

St. Clair Avenue West Transit Improvements

Class Environmental Assessment

Urban Design Summary



September 2004

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Note to the Reader:

This Urban Design Summary has been prepared to provide a detailed overview of urban design issues and design concepts associated with the St. Clair Avenue West Transit Improvements Class Environmental Assessment. Urban design concepts have been prepared in response to opportunities identified through consultation and research associated with the proposed enhancements to the St Clair Avenue West streetcar line and roadway operations. All urban design concepts and drawings documented in this report have been prepared for illustrative purposes only and do not reflect a detailed urban design process.

1 Urban Design Purpose & Objectives

The St. Clair Avenue West Transit Improvements provide several key opportunities to improve the urban design character of the St. Clair West corridor. These urban design enhancements can be broadly grouped into three areas:

1. **The Street Corridor.** The street corridor includes the travel space between street curbs, including both the travel lanes for automobile use and exclusive streetcar lanes with their associated infrastructure such as transit platforms, shelters, landscaping, and streetcar power line supports. The design of these elements provides an exciting opportunity to enliven the streetscape of St. Clair West through innovative design of pavement surfaces, attractive centre posts that will assist in reducing the presently wide and featureless pavement width, and the addition of comfortable and attractive transit shelters and platforms integrating seating, sustainable landscaping and public art.
2. **The Pedestrian Realm.** The pedestrian realm includes sidewalk areas and crosswalks corresponding to areas that will be reconfigured as part of the transit improvements. Opportunities exist to provide enhanced sidewalk treatments through the use of sidewalk materials and patterns, integration of street furnishings including benches, integration of street trees and planters, integration of public art, and elimination in certain areas of power poles presently located in the sidewalk zone.
3. **Key Locations:** Several unique locations along the corridor have been identified as opportunities to provide spaces that will visually enhance the corridor and provide a greater level of greening and amenity. Examples include the TTC viaduct portal east of Bathurst Street and the creation of a new entrance to EarlsCourt Park at the Lansdowne TTC loop. These represent opportunities for larger interventions in concert with other City of Toronto initiatives to enliven St. Clair West with a sequence of themed public spaces that interpret the cultural history of the area through design and public art.

The objectives for a revitalized urban design for St. Clair West in concert with Transit Improvements include:

- a) An enhanced streetscape should beautify St. Clair West in a manner that conveys the special and unique identity of this area of the City as well as provide for increased safety and function for pedestrians, transit users, drivers, local businesses and residents.
- b) An improved transit shelter and platform design should address the need for increased safety and comfort of transit users and improve conditions for transit use for people with disabilities. Integration of sustainable landscaping, lighting, seating, and public art are important criteria to be addressed in the design.
- c) Urban design elements should be cost-effective and support the improvement initiatives of the various BIA's throughout St. Clair West.
- d) Where possible increased 'greening' of the street environment should be achieved mindful of long-term maintenance needs.
- e) Integration of public art in the design of the above elements should be promoted as a means of enhancing the 'sense of place' and community identity.
- f) Process established for community involvement, public comment, and a public art process.

2 St. Clair West Urban Design Context

2.1 Community and Stakeholder Input

Community and stakeholder input has provided considerable insight and direction to the development of urban design concepts associated with the public realm and street corridor. A series of urban design issues and opportunities were identified during community stakeholder site visits and formal consultation/workshop events, which have been summarized below. The project area has been divided into sections of similar dimensions.

2.2 Conditions between Gunns Road and Dufferin Street

The section between Gunns Road to Dufferin Street incorporates the St. Clair Gardens BIA (between Old Weston Road and Caledonia Road) and the Corso Italia BIA (between Lansdowne Avenue and Dufferin Street).

The character of the neighbourhood between Gunns Road and CNR rail underpass is disparate, with a contrasting mix of industrial, emerging residential communities, and big box retail. Recent streetscaping improvements associated with the Home Depot development consists of boulevard planting including semi-mature trees, and parking area screening. The CNR rail underpass acts as an informal gateway to the commercial areas beyond. Nearby commercial areas and the St. Clair Gardens BIA are characterized by very wide sidewalks and established trees that are planted in an offset fashion. Higher quality streetscape elements also exists within the Corso Italia BIA. Opportunities for improvement include reconfiguration and upgrade of Earlscourt Park frontages at the intersection of Caledonia Park Road and St Clair Ave West, and access enhancements as the Lansdowne Avenue transit loop.

