT SCHEDULES

Schedule A	<ul style="list-style-type: none">• Include a number of municipal maintenance and operational activities;• Are limited in scale;• Have minimal adverse environmental effects; and• Projects are pre-approved and may proceed to implementation without following the full Class EA planning process.
Schedule B	<ul style="list-style-type: none">• Would involve the installation of traffic control devices, smaller road-related works or the building of water/wastewater conveyance and stormwater works;• Have the potential for some adverse environmental effects;• Proponents are required to complete Phases 1 and 2 of the Class EA process including evaluating Alternatives to the Project; and• May proceed to implementation if there are no outstanding concerns.
Schedule C	<ul style="list-style-type: none">• Are larger projects involving road-related works, construction of underpasses or overpasses, and more substantial water/wastewater projects;• Have the potential for significant environmental effects;• Proponents must proceed under the full planning and documentation procedures specified in the Class EA (Phases 1 to 5) including evaluating Alternatives to the Project as well as Alternative Designs; and• Requires preparation of an Environmental Study Report that is filed for review by the public and review agencies.

EVALUATION CRITERIA FOR DESIGN ALTERNATIVES

Criteria	Sub-Criteria	Rationale/Definition
Transportation Service (where applicable)	Road safety	The expected impacts that the various forms of transportation service may have on road safety, bicyclists, pedestrians, public transit and travel demands.
	Ability to satisfy travel demand	
	Access	
	Ability to support/promote transit	
	Service to bicyclists	
	Service to pedestrians	
	Facilitation of goods movement	
	Police and emergency service	
	Operations	
	Impacts to traffic operations	
Municipal Services (where applicable)	Reliability of services	The ability to service future community demands in a reliable and cost effective way.
	Flexibility to provide capacity for future growth and/or improved service level	
	Life expectancy	
	Maintenance requirements	

FURTHER EA WORK

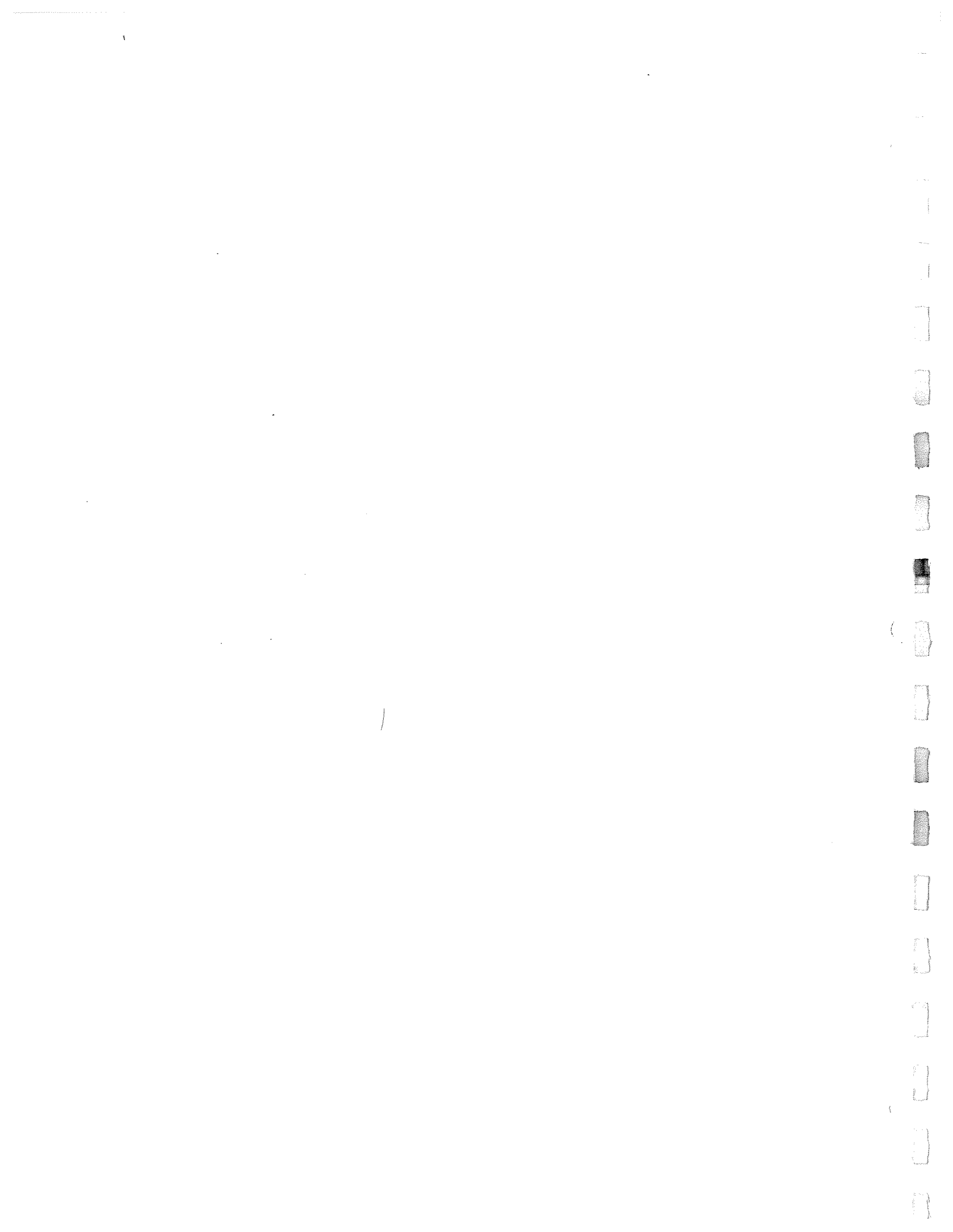
- Further analysis and consultation will be needed to complete the EA studies for pedestrian bridges.
- Transit projects will require separate EA studies.
- The Class EA Master Plan will specify the process to be followed if there are any changes to the proposed projects.
- Significant changes (e.g., new alternatives) will require further analysis and consultation with stakeholders.

TRANSIT FACILITIES

- The Class EA Master Plan for West Don Lands cannot be used for transit projects. However, it does include consideration of space requirements for future public transit facilities in road allowances.
- New public transit facilities must be evaluated and approved as separate studies under the EA Act.

MASTER PLAN - NEXT STEPS

- Comments received from the public and agencies on the alternative designs will be used to confirm or refine the evaluation (Spring 2004).
- An EA Master Plan Report will be prepared (Summer 2004).
- The EA Master Plan will be submitted to City Council (Fall 2004).
- A Notice of Study Completion will be published in the local newspaper and sent to stakeholders on the mailing list (Fall 2004).
- The report will be available for a 30 day review period during which time comments can be sent to the Minister of Environment.



Completion



**Infrastructure and Transportation
Display Boards**

**Infrastructure and Transportation
Display Boards**



ALTERNATIVES TO DEAL WITH MUNICIPAL INFRASTRUCTURE

WATER	<ul style="list-style-type: none"> • DO NOTHING • ALT. A • ALT. B 	<ul style="list-style-type: none"> - Only utilize existing infrastructure - Rebuild the infrastructure to follow the plan - Use existing infrastructure with operational efficiencies and build new infrastructure
WASTE WATER	<ul style="list-style-type: none"> • DO NOTHING • ALT. A • ALT. B 	<ul style="list-style-type: none"> - Only utilize existing infrastructure - Rebuild the infrastructure to follow the plan - Use existing infrastructure with operational efficiencies and build new infrastructure
STORM WATER	<ul style="list-style-type: none"> • DO NOTHING • ALT. A • ALT. B • ALT. C • ALT. D • ALT. E 	<ul style="list-style-type: none"> - Only utilize existing infrastructure - Rebuild the infrastructure to follow the plan - Use stormwater as a resource (e.g., lawn working, root ton gardens) - Infiltrate stormwater (e.g., infiltration trends, grassed swales) exfiltration system - "End-of-Pipe" controls. Use techniques to clean poor quality stormwater immediately before discharge into watercourses & Bodies of water. (e.g. quality ponds, constructed wetlands) - A combination of using existing infrastructure, rebuilding infrastructure, separating combined sewers, using stormwater as a resource, infiltration and clean storm water
UTILITY CORRIDORS	<ul style="list-style-type: none"> • DO NOTHING • CORRIDOR • UTILIDOR / UTILITY TUNNEL 	<ul style="list-style-type: none"> - Only utilize existing infrastructure - Rebuild the infrastructure to follow the plan - Use existing infrastructure with operational efficiencies and build new infrastructure

CRITERIA FOR EVALUATION OF ALTERNATIVES

MAIN CRITERION	SUB-CRITERIA
NATURAL ENVIRONMENT	<ul style="list-style-type: none"> - Terrestrial Habitat - Land - Water
SOCIAL & ECONOMIC	<ul style="list-style-type: none"> - Cultural Heritage Resource - Traffic Disruption - Recreation & Tourism - Health & Safety - Employment - Noise & Vibration
OPPORTUNITY FOR REVITALIZATION	
FEASIBILITY & COST	<ul style="list-style-type: none"> - Feasibility - Cost
TECHNICAL	<ul style="list-style-type: none"> - Reliability of services - Flexibility to provide capacity for future growth and/or improved service level - Life expectancy - Maintenance requirements

FIG 6-1

EVALUATION COMPONENT	RATIONALE / DEFINITION
Natural Environment	The expected impact on terrestrial habitat, surface water quality, groundwater quality, aquatic habitat, aesthetics and landscaping.
Socio-Economic Environment	Issues related to access to private property, archaeological and cultural heritage resources, employment activity, noise and vibration, traffic disruption, and health and safety.
Opportunity for Revitalization	The extent which the alternative supports the planning and urban design goals of the waterfront revitalization.
Feasibility and Cost	Cost and capability to adequately service the study area.
Technical	Issues related to life expectancy of infrastructure, maintenance requirements, service reliability and flexibility to provide for service capacity improvements and future growth.

