WindsorSEEN Policy Project 5A

City Centre Planning District Streetscaping Standards Manual

[January 24, 2005]

Urban Design and Community Development
Planning Department
Corporation of the City of Windsor

DRAFT FOR ADOPTION

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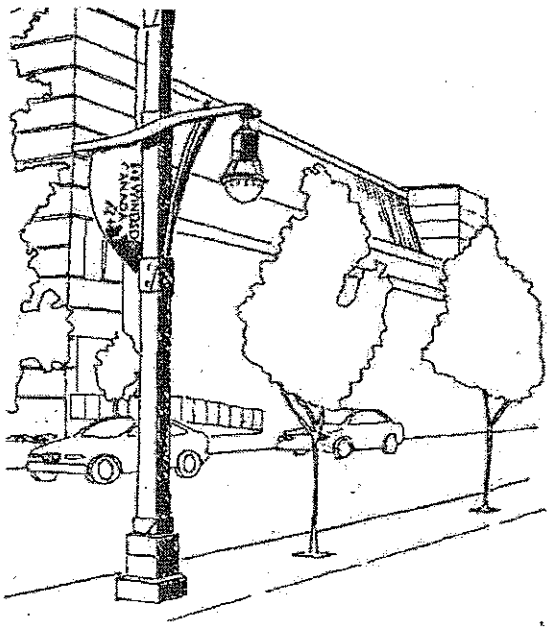
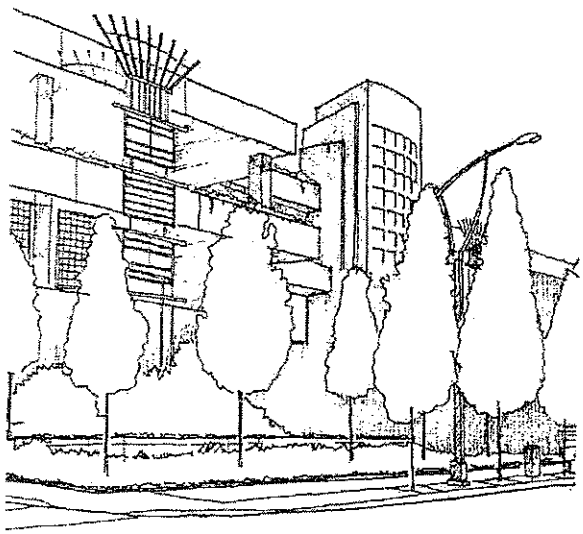
1.0 PURPOSE OF STREETSCAPE IMPROVEMENTS IN THE CITY CENTRE PLANNING DISTRICT



Illustrating the positive impact of streetscape improvements in the City Centre



Streetscaping in the City Centre Planning District should be updated to meet current functional and aesthetic standards to signify a renewed commitment and reinvestment in Windsor's public spaces.

Streetscaping improvements in the City Centre, the downtown core of Windsor, were initially installed in 1980.

For its time, the improvements were very successful but over time have succumbed to old age, ongoing redevelopment impacts and increased performance demands. The original streetscaping elements are increasingly becoming functionally obsolete and more expensive to maintain. As an example, the City Centre Business Association has experienced significant cost impacts and technical difficulties over the last eight years in maintaining the aging pedestrian lighting standards and updating the electrical capacity to display seasonal decorations.

Today's standards for construction and servicing are greatly improved for streetscaping elements such as street lighting, trees and vegetation plantings, accessibility, and pavement durability. Recent streetscaping improvements that have been undertaken in other commercial areas of Windsor successfully incorporate these technical and aesthetic advancements.

Adopting consistent standards for retrofitting the City Centre streetscape should achieve the following results:

- an upgrade of fixtures, treatments and furnishings which meets current construction, functional, and aesthetic standards;
- a predictability in how rights-of-way are to be restored upon reconstruction, which is necessary for consistency in the maintenance of roadways, lighting, and underground services; and
- a reduction in the costs associated with maintaining the array of incompatible existing streetscaping elements.

1.1 DEFINING THE SCOPE OF STREETSCAPE IMPROVEMENTS

Streetscaping improvements will include:

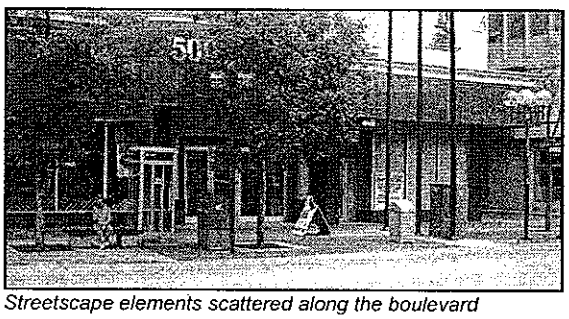
- roadway crosswalks;
- on-street parking spaces;
- sidewalks and curbs;
- roadway and pedestrian lighting;
- street trees and plantings;
- street furniture, such as benches, trash receptacles, bicycle racks and parking meters;
- orientation signage; and
- special features such as monuments, sculpture, fountains, parks and plazas

These improvements will be implemented to create a more attractive urban environment, to reinforce and complement the architecture of the area and to enhance the overall quality and function of the entire business district.

1.2 RECOMMENDATIONS FOR STREETSCAPE IMPROVEMENTS

The *Windsor City Centre Revitalization & Design Study* and the *Bellmio Report* recommend that the original streetscaping be "thinned out" somewhat to better serve increased pedestrian traffic volumes.

Both reports also include recommendations for accommodating a greater variety of uses on the right-of-way – greater accessibility, more on-street parking, sidewalk cafes – but also ensuring a balance of activities and meeting diverse needs.

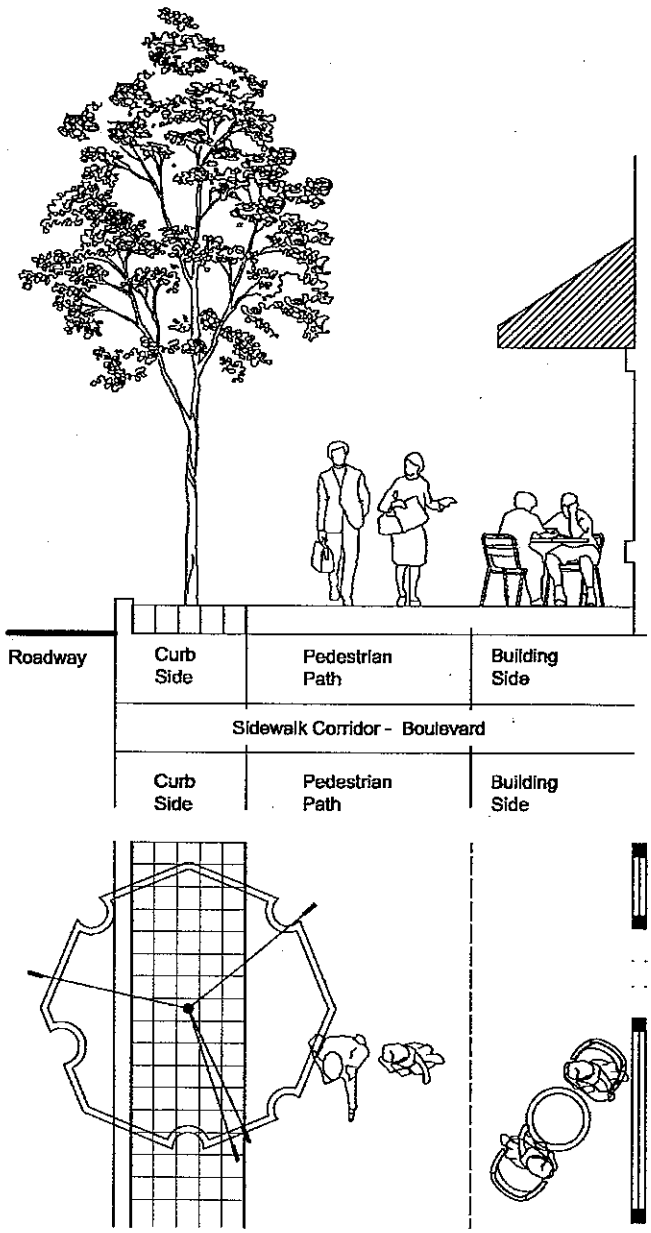


Streetscape elements scattered along the boulevard

1.3 WHERE THE STREETSCAPE IMPROVEMENTS WILL OCCUR ON THE BOULEVARD

The **Sidewalk Corridor – Boulevard** shall consist of three distinct zones:

1. **Curb Side**: the zone for the placement of infrastructure and publicly-accessible services.
2. **Pedestrian Path**: the zone for pedestrian circulation – a clear, unobstructed route.
3. **Building Side**: the zone for the placement of individual business-related amenities.



1.4 NEED FOR STREETSCAPE IMPROVEMENTS

The extent to which streetscaping improvements are implemented within the City Centre will vary according to:

- patterns of pedestrian use;
- levels (intensity) of pedestrian and business activity on the boulevard;
- availability of resources; and
- scale/density of the surrounding built form.

A pleasant public environment increases community pride and demonstrates public and private commitment to customers, residents and investors. Both the public and private sectors must be responsible for designing, implementing and maintaining improvements in the district.

A properly maintained public environment can foster a greater sense of security throughout the district. When trash is collected on a regular schedule, broken fixtures promptly repaired and graffiti removed, people will sense that the environment is well tended and will feel more secure in it. Similarly, when the public environment is designed to accommodate a variety of uses, the very presence of these activities and their participants will make the district safer.

Example of a safe and consistent pattern of streetscape elements creating unobstructed movement and views

1.5 RECENTLY IMPLEMENTED STREETSCAPE IMPROVEMENTS

Since 1995, the City Centre district has experienced levels of redevelopment activity much higher than in the decades before. This resulted in the reconstruction of the adjacent roadways and boulevards. The opportunity and impetus arose to retrofit the original streetscaping using a modern set of standards, which are aesthetically compatible with the streetscaping improvements surrounding the Casino Windsor site.