Key Features:

- # Streetcar terminus at Gunns Road.
- # Big Box Retail.
- # New Residential Townhouse development.
- # Hydro Corridor.
- # Railway Viaduct.
- # Joseph Piccininni Centre.
- # Prospect Cemetery.
- # Lansdowne Ave Transit Loop.
- # Earlscourt Park.
- # Generally wide sidewalks. Sidewalk width increases to 7.0m between Prescott Avenue and Cloverdale Road.

Opportunities:

- # Enhancement to the TTC terminus/loop through significant landscaping and a new passenger shelter.
- # Landscaping improvements to the entrances of the hydro corridor park system.
- # Aesthetic enhancement to the railway viaduct.
- # Redesign Earlscourt Park Frontages at Caledonia Park Road and at Lansdowne Avenue Loop.

Figures 1 – 4: Location Images between Gunns Road and Dufferin Street



1. Gunns Road Terminus



2. Big Box Retail



3. Railway Viaduct



4. Lansdowne Ave Loop

2.3 Conditions between Dufferin Street and Humewood Drive

The section between Dufferin Street and Humewood Drive incorporates the St. Clair Avenue West BIA (between Westmount Avenue and Glenholme Avenue) and the Hillcrest Village BIA (between Winona Drive and Pinewood Avenue).

The area is commercial in character, with the local landmark being Oakwood Collegiate. Oakwood Collegiate is a major contributor to local street/pedestrian activity and transit passengers. Streetscape upgrades are in place as a result of the BIAs, including significant improvements at Oakwood Collegiate initiated by the City of Toronto. The Garrison Creek alignment is located within section of St. Clair West and pavement markers provide historic reminders.

Key Features:

- # St. Clare's Church.
- # Oakwood Collegiate.
- # Garrison Creek Historic Markers.
- # Active commercial retail area.

Opportunities:

- # Reconfiguration and design enhancements for Piazza Santa Chiara.
- # Public art could be incorporated within the streetscape at Oakwood Collegiate to commemorate its 100th Anniversary in 2005.
- # Enhanced pavements for pedestrian crossing opposite Oakwood Collegiate.

Figures 5 – 8: Location Images between Dufferin Street and Humewood Drive



5. St. Clare's Church



6. Piazza Santa Chiara



7. Oakwood Collegiate



8. Garrison Creek Markers

2.4 Conditions between Humewood Drive and Spadina Road

The section between Humewood Drive and Spadina Road incorporates the Wychwood Heights BIA between Pinewood Avenue and Tweedsmuir Avenue.

The Vaughan Road/St. Clair Ave intersection is a key commercial, vehicle, transit and pedestrian node. Pedestrian activity is high and vehicular movements are numerous. It appears that some vehicular movements may be in conflict with pedestrian safety due to the irregular layout of this intersection. Three of the four street corners accommodate heritage structures.

The area between Bathurst Street and Spadina Road can be considered as a 'gateway to the western neighbourhoods'. The first major commercial frontage becomes evident at Loblaws, which provides generous setbacks, streetscape elements, and a sidewalk market that contribute to the appeal of this section. An obvious opportunity for urban design intervention is associated with the Streetcar subway portals. Enhancing the design of these portals may be achieved through landscaping and street trees, lighting, and public art. This would enable greater visual and natural connection to the adjacent 'green' environments at Cedarvale Creek and Wells Hill Park.

Key Features:

- # Irregular intersection configuration at Vaughan Road & heritage buildings.
- # Bathurst Street intersection redevelopment opportunities.
- # Streetcar & St. Clair West TTC Subway.
- # Cedarvale Creek and Wells Hill Park

Opportunities:

- # A key opportunity is to enhance the Vaughan Road intersection and generally improve the character of the street and retail environments. Three of the four street corners accommodate heritage structures.
- # Design upgrade associated with the Streetcar portals to incorporate landscaping, lighting, public art and a renewed vision for the design of civic infrastructure.
- # Sidewalk improvement at the northeast corner of Bathurst Street and St. Clair intersection associated with future redevelopment of this site.