PRECINCT PLANNING

WEST DON LANDS: EXISTING WATER DISTRIBUTION SYSTEM

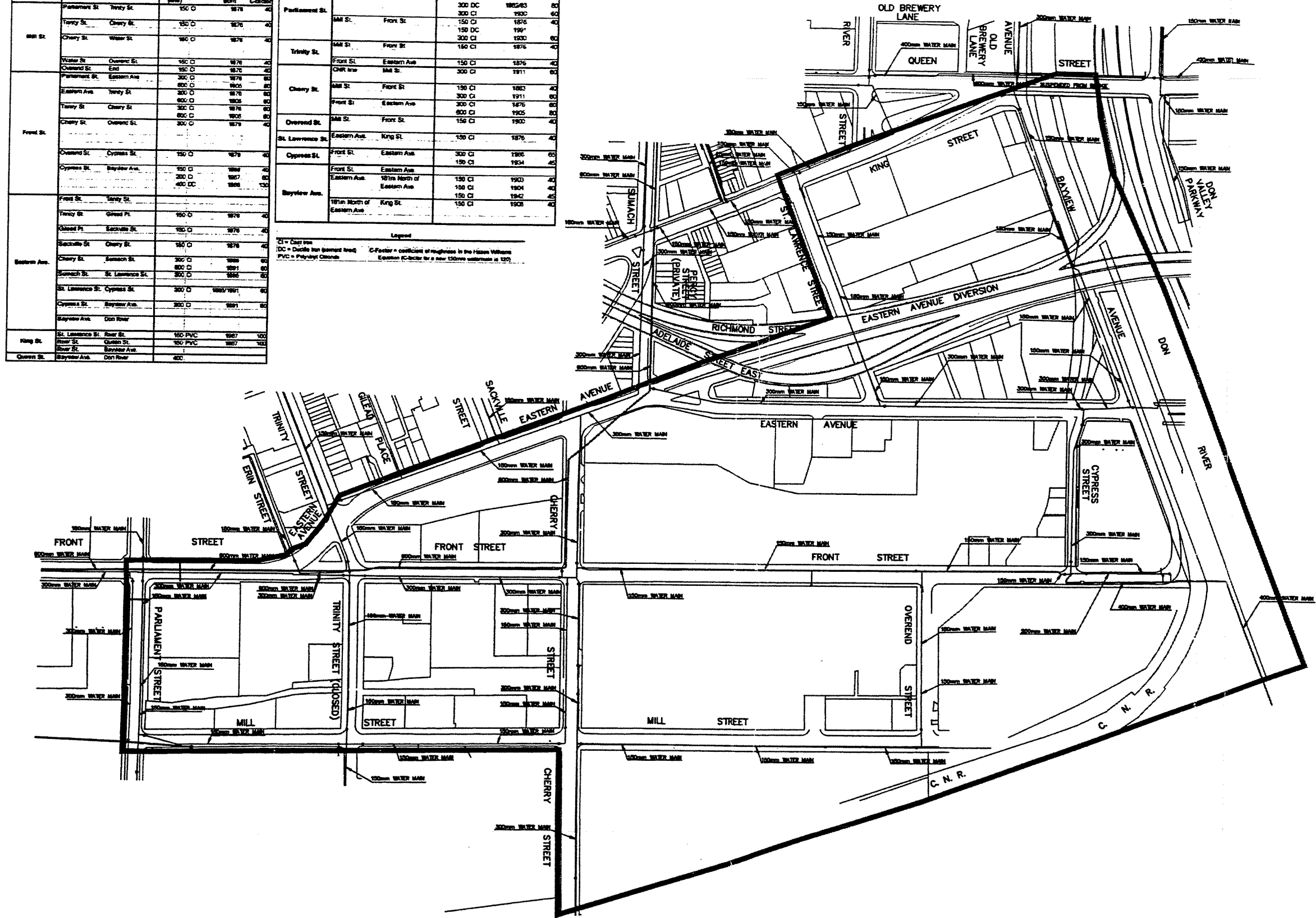


Inventory of Existing Watermains

Street	From	To	Watermain	Material	Year Built	Condition
Mill St.	Parliament St.	Trinity St.	150 O	1878	40	
	Trinity St.	Cherry St.	150 O	1878	40	
	Cherry St.	Water St.	150 O	1878	40	
Front St.	Water St.	Overend St.	150 O	1878	40	
	Overend St.	End	150 O	1878	40	
	Parliament St.	Eastern Ave	300 O	1878	60	
	Eastern Ave	Trinity St.	300 O	1878	60	
	Trinity St.	Cherry St.	300 O	1878	60	
Eastern Ave.	Cherry St.	Jamrach St.	300 O	1898	60	
	Jamrach St.	St. Lawrence St.	300 O	1891	60	
	St. Lawrence St.	Cypress St.	300 O	1891	60	
	Cypress St.	Bayview Ave.	300 O	1891	60	
	Bayview Ave.	Don River	300 O	1891	60	
King St.	St. Lawrence St.	Rear St.	150 PVC	1987	100	
	Rear St.	Queen St.	150 PVC	1987	100	
Queen St.	Bayview Ave.	Don River	400			

Street	From	To	Watermain	Material	Year Built	Condition
Parliament St.	Mill St.	Front St.	150 PVC	1988	100	
	Front St.	Trinity St.	150 CI	1898	40	
	Trinity St.	Cherry St.	300 DC	1898	60	
Trinity St.	Mill St.	Front St.	150 CI	1930	60	
	Front St.	Eastern Ave	150 DC	1876	40	
	Eastern Ave	Mill St.	300 CI	1911	60	
Cherry St.	Mill St.	Front St.	150 CI	1883	40	
	Front St.	Eastern Ave	300 CI	1911	60	
	Eastern Ave	Mill St.	800 CI	1876	60	
Overend St.	Mill St.	Front St.	150 CI	1903	60	
	Front St.	Eastern Ave	150 CI	1876	40	
Cypress St.	Front St.	Eastern Ave	300 CI	1880	60	
	Eastern Ave	187th North of Eastern Ave	150 CI	1903	40	
Bayview Ave.	187th North of Eastern Ave	King St.	150 CI	1903	40	
	King St.	190th North of Eastern Ave	150 CI	1903	40	

Legend
 CI = Cast Iron
 DC = Ductile Iron (current level)
 PVC = Polyvinyl Chloride
 C-Factor = coefficient of roughness in the Hazen-Williams Equation (C-factor for a new 150mm watermain is 120)