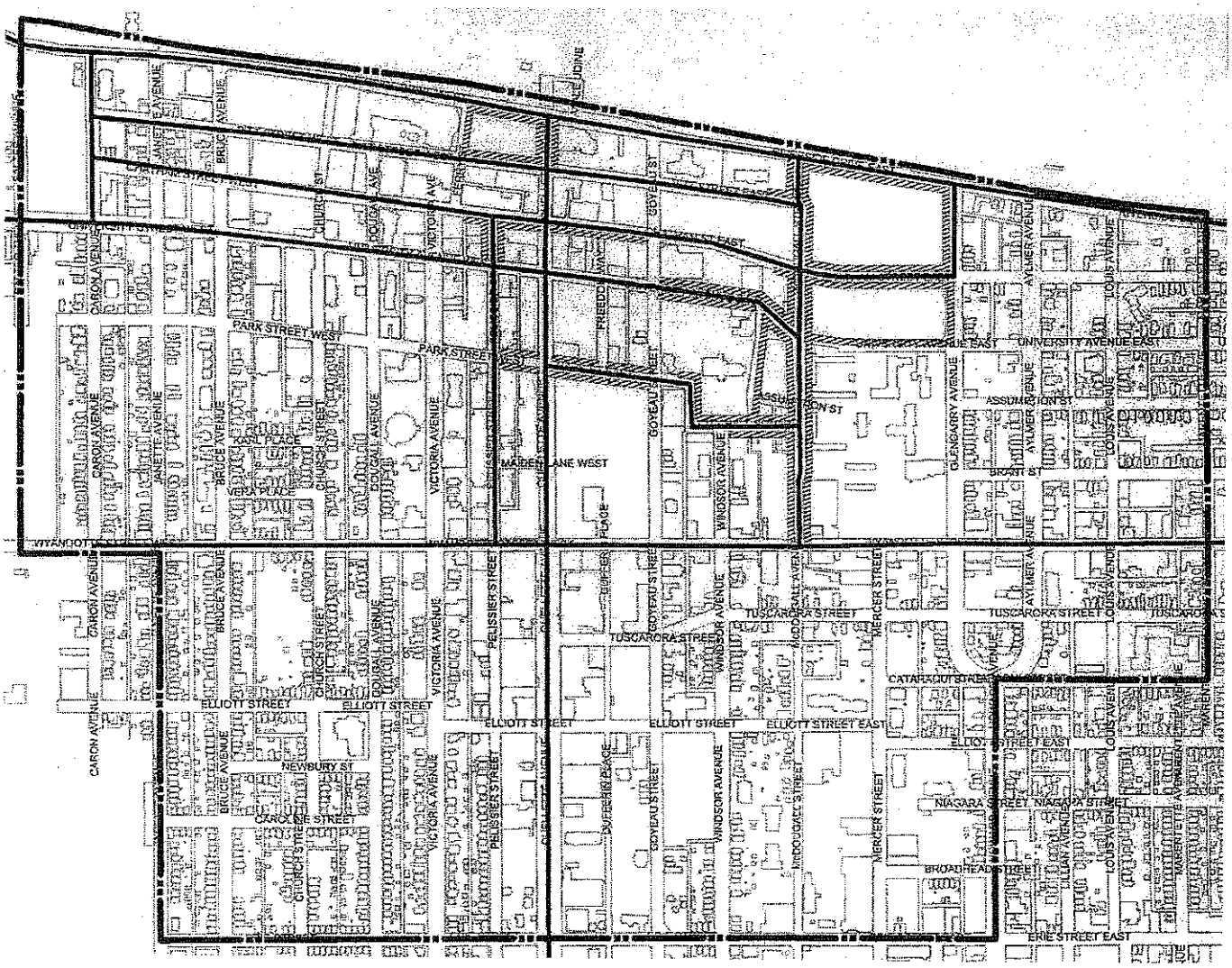
As of January 2005, locations within the City Centre with completed (and those partially completed) streetscape improvements with the approved performance standards include:

- all rights-of-way surrounding the **Casino Windsor** development (parts of Riverside Drive East, Glengarry Avenue, Chatham Street, and University Avenue);
- **McDougall Street** from Riverside Drive East to Wyandotte Street East;
- **Park Street East and West** from Pelissier Street to McDougall Street (some portions incomplete);
- **Ouellette Avenue** between Riverside Drive and Pitt Street;
- South side of **Chatham Street East and West** between Ferry Street and Goyeau Street;
- **University Avenue East** between Goyeau Street and McDougall Street; and
- **Pelissier Street** between Chatham Street West and University Avenue West

[Refer to **Map 1.6 – Completed Streetscape Improvement Locations in the City Centre Planning District**]

The scattered sites containing the completed streetscaping with the new standards must be connected, integrated and extended to achieve an attractive and cohesive City Centre. The inconsistencies between the 'old' and the 'new' heightens the widening visual disparity, especially when compared with the patchy, piecemeal and disengaging original streetscaping elements.

1.6 MAP OF COMPLETED STREETSCAPE IMPROVEMENT LOCATIONS IN THE CITY CENTRE PLANNING DISTRICT

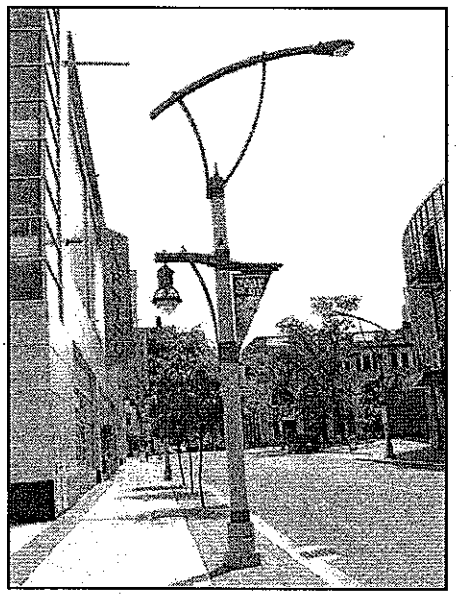


Theme Streets ————

CCPD Boundary —··—··—··—

Completed Streetscaping ////////

2.0 PURPOSE OF A STREETSCAPING STANDARDS MANUAL FOR THE CITY CENTRE PLANNING DISTRICT



Establishing a consistent pattern that unifies the district

The purpose of this Manual is to provide standards that will achieve a coordinated and consistent streetscape treatment for Theme Streets within the City Centre Planning District, which will create a unified and visually enhanced character throughout the downtown.

The standards are established to assist in guiding streetscaping design solutions towards:

- Comprehensive, functional and cost-effective streetscaping plans;
- Selecting quality materials that are durable, easy to maintain and related to the district's character;
- Establishing a consistent pattern that unifies the district;
- Establishing clear standards for the reconstruction and maintenance of the public right-of-way to ensure consistency;
- Creating a safe pedestrian-friendly environment that also safely integrates vehicles; and
- Achieving the redevelopment and revitalization initiatives of the City Centre Business Association.

Streetscape Improvement Partners

Corporation of the City of Windsor

The Heart of the City

DOWNTOWN WINDSOR

City Centre Business Association

2.1 PARTNERSHIPS IN STREETSCAPE IMPROVEMENTS

The *Streetscaping Standards Manual* is a coordinated effort and partnership between the **Corporation of the City of Windsor** and the **City Centre Business Association** to guide the implementation of a comprehensive streetscaping improvement initiative that will update the fixtures on and functions of Theme Streets within the planning district.

2.2 WHO WILL USE THIS MANUAL

The *Streetscaping Standards Manual* will be used by:

- the City of Windsor and their contractors,
- developers,
- designers,
- business owners,
- property owners, and

others involved in the rehabilitation and reconstruction of Theme Streets within the City Centre Planning District as identified in the City of Windsor's *Official Plan*.

Before any reconstruction activity can be undertaken on the public right-of-way of Theme Streets in the downtown, the City of Windsor Administration and Council and the City Centre Business Association Board must review and approve all plans for redevelopment to ensure consistency with the approved standards.

2.3 HOW THIS MANUAL IS ORGANIZED

The Manual outlines the following:

- **Function and Application** of Streetscaping Standards for the City Centre.
- **Identification** of Individual Streetscape Elements for Installation on Theme Streets.
- **Standards** for Individual Streetscape Elements
  - Design Criteria – *"How it Functions"*
  - Placement – *"Where it Goes"*
- **Specifications and Details** for selected Streetscape Elements.
- **Installation and Maintenance Standards** for each Streetscape Element.

2.4 CRITERIA USED IN THE SELECTION OF STREETSCAPE ELEMENTS

The following criteria were considered when selecting and designing the various streetscaping elements to be implemented as public improvements on Theme Streets in the City Centre:

Appearance:

- What does the element look like?
- Does the design of the element have an enduring appeal?
- Does the overall character of the element reinforce the district's image?
- Is the element in scale with its surroundings?

Function and Placement:

- Will the element be located in the right place?
- Can this element do its job?
  - Are trash containers large enough, easily emptied and conveniently placed?
  - Are benches comfortable for sitting or will the material be too hot in the summer?
  - Is the lighting adequate to give a sense of security at night without creating excessive glare?

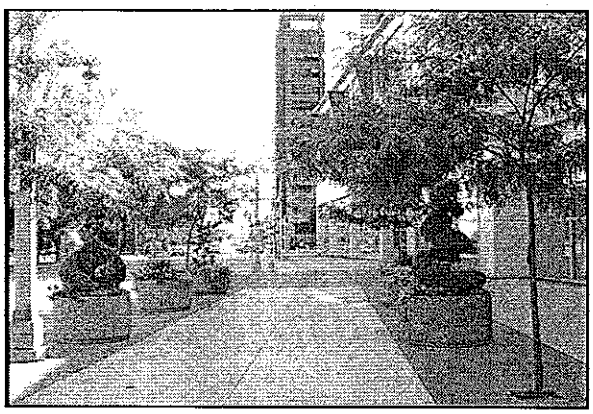
Durability and Maintenance:

- Is the element designed to last a long time?
- Will the materials of the element withstand changing seasons in this climate?
- What are the maintenance needs of the element?

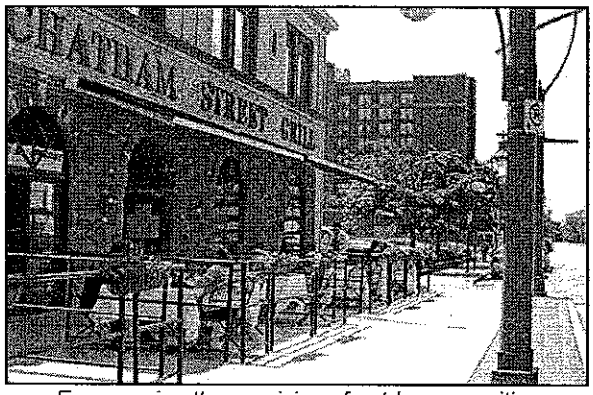
Cost:

- What will the improvements cost?
- Is the improvement worth the price?
- Is it better to select a cheaper element?
  - Although it may be tempting to select an item or material because of its low initial cost, often this is false economy as the element may become outdated, vulnerable to vandalism or in need of constant repair.
  - It is generally better to purchase a few elements of good quality rather than a large number of cheaper items.

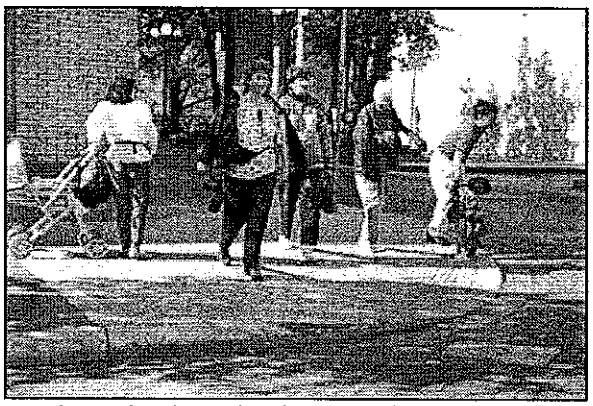
3.0 LOCATIONS FOR STREETSCAPING IN THE CITY CENTRE PLANNING DISTRICT



Enhancing the public rights-of-way with appropriate and consistent soft and hard landscaping elements **and** *Protecting and enhancing significant views along public rights-of-way*



Encouraging the provision of outdoor amenities such as sidewalk restaurant patios



Improving the pedestrian scale along the street

The streetscaping standards outlined in this Manual are <u>only</u> applicable to the public rights-of-way of designated as "Theme Streets" located within the boundaries of the City Centre Planning District.

The City of Windsor *Official Plan* (2000) identifies certain roadways as "**Theme Streets**", which refers to designated roadways within Windsor that are intended and designed to:

(a) Promote a diverse mixture of commercial, residential and other appropriate land uses along the road;

(b) Encourage pedestrian activity and movement along the streetscape; and

(c) Provide and/or enhance the unique character of the surrounding neighbourhood.

