



New LRV Fleet Maintenance & Storage Facility

Presentation to

The Port Lands Action Committee

September 17, 2009





TODAY'S PRESENTATION

- Provide background and context to the TTC proposal to develop a new maintenance and storage facility for the new Low Floor Light Rail Vehicles (LRV) fleet
- Present the site locations considered and the criteria used to assess those sites
- Identify preferred site
- Answer any questions you may have with this project



NEW LIGHT RAIL VEHICLE

- Existing streetcars are 30 to 40 years old and are nearing the end of their useful lives
- Replacement fleet will consist of 204 new Low Floor Light Rail Vehicles (LRVs)
- New LRVs will improved reliability of the vehicles (LRVs)
- New vehicle is almost twice as long as the current streetcars
- Will provide higher capacity for improved passenger flow and reduced crowding
- Are wheelchair accessible
- Designed with a strong focus on safety, security and customer convenience in all aspects of design
- Provides bright and easy to read LED route/destination signs
- Provide improved interior and exterior lighting
- Provide air conditioning
- Accommodates bicycles and baby strollers in the passenger compartment



LRV - LODZ, POLAND



BOMBARDIER LOW FLOOR LRV



MAINTENANCE AND STORAGE FACILITY MASTER PLAN STUDY

- Initiated by TTC to review the requirements to maintain and store the new fleet of 204 LRVs
- Considered Roncesvalles Carhouse and Russell Carhouse
 - Over 80 years old
 - Insufficient space within the existing buildings to service new LRVs
 - Insufficient storage space within the yards for new vehicles
 - Would require rebuilding and expanding existing facilities into adjacent residential neighbourhoods





SCHEDULE FOR NEW LRVs

LRV Fleet Delivery Schedule

- Delivery of 6 Demonstration/Prototype vehicles By end of 2012
- Delivery of 36 production vehicles annually Starting in 2013
- Complete fleet delivery (204 cars) By end of 2018

Project Schedule

- Conceptual Design Complete Fall 2009
- Environmental Assessment Commence Fall 2009
- Preliminary Design Commence Fall 2009
- Detailed Design Commence Mid 2010
- Construction Commence Early 2011-Complete Mid 2013