PRECINCT PLANNING

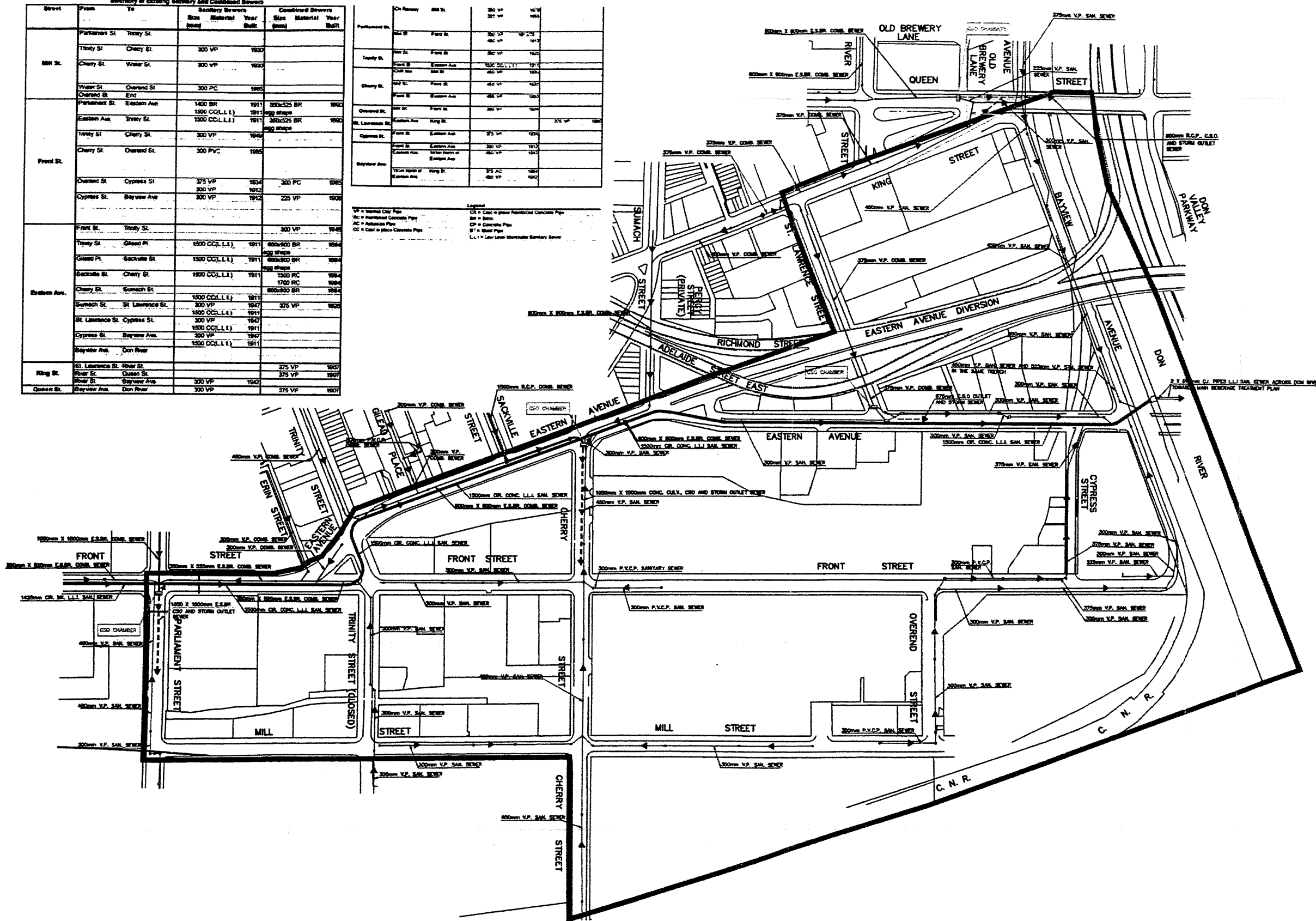
WEST DON LANDS: EXISTING SANITARY AND COMBINED SEWER SYSTEM

Inventory of Existing Sanitary and Combined Sewers

Street	From	To	Sanitary Sewers			Combined Sewers		
			Size	Material	Year Built	Size	Material	Year Built
Mill St.	Parliament St.	Trinity St.	300	VP	1930			
	Trinity St.	Cherry St.	300	VP	1930			
	Cherry St.	Wheat St.	300	VP	1930			
Front St.	Water St.	Overend St.	300	PC	1980			
	Overend St.	End						
	Parliament St.	Eastern Ave.	1400	BR	1911	800x325	BR	1982
	Eastern Ave.	Trinity St.	1500	CC(L.L.)	1911	800	Shape	
	Trinity St.	Cherry St.	300	VP	1940	350x225	BR	1982
Eastern Ave.	Cherry St.	Overend St.	300	PVC	1980			
	Overend St.	Cypress St.	375	VP	1934	300	PC	1980
	Cypress St.	Bayview Ave.	300	VP	1912	225	VP	1900
	Front St.	Trinity St.				300	VP	1940
	Trinity St.	Gleadow St.	1500	CC(L.L.)	1911	600x300	BR	1984
King St.	Gleadow St.	Backville St.	1300	CC(L.L.)	1911	600x300	BR	1984
	Backville St.	Cherry St.	1500	CC(L.L.)	1911	1500	RC	1984
	Cherry St.	Somach St.	1500	CC(L.L.)	1911	1700	RC	1984
	Somach St.	St. Lawrence St.	1500	CC(L.L.)	1911	600x300	BR	1984
	Somach St.	St. Lawrence St.	300	VP	1947	375	VP	1930
	St. Lawrence St.	Cypress St.	300	VP	1947			
	Cypress St.	Bayview Ave.	1500	CC(L.L.)	1911			
Queen St.	St. Lawrence St.	River St.				275	VP	1907
	River St.	Queen St.				375	VP	1907
Queen St.	River St.	Bayview Ave.	300	VP	1942			
	Bayview Ave.	Don River	300	VP		375	VP	1907

On River	MS S.	300 VP	150 VP
Parliament St.	Front St.	300 VP	150 VP
Trinity St.	Front St.	300 VP	150 VP
Cherry St.	Eastern Ave.	300 CC(L.L.)	150 VP
Overend St.	Front St.	300 VP	150 VP
St. Lawrence St.	Eastern Ave.	375 VP	150 VP
Oppress St.	Front St.	300 VP	150 VP
Bayview Ave.	Eastern Ave.	300 VP	150 VP
Bayview Ave.	King St.	375 VP	150 VP

Legend
 VP = Vertical Clay Pipe
 CC = Cast in place Reinforced Concrete Pipe
 BR = Brick
 PC = Polyethylene Pipe
 CC = Cast in place Concrete Pipe
 L.L. = Low Level Manhole Sanitary Sewer



PRECINCT PLANNING

WEST DON LANDS: EXISTING STORM SEWER SYSTEM

Inventory of Existing Storm Sewers

Street	From	To	Storm Sewer Size Material Year Built
Mill St.	Parliament St.	Trinity St.	375 VP 1929
	Trinity St.	Cherry St.	525 VP 1936
	Cherry St.	Water St.	400 VP 1930
	Water St.	Owend St.	525 VP 1930
	Owend St.	East	375 VP 1930
Front St.	Parliament St.	East	300 VP 1909
	East	East	300 VP 1909
	East	Trinity St.	450 RC 1968
	Trinity St.	Cherry St.	375x750 BR egg shape 1959
	Cherry St.	Owend St.	600x900 BR egg shape 1907
Eastern Ave.	Owend St.	Cypress St.	600x900 BR egg shape 1907
	Cypress St.	Bayview Ave.	600x900 BR egg shape 1907
	Bayview Ave.	Don River	300 VP 1929
	Don River	Don River	800 CP 1929
	Don River	Don River	800 CP 1929
Queen St.	Front St.	Trinity St.	375 VP 1947
	Trinity St.	Cherry St.	625 VP 1947
	Cherry St.	Water St.	675 RC 1947
	Water St.	Owend St.	750 RC 1947
	Owend St.	East	750 RC 1947

Street	From	To	Storm Sewer Size Material Year Built
Parliament St.	Mill St.	Front St.	1050x1500 BR egg shape 1909
	Front St.	East	300 VP 1909
Trinity St.	Mill St.	Front St.	300 VP 1909
	Front St.	East	300 VP 1909
Cherry St.	Mill St.	Front St.	1050x1500 CR rect box shape 1930
	Front St.	East	300 VP 1909
Owend St.	Mill St.	Front St.	300 VP 1909
	Front St.	East	300 VP 1909
St. Lawrence St.	East	King St.	375 RC 1962
	King St.	East	825 RC 1962
Cypress St.	Front St.	East	300 VP 1904
	East	East	300 VP 1904
Bayview Ave.	Front St.	East	525 VP 1942
	East	East	450 VP 1942
Bayview Ave.	18th North of East	King St.	375 VP 1942
	King St.	East	300 VP 1942
Bayview Ave.	18th North of East	East	1850 RC 1962
	East	East	1850 RC 1962

Legend
 VP = Vertical Clay Pipe
 RC = Reinforced Concrete Pipe
 AC = Adhesive Pipe
 CC = Cast in place Concrete Pipe
 ST = Steel Pipe
 CR = Cast in place Reinforced Concrete Pipe
 BR = Brick
 CP = Concrete Pipe
 ST = Steel Pipe

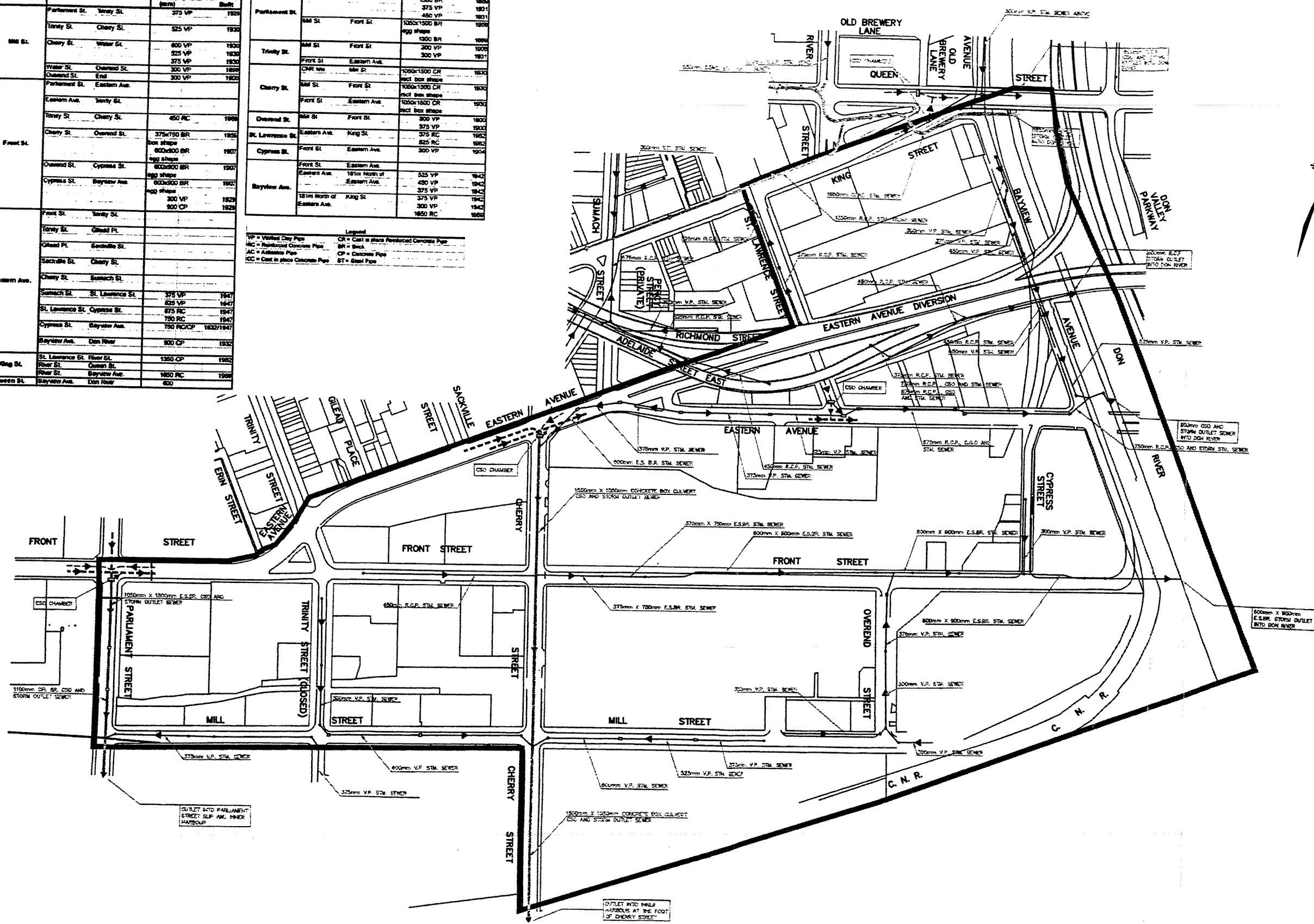
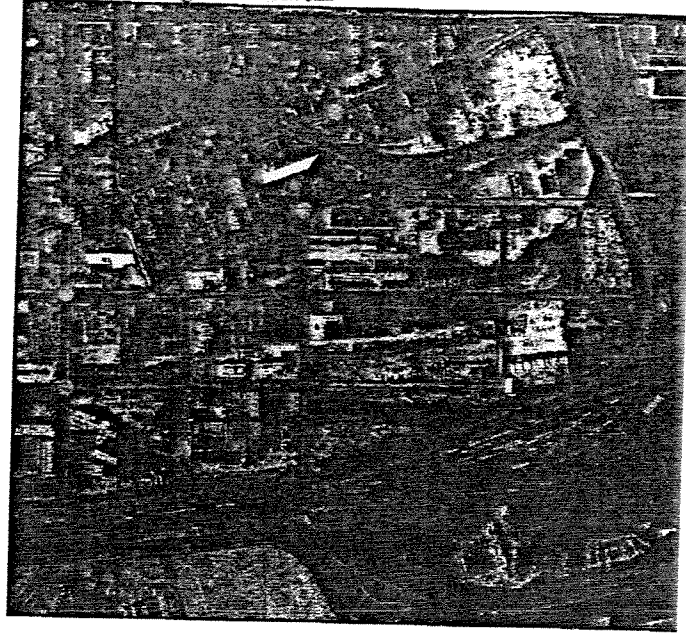
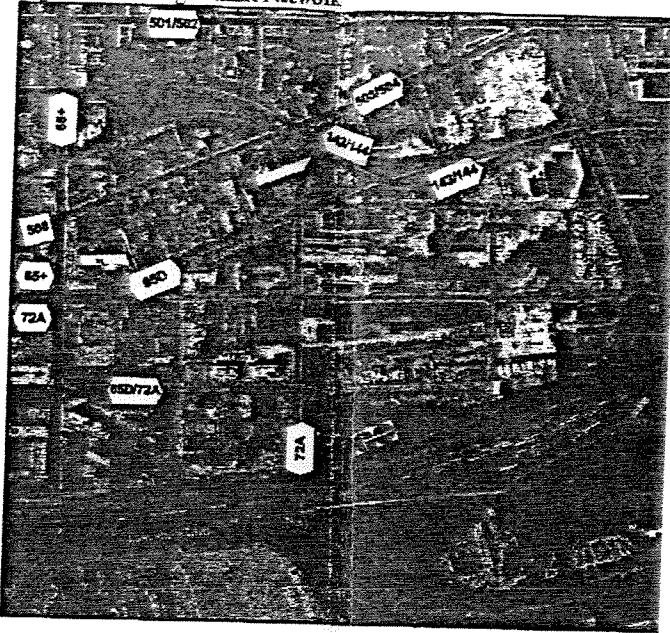