3.1 THEME STREET POLICIES

Section 6.11.11.2 of the City of Windsor *Official Plan* states: *"Council will provide for the enhancement of designated* ***Theme Streets*** *by:*

(a) Promoting a diverse mixture of commercial, residential and other appropriate uses;

(b) Enhancing the public rights-of-way with appropriate and consistent soft and hard landscaping elements such as special lighting, street trees and other vegetation, street furniture and public art;

(c) Protecting and enhancing significant views along public rights-of-way;

(d) Protecting and enhancing heritage resources;

(e) Encouraging the provision of outdoor amenities such as sidewalk restaurant patios and retail display areas;

(f) Encouraging provision of building and streetscaping elements which provide shelter from inclement weather; and

(g) Improving the pedestrian scale along the street through development guidelines and streetscaping."

3.2 THEME STREET LOCATIONS

Theme Streets located within the **City Centre Planning District**, as identified on Schedule G: "Civic Image" of the *Official Plan,* include the following streets:

Theme Streets	From... To	
Caron Avenue	Riverside Dr. W	University Ave. W
Chatham Street	Caron Ave.	Glengarry Ave.
McDougall Avenue	Riverside Dr. E	Wyandotte St. E
Ouellette Avenue	Riverside Drive	Giles Ave.
Park Street	Ouellette Ave.	Glengarry Ave.
Pelissier Street	Chatham St. W	Wyandotte St. W
Pitt Street	Caron Ave.	McDougall Ave.
Riverside Drive	Caron Ave.	Glengarry Ave.
University Avenue	Caron Ave.	Glengarry Ave.

[Refer to **Map 3.4 – MAP OF THEME STREETS LOCATED WITHIN CITY CENTRE PLANNING DISTRICT**]

3.3 CITY CENTRE "PLANNING DISTRICT" VERSUS "BUSINESS IMPROVEMENT AREA"

CITY CENTRE PLANNING DISTRICT

The City Centre holds a special position in Windsor as the hub of economic, social and cultural activities, an international gateway and heart of Windsor.

This special area is recognized through policies and objectives for redevelopment within the City of Windsor *Official Plan* (2000) **Section 6.11** *"... to ensure the city centre prospers, Council will manage development to promote a divers mixture of businesses, cultural venues, major government offices, residential neighbourhoods and entertainment venues"* and further reinforced by **Section 6.11.1.9** *"...to designate key streets as pedestrian oriented theme streets and providing appropriate streetscaping."*

The **City Centre Planning District** comprises approximately 231 hectares (570.8 acres) in the area bounded by:

- the Detroit River to the north;
- Howard Avenue and Marentette Street on the east;
- Erie Street and Cataraqui Street on the south; and
- Janette Avenue, the former Canadian Pacific Railway Line and Salter Street on the west.

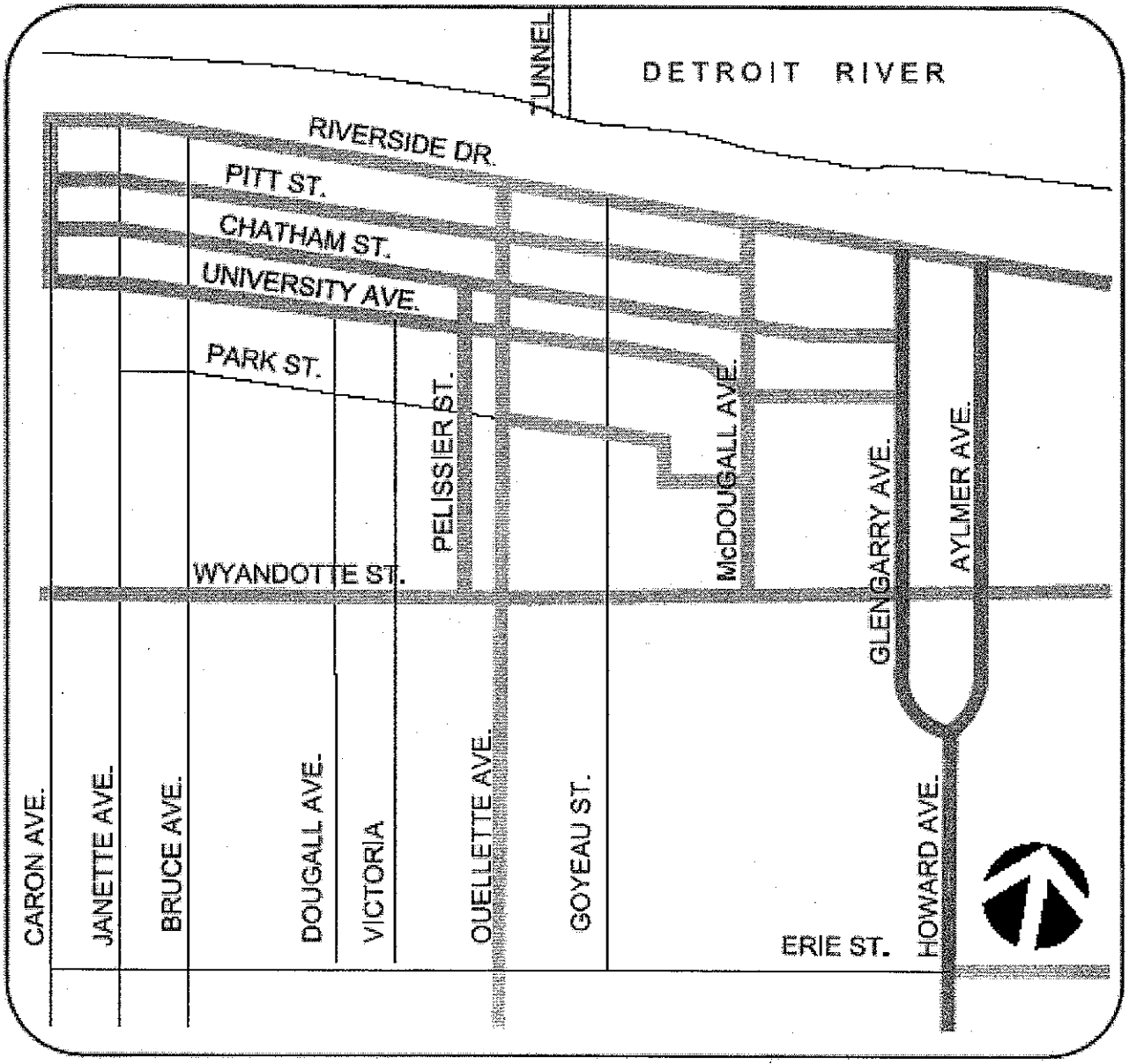
CITY CENTRE BUSINESS IMPROVEMENT AREA

The policies and objectives for the City Centre Planning District support the revitalization activities of the City Centre Business Association within the **City Centre Business Improvement Area.**

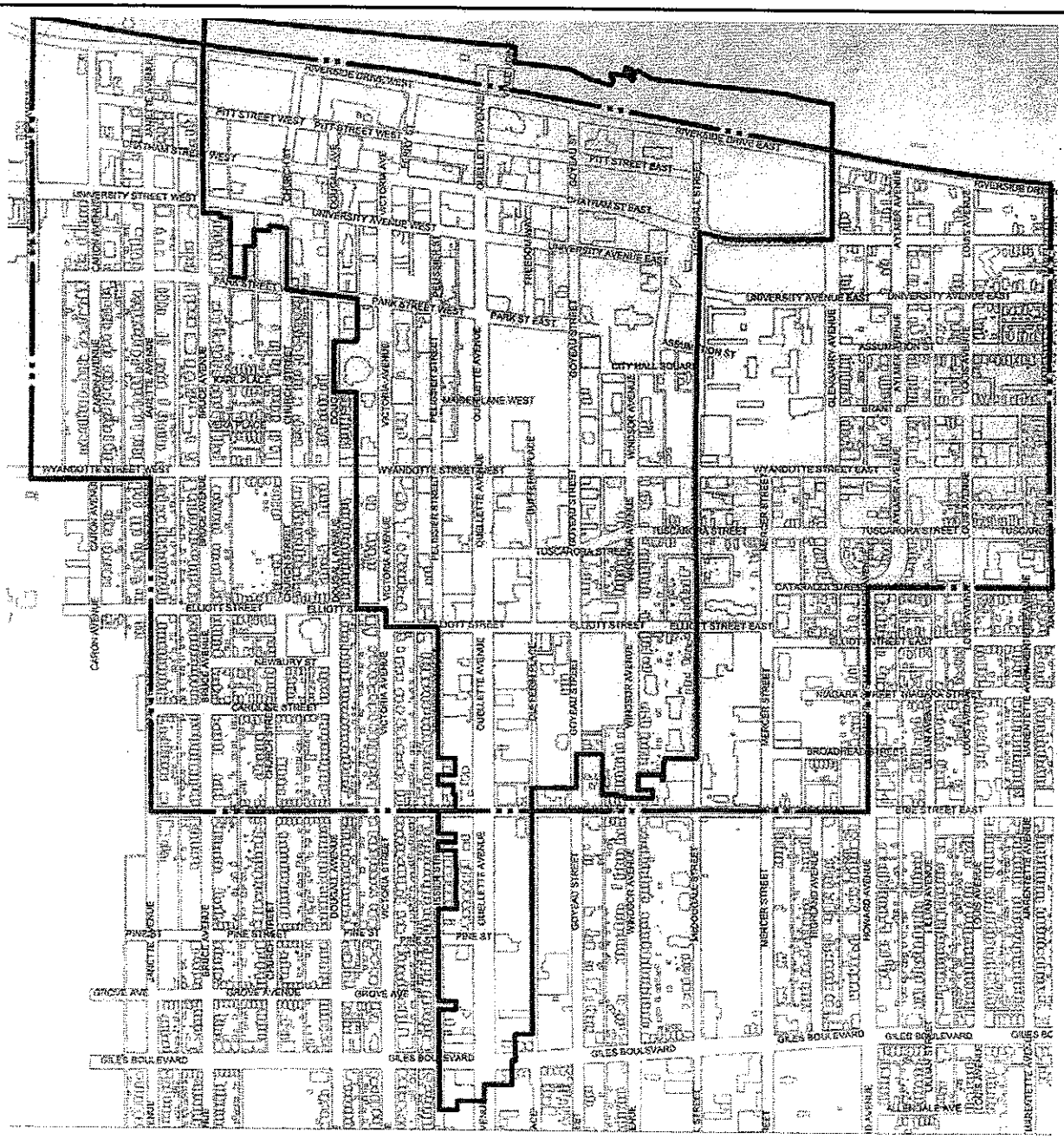
Understandably, there is considerable overlap between the boundaries of the City Centre Planning District and the City Centre Business Improvement Area. The streetscape improvements on Theme Streets within the shared area are the responsibility of the Partnership. Those areas within the BIA, but on the outside of the Planning District are the responsibility of the Business Association.