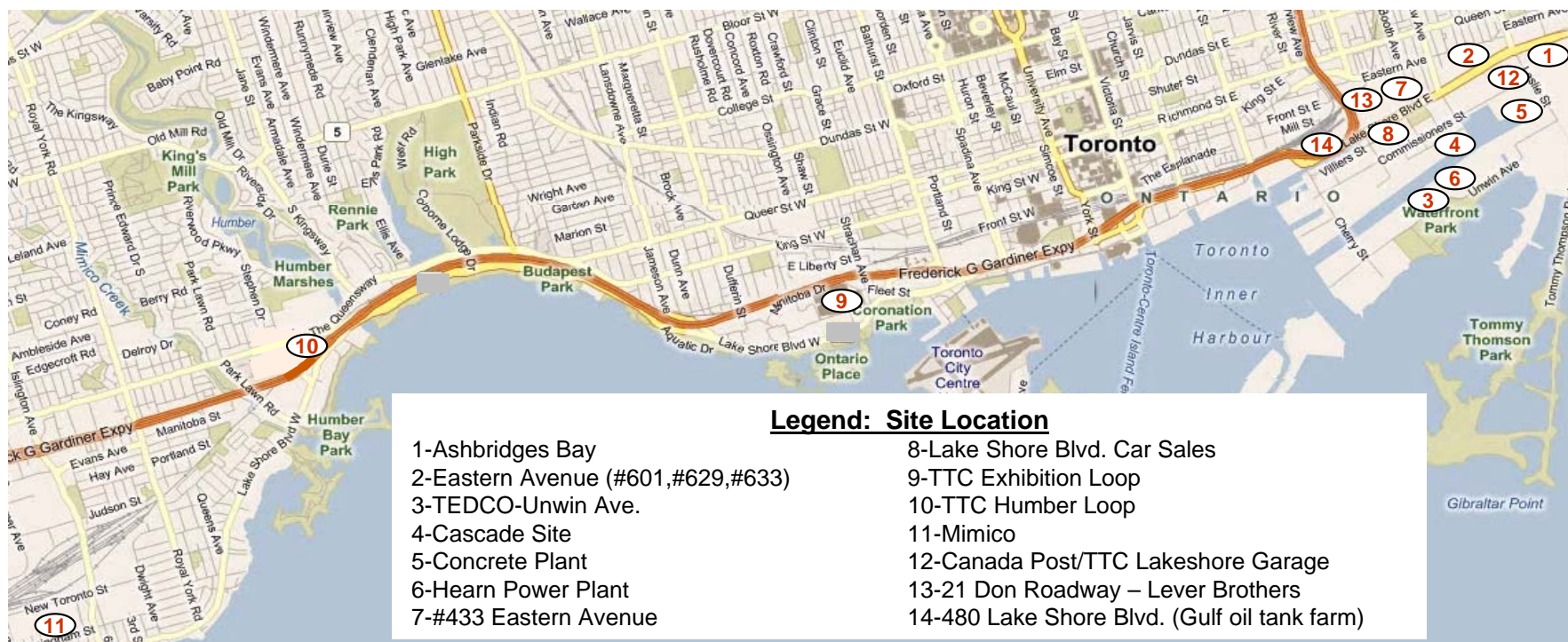
NEW FACILITY SITE SEARCH CRITERIA

Initial Search Criteria

- Property requirement approximately 22 acres
- Close proximity to existing streetcar network
- Minimal relocation of existing business and their facilities
- Minimize crossings of existing rail road tracks



PROPERTY SEARCH



- Fourteen sites were investigated as potential locations to accommodate the Fleet Replacement Maintenance and Storage Facility (MSF)
- Six of these sites met the minimum property requirements (Sites #1-#6)
- The remaining eight sites were not suitable for the MSF as they did not meet the minimum property requirement



PROPERTY SEARCH

The following six sites that met the minimum property size and access requirement are:

1. Ashbridges Bay- Leslie Street at Lake Shore Blvd. East
2. Eastern Avenue (#601, #629 & #633)
3. TEDCO - Unwin Avenue (Lots 447-449, 451)
4. Cascade site- Commissioners St./Basin St.
5. Concrete Plant – Commissioner St./Leslie St.
6. Old Hearn Generating Plant



PROPERTY SCREENING

The site evaluations were assessed based on the following criteria:

- Property Size
- Community Considerations
- Operational Issues
- Cost
- Potential for site to be developed and in service by mid 2013



SITES WHICH MEET PROPERTY CRITERIA



- LEGEND**
- Property Boundary
 - ⋯ Connection Track from site to Queen Street



SITE EVALUATION

Factors/Criteria and indicators	Site 1 Ashbridges Bay Site (Leslie St. & Lake Shore Blvd.)	Site 2 #601 & #629, #633 Eastern Avenue	Site 3 TEDCO – Unwin Ave. (Lots 447-449, 451)	Site 4 Cascade Site (Commissioners St./Basin St.)	Site 5 Concrete Plant (Commissioners St./Leslie St.)	Site 6 Hearn Power Plant (440 Unwin Ave.)
1. Property <ul style="list-style-type: none"> • Current use on site and availability of site • Ease of acquisition and availability • Size 	Vacant land Property owned by Port Authority; lease amendment required. 22 acres	Film Studio / vacant land and car dealership Requires relocation of Toronto Film Studio and car dealership 22 acres	Staging of granular material Property owned by TEDCO 22.7 acres	Business Activity and vacant land Require relocation of businesses 25 acres	Concrete Batch plant. Long term leases established by TEDCO Requires relocation of concrete batch plant. 25 acres	Disused Hearn Power Plant Property owned by OPG. 32 acres
2 Community Considerations <ul style="list-style-type: none"> • Adjacent land uses 	Linear Park/ Berm buffer between MSF and adjacent streets. Wastewater treatment Plant, commercial and industrial uses	Relocation of businesses. Adjacent to film studios (potential noise and vibration issues) Residential community to the north of the site.	No perceived impacts to community Industrial uses adjacent to site.	Relocation of businesses Adjacent to film studio (potential noise and vibration issues) Industrial uses adjacent.	Relocation of businesses Industrial uses adjacent to site.	Short term uses for other activities (eg. filming) Industrial uses adjacent to site
3. Operational Issues <ul style="list-style-type: none"> • Operational impediments • Distance traveled by vehicles to City's core operational routes 	No rail track crossing 0.8 km connection track to line	No rail track crossing 0.8 km connection track to line	Requires crossing of existing rail spur line on Leslie Street 3.0 km connection track to line	Requires crossing of existing rail spur line at the east end of Commissioners Street 1.8 km connection track to line	Requires crossing of existing rail spur line at the east end of Commissioners Street 1.1 km connection track to line	Requires crossing of existing rail spur line on Leslie Street 2.6 km connection track to line
4. Schedule/Timing <ul style="list-style-type: none"> • Facility complete by end of 2012 	Meets schedule	Acquisition and demolition of building could extend completion by 1-2 years Will not meet schedule	Plans require review by Waterfront Toronto's Design Review Panel – scheduled impact 3 months Meets schedule	Acquisition and demolition of building could extend completion by 1-2 years Plans require review by Waterfront Toronto's Design Review Panel – scheduled impact 3 months Will not meet schedule	Acquisition and demolition of building could extend completion by 1-2 years Plans require review by Waterfront Toronto's Design Review Panel – scheduled impact 3 months Will not meet schedule	Demolition of building is anticipated to extend completion by 1-2 years Plans require review by Waterfront Toronto's Design Review Panel – scheduled impact 3 months Will not meet schedule
5. Costs	Property Connection Track Deadhead Berm/wall Landscape feature Site levelling Use amendment	Property Connection Track Deadhead Berm/wall Demolition Business Relocation Existing facility modifications to meet schedule Premium to meet schedule	Property Connection Track Deadhead Berm/wall Rail Crossing Structures/bridge	Property Connection Track Deadhead Berm/wall Demolition Business Relocation Rail Crossing	Property Connection Track Deadhead Berm/wall Demolition Business Relocation Rail Crossing	Property Connection Track Deadhead Berm/wall Demolition Business Relocation Rail Crossing Structures/bridge