Figure 1: Existing Road Network



● Signalized Intersection

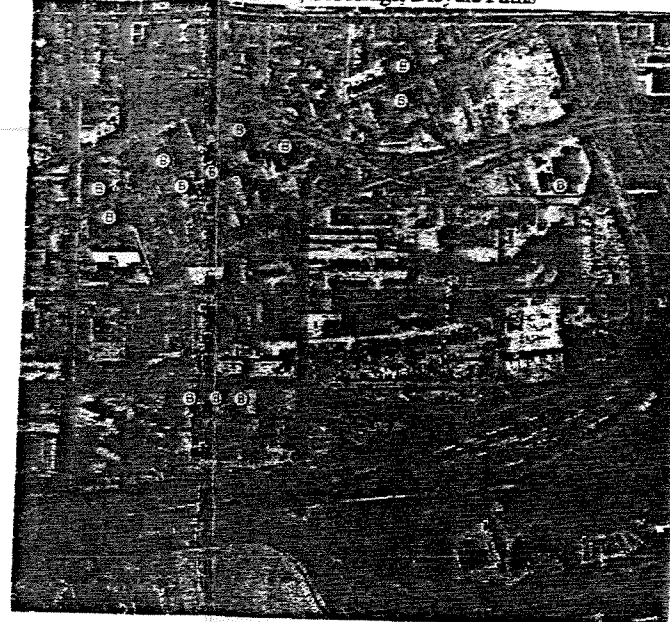
Figure 2: Existing Transit Network



— Existing TTC Routes (Regular)
 Existing TTC Routes (Seasonal)
 — Existing GO Train Routes

143/144 Direction of Travel & Service Number
 508 End of Route

Figure 3: Pedestrian Sidewalk, Crossings, Bicycle Paths



— Pedestrian Sidewalks
 — Pedestrian Crossings
 ⊙ Bicycle Parking

— Bikeway Route 41
 — Bikeway Route 6
 — Major Multi-Use Trail

EXISTING STREETS

- Major Arterials**
 - Eastern Avenue Diversion
 - King Street East
- Minor Arterials**
 - Parliament Street
 - Front Street East
 - Eastern Avenue (Between Sumach Street and Bayview Avenue)
- Collector Streets**
 - Cherry Street
 - Bayview Avenue (Between Front Street and Queen Street)
- Local Arterials**
 - Derby Street
 - Corktown Lane
 - Erin Street
 - Gilead Place
 - Percy Street
 - Trinity Street
 - Overend Street
 - Cypress Street
 - St. Lawrence Street
 - Sumach Street
 - Sackville Street

EXISTING TRANSIT SERVICES

- TTC Services**
 - Parliament 65 and 65D Bus Service
 - Pape 72A Bus Service
 - Downtown Beach Express (143) Bus Service
 - Kingston Road Streetcar (503)
 - King Street Streetcar (504)
 - Lakeshore Streetcar (508)
 - Queen Streetcar (501)
 - Downtowner Streetcar (502)
 - Downtown/ Don Valley Express (144) Bus Service
- GO Transit**
 - Lakeshore East Line
 - Richmond Hill Line

EXISTING BICYCLE & PEDESTRIAN FACILITIES

- Bikeways**
 - Bikeway Route 6 (Shared Road Way)
 - Bikeway Route 41 (Shared Road Way)
- Sidewalks**
- Multipurpose Trails**
 - Martin Goodman Trail
 - Lower Don Trail

Improvement Strategy	Alternative Strategy	Description
DO NOTHING	A	Retain existing transportation infrastructure.
NEW ROADS	B	Provide new roads within the West Don Lands Precinct.
	C	Provide new roads outside the West Don Lands Precinct.
ROAD WIDENINGS	D	Widening existing roads within the West Don Lands Precinct.
	E	Widening existing roads outside the West Don Lands Precinct.
ROAD REALIGNMENTS	F	Realign existing roads and intersections within the West Don Lands Precinct.
TRANSIT	G	Improve existing bus service to/from the West Don Lands Precinct.
	H	Construct new and/or extend existing streetcars in own right-of-way within the West Don Lands Precinct.
	I	Construct new and/or extend existing streetcars in own right-of-way outside the West Don Lands Precinct.
BICYCLE/PEDESTRIANS FACILITIES	J	Construct new and/or extend and improve existing bicycle and pedestrian facilities to/from and within the West Don Lands Precinct.

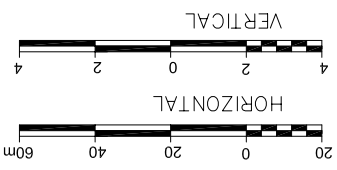
ALTERNATIVES TO ADDRESS THE TRANSPORTATION NEEDS OF THE WEST DON LANDS PRECINCT PLAN

Main Criteria	Sub-Criteria
TRANSPORTATION SERVICE	<ul style="list-style-type: none"> • Road Safety • Ability to satisfy travel demand of local and through traffic • Access • Ability to accommodate/encourage transit • Service to bicyclists • Service to pedestrians • Promotion of goods movement • Support Police and Emergency Service Operations
NATURAL ENVIRONMENT	<ul style="list-style-type: none"> • Terrestrial habitat • Vegetation • Availability of land • Existing bodies of water
SOCIAL AND ECONOMIC	<ul style="list-style-type: none"> • Air quality • Noise and vibration • Employment • Cultural and heritage resources
OPPORTUNITY FOR REVITALIZATION	<ul style="list-style-type: none"> • Ability to support development objectives of the West Don Lands Precinct Plan • Ability to meet the urban design objectives of the West Don Lands Precinct Plan
COST EFFECTIVENESS	<ul style="list-style-type: none"> • Ability to support Waterfront wide revitalization