[Refer to **Map 3.5 – MAP COMPARING THE BOUNDARIES OF THE CITY CENTRE PLANNING DISTRICT AND THE CITY CENTRE BUSINESS IMPROVEMENT AREA**]

3.4 MAP OF THEME STREETS LOCATED WITHIN CITY CENTRE PLANNING DISTRICT



3.5 MAP COMPARING THE BOUNDARIES OF THE CITY CENTRE PLANNING DISTRICT AND THE CITY CENTRE BUSINESS IMPROVEMENT AREA



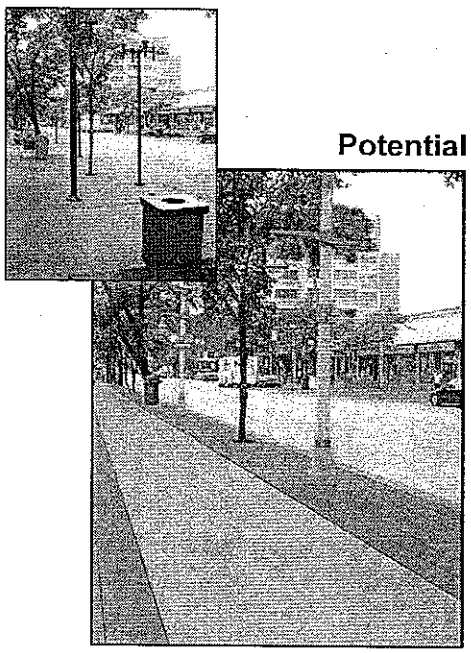
Legend

BIA Boundary ————

CCPD Boundary —··—··—

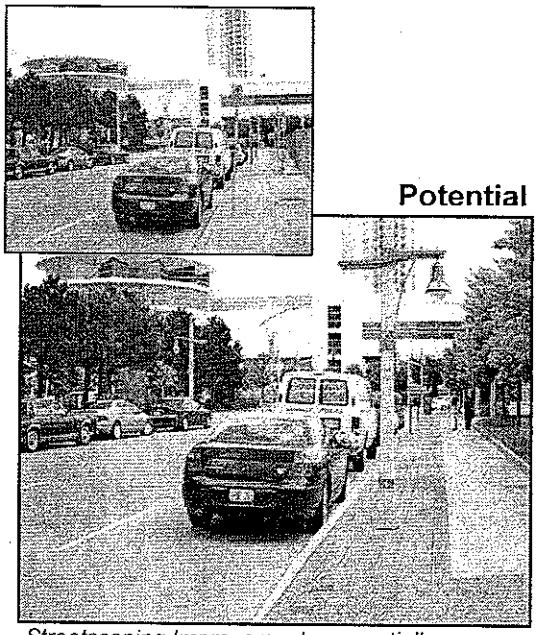
4.0 STREETSCAPING IMPLEMENTATION PRIORITIES

Current



Streetscaping Improvements on Ouellette Avenue (both sides)

Current



Streetscaping Improvements on partially completed corridors (the 'other side' of completed streets)

4.1 IMPLEMENTATION PRIORITIES FOR LOCATIONS IN THE CITY CENTRE

The costs associated with streetscaping implementation makes it unfeasible to apply it on every right-of-way within the City Centre Planning District

Instead, its economic value is in creating a safe and attractive environment on a limited number of pedestrian linkages that are strategically sited among major destinations and various activity areas.

Installation Location Priorities:

1. Streetscaping improvements on the ***Theme Streets*** surrounding **major redevelopment sites**.
2. **Ouellette Avenue** (both sides) from Pitt Street to Elliot Street.
3. **Pelissier Street** (both sides) from University Avenue West to Wyandotte Street West.
4. **Maiden Lane West** (both sides) from Ouellette Avenue to Pelissier Street.
5. **Finishing partially completed corridors**
   - installing streetscaping elements on the "other side" of already completed streets; and
   - installing all of the prescribed streetscaping elements on partially completed streets.
6. **Other** site-specific locations and corridors, which will be determined dependent on redevelopment activity and available resources.

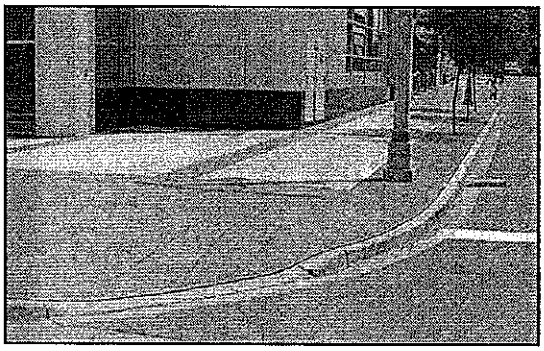
4.2 IMPLEMENTATION PRIORITIES FOR INDIVIDUAL STREETSCAPE ELEMENTS

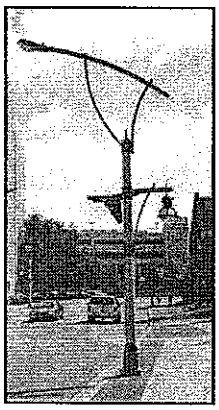
Installing all of the prescribed streetscaping elements all at once may be unfeasible and cost prohibitive for completing streetscaping throughout the City Centre Planning District.

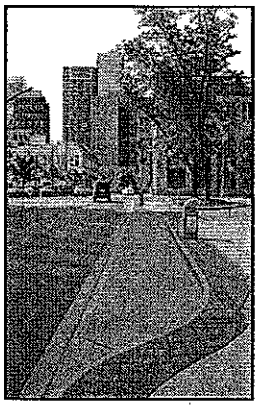
By prioritizing or phasing the installation of streetscaping, the 'primary' elements (those considered as the streetscape infrastructure and not as flexible in their placement) can be planned for and strategically implemented at the same time to establish the organizing framework for the addition of more flexible street furnishings and amenities ('secondary' elements).

Prioritizing the installation of the streetscaping elements requires the preparation of an implementation strategy that clearly outlines the phasing schedule of new elements.

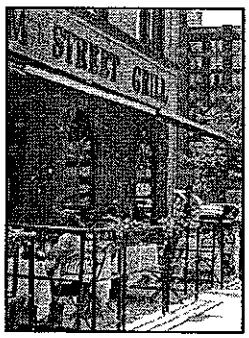
PRIMARY ELEMENTS
Streetscape Infrastructure

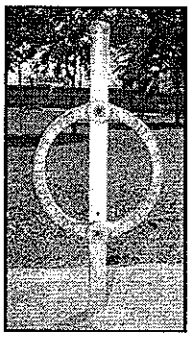


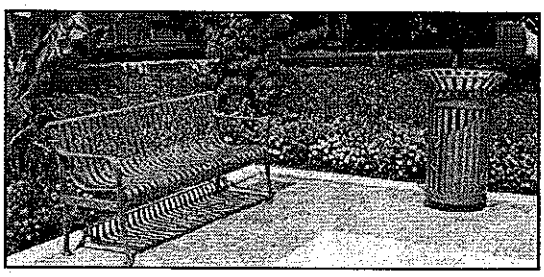




SECONDARY ELEMENTS
Amenities







IMPLEMENTATION PRIORITIES:

1. **PRIMARY ELEMENTS – Streetscape Infrastructure**

   a) **Hardscaping**
   - All **Pavement** Elements
   - All **Parking and Loading** Elements
   - **Light Standards**
     - All **Combined Roadway and Pedestrian Lighting**
     - Supplemental **Pedestrian-only Lighting**
     - **Special Area Lighting**

   b) **Landscaping**
   - **Street Trees**
   - Retrofitting **Retained Fixed Planter Beds**

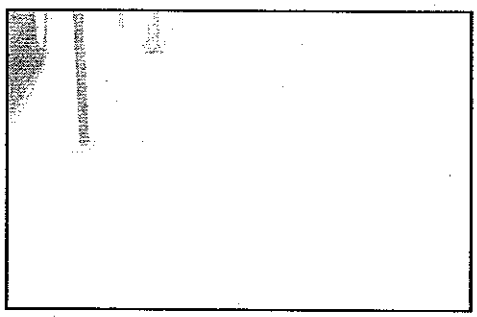
2. **SECONDARY ELEMENTS – Amenities**

   a) **Furnishings**
   - **Benches**
   - **Waste Receptacles**
   - **Bicycle Racks**
   - Other furnishings as needed and as resources allow
   - Elements placed by others

   b) **Landscaping**
   - **Moveable Planters**

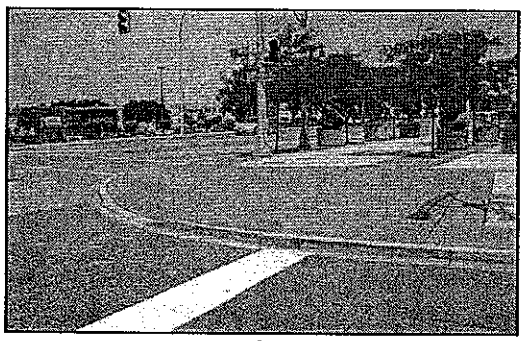
   c) **Orientation Signage**
   - **Street Name Signs**
   - **Decorative Banners**
   - Other **Orientation Signage** as needed

5.0 PAVEMENT STANDARDS

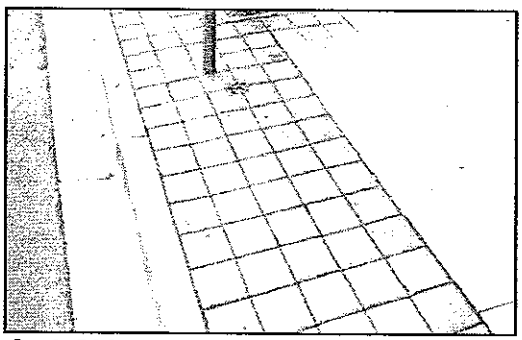


Pedestrian Path

Crosswalk



Corner of Intersection



Curb Side

Paving is a significant unifying element in any streetscape design. The patterns of different pavement types and the installation techniques can be used to guide pedestrian movement, clearly define spaces and provide visual variety.

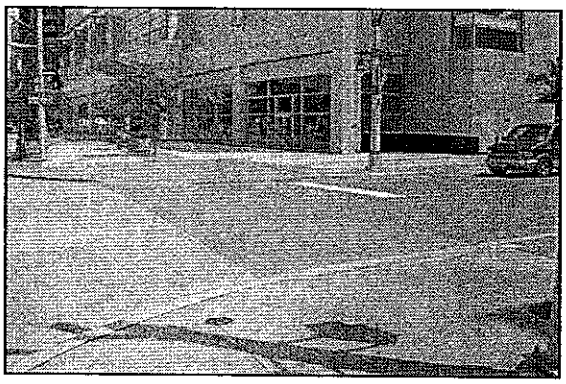
During the replacement of existing sidewalk paving, street corner paving and crosswalk paving on Theme Streets throughout the planning district – each currently consisting of differing materials and installation techniques – the following objectives must be achieved:

- Establishing **consistency** in pavement materials and treatment so an obvious and unobstructed pedestrian route is clearly demarcated along the entire public right-of-way and at specific points crossing the roadway.
- Establishing a paving pattern that provides the **organizing framework** for the placement of fixtures, furnishings, decorations and vegetation within the completed streetscape.
- Establishing and clearly differentiating between the three zones forming the ***"Boulevard"***: the curb side, the pedestrian path and the building side.
- Selecting the **paving patterns, colours and textures** to complement the nearby streetscaping elements and surrounding built form. The coordination of pavement types and the patterns created will establish a sense of order, scale and identity on the street.