Figures 9 – 12: Location Images between Humewood Drive and Spadina Road



9. Vaughan Rd Configuration



10. Bathurst Street intersection



11. Streetcar Portal



12. Sir Winston Churchill Park

2.5 Conditions between Spadina Road and Yonge Street

A mix of residential and office uses characterizes the area immediately beyond Spadina Road. The area is a mix of residential and small office uses. Sidewalks are narrow with deep landscaped front yard setbacks that contribute to the overall streetscape amenity.

Publicly accessible open space is situated along the entire section, with Sir Winston Churchill Park, Glen Gould Park and Avenue Road Square providing regular opportunities for active and passive recreation. Between Avenue Road and Yonge Street, development is typically mid to high density residential and office buildings, generally with commercial at street level. Sidewalks are generally wide and situated adjacent generous, well-maintained landscaped setbacks.

Key Features:

- # Sir Winston Churchill Park.
- # Deep setbacks with narrow sidewalks.
- # Significant Corporate Office frontages with broad sidewalks.
- # Glen Gould Park & Avenue Road Square.
- # Mixture of narrow and wide sidewalks.
- # Extensive property and streetscape landscaping.

Opportunities:

- # Integrated Art at Avenue Road Square.
- # Custom Transit shelters.
- # Public Art integrated.
- # Gateway and or community identifiers.

Figures 13 – 16: Location Images between Humewood Drive and Spadina Road



13. Landscape Setbacks



14. Avenue Road Square



15. Narrow Sidewalks



16. High density residential

3 The Street Corridor

3.1 Streetcar Track Reconstruction

A total of two design alternatives for streetcar track reconstruction were identified and evaluated. The evaluation of each of the track reconstruction design concepts resulted in the identification of a preferred design concept, which addresses the primary issue of streetcar reliability and management of vehicle/streetcar conflict. Due to a shared roadway, streetcar services are regularly delayed and generally considered to be unreliable.

The proposed development of exclusive transit lanes also provides the opportunity to establish a high level of civic design to the St Clair West Corridor, with the addition of new design elements including special pavement materials, centre poles with 'up' lighting, and new transit shelters integrating public art and landscaping.

Figures 17 – 20: Location Images between Humewood Drive and Spadina Road



Following extensive evaluation, testing and consultation, the preferred track reconstruction alternative was selected. The preferred alternative will restrict non-transit vehicle movements both along and across the streetcar trackbed. Specifically, the preferred design concept includes the following elements:

- # Two centre lanes reserved for exclusive use by streetcars (and emergency vehicles) protected by a raised, but mountable, trackbed;
- # Two general purpose traffic lanes in each direction located on either side of the streetcar tracks,
- # On street parking where possible.

Figure 21: Conceptual cross-section of Preferred Alternative at Bathurst Street intersection, featuring raised trackbed with rolled curb, center pole and transit shelter.