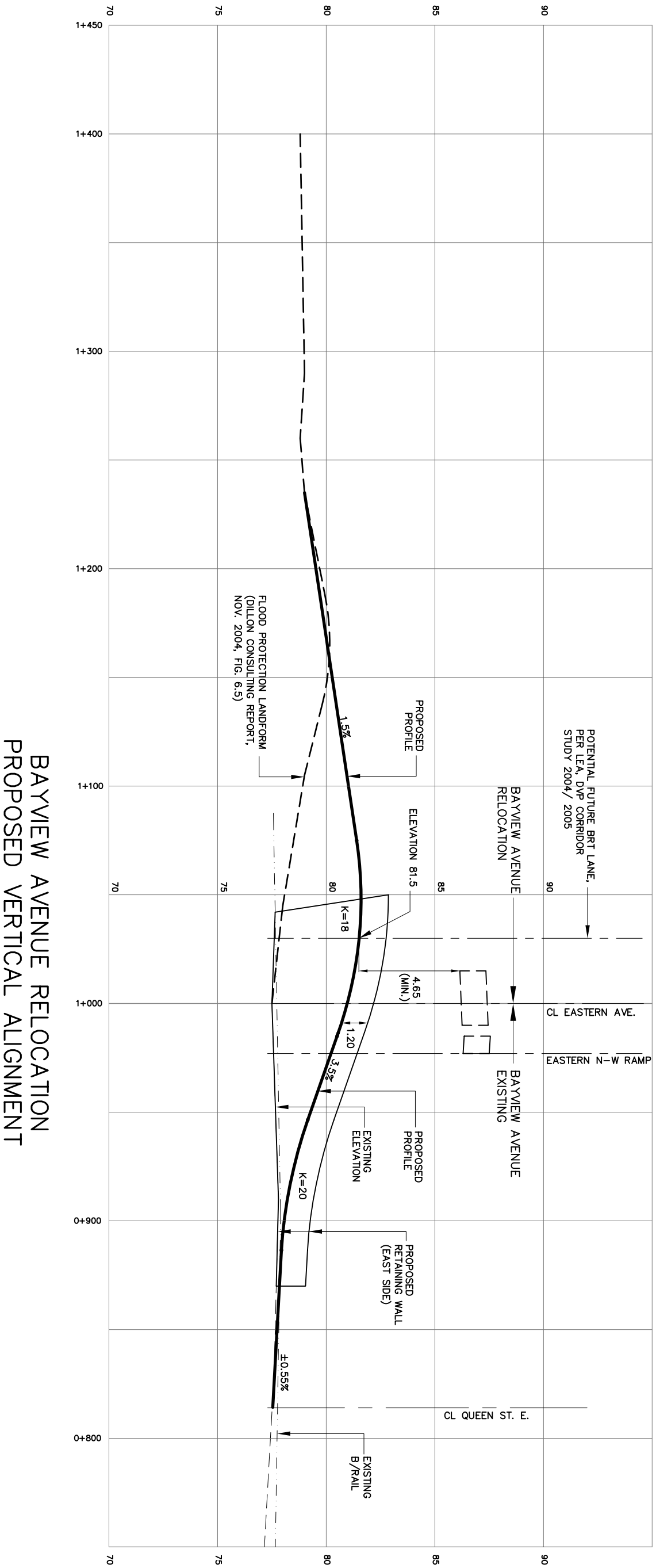
CRITERIA FOR EVALUATION OF ALTERNATIVES

APPENDIX B

Plan and Profile Drawings



EA MASTER PLAN, WEST DON LANDS
BAYVIEW AVENUE RELOCATION
VERTICAL ALIGNMENT, PREFERRED LOCATION.



BAYVIEW AVENUE RELOCATION
PROPOSED VERTICAL ALIGNMENT

APPENDIX C

**Assessment of Future
Transportation Conditions**

Appendix A

Future Total Traffic Conditions – West Don Lands

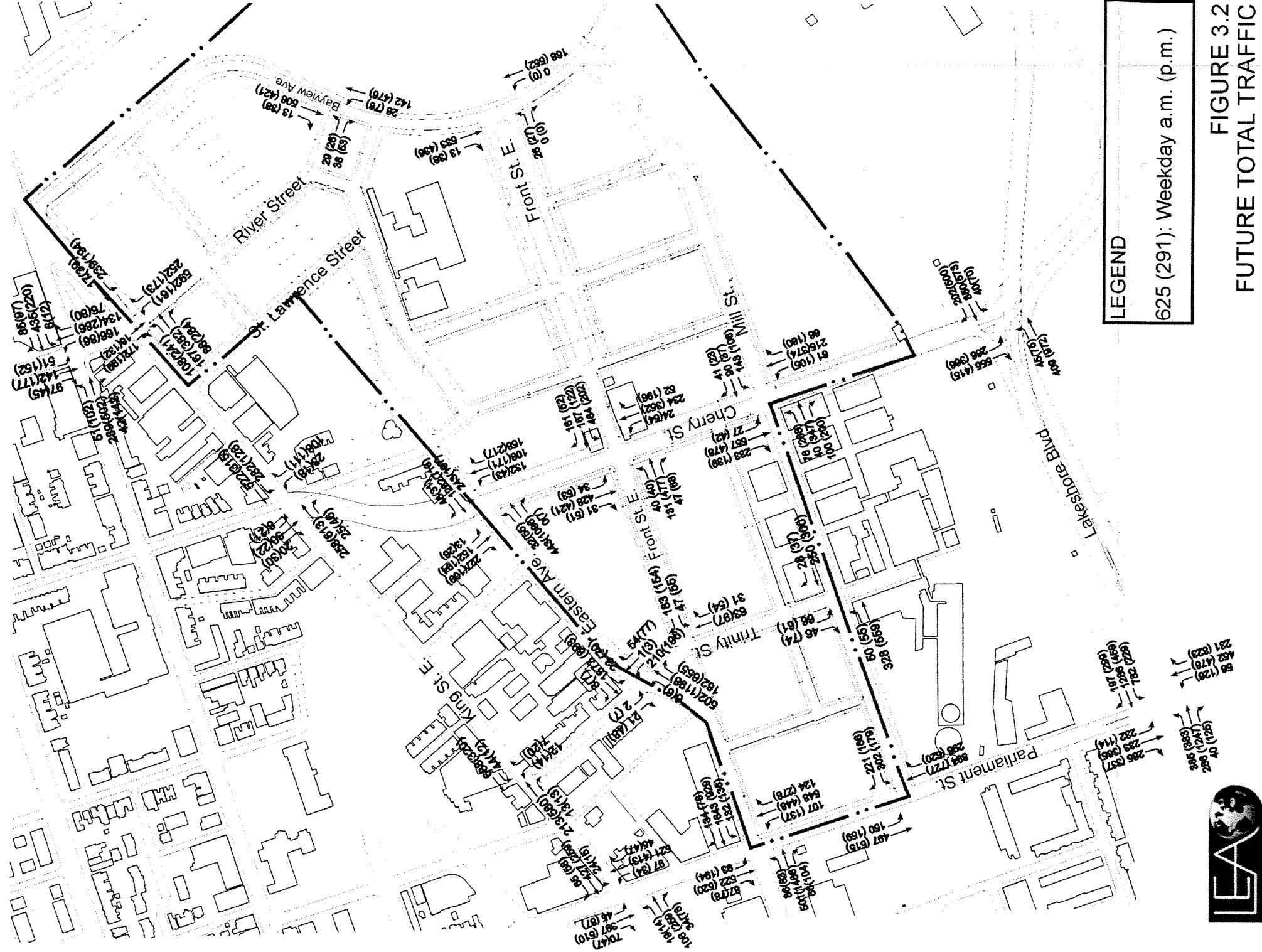


FIGURE 3.2
FUTURE TOTAL TRAFFIC

WEST DON LANDS EA MASTER PLAN: ASSESSMENT OF FUTURE TRANSPORTATION CONDITIONS

This document addresses future transportation conditions in the West Don Lands Precinct, as an appendix to the Precinct Class Environmental Assessment Master Plan completed in January 2005. This assessment is based on the following three studies: Travel Demand Forecasts Preliminary Findings, Phase 1 report, and The West Don Lands Transit Analysis Technical Memorandum, both of which were prepared by the IBI Group; and the West Don Lands Transportation Precinct Planning Report prepared by LEA Consulting Ltd.

1. DEVELOPMENT LEVELS

Full build-out of the West Don Lands (WDL) and East Bayfront have been reflected in the future transportation demands. These precincts are estimated to be at full build-out by the year 2021, as outlined in the Phase 1 report of the Travel Demand Forecasts Preliminary Findings (IBI Group, September 2004). The Phase 1 report estimates the build-out projections and timeframe for the West, East, and Central Waterfront, which encompass the above mentioned areas and more. The build-out numbers for the East Bayfront are 6,337 residential units and 190,107 sq. m of commercial space. For the West Don Lands, the Precinct Plan projects approximately 6,000 new units and 85,000 sq. m. of new commercial and institutional space will be complete by the build-out year. The Port Lands development levels have been assessed by the IBI Group, but that information was not available for inclusion in this study. Follow-on work is proposed to address these broader transportation demand impacts.

2. METHODOLOGY FOR PROJECTION OF FUTURE DEMANDS

Travel demand projections for the West Don Lands Precinct were derived from standards and surveys available from the city and other private consultants.

2.1. Trip Generation

Trip Generation rates used for the build-out year, 2021, were estimated by the City of Toronto as seen in Table 2.1 and Table 2.2. These rates were used by the City to prepare the Central Waterfront Secondary Plan.

Table 2.1. Trip Generation Rates
Source: West Don Lands Precinct Plan

	A.M. Peak Hour		P.M. Peak Hour	
	In	Out	In	Out
Residential (person trips per unit)	0.08892	0.35568	0.2964	0.0988
Office (person trips per 100 m ²)	1.1748	0.2238	0.3108	0.9324
Retail (person trips per 100 m ²)	0.09	0.09	1.58	1.58

For trip generation purposes, one third of the gross floor area (sqft) of total commercial development in the WDL would be offices and two-thirds would consist of retail uses. The auto trips in table 2.2 were comparable to results obtained from other studies and surveys carried out in the precinct. The traffic forecasts also took into account mixed-use developments planned for the Distillery District as well as developments in the East Bayfront. Additionally, the traffic volumes were increased by 10% to

account for traffic generated by other developments outside the WDL. Table 2.3 summarizes the number of trips generated by the proposed development in WDL for residential and commercial uses.

Table 2.2. Comparison of Auto Trip Generation Rates for Residential Development

Source: West Don Lands Precinct Plan

* Located < 500m from Subway Station

	A.M. Peak Hour		P.M. Peak Hour	
	In	Out	In	Out
Precinct Planning for WDL	0.03	0.12	0.1	0.03
Railway Lands West Traffic Study	0.02	0.1	-	-
Surveys at Six Condominiums *	0.04	0.12	0.11	0.06

Table 2.3. Trip Generation (Person Trips)

Source: West Don Lands Precinct Plan

	A.M. Peak Hour				P.M. Peak Hour			
	In		Out		In		Out	
Residential	552	57%	2207	95%	1839	63%	613	33%
Commercial	416	43%	125	5%	1078	37%	1269	67%
Total	968	100%	2332	100%	2917	100%	1882	100%

2.2. Trip Distribution

Trip distributions of nearby zones that have similar land uses to those proposed in the WDL were used to estimate the distribution for the WDL. The City had earlier adopted this approach for the Central Waterfront Secondary Plan using the 1996 TTS database. Using the above methodology, the trip distribution for WDL was projected for the 6:30 a.m. to 9:30 a.m. and 3:30 p.m. to 6:30 p.m. peak periods, using the 2001 TTS data. This is shown in Table 2.4.