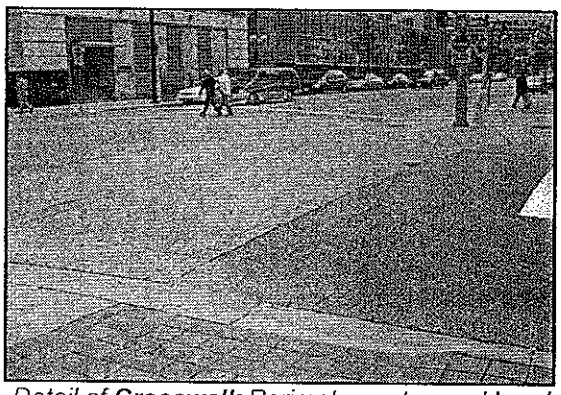
Pavement Standards

5.1	Crosswalks
5.2	Corners of Intersections
5.3	Curb Side
5.4	Pedestrian Path
5.5	Building Side
5.6	Pedestrian Access Curb Cuts
5.7	Driveway Access Curb Cuts

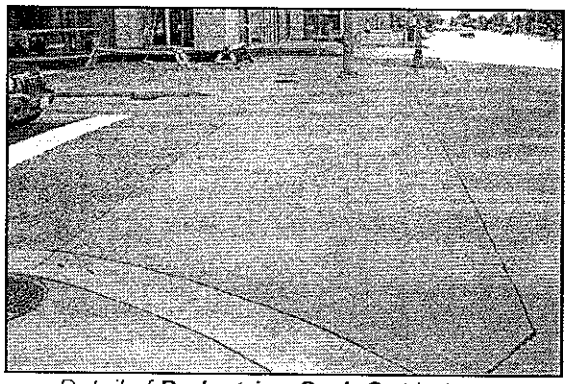
5.1
CROSSWALK



Crosswalk aligned with ***Pedestrian Path*** *and* ***Corner of Intersection***



Detail of ***Crosswalk*** *Perimeter – stamped band*



Detail of ***Pedestrian Curb Cut*** *between* ***Crosswalk*** *and* ***Corner of Intersection***

A **CROSSWALK** is considered as the continuation of the pedestrian path as it crosses the roadway that provides for the safe movement and integration of pedestrians within the travelled right-of-way.

DESIGN CRITERIA – "How It Functions"

- The crosswalk pavement must contrast with the adjacent street surfacing in both colour and texture to indicate where the pedestrians can cross the roadway safely.
- The crosswalk is constructed in concrete that is tinted with a "***Dune***" colour and the surface is impressed with a "***Slate Skin***" texture.
- The perimeter of the crosswalk is defined by a continuous stamped band of 0.203m x 0.203m (8" x 8") squares set to align with the joints of the abutting curb side block pattern.
- Although crosswalks are intended to be highly visible through texture and colour, stop bars (painted lines) must also be provided on the roadway to warn drivers of the upcoming crossing.
- The clear delineation of all crosswalks is mandatory in relation to the enforcement of Highway Traffic Act violations.
- The width of the crosswalks is designed so that pedestrians can travel within the marked area through the entire crossing. The width of the crosswalk should not be narrower than the pedestrian paths it connects.

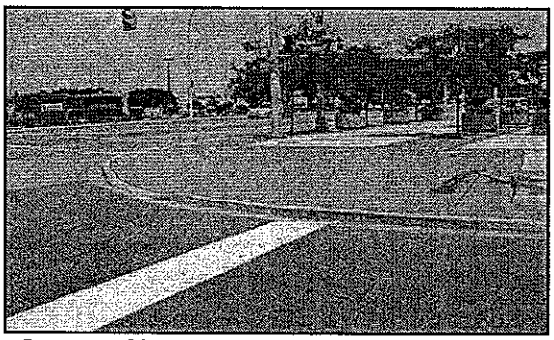
PLACEMENT – "Where It Goes"

- The concrete crosswalk stretches across the roadway portion of the public right-of-way and is in alignment between the pedestrian access curb cuts of the corners of intersections.

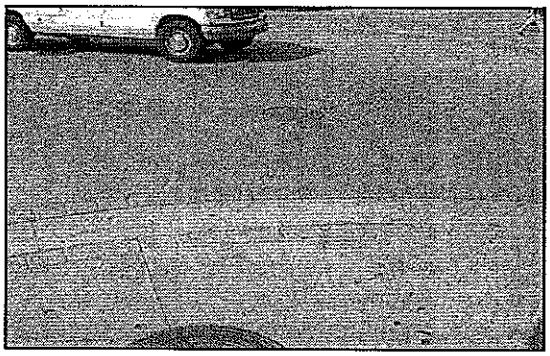
SPECIFICATIONS

Schedule A: **Figure 5.1.1**: Partially Completed
Schedule A: **Figure 5.1.2**: Partially Completed

5.2
CORNERS OF INTERSECTIONS



Corner of Intersection *signifies the location for pausing before crossing the roadway*



Detail of materials used for ***Crosswalk*** *and* ***Corner of Intersection*** *providing indicators to pedestrians that they are entering the roadway*

The **CORNERS OF INTERSECTIONS** define the area of transition for the pedestrian between the sidewalk (pedestrian path) and the crosswalk.

DESIGN CRITERIA – "How It Functions"

- The pavement at the corners of intersections must contrast with that of the adjacent sidewalk pavement through colour and texture to signify that the pedestrian path is about to cross the roadway by continuing onto the crosswalk.
- The corners of intersections are constructed in concrete that is tinted with a "***Dune***" colour and the surface is impressed with a "***Slate Skin***" texture.
- The perimeter of the corners of intersections is defined by a continuous stamped band of 0.203m x 0.203m (8" x 8") squares set to align with the joints of the abutting curb side block pattern.
- The perimeter of the corners of intersections is stamped with directional lines that are oriented parallel to the crosswalk and are used as a tactile cue to indicate the upcoming transition of zones for the visually impaired. This feature is important for ensuring barrier-free design.
- The corners of intersections may contain a blend of grade transitions with slopes that are parallel and perpendicular to the curb from the level of the finished sidewalk down to the level of the finished roadway.

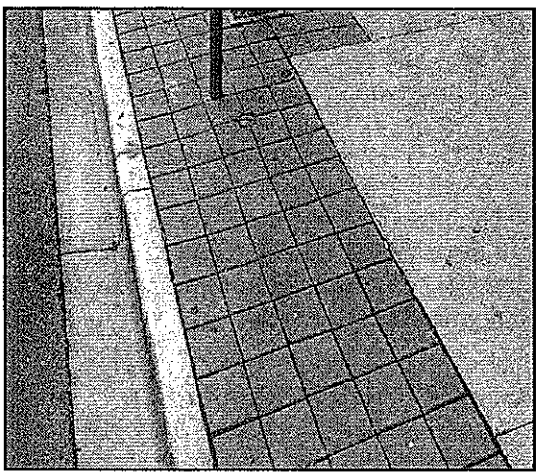
PLACEMENT – "Where It Goes"

- The shape of corners of intersections represent ¼ of a circle with the radius in alignment with a line projecting out from the property line between public and private properties, with the arc of the circle following the curb between the two streets. The width of the 'radius' should be consistent with the width of the pedestrian path and the curb side areas combined.

SPECIFICATIONS

Schedule A: **Figure 5.2.1**: Partially Completed

5.3
CURB SIDE



*Detail of the **Curb Side** Zone*

The **CURB SIDE** zone -- or the 'service zone' -- is the area of pavement located directly along the back of the curb and serves as the location for the installation of lighting fixtures, utilities, furnishings, parking meters, trash receptacles and street trees.

DESIGN CRITERIA – "How It Functions"

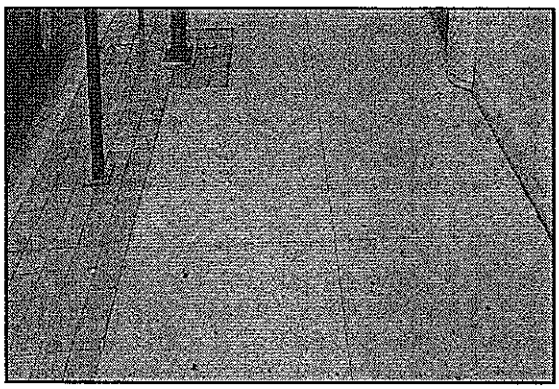
- The bands of paver blocks that comprise the curb side provide a considerable contrast, through colour and texture, compared with the adjacent sidewalk pavement and the roadway curbing.
- The curb side zone consists of a concrete curb, behind which 0.203m x 0.203m (8" x 8") unit paver blocks in "***Timberwood***" colour are installed in 5 soldier course rows on a minimum of 2" (0.05 m) concrete foundation with a sand base.
- The width of the curb side zone will range from 1.22m (4') minimum to 1.83m (6') maximum, which includes the curbing.

PLACEMENT – "Where It Goes"

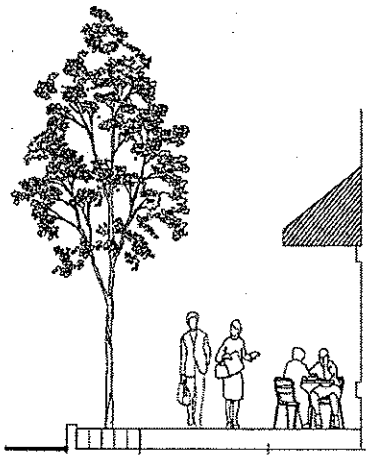
- The **curb side** is the pavement area located directly along the back of the curb.
- The curb side paving pattern is 'paused' where the curb is cut by mid-block pedestrian access points, at corners of intersections and at driveway access cuts. The paving pattern is then continued on the other side of the cut.

SPECIFICATIONS

Schedule A: **Figure 5.3.1**: Partially Completed
Schedule A: **Figure 5.3.2**: Partially Completed



*Detail of the **Pedestrian Path** – spanning from the **Curb Side** to the **Building Side***



No obstacles within the pedestrian path – not from above, from mid-range nor from below.

SPECIFICATIONS

5.4
PEDESTRIAN PATH

The **PEDESTRIAN PATH** zone is the pavement area located between the curb side and the building wall (property line) and is the clear route designated along the boulevard for pedestrian circulation.

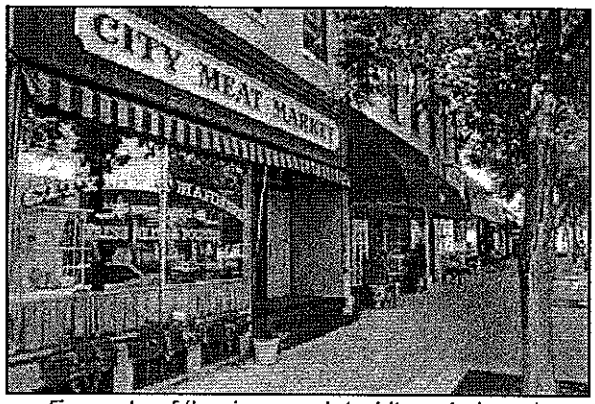
DESIGN CRITERIA – "How It Functions"

- A 2.5m to 3.0m (8' to 10') wide, unobstructed pedestrian path should be established and maintained, especially on high vehicular and pedestrian traffic streets.
- The pedestrian path consists of standard concrete that is poured in clean, non-scored sections. Maintenance of the pedestrian path pavement involves removing and replacing all concrete within the joint lines of the damaged area.
- The space made available for the pedestrian path zone must not be reduced by any obstacles in the following areas:
  - ← From **above**: the pedestrian path should have a minimum clearance of 2.4m (7.8') in height from tree branches, canopies and awnings, signs and other overhead objects.
  - ← At **mid-range**: the pedestrian path should be clear of garbage receptacles, mail boxes, planters, utility poles, lighting standards and other street furniture.
  - ← From the **ground**: the pedestrian path should be free of grates and changes in grade where possible.