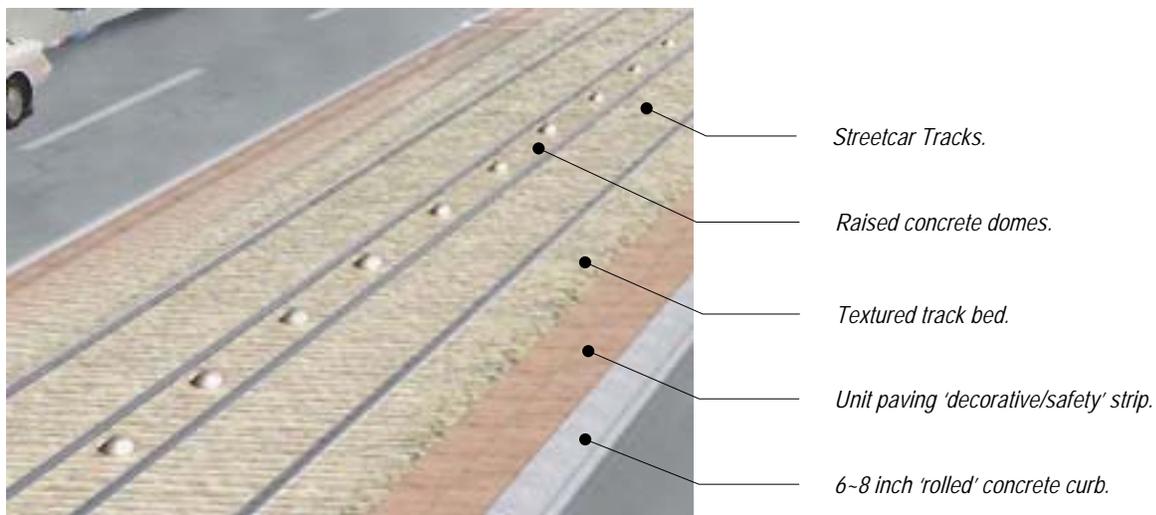
3.1.1 Raised Trackbed Design Concept

The preferred design concept for a raised trackbed incorporates a 6 ~ 8 inch rolled curb to provides a differential between the roadway and raised trackbed. The rolled curb is a deterrent to vehicular traffic from mounting the raised trackbed, whilst enabling emergency vehicle access. Texture of the trackbed surface could be incorporated to visually and physically differentiate the streetcar tracks from adjacent vehicle lanes, which could be achieved through either stamped/scored concrete or by interlocking paving. A decorative/safety band constructed of unit paving could also be incorporated to complement adjacent sidewalk design. The centre of the trackbed should accommodate a low barrier, possibly a concrete 'dome' to prevent ordinary vehicles crossing the tracks and interrupting streetcar movements.

Figure 22: Perspective View of Preferred Alternative, featuring raised trackbed with rolled curb, center pole and transit shelter.



Figure 23: Detailed View of Trackbed Design Concept.



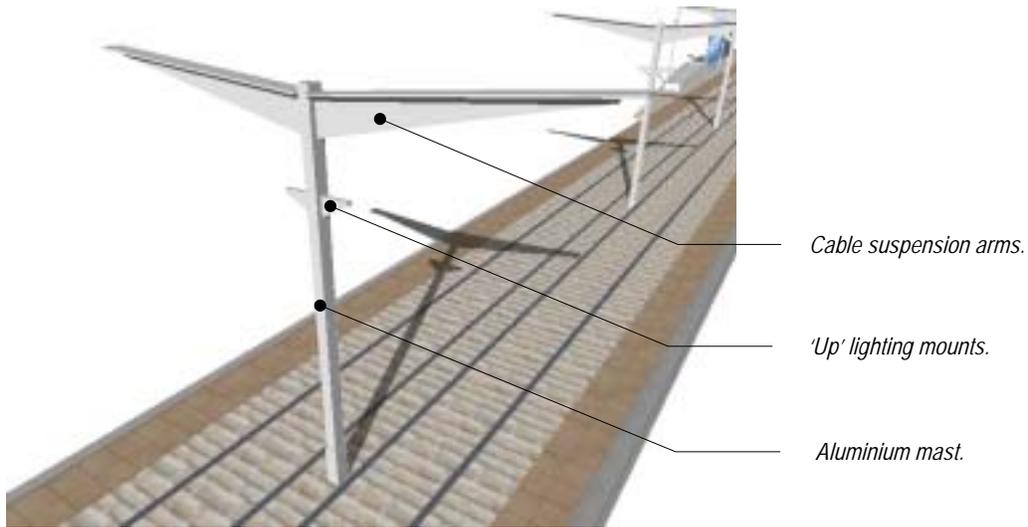
3.1.2 Streetcar Power Pole Design Concept

Currently, power for the streetcars is provided via hydro-power poles located on the sidewalk. Future 'undergrounding' of hydro-power infrastructure will provide the opportunity to incorporate streetcar power poles within the trackbed. Currently, only the Corso Italia BIA section of St Clair West has undergrounded hydro-power.

Locating power poles within the trackbed will ultimately clear sidewalks of additional obstacles and enable integration of urban design elements within the street corridor, such as street trees.

A conceptual model of a centrally located streetcar power pole is shown below.

Figure 24: Detailed View of Streetcar Power Pole Concept.



3.1.3 Shelters & Platform Design Concept

There will be twenty-six new shelters provided along the St. Clair West corridor. The concept for a new shelter design addresses the needs of transit users while providing a level of civic design that will contribute to the vitality and urban design quality of St. Clair West. The design concept outlined in this section is a proposal only, and open to further consultation with all stakeholders.