Table 2.4. Estimated Distribution of Auto Driver Trips to / from the WDL

Source: West Don Lands Precinct Plan

	A.M. Peak Hour		P.M. Peak Hour	
	In	Out	In	Out
Downtown via Front St / King St	5%	10%	5%	5%
North via Parliament St	5%	10%	10%	5%
West via Lake Shore Blvd / Gardiner Expressway	40%	45%	45%	40%
East via Lake Shore Blvd / Eastern Ave	20%	10%	10%	10%
North via Don Valley Pkwy / Bayview Ave	30%	25%	30%	40%
Total	100%	100%	100%	100%

2.3. Mode Split

Due to the largely undeveloped nature of the WDL and the anticipated changes in the future, the Kings Survey and the Waterfront Travel Survey were used to estimate the mode splits. Additionally, the City's policy of a 35% auto mode split and emphasis on a high level of transit service, as well as pedestrian and bicycle facilities, was incorporated in the mode split values as seen in Table 2.5.

Table 2.5. A.M. Peak Period Mode Split (All Trip Purposes)
 Source: West Don Lands Precinct Plan

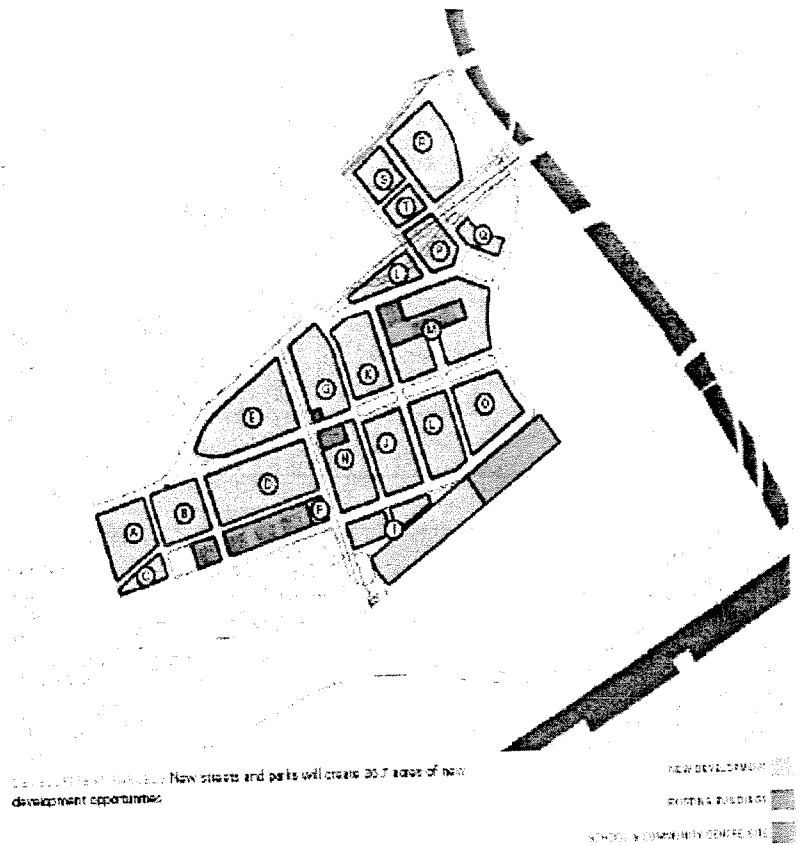
	Kings Travel Survey (%)	Waterfront Travel Survey (%)
Auto Driver	35	33
Auto Passenger	3	3
Local Transit	30	31
GO Train	0	0
Bicycle	2	1
Walk	29	28
Other	0	4
Total	100	100

2.4. Trip Assignment

A future transportation network as represented in Figure 2.1 of the WDL Precinct Plan was created in QRSII (a computerized travel forecasting software) to model the a.m. and p.m. trip assignments. Changes to the existing road network, road closures, and relocation of links were modeled in the network for Trip Assignment. The existing traffic volumes were manually adjusted to reflect re-routings due to street closures and other changes, and the traffic generated by the WDL and EBF was layered on top of these values. No growth in through traffic was factored in (reflecting the overall trend across the Planning District 1 Cordon over the past 15 to 20 years).

The future transportation demands are shown in Appendix A. These build on the QRS model, and reflect local network characteristics and operational issues.

Figure 2.1 Proposed Streets and Block Plan



3. FUTURE TRANSPORTATION DEMANDS

The existing levels of service were calculated for all of the signalized intersections in the Precinct using Synchro / Simtraffic (Version 6.0). All of the intersections in the precinct were found to be operating at acceptable levels of service as seen in Table 3.1. Future transportation conditions at full build-out were also analyzed, and these are shown in Table 3.1. All of the intersections are projected to remain operating at acceptable levels of service. As noted above, the assignment reflected the proposed Streets and Blocks Plan. The use of Synchro/Simtraffic allows the assessment of individual intersections (believed to be the primary criterion for network performance in a network of short blocks, in an urban setting) and progression between intersections, also a significant measure of the functionality of the network.

Table 3.1. Levels of Service for Existing and Future Traffic Conditions
 Source: West Don Lands Precinct Plan

Intersection	Existing Traffic			Future Traffic (2021)		
	Level of Service	Critical Lanes	Degree of Sat. ≥ 0.85	Level of Service	Critical Lanes	Degree of Sat. ≥ 0.85
A.M. Peak Hour						
Parliament / King	B	-	-	B	-	-
Parliament / Front	B	-	-	D	WBT/NBT/SBT	0.99/0.96/0.87
Parliament / Mill	A	-	-	B	-	-
Parliament / Lake Shore	C	WBT	0.87	D	WBT/NBT/SBT	0.99/0.96/0.87
Cherry / King	A	-	-	B	-	-
Cherry / Eastern	B	-	-	B	-	-
Cherry / Lake Shore	B	-	-	B	-	-
River St / Queen	B	-	-	B	-	-
P.M. Peak Hour						
Parliament / King	B	-	-	A	-	-
Parliament / Front	B	-	-	C	EBT	0.95
Parliament / Mill	A	-	-	A	-	-
Parliament / Lake Shore	C	NBT	0.88	C	EBT/NBR	0.95/0.94
Cherry / King	A	-	-	A	-	-
Cherry / Eastern	A	-	-	B	-	-
Cherry / Lake Shore	B	-	-	B	-	-
River St / Queen	B	-	-	B	-	-

At present, the intersections at Front Street/Eastern Avenue/Trinity Street, Front Street/Cherry Street, Mill Street/Cherry Street and River Street/King Street are not signalized. Assuming that signals ultimately will be warranted at these locations, the future levels of service based on the traffic forecasts were estimated. In all cases, it was estimated that these intersections would operate at an excellent Level of Service A or B.

Each of the alternative solutions identified in the EA Master Plan report has been reviewed in relation to the transportation demands.

3.1. Alternative A

Alternative A is the base case, "do nothing" alternative. Total future traffic conditions were not explicitly analyzed on the existing transportation network for the "do nothing" alternative. However, given that the network is currently under-utilized, the results for future traffic conditions in Table 3.1 can be taken as generally representative of Alternative A. The results did not take into account the impact of a streetcar line operating on Front Street or Cherry Street.

3.2. Alternatives B and C

The New Roads Alternatives (B / C) include the construction of new, or extensions of existing, public roads within and outside WDL, providing an overall connected network. The new local roads within WDL are estimated to carry low volumes of traffic. These roads would essentially serve local

transportation demands for the various modes (auto, pedestrian, bicycle) and provide access to new developments abutting both sides of the street. Hence, the impact of these alternatives on traffic operations is indirectly accounted for in the LOS and capacity analysis of other road alternatives listed below. There is very limited scope for Alternative C, involving construction of new road links outside the Precinct to serve the Precinct demands. Introduction of new external road connections beyond those proposed would be extremely costly, and would not serve the primary vectors of demand (north and west).

3.3. Alternatives D and F

These alternatives cover two opportunities: road widening within the WDL (D), and road realignment (F). The alternatives take into account that regular traffic and streetcars share the same right-of-way.

3.3.1. Alternative D

Results obtained from the West Don Lands Transit Analysis report help define the projected impact of widening roads and intersections that share right-of-way with one of the proposed streetcar lines (for proposed streetcar options, see Alternative H below) as seen in Table 3.2. The transit analysis was undertaken for the 2021 build out conditions and assumed the corresponding land use and transportation network. The following intersections (and connecting links between them) would have to be widened for the successful implementation of any one of the proposed streetcar lines: Parliament/King, Parliament/Front, Cherry/King, Cherry/Eastern, Cherry/Front, and Cherry/Mill.

As seen from Table 3.2, with the road widenings and either one of the streetcar options in place approximately 27% to 25% of the a.m. peak hour trips would be made by the streetcar line in the WDL Precinct. Similarly, analysis carried out for transit trip flows through WDL showed that the streetcar Option 1 would result in 2,181 through trips compared to 2,270 through trips for Option 2, as seen in Table 3.4.