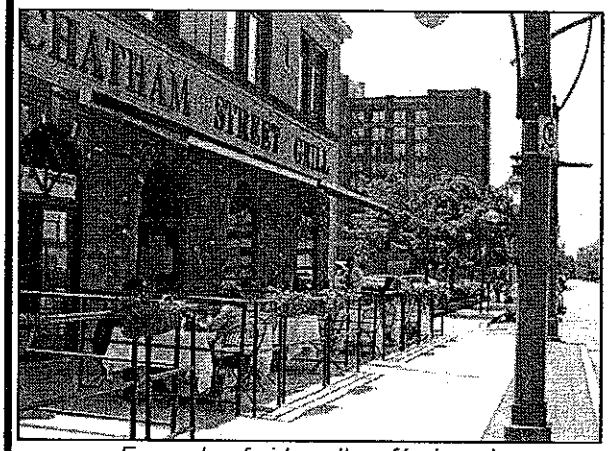
PLACEMENT – "Where It Goes"

- The pedestrian path is the pavement area located between the curb side zone and the building side zone on the boulevard.

Schedule A: **Figure 5.3.1**: Partially Completed
Schedule A: **Figure 5.3.2**: Partially Completed
Schedule A: **Figure 5.3.3**: Partially Completed



*Example of 'business-related items' placed within the **Building Side** encroachment zone with minimal space available*



*Example of sidewalk café placed within the **Building Side** encroachment zone.*

*This photo clearly illustrates the **three zones** of the sidewalk/boulevard consisting of:*

- *the **curb side** service zone (lighting fixtures)*
- *the **pedestrian path** for circulation; and*
- *the **building side** encroachment zone defined by the café enclosure*

SPECIFICATIONS

5.5
BUILDING SIDE

The **BUILDING SIDE** zone is the pavement area located between the pedestrian path and the building wall (property line). This is the 'encroachment zone' on the boulevard for sidewalk cafes, merchandise displays and sidewalk signs in order to keep the pedestrian path unobstructed.

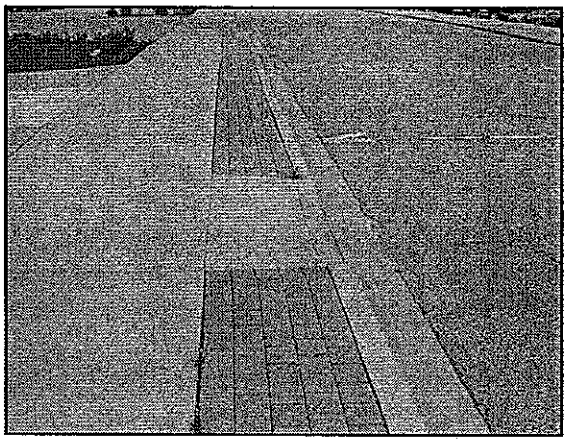
DESIGN CRITERIA – "How It Functions"

- The width of the building side zone will vary as it is comprised of the remaining space on the sidewalk after the curb side and pedestrian path have been established. The width may vary from no space available to several metres deep – dependent on the setback of the private property line and the proximity to on-street parking and loading areas.
- Pedestrians typically do not walk too close to the building side of the boulevard. This 'building side zone' should provide a clear space to protect passersby from opening doors and objects protruding from buildings.
- The building side zone is the appropriate location for individual businesses to accommodate limited outdoor uses (sidewalk cafes and merchandise displays).
- The building side zone consists of standard concrete that is poured in clean, non-scored sections. Maintenance of the building side zone pavement involves removing and replacing all concrete within the joint lines of the damaged area.

PLACEMENT – "Where It Goes"

- The building side zone is the pavement area located between the pedestrian path and the property line.

Schedule A: **Figure 5.3.1**: Partially Completed
Schedule A: **Figure 5.3.2**: Partially Completed
Schedule A: **Figure 5.3.3**: Partially Completed



Detail of ***Pedestrian Access Curb Cut***

5.6
PEDESTRIAN ACCESS CURB CUTS

PEDESTRIAN ACCESS CURB CUTS through the curb side zone of the boulevard are required where the pedestrian path crosses a curb. The curb cut creates a transition between the varying grades of the walking surfaces and enables the safe and convenient movement of pedestrians.

DESIGN CRITERIA – "How It Functions"

- Pedestrian access curb cuts must have a minimum width of 1.2m (4') and a maximum width of 1.5m (5') across (perpendicular to) the surface of the curb side to ensure the greatest barrier-free flexibility.
- The curb cuts are constructed of standard concrete poured in clean, non-scored sections. The concrete slopes from the surface of the pedestrian path to the dropped curb flush with the roadway surface.
- Curb cuts must have a cross slope no greater than 1:48, contain level landings at the top (sidewalk) and have side flares no greater than 1:10 slope.

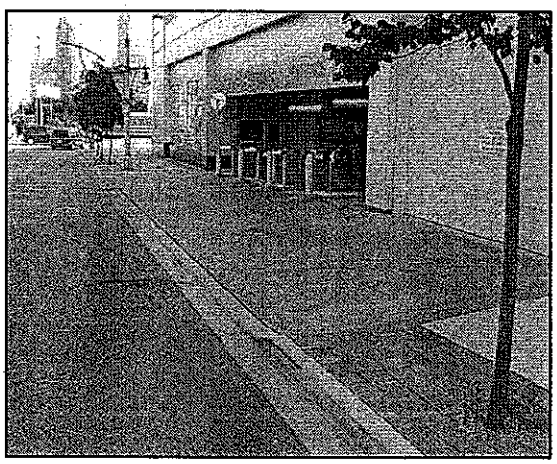
PLACEMENT – "Where It Goes"

- The pedestrian access curb cuts are located where the pedestrian path crosses the curb, typically in a mid-block location.

SPECIFICATIONS

Schedule A: **Figure 5.5.1**: Partially Completed
Schedule A: **Figure 5.3.3**: Partially Completed

*Detail of **Driveway Access Curb Cut** for an alley right-of-way*



*Detail of **Driveway Access Curb Cut** for a private driveway*

SPECIFICATIONS

5.7
DRIVEWAY ACCESS CURB CUTS

DRIVEWAY ACCESS CURB CUTS bisect all three zones of the boulevard and are installed where vehicles must cross a curb to access an alley public right-of-way or private driveway.

DESIGN CRITERIA – "How It Functions"

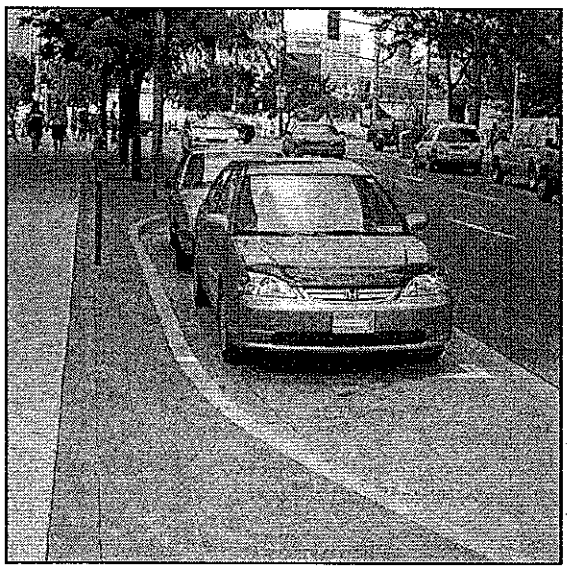
- Driveway access curb cuts must have the same width of the alley or driveway for which it provides access.
- The curb cuts are constructed of standard concrete poured in clean, non-scored sections that are tinted "***Dune***" in colour with the surface impressed with a "***Slate Skin***" texture to clearly indicate to pedestrians that they are entering an area where moving vehicles may be present.
- Curb cuts must have a cross slope no greater than 1:48, contain level landings at the top (sidewalk) and have side flares no greater than 1:10 slope.

PLACEMENT – "Where It Goes"

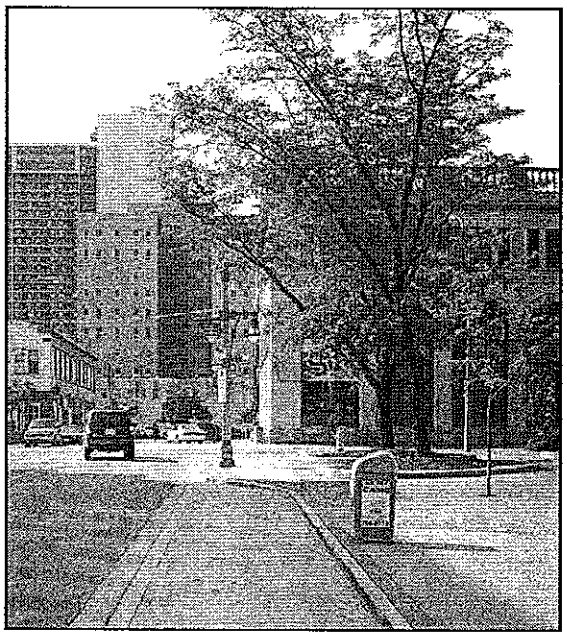
- The driveway access curb cuts are located where the vehicular route crosses a curb, typically to provide access to an alley or private driveway.

Schedule A: **Figure 5.6.1**: Partially Completed
Schedule A: **Figure 5.3.3**: Partially Completed

6.0 PARKING AND LOADING SPACE STANDARDS



On-Street Parking Spaces



On-Street Passenger Loading Space

On-street parking and loading spaces are critical elements of the streetscape for maintaining safe, orderly and effective circulation within and throughout the downtown environment for pedestrians, automobiles and commercial activity.

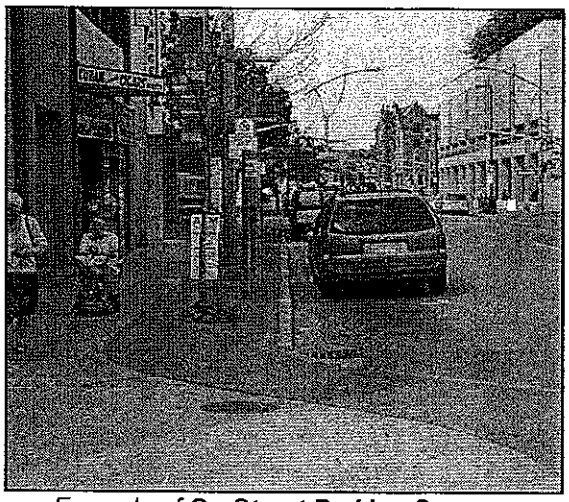
On-street parking and loading spaces provide:

- direct "door-step" access to businesses and properties within the planning district;
- greater pedestrian comfort and safety by providing a buffer (parked vehicles) between pedestrians and moving traffic – a form of "traffic calming"; and
- locations to accommodate direct access for emergency service vehicles (police, fire and ambulance) for incident response situations.

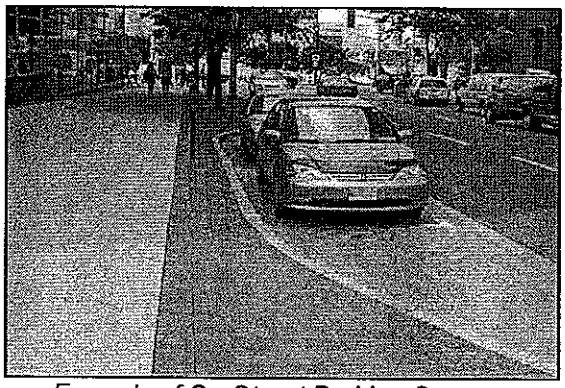
Parking and Loading

6.1	On-Street Vehicle Parking Spaces
6.2	On-Street Commercial Vehicle Loading Spaces
6.3	On-Street Passenger Loading Spaces
6.4	On-Street Bus Passenger Loading Spaces

6.1
ON-STREET VEHICLE PARKING SPACES



*Example of **On-Street Parking Spaces***



*Example of **On-Street Parking Spaces***

ON-STREET PARKING SPACES are intended for short-term use for quick transactions and high customer turnover and to provide the closest access possible to client-based and 'drop-in' businesses. On-street parking can also be an effective traffic-calming tool by separating the areas of vehicular and pedestrian movement.