The shelter design is based on an increased platform width to 2.0 to 2.4m that will provide adequate space for transit users with disabilities and a higher degree of comfort, weather protection, and safety for all users.

Key elements of the design include:

- # Integrated seating
- # Enhanced barrier protection between automobiles and pedestrians
- # Clear glazing on back and side walls for wind protection
- # Roof design that captures rain water run-off and directs it to an adjacent planter
- # Planter designed to accommodate sustainable planting using drought resistant/salt tolerant perennial planting. A grass plant – Calamagrostis Brachytrica is recommended for the planter which is attractive through-out the year.

3.1.4 Integrating Public Art

The Transit Shelter design incorporates a public art 'framework' comprised of vertical supports and a translucent panel system that extends above roof level that will accommodate permanent art installations. Each Shelter will have a unique character special to St. Clair West through its public art component.

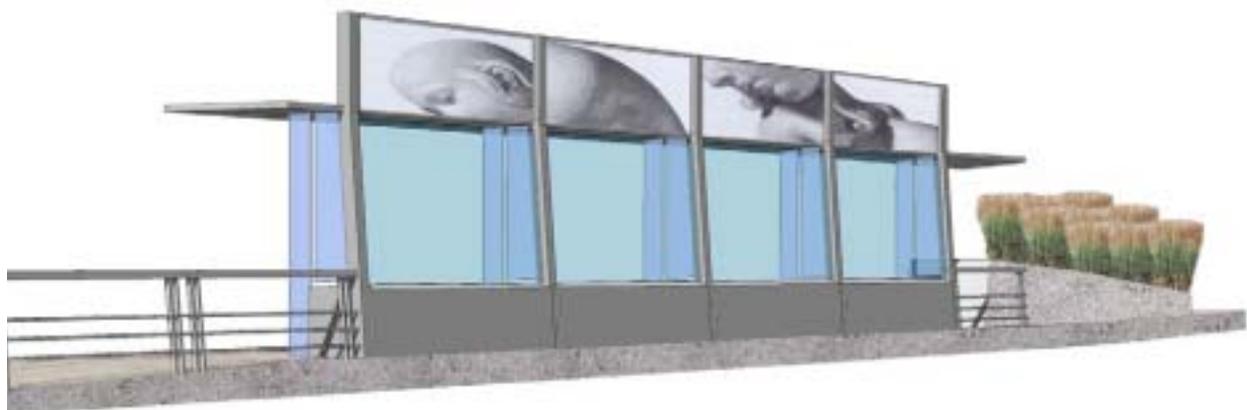
Figure 25: Public Art concept integrated with Transit Shelter



The selection of public art may be structured through a public competition process. A design brief would be prepared which provided artists with an understanding of the history and cultural influences of the St Clair West neighbourhoods as well as information on each of the 26 Shelter sites.

Additional opportunities for public art can be explored for other areas of the transit platform including integration into pavement, the planter and the concrete base of the Shelter.

Figure 26: Public Art concept integrated with Transit Shelter



3.2 Before & After Perspective Images

Figure 28: Perspective View towards Arlington Avenue including Streetcar Platform, Shelter, and Center Pole Concept.



Figure 29: Perspective View towards Arlington Avenue including Streetcar Platform, Shelter, and Center Pole Concept (Evening).



Figure 30: Before view towards Dufferin Street.



Figure 31: Perspective View towards Dufferin Street, including Streetcar Platform, Shelter, and Center Pole Concept.



Figure 32: Before view towards Avenue Road.



Figure 33: Perspective View towards Avenue Road, including Streetcar Platform, Shelter, and Center Pole Concept.



Figure 34: Before view towards Earls court Avenue.



Figure 35: Perspective View towards Earls court Avenue including exclusive transit lanes and center pole concept.



4 The Pedestrian Realm

4.1 Background

Preliminary urban design consideration has been given to the scope of 'pedestrian realm' enhancements that would complement street corridor reconfiguration and reconstruction, including dedicated streetcar tracks, transit shelters and platforms. Pedestrian realm urban design concepts will be elaborated and refined during detailed design of the transit improvements and also as part of the upcoming City of Toronto 'Avenues Study' for St Clair West.

4.2 Key Issues

Sidewalks are a major component of the 'pedestrian realm' and are under pressure to serve a variety of users and functions. The primary function of the sidewalk is to provide safe pedestrian access to multiple destinations along the street. However, the sidewalk is also used for landscaping, seating, lighting, art, power infrastructure, advertising and merchandise sales. The appearance and organisation of the sidewalk is vital to creating a vibrant, attractive and safe pedestrian realm that enhances the distinct identity of the

Sidewalks along St. Clair West between Gunns Road and Yonge Street are highly variable in terms of quality and design. Through detailed review of existing conditions, and input from community representatives, a number of key issues requiring urban design attention were identified. These issues include:

- # Low-grade sidewalk quality and appearance.
- # Vehicle parking areas located immediately adjacent to sidewalk without buffer or barrier.
- # Drive-through retail establishments creating vehicle/pedestrian conflicts on the sidewalk.
- # Poor appearance of power utilities.
- # Redundant planters.
- # Dead or dying street trees, planted under concrete with small openings and without adequate soil.
- # Narrow sidewalks along particular sections of the street.
- # Undefined and potentially unsafe crosswalks (e.g. feint line markings or undistinguishable surface material).

Figures 36 - 43: Common sidewalk conditions.



36. High quality sidewalk



37. Low-grade sidewalk



38. Sidewalk with 'forecourt' parking



39. Power Utilities



40. Redundant planter



41. Dead Tree under concrete collar



42. Narrow Sidewalk



43. Poorly defined crosswalk

4.2.1 Preliminary Design Concept

As shown below, a wide variety of sidewalk design elements are available and appropriate to St Clair West.

Figure 44: Common Sidewalks elements.



Key elements of the 'pedestrian realm' design include:

- ## **Street trees:** Trees are a highly desirable element of the streetscape and pedestrian realm, providing numerous visual, amenity, and environmental benefits. Community stakeholders identified street tree health to be a concern, particularly in areas where tree damage results in the regular removal and replacement of trees. As with other areas of the city, trees within hard paved urban environments are difficult to maintain. The factors influencing poor tree health and longevity are numerous and may include inadequate sunlight and or water, compaction of roots, small poorly designed tree pits, lack of oxygen to root system, vandalism, excessive salt, poor soil, etc. Reconstruction of sidewalks will provide the opportunity to replace damaged or dying trees and establish adequate infrastructure for health and vibrant tree growth, including trench tree pits, decorative tree grates, high quality soil, and irrigation.
- ## **Seating:** Seating located on the sidewalk is an integral component to any commercial retail street. Seating enhances the comfort of pedestrians and is conducive to social public gathering. Ideally, seating is located in close proximity to street trees or landscaping for shade and comfort. Sidewalk seating also provides an opportunity for public art integration.
- ## **Sidewalk Pavements:** Pavements are opportunities for design expression, and may incorporate detailing that reflect function, character, art, or historic context. St Clair West sidewalks are typically constructed of concrete and, in some cases, include red brick 'splash strip' located against the curb. Opportunities to incorporate pavement design can be explored where sidewalk reconstruction is required.
- ## **Forecourt Parking:** The condition of 'forecourt' parking that is located in close proximity to the sidewalk is a common issue along St Clair West. This condition poses a direct threat to the safety and enjoyment of pedestrians. Appropriate separation is required between pedestrians and parked cars, which is provided a buffer. This buffer may be provided by landscaping, bollards, or some other well-designed physical barrier.

The pedestrian realm design concept is demonstrated in the following 'before' and 'after' images.

Figure 45: 'Before' view west from Vaughan Road.



Figure 46: 'After' view west from Vaughan Road



5 Public Art Opportunities

Three types of public art opportunities typically exist: integrated, semi-integrated, and discrete.

1. Integrated: public art that is conceived as an incremental upgrade to a stock treatment or custom design of a functional piece, which takes meaning from the site.
2. Semi- integrated: public art that is conceived as custom piece or incremental upgrade to a stock treatment that does not take meaning from the site but rather is of the artists/designers own interest.
3. Discrete: work that is non-integrated with any functional work and is of artists/designers own interest.

All three types of public art opportunities potentially exist as part of transit infrastructure improvements, and could be integrated custom streetscape elements at key location e.g. transit shelters, sidewalks, special sites, etc.

5.1 Potential Integrated/Semi-Integrated Public Art Sites

- # Transit Shelters: Shelters can incorporate a public art element through design competition or commissioned artists as an enhancement of the shelter structure. See section 3.1.4.
- # TTC Platforms: railings and pavement
- # Sidewalk Areas: Integration of public art into sidewalk design, planters, tree grates, and street furniture.

5.2 Other Potential Public Art/ Design Projects

Other opportunities for Public Art may include:

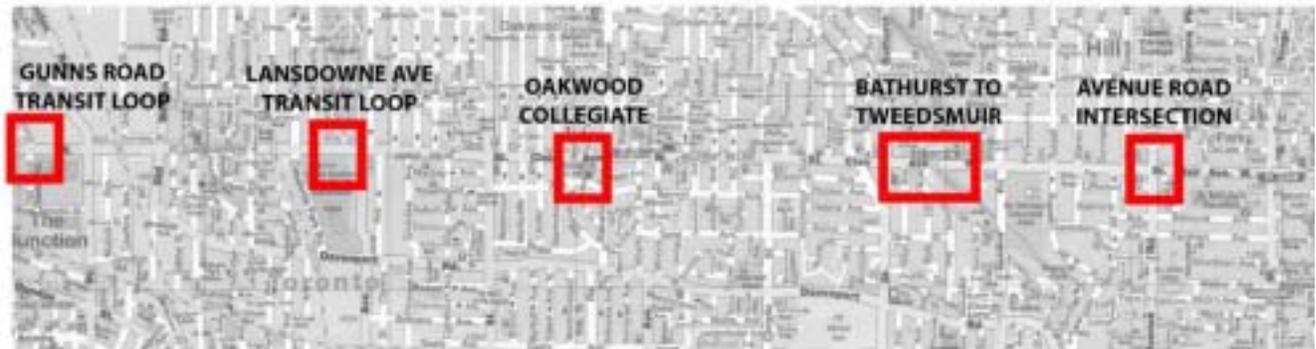
- # Custom benches.
- # Stand alone sculpture.
- # Open Planting areas.
- # Discrete public art located at special sites.
- # Lighting – festival and or special occasion.
- # Historical reminders such as history of streetcar, street, or neighbourhood, etc.

6 Key Locations

Within the 6.5km project area, a number of 'key locations' have been identified for as unique and appropriate for detailed design consideration. The key locations may be considered as opportunities to reinforce gateways or local historical context and neighborhood identity.

The key locations are identified below.

Figure 47: Key Locations Map



Design concepts for selected 'key locations' have been produced to illustrate the potential enhancements that could be achieved. Please refer to the following sections for site-specific details.

6.1 Gunns Road Transit Loop

The Gunns Road Transit Loop is the west terminus for the St. Clair West streetcar line. In recognition of its status as a gateway and hub of transit activity, the site could be redesigned to accommodate a new transit shelter and improved landscaping treatments. The objective is to provide an inviting and interesting environment for transit passengers transferring to and from the streetcar line.

Figure 48: Existing conditions at Gunns Road



Figure 49: Proposed design



6.2 Lansdowne Transit Loop

The Lansdowne Transit Loop is situated adjacent to the J.J. Piccininni Centre and serves as both a streetcar and bus loop facility and pedestrian entrance to Earlscourt Park. As shown in the 'before' and 'after' images below, the Loop could provide an enhanced entrance to Earlscourt Park through reconfiguration and minor redesign of the JJ Piccininni forecourt and the adjacent Loop roadway to create a more visible, attractive and direct access point to Earlscourt Park.

Figure 50: Existing conditions at the Lansdowne Transit Loop



Figure 51: Design concept for the Lansdowne Transit Loop entry into Earlscourt Park



6.3 St Clair West Subway Portal

An unused pavement surface is located above the eastern street portal to the St Clair West subway. This unused area could be enhanced through landscaping and public art to reflect the sites potential role as a 'gateway to the western neighbourhoods'. A landscaped boulevard can be developed that incorporates street trees, banners and or signage, lawn surfaces, and public art. 'Greening' this area would improve the visual, physical, and natural connection both across and along the street.

Figure 52: Existing conditions at the St Clair West Subway Portal



Figure 53: Design concept for the St Clair West Subway Portal



Figure 54: Design concept for the St Clair West Subway Portal (evening view)