Table 3.2 2021 A.M. Peak (3-hour) Period Trip Flows Originating From/ Destined To West Don Lands
 Source: West Don Lands Transit Analysis

Trips		Total Motor Trips	Gen. Transit Travel Time (min.)			Transit Trips		
Originating From	Destined To		Option 1	Option 2	Difference	Option 1	Option 2	Difference
West Don Lands	Port Lands	50	34.9	32.9	-2	19	21	2
	Rest of Central Area	1580	37.6	40.3	2.7	1166	1061	-105
	Rest of Waterfront	220	44.6	47.7	3.1	129	118	-11
	West Toronto	790	78.5	82.3	3.8	304	284	-20
	East Toronto	840	73.7	77.3	3.6	299	279	-20
	Rest of GTA	550	144	144.6	0.6	53	53	0
Sub Total		4030	n/a	n/a	n/a	1970	1816	-154
Port Lands	West Don Lands	70	32.8	30.7	-2.1	25	28	3
Rest of Central Area		610	45.7	48.1	2.4	231	215	-16
Rest of Waterfront		170	49.2	52.1	2.9	55	51	-4
West Toronto		870	81.7	85.1	3.4	300	283	-17
East Toronto		1170	77	80.6	3.6	384	360	-24
Rest of GTA		1320	156.7	157.2	0.5	101	101	0
Sub Total		4210	n/a	n/a	n/a	1096	1038	-58
Total To / From West Don Lands		8240	n/a	n/a	n/a	3066	2854	-212

3.3.2. Alternative F

The realignment of the Front Street and Eastern Avenue intersections serves a two-fold purpose; first, to accommodate future total traffic conditions while catering to the existing flow of commuter traffic, and second, to allow the introduction of a streetcar line along Front Street (Option 1 in Transit Alternatives). Two alignments for the intersection were analyzed (Figure 3.1 and 3.2). LOS and capacity analysis, along with direction and destination of the traffic, was examined in selecting the best alternative. Table 3.3 summarizes the results of the analysis.

Table 3.3. Levels of Service at the Front St / Eastern Ave / Trinity St. Intersection
 Source: West Don Lands Precinct Plan

Intersection	LOS	Front St / Eastern Ave. Diversion	Vol. / Cap.
A.M. Peak Hour			
Alternative 1	B	Front St. Eastbound (double left turn)	0.76
		Eastern Ave. South to Westbound (double right turn)	0.6
Alternative 2	B	Front St / Eastern Ave. Eastbound	0.29
		Front St / Eastern Ave. Westbound	0.83
P.M. Peak Hour			
Alternative 1	B	Front St. Eastbound (double left turn)	0.81
		Eastern Ave. South to Westbound (double right turn)	0.63
Alternative 2	B	Front St / Eastern Ave. Eastbound	0.69
		Front St / Eastern Ave. Westbound	0.56

Figure 3.1. Alternative 1 realigns the intersection so that Front Street both east and west of Trinity Street functions as a continuous east-west road.

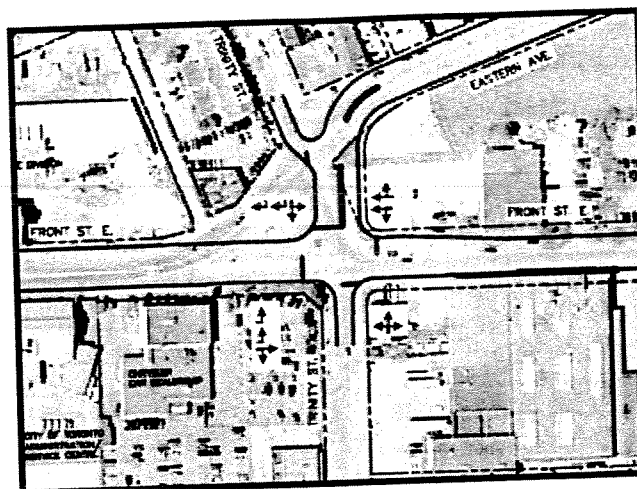
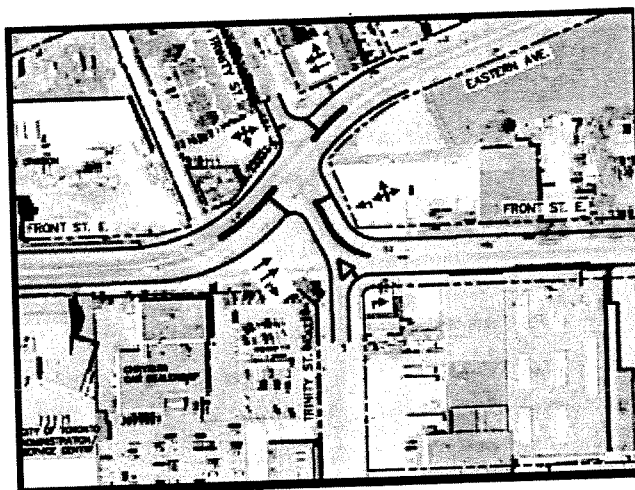


Figure 3.2. Alternative 2 realigns the intersection such that Front Street and Eastern Avenue form a single east-west road.



Alternative 2 was selected as it is expected to maintain an uninterrupted flow of East-West traffic and reduce the risk of traffic cutting through the WDL, along with a resulting better level of service and lower v/c ratios. The impact of this realignment on auto and transit trips is embedded in the results of Table 3.2.

3.4. Alternative H

The transit alternative assessed involves construction of new and/or extend existing rapid transit within the WDL.

Two streetcar lines have been proposed based on the WDL Transit Analysis Technical Memorandum; Option 1, routings that divert from King Street at Parliament Street and then continue along Front Street, and Option 2, routing through WDL via Cherry Street. Both the options were analyzed with the help of ridership estimates from the Travel Demand Model and an elasticity approach. Option 1 results were pivoted off of the Option 2 results using a total travel time elasticity approach developed

by TTC for marginal service planning purposes. This approach calculated a generalized travel time, which was used to estimate the impacts of marginal service planning issues on transit ridership. Equations 3.1 and 3.2 describe the methodology:

$$\text{Generalized Travel Time} = (1.0 \times \text{In-Vehicle Time}) + (2.5 \times \text{Walk Time}) + (1.5 \times \text{Wait Time}) + (10 \text{ min} / \text{Transfer}) \quad 3.1$$

$$(\% \text{ Change in Transit Riders}) = (-1.5\%) * (\% \text{ Change in Generalized Travel Time}) \quad 3.2$$

Table 3.4. 2021 A.M. Peak (3-hour) Period Route Transit Trip Flows Through West Don Lands
Source: West Don Lands Transit Analysis

Originating From	Trips Destined To	Gen. Transit Travel Time (min.)			Transit Trips Through WDL		
		Option 1	Option 1	Difference	Option 1	Option 2	Difference
East Toronto	Port Lands	85.1	83.6	-1.5	40	41	1
	Rest of Central Area	48.6	46.1	-2.5	1364	1484	120
	Rest of Waterfront	50.8	48.3	-2.5	67	73	6
	West Toronto	63.6	61.1	-2.5	29	31	2
	Rest of GTA	130.8	128.3	-2.5	1	2	1
Sub Total		n/a	n/a	n/a	1501	1630	129
Port Lands	East Toronto	51.2	49.7	-1.5	33	34	1
Rest of Central Area		53	50.5	-2.5	59	64	5
Rest of Waterfront		51.7	49.2	-2.5	60	65	5
West Toronto		56.6	54.1	-2.5	10	11	1
Rest of GTA		146.7	144.2	-2.5	6	6	0
Sub Total		n/a	n/a	n/a	168	180	12
Port Lands	Rest of Central Area	31.4	34.3	2.9	386	343	-43
	Rest of Waterfront	40.6	43.5	2.9	10	9	-1
	West Toronto	56.6	59.5	2.9	3	3	0
	Rest of GTA	130.5	130.5	0	0	0	0
Sub Total		n/a	n/a	n/a	399	355	-44
Rest of Central Area	Port Lands	35	37.9	2.9	56	51	-5
Rest of Waterfront		42.2	45.1	2.9	1	1	0
West Toronto		69.1	72	2.9	54	51	-3
Rest of GTA		181.7	181.7	0	2	2	0
Sub Total		n/a	n/a	n/a	113	104	-9
Total Through West Don Lands		n/a	n/a	n/a	2181	2270	89

In Eq. 3.1, walk time is more heavily weighted, thus Option 1 results in an overall addition of 212 trips for both the a.m. and p.m. peak periods as it has a larger catchment area (based on the 5-minute walking distance buffer). On the other hand, for through trips, Option 2 with its lesser wait time due to smaller headways attracts 89 more transit trips as compared to Option 1 as seen in Table 3.4. In the final analysis, Option 1 attracts only 120 net additional riders during the a.m. peak period. This advantage is more than offset by the cost to build a 5.2 km long streetcar line, as opposed to a 3.7 km line for Option 2. Thus, Option 2 is the preferred streetcar line routing.

The Transit Alternatives G and I are not part of the current evaluation.

3.5. Recommended Cross-Sections

Based on the analysis of road and transit requirements documented above (and also taking into consideration other planning issues documented in the EA Master Plan report), the following cross-sections are recommended:

- **Front Street:** Between Eastern Avenue and Cherry Street, the volumes generated by Lea and IBI both suggest that one through lane per direction is sufficient. The IBI work to date [focused more at the regional level] suggests that a volume of 500 to 600 vehicles is expected in the peak direction.) It is understood that a parking lane is to be provided on each side. West of Eastern Avenue, four lanes of traffic capacity are required. These cross-sections do not account for a streetcar line (Option1).
- **Cherry Street:** north of Eastern Avenue, a two-lane cross-section is required. South of Eastern Avenue, a four-lane cross-section is required. As seen in Section 3 and Table 3.1 the current infrastructure (number of lanes - capacity) provides acceptable levels of service for total future traffic conditions. Thus, while maintaining existing number of lanes, the right-of-way for Cherry Street has been widened to include the streetcar line (Option 2).

North of Eastern Avenue, the existing right-of-way allows the inclusion of the streetcar line as seen in Figures 3.2 and 3.3 while maintaining the number of lanes (i.e. the same capacity). From south of Eastern Avenue to the rail corridor, Cherry Street is proposed to be widened selectively on either the west or east side to minimize the impact on existing infrastructure, as well as to provide the necessary right-of-way to accommodate the streetcar line. Figures 3.4 and 3.5 show a typical cross-section.

Figure 3.2. Cross section at the Cherry Street and King Street intersection.