DESIGN CRITERIA – "How It Functions"

- On-street parking is metered to ensure a high turnover rate on the limited number of on-street parking spaces.
- The limits (length and width) of each parking space is clearly demarcated with white painted lines on the roadway surface.
- On-street commercial loading spaces may also be used as barrier-free parking spaces as specified and regulated under the Parking By-law 9023.

PLACEMENT – "Where It Goes"

- On-street parking spaces can be provided where:
  - there is ample space on the roadway to ensure vehicular traffic flow, and
  - ample space on the boulevard to ensure a curb side service area, unobstructed pedestrian flow, and little demand for building side encroachment space.

* **Placement of additional on-street vehicle parking spaces may result in the removal and loss of existing mature street trees.**

SIGNAGE

- All on-street parking spaces must be signed with the regulations of use. The information may be contained within the parking meter fixture, attached to the meter post or located in a separate, yet highly visible location.
- All barrier-free parking spaces should be signed to clearly indicate the restrictions of usage.

SPECIFICATIONS

Schedule A: **Figure 6.1.1**: To be Completed

IMAGE TO BE INSERTED

6.2
ON-STREET COMMERCIAL VEHICLE LOADING SPACES

Although loading and unloading of commercial vehicles should occur in the 'service realm' of the alleys. Where alley access may not be provided, **ON-STREET COMMERCIAL LOADING SPACES** may be strategically placed on the roadway to serve nearby businesses.

DESIGN CRITERIA – "How It Functions"

- The on-street commercial vehicles loading space is designed similar to an on-street vehicle parking space with the appropriate curbing to effectively define the extent of the loading area.
- The on-street commercial vehicle loading space must not obstruct traffic flow or significantly reduce driver sightlines when the commercial vehicles are stopped to deliver goods.
- On-street commercial vehicles loading spaces may also be used as barrier-free parking spaces as specified and regulated under the Parking By-law 9023.
- On-street commercial vehicles loading is also permitted in any "NO PARKING" zone as outlined in the Parking By-law 9023.

PLACEMENT – "Where It Goes"

- On-street loading spaces should be strategically located to serve several businesses where side building access or alley access is not available. Typically, placement is restricted to one loading space per block to serve all businesses in that area.

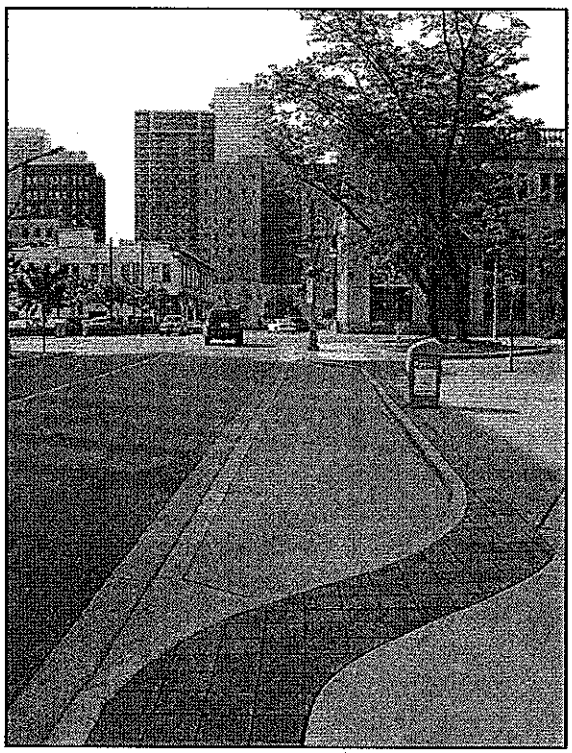
SIGNAGE

- Signage must identify the limit (length and width) of the loading space reserved and hours of restricted use.
- Signage must clearly indicate the types of authorized and unauthorized usage (including the violations to permit appropriate enforcement).

SPECIFICATIONS

Schedule A: **Figure 6.2.1**: To be Completed

6.3
ON-STREET PASSENGER LOADING SPACES



*Example of **On-Street Passenger Loading Space***

ON-STREET PASSENGER LOADING SPACES are intended as drop-off and pick-up areas for patrons and visitors, and are typically located adjacent to public buildings and other downtown destinations requiring this type of facility.

DESIGN CRITERIA – "How It Functions"

- The on-street passenger loading space is designed similar to an on-street commercial loading space with the appropriate curbing to effectively define the extent of the loading area.
- The on-street passenger loading space must have a pedestrian curb cut through the curb side zone for accessibility to the pedestrian path and building side of the boulevard.
- The on-street passenger loading space must not obstruct traffic flow when motorists are stopped to collect or discharge passengers.
- The on-street passenger loading space should be clearly defined with a paving material that is distinguishable from the travel lane of the roadway.
- Consideration should be given to multi-task these designated on-street passenger loading spaces as parking spaces during certain times; that is reserving it for drop-off and pick-up during hours of operation, with the possibility of using as a series of parking spaces during off-hours.

PLACEMENT – "Where It Goes"

- On-street passenger loading spaces should be appropriately sized and strategically located to serve:
  - several public buildings; and/or
  - downtown destinations which receive intense and/or continuous visitation.

SIGNAGE

- Signage must identify the limits (length and width) of the loading space reserved and hours of restricted use.

SPECIFICATIONS

Schedule A: **Figure 6.3.1**: To be Completed

6.4
ON-STREET BUS PASSENGER LOADING SPACES

*Example of **On-Street Bus Passenger Loading Space***

The spacing, location and design of **ON-STREET BUS PASSENGER LOADING SPACES** (also referred to as a "bus bay") significantly influence the transportation system's performance, customer satisfaction and continued traffic flow.

DESIGN CRITERIA – "How It Functions"

- On most Theme Streets, on-street bus passenger loading spaces will be conducted in a traffic lane and no streetscaping improvements are required.
- At major interchanges within the planning district, buses may have to pull into a designated space to clear the travel lane during scheduled layovers to wait for connections
- On-street bus passenger loading spaces should conform to the following dimensions:

Design Condition	Min. Entry Length	Bay Length	Min. Exit Length
Far Side Stop	3.05m 10 feet	12.2m 40 feet	9.1m 30 feet
Near Side Stop	18.3m 60 feet	12.2m 40 feet	0.0m 0 feet

PLACEMENT – "Where It Goes"

- On street bus passenger-loading spaces will be strategically located for scheduled layovers by Transit Windsor to best serve transit riders.
- For tourist-based buses, the on-street bus passenger loading spaces can be used to collect and discharge passengers where off-street parking is not available or conveniently located.

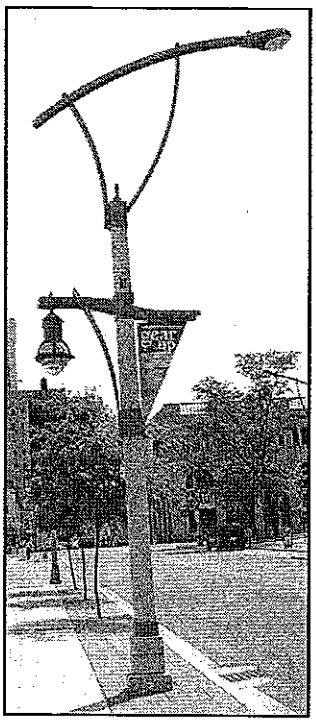
SIGNAGE

- Signage required for transit stops consists of:
  - "No Stopping" signs with "Bus Stop" clearly printed, which are visible to oncoming vehicular traffic to define the area(s) along the roadway that require specific clearances.
  - For Transit Windsor buses, transit route information displayed on a designated post detailing the bus arrival and departure times and contact information.

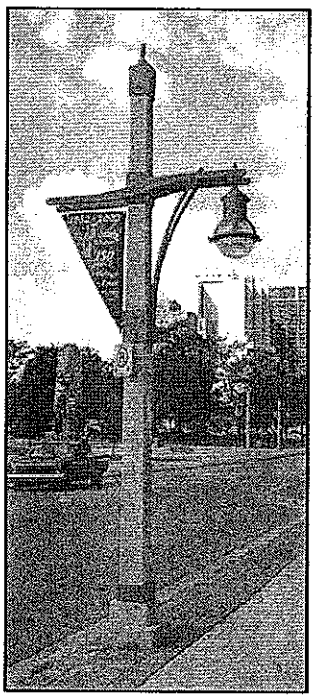
SPECIFICATIONS

Schedule A: **Figure 6.4.1**: To be Completed

7.0 LIGHTING STANDARDS



Street and Pedestrian Combined Lighting Standard



Pedestrian Lighting Standard

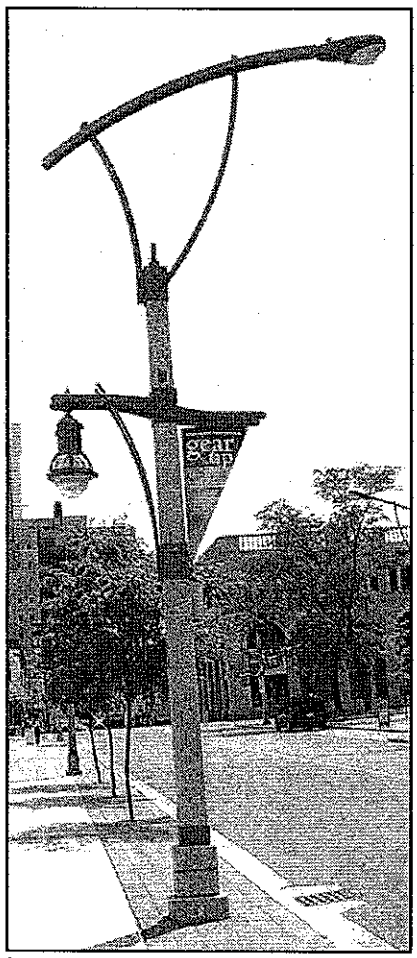
Street lighting plays an important role in establishing the character, function, quality and security of a streetscape, especially at night. The scale, style, lighting effect, cost and maintenance of lighting standards are criteria that have influenced the selection of the standard posts, armatures and luminaires.

In decommissioning the existing "shoebox" streetlight and globe pedestrian lighting standards, the ***"Windsor-Style"* Street and Pedestrian Combined Lighting Standard** replacement merges the former need for two standards into one and results in the following benefits:

- Reducing the streetlight and pedestrian light standard inventory and carrying costs by half in requiring fewer poles the clustering lamps and other amenities (decorations) onto one standard post;
- Reducing the separate streetlight and pedestrian lighting standard maintenance and replacement costs as more substantial and sturdier pre-stressed concrete standards are installed, that are weather-resistant and low-maintenance.

Lighting Standards

7.1	Street and Pedestrian Combined Lighting Standards
7.2	Pedestrian Lighting Standards
7.3	Specific Area Lighting Standards



Street and Pedestrian Combined Lighting Standard

This is the primary lighting standard to be installed. Other specified standards will be implemented as supplements to achieve the desired illumination levels and /or character on the streetscape.

SPECIFICATIONS

7.1

STREET AND PEDESTRIAN COMBINED LIGHTING STANDARDS

The **STREET AND PEDESTRIAN COMBINED LIGHTING STANDARD** provides direct and adequate illumination to the roadway for enhanced vehicular circulation and to the sidewalk for pedestrian activities.

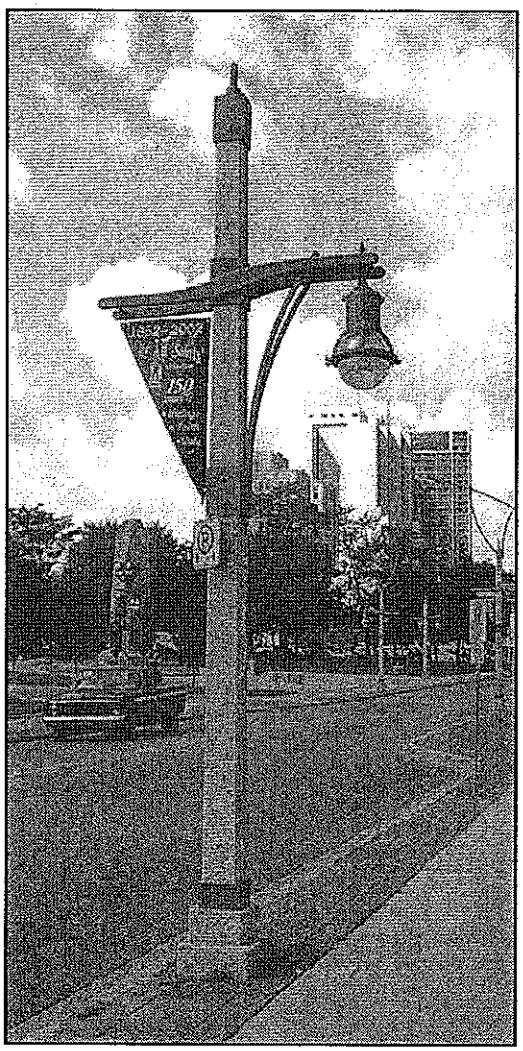
DESIGN CRITERIA – "How It Functions"

- The lighting standard is designed with:
  - Two luminaires:
    - 'cobra-head' (high-pressure sodium-vapour) fixture suspended over the roadway.
    - pendent (metal halide) fixture suspended over the boulevard.
  - Two mounting arms:
    - roadway-oriented arm suspending a luminaire over the roadway and attached to the decorative concrete pole approximately 5.36m (17.6') above grade.
    - sidewalk-oriented arm suspending a pendent luminaire over the pedestrian path and suspending a banner over the curb side, and attached to the decorative concrete pole approximately 4.27m (14') above grade.

PLACEMENT – "Where It Goes"

- The street/pedestrian combined lighting standards are installed within the curb side service zone which conforms to the overall streetscape organizational system.
- The spacing of street/pedestrian combined lighting standards along the streetscape is dependent on:
  - the physical attributes of the corridor (width of overall public right-of-way from building wall to building wall, the width of the boulevard and the adjacent land uses)
  - the desired illumination levels.
- The street/pedestrian combined lighting standards are typically spaced at XXm (XX') apart.

Schedule A: **Figure 7.1.1**
Schedule A: **Figure 7.4.1**
Style: **EX3** [StressCrete Group] **KWC175-III-G-S41**



Pedestrian Lighting Standard

SPECIFICATIONS

7.2
PEDESTRIAN LIGHTING STANDARDS

The **PEDESTRIAN LIGHTING STANDARD** provides direct illumination to enhance sidewalk and walkway areas for pedestrian activities.

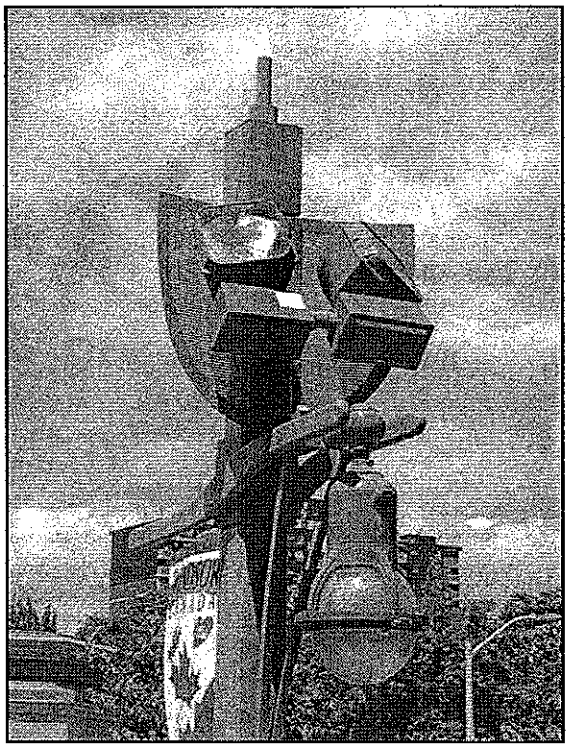
DESIGN CRITERIA – "How It Functions"

- The lighting standard is designed with one mounting arm containing a decorative pendant luminaire (metal halide) suspended over the sidewalk and attached to a decorative concrete pole approximately 4.27m (14') above grade.

PLACEMENT – "Where It Goes"

- The pedestrian lighting standards are installed within the curb side service zone which conforms to the overall streetscape organizational system as the location for fixed and moveable fixtures.
- The placement and spacing of pedestrian lighting standards along the streetscape is dependent on:
  - Increasing or supplementing illumination levels – greater than the illumination output from the street/pedestrian combined lighting standard;
  - providing greater illuminations levels in areas of intense pedestrian traffic;
  - providing illumination in areas where the combined lighting standard is not deemed to be appropriate;
  - providing a greater sense of security at night through enhanced illumination; and
  - enhancing the unique pedestrian-oriented character of the downtown.

Schedule A: **Figure 7.2.1**
Schedule A: **Figure 7.4.1**
Style: **EX7** [StressCrete Group] **KWC175-III-G-S41**



Specific Area Lighting Standard

7.3
SPECIFIC AREA LIGHTING STANDARDS

The **SPECIFIC AREA LIGHTING STANDARD** provides direct illumination to parking areas, urban open spaces and onto buildings within the downtown.

DESIGN CRITERIA – "How It Functions"

- The decorative concrete pole standard (with or without the street/pedestrian or pedestrian only mounting arms and luminaires) is equipped with cut-off floodlight luminaires with side guards, which are mounted at specific heights and locations on the pole that will minimize glare and achieve the desired illumination levels and/or desired effect.

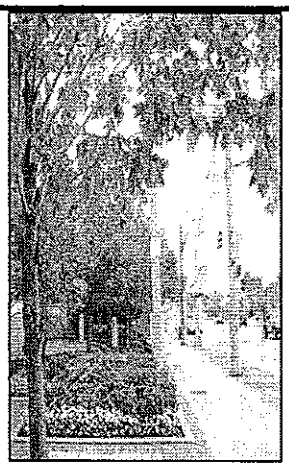
PLACEMENT – "Where It Goes"

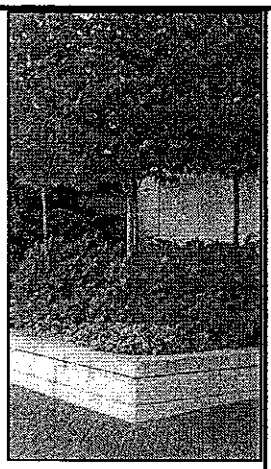
- Special Area Lighting Standards are installed on the perimeter of parking areas and within other urban open spaces where specific illumination levels must be achieved to provide security.
- Special Area Lighting Standards are installed to highlight specific architectural features or to define a special area.

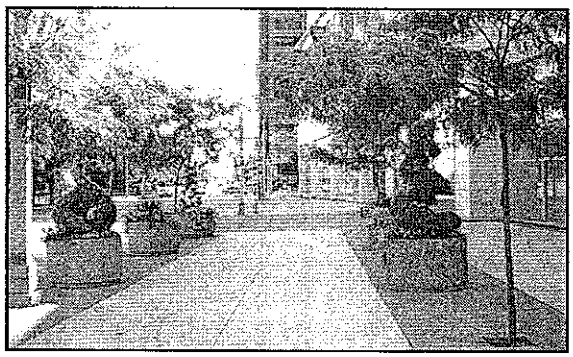
SPECIFICATIONS

Schedule A: **Figure 7.3.1**
Style: **EX7U** [StressCrete Group] **KWC175-III-G-S41**

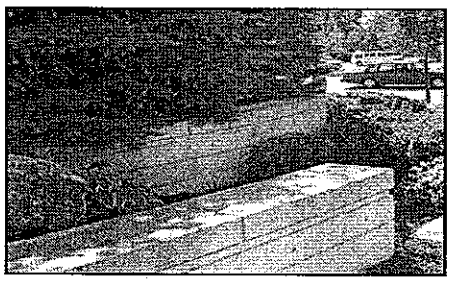
8.0 LANDSCAPING STANDARDS

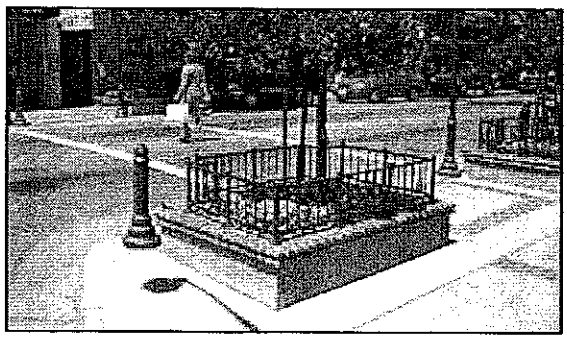






Greening the Streetscape





Trees and other decorative plantings are significant elements of the street scene as they can unify and soften the streetscape, help define the pedestrian path to channel circulation and serve as a buffer between the sidewalk and the street.

"Greening" the downtown district offers numerous environmental benefits; such as

- providing shade from the sun;
- providing screening from prevailing winds;
- providing air purification; and
- controlling glare from nearby building surfaces.

As part of a comprehensive streetscaping initiative, the retention and/or replacement of street trees and other forms of vegetation should be selected and located to enhance the pedestrian experience without creating hazards, such as obstructing visibility and reducing illumination from streetlight sources.

Street tree placement, spacing and species selection will depend on the existing site conditions and proposed design intent.

Landscaping within the district will be further enhanced by the use of seasonal plantings and flower displays in fixed and moveable planter pots. These plantings not only add colour, but also reflect a place that is well cared for and nurtured.

Landscaping

8.1	Street Trees in Subsurface Pits
8.2	Street Trees in Grates
8.3	Street Trees in Fixed Planter Beds
8.4	Vegetation in Moveable Planters
8.5	Vegetation in Fixed Planters

STREET TREE SPECIES SELECTION

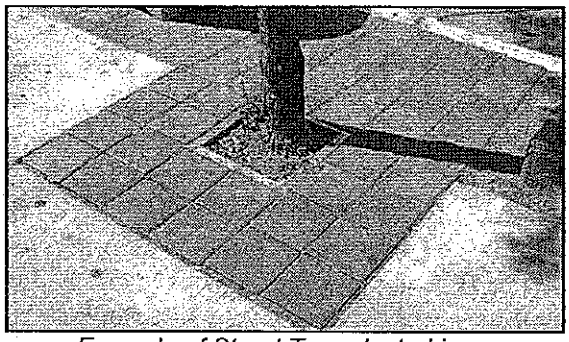
Street tree **species selection** involves understanding specific design issues of the particular planting site and by cross-referencing the recommended species for Windsor