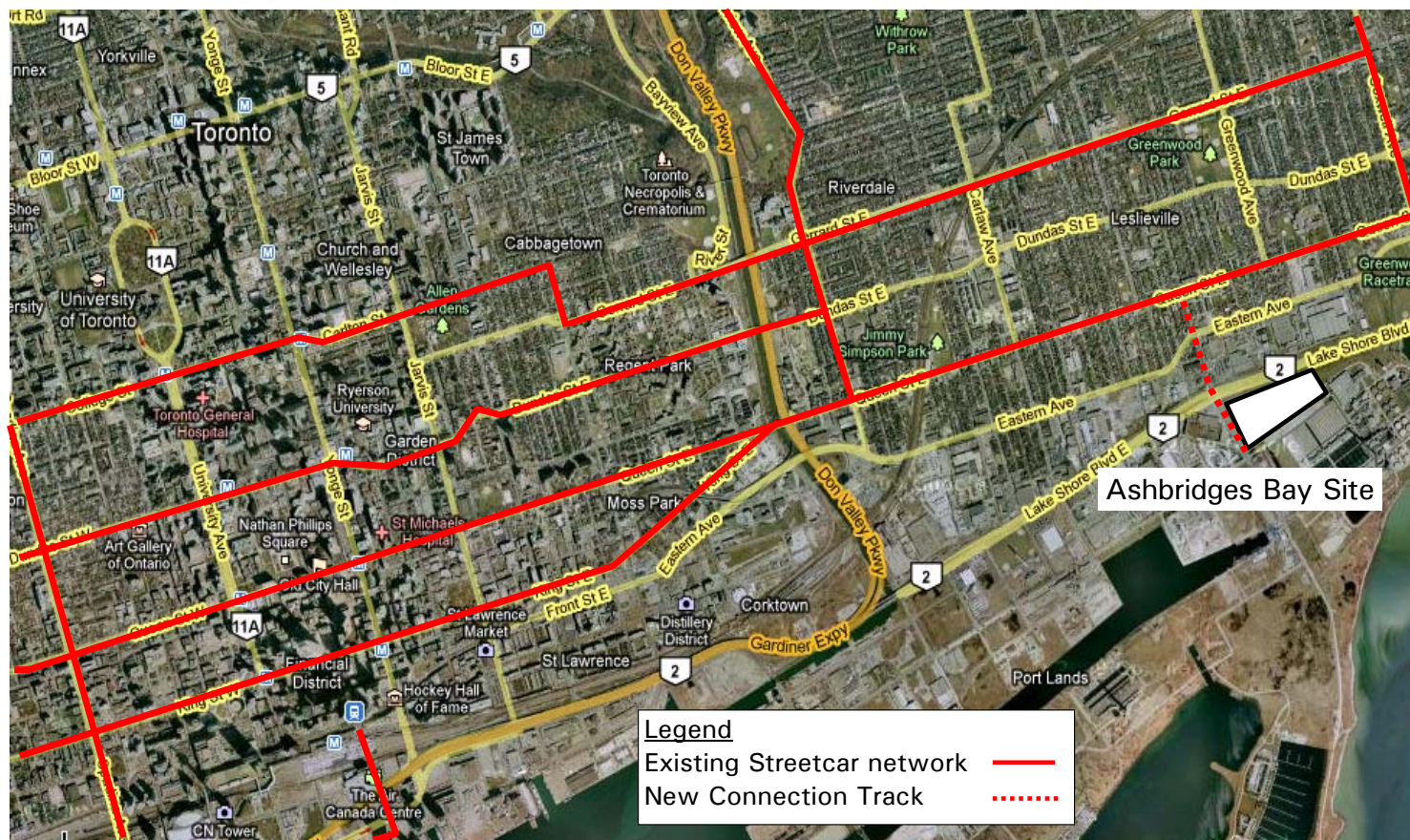


SITE EVALUATION

- Based on the evaluation, the following three sites meet the criteria to accommodate the new LRV Maintenance & Storage Facility and have the highest potential to meet the scheduled completion date of 2013
 - Ashbridges Bay (Leslie Street at Lake Shore Blvd. East)
 - Eastern Avenue (#601, #629 & #633)
 - TEDCO – Unwin Avenue



PREFERRED SITE – Ashbridges Bay

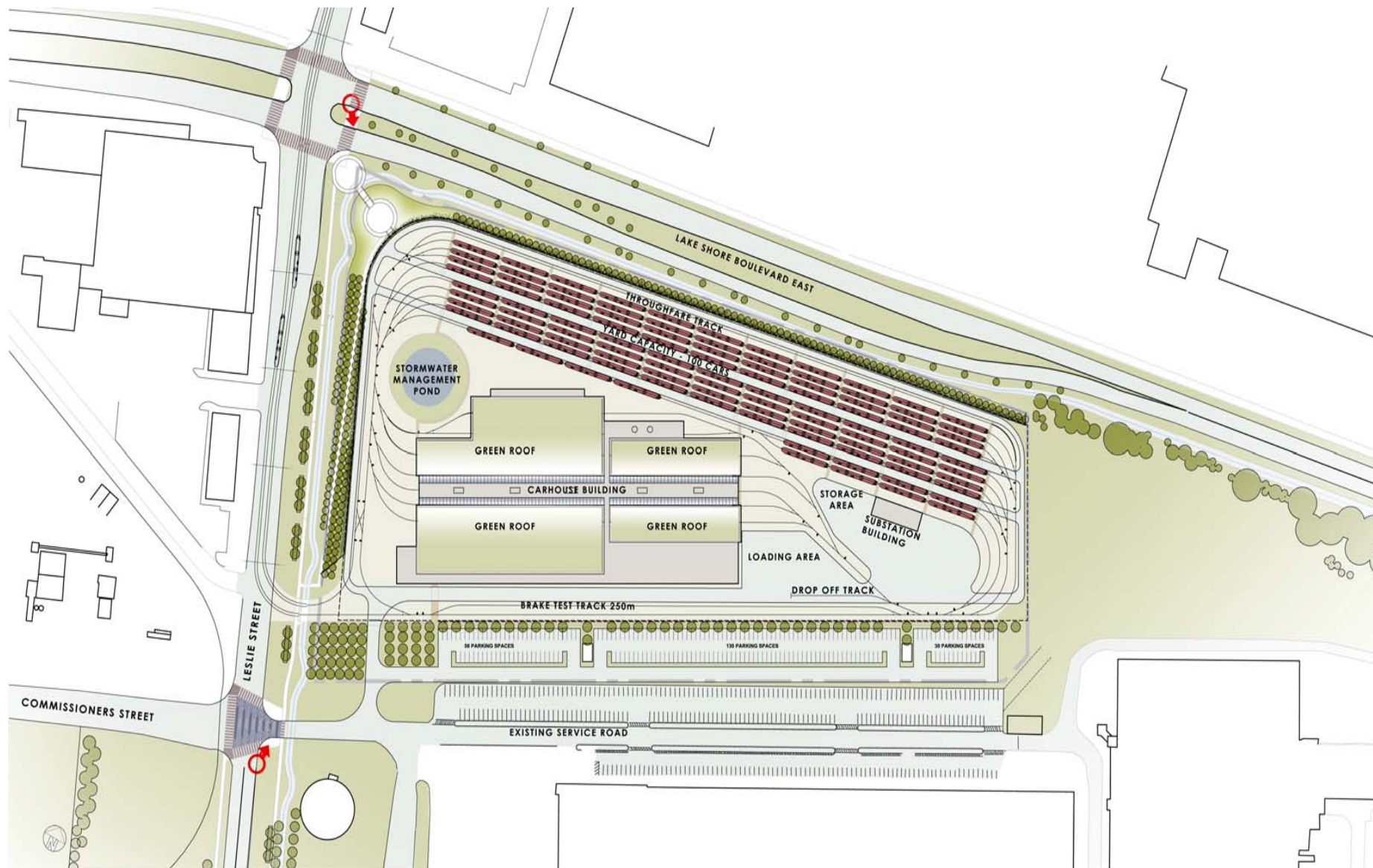


Advantages

- Close proximity to existing streetcar line (Queen St.)
- Site is mostly vacant and has most potential to meet the 2013 completion date
- Meets the minimum property size requirement
- Adjacent to industrial and commercial developments

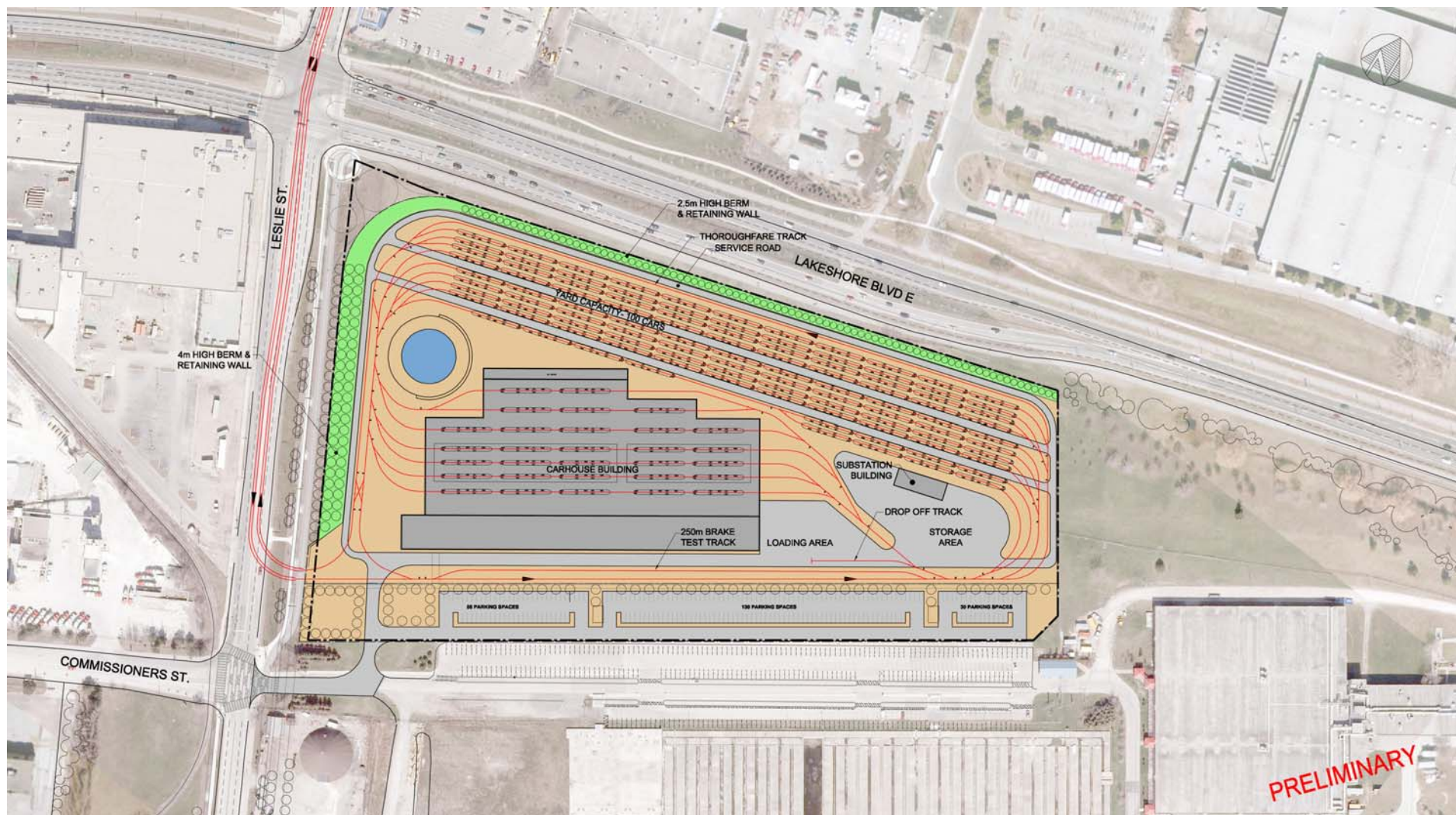


ASHBRIDGES BAY





ASHBRIDGES BAY



Ashbridges Bay Facility Layout



ASHBRIDGES BAY



Connecting Track to Queen Street East



ASHBRIDGES BAY



QUEEN ST.
WEST VIEW AT LESLIE ST.

EXISTING



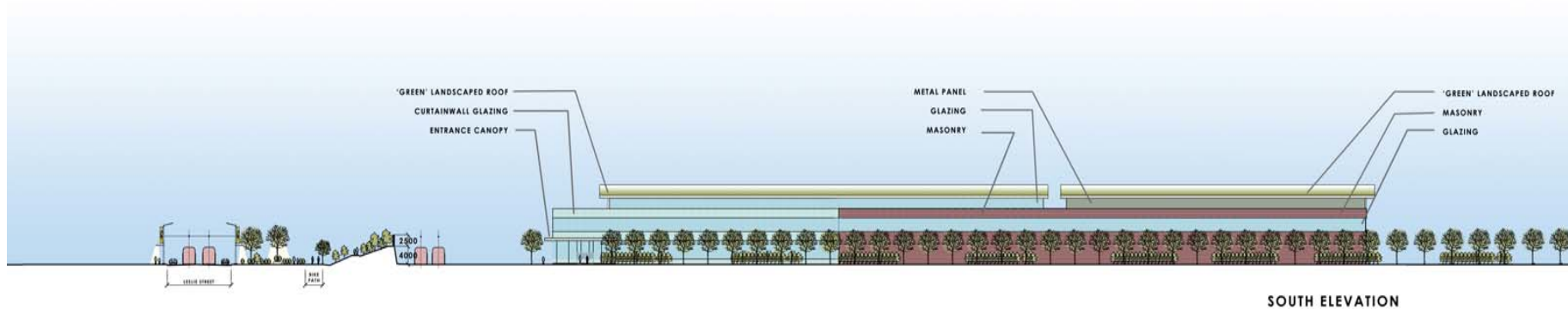
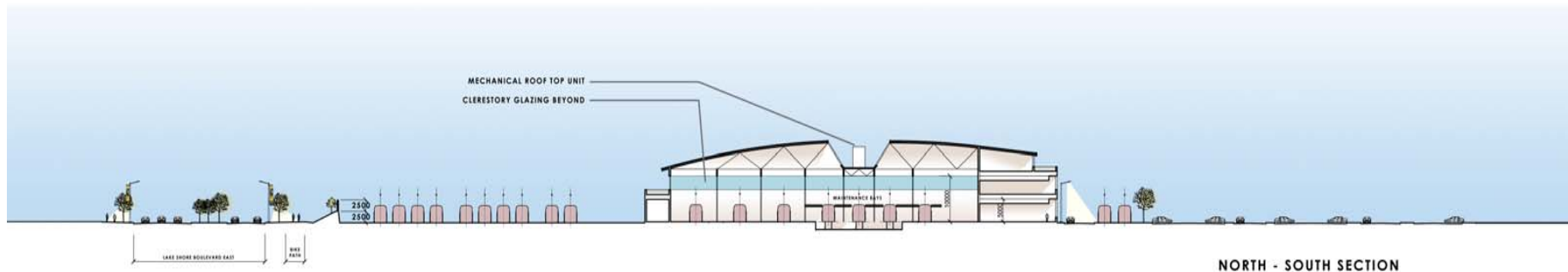
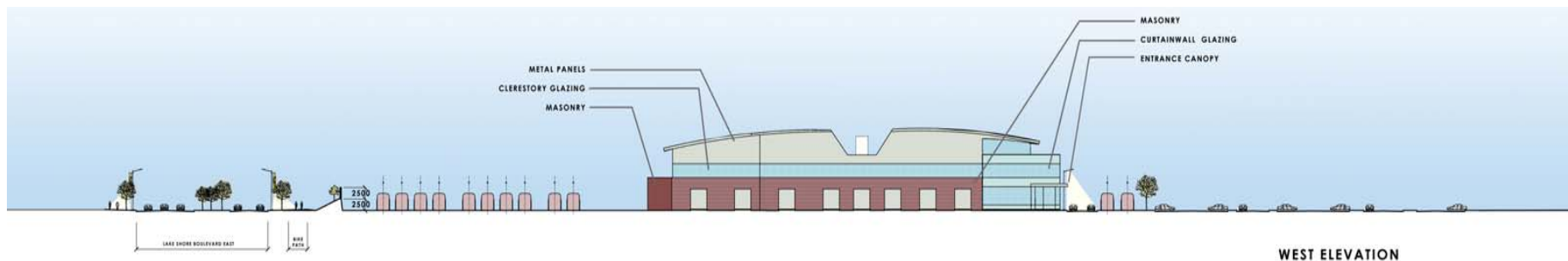
PROPOSED

PRELIMINARY

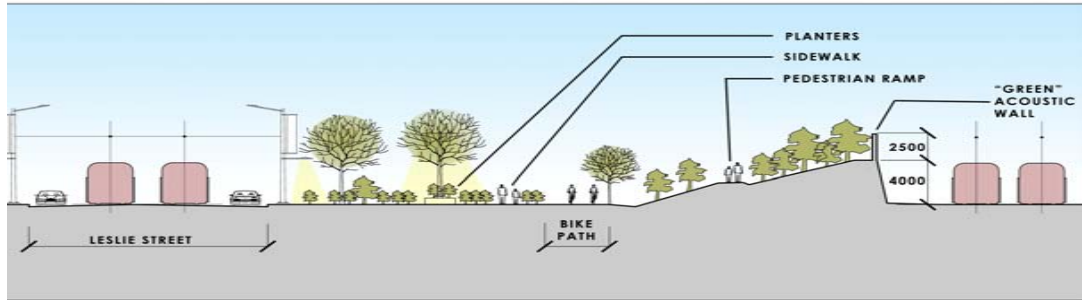
Queen St./Leslie St. Track Connection



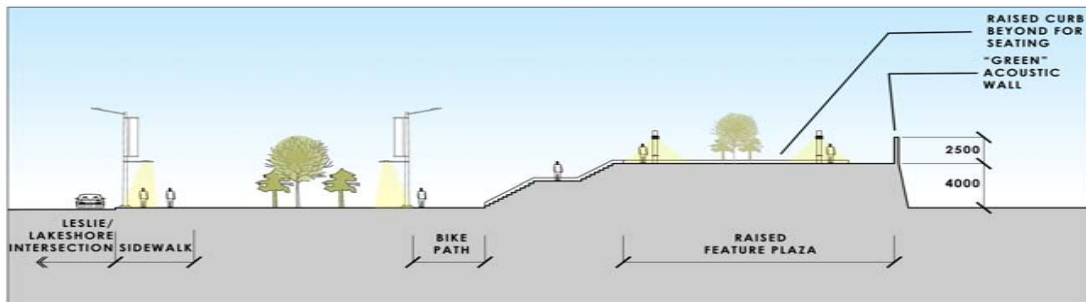
TYPICAL FACILITY ELEVATIONS AND SECTION



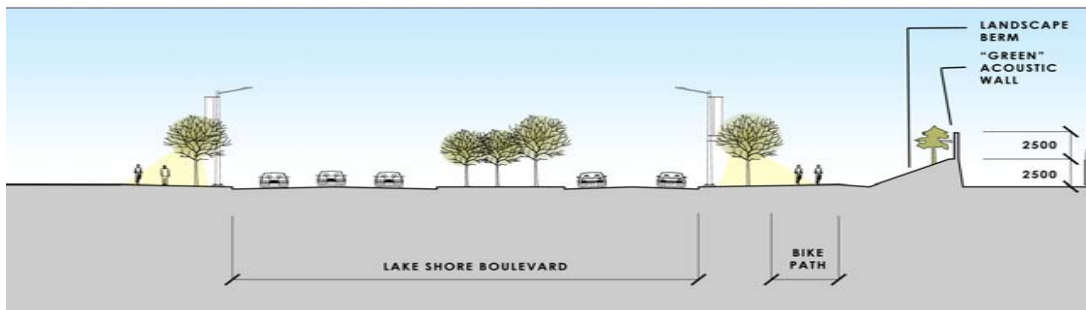
ASHBRIDGES BAY



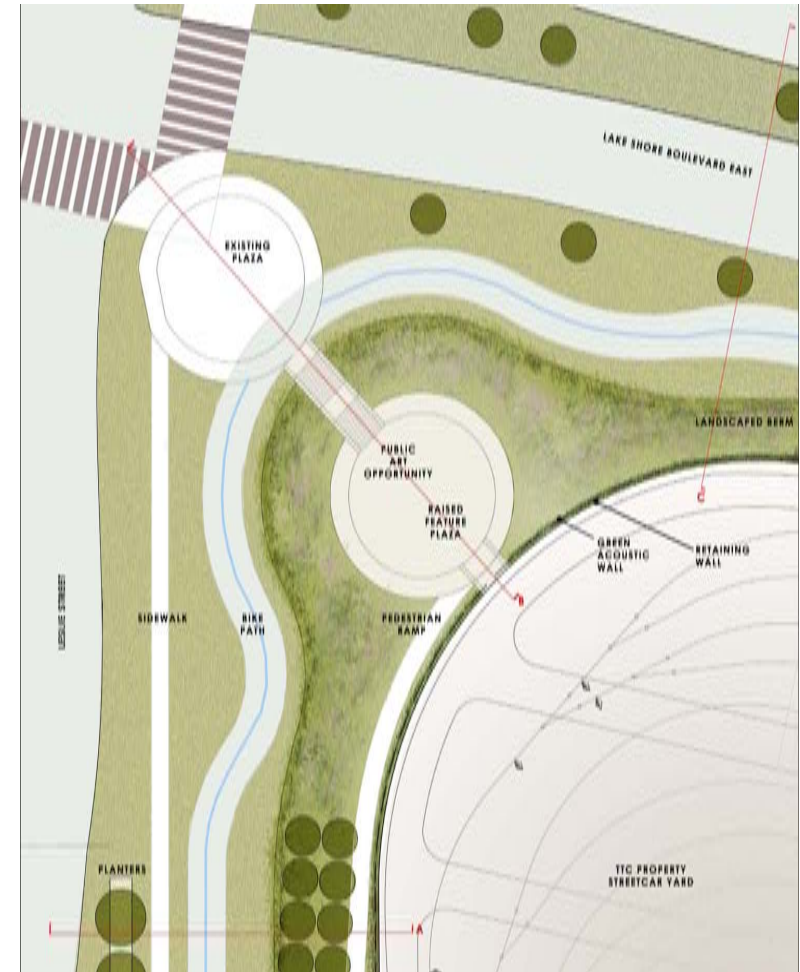
LESLIE STREET SECTION A



PARKETTE PLAZA SECTION SECTION B



LAKE SHORE BOULEVARD SECTION C



Proposed Parkette at Leslie and Lake Shore and cross sections along Lake Shore and Leslie



ASHBRIDGES BAY



Existing south view of Martin Goodman Trail at Leslie and Lake Shore



Proposed south view of Martin Goodman Trail at Leslie and Lake Shore



ASHBRIDGES BAY

Existing north view of Martin Goodman trail at Leslie and Commissioners Street



Proposed North View of Martin Goodman Trail at Leslie and Commissioners Street



GREENING INITIATIVES

- New LRV Maintenance and Storage Facility will be built to:
 - Toronto Green Development Standards
 - Green development standards that may be considered for this site could include:
 - Provision for bicycle parking
 - 50% green roof coverage
 - Storm water management ponds and systems
 - Accommodate collection of recyclables
 - Window shading devices
 - Natural light utilization for interior spaces
 - Urban heat island reduction on roof (light coloured roof membrane)





ECONOMIC DEVELOPMENT

- The New LRV Fleet Maintenance and Storage facility will stimulate both short term and long term job creation
 - Short Term – Construction jobs
 - Long Term – Approximately 540 employees working from this facility
- Provides durable employment land use
- Brings new wages to the area and a new customer base for local restaurants and retailers
- Improves an existing underutilized site
- Will catalyze improvement to underutilized property in the area
- Will compel investment in needed infrastructure improvements



PUBLIC CONSULTATION

- Public Open House
 - Series of three Public Open Houses held June 16, 17, 18
 - Over 185 people attended
 - Approximately 200 comments received
 - Overwhelming majority of comments advocating against the selection of Eastern Avenue site
- Toronto Film Board
 - Met with Toronto Film Board Executive to discuss proposed sites
 - Subsequent meeting scheduled for September 22



NEXT STEPS

- Continue discussions with Toronto Port Authority for the Ashbriges Bay site
- Obtain Toronto City Council approval on recommended site
- Commence Environmental Assessment and preliminary planning on Ashbridges Bay site and connecting trackwork between Queen Street and new carhouse

Website: www.toronto.ca/involved/projects/lrv