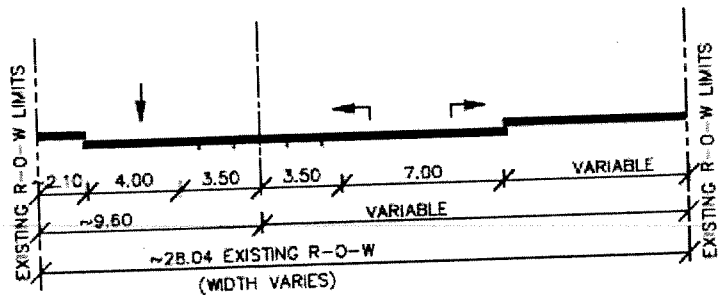


Figure 3.3. Cross-section taken immediately to the south of the Adelaide / Richmond St ramps.

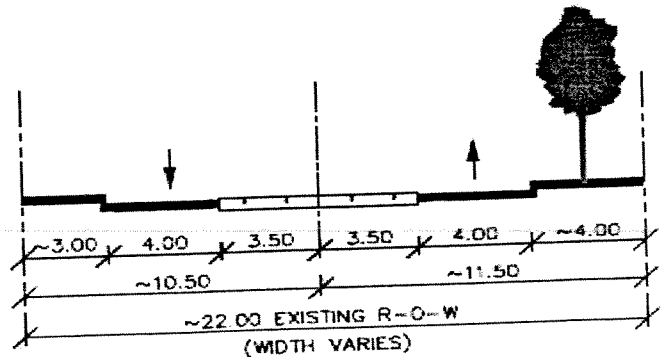


Figure 3.4. Typical cross-section between Eastern Avenue and Front Street

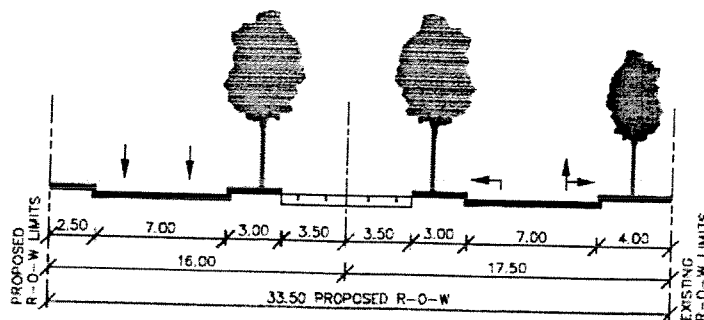
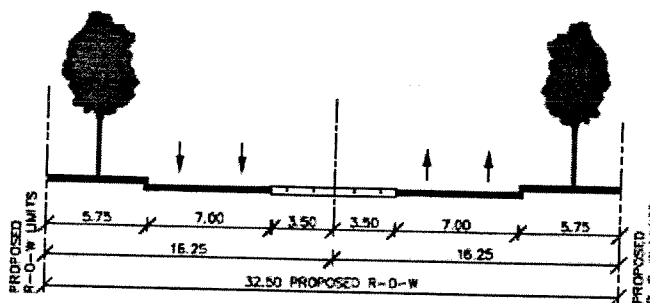


Figure 3.5. Typical cross-section South of Front Street to Rail Corridor.



- River Street Extension: two-lanes plus bike lanes in each direction are proposed, with a parking lane on the east side
- “The Park”: a four-lane cross-section is proposed, with bike lanes in each direction
- Bayview Avenue: a two-lane cross-section plus a bike lane and parking lane on each side is proposed

The bike network through this area is proposed to include the following reserved bike lanes, in addition to the existing network of shared lanes and trails:

- River Street Extension
- Bayview Avenue south of the River Street Extension
- Mill Street, between Bayview Avenue and Parliament Street

This has been concluded in recognition of the increased traffic demands in and through the WDL, and in recognition for the need for connections to the City’s existing network and future areas of projected demand.

There is the potential to designate reserved bike lanes on Cherry Street, and it is recognized that this would enhance the connectivity of the cycling network, and thereby enhance the sustainability of the area’s transportation system. Cherry Street provides the most direct routing for residents of Corktown, Regent Park and Cabbagetown to the Lake, and it would fill in a gap in the cycling network east of Sherbourne Street. Given the volume of traffic and uncertainty as the parking operation on Cherry Street, the Master Plan has not attempted to be definitive on this issue. However, the pavement width is wide enough to accommodate bike lanes, and it should be noted as an option in the City’s

operational strategy, to be resolved in concert with the decision regarding the streetcar routing into the West Don Lands.

It is acknowledged that there is some loss of functionality for cyclists due to the narrower right-of-way on Cherry Street north of Mill Street. Provision of off-street parking can assist in maximizing the utility of the right-of-way for cyclists as well as vehicular traffic. Alternatives which can be explored during detailed design include narrowing the sidewalks slightly to accommodate reserved bike lanes, or application of a colonnade system for wider pedestrian space in combination with wide pavement to accommodate reserved bike lanes.

3.6. Projected Demands for Schedule "C" Projects

The Bayview Avenue Re-alignment and Cherry Street Widening are listed as falling under Schedule "C" under the MEA Class EA Schedule in the WDL Class Environmental Assessment Master Plan. The projected future demands for Cherry Street and Mill Street are listed in the WDL Precinct Plan (Figure 3.2). Presented below is a review of the projected future peak hour traffic conditions for Cherry Street and Bayview Avenue:

Bayview Avenue Realignment

It is proposed to realign Bayview Avenue to protect as much as possible of the road from flooding, by placing on top of the flood protection landform. The realignment also involves the addition of new intersections and links to Bayview Avenue from other major streets in the Precinct. This change in the network geometry is expected to have an impact on travel patterns within the precinct. Traffic growth (documented in the WDL Precinct Plan) on existing major streets (Cherry Street and Mill Street) along with results obtained from the QRS model have been used to define a range of future total traffic conditions for Bayview Avenue. Table 3.5 shows the compound growth rate and the existing and future directional peak hour traffic volumes for Cherry Street and Mill Street.

Table 3.5. Existing and Future Total Peak Hour Traffic
Cherry Street

	Northbound				Southbound			
	A.M.		P.M.		A.M.		P.M.	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
	452	1050	436	1692	1208	2131	906	1965
Growth / yr	5%		7%		3%		4%	

Mill Street

	Eastbound				Westbound			
	A.M.		P.M.		A.M.		P.M.	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
	452	1050	436	1692	1208	2131	906	1965
Growth / yr	5%		9%		6%		8%	

An average of the growth rates from Table 3.5 was used to calculate future directional peak hour traffic volumes for Bayview Avenue, shown in Table 3.6. Estimates from the QRS model are also

shown in Table 3.6. The two values can be taken as the high and low ends of the range of future directional traffic conditions on Bayview Avenue during the peak hour.

Table 3.6. Existing and Projected Bayview Avenue Traffic Volumes

	Northbound				Southbound			
	A.M.		P.M.		A.M.		P.M.	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
Growth Rate	102	257	696	3203	520	1186	385	1142
QRS Model		168		552		533		436

The northbound p.m. volume projected based on the growth rate is very high, in comparison to the QRS projection. A growth rate of 8% per year is likely not sustainable over a period of 10 to 20 years. However, the northbound QRS value is less than the existing. **Applying a one percent growth rate over 20 years would result in p.m. peak hour values of 850 northbound and 470 southbound.** The p.m. peak hour is expected to be the critical time period. These values are expected to be representative of future conditions. These values can be accommodated on the proposed Bayview Avenue cross-section, based on the function of Bayview as a “single-loaded” street which does (and will continue to) serve primarily as a commuter route.

Cherry Street Widening from King Street to South of Mill Street

The widening is to be carried out to accommodate a 12 to 13m wide landscaped median along with a dedicated right-of-way for the proposed streetcar line. The estimated total future directional peak hour traffic is seen in Table 3.7.

Cherry Street Widening from South of Mill Street to Rail Corridor

In the long term, the streetcar line will be extended under the rail corridor and to the Port Lands. Currently, it is proposed to provide a loop on the south side of Mill Street for the streetcar line on Cherry Street. The estimated total future directional peak hour traffic is seen in Table 3.7.

Table 3.7. Cherry Street - Existing and Future Total Traffic

Cherry Street (King St to South of Mill St)

	NB				SB			
	A.M.		P.M.		A.M.		P.M.	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
TOTAL	310	708	281	1033	724	1310	586	1184

Cherry Street (South of Mill St to Rail Corridor)

	NB				SB			
	A.M.		P.M.		A.M.		P.M.	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
TOTAL	142	342	155	659	484	821	320	781

These projected volumes can be accommodated on the proposed cross-sections.

4.0 CONCLUSIONS

Based on the reports and studies mentioned in the above document, the following alternatives are expected to improve the transportation network within the West Don Lands and support the development envisioned for the Central Waterfront Secondary Plan area.

- Alternative 'D' – Widening existing roads within the West Don Lands Precinct. This is the most cost-effective and feasible method to meet the transportation demands of WDL. In the majority of cases existing road right-of-ways permit the widening of major links within the WDL making the network flexible enough to support both vehicular traffic as well as transit additions in the form of streetcars.
- Alternative 'F' – Realign existing roads and intersections within the West Don Lands Precinct. The Front Street / Eastern Avenue intersection is the only major realignment proposed for the study area. The alignment limited the distribution of through traffic within the WDL and maintains the familiar "through" routes. This helped in aiding the smooth flow of traffic and allowed more capacity for local traffic on the internal roads.
- Alternative 'H' – Construct new and / or extend existing transit within the West Don Lands Precinct. The WDL Transit Analysis Technical Memo findings for Option 2 indicate a mode split of nearly 35% for transit trips originating from or destined to the WDL. This fits well with the City of Toronto's goal to encourage the use of transit, which will consequently lower the auto mode split to an average of 35% for the Waterfront area. To achieve the goals a streetcar system (Option 2) is recommended based on the City's Secondary Plan for the Central Waterfront.

Road cross-sections (including recommendations regarding bike lanes) were defined for incorporation into the Master Plan; these are noted in Section 3.5 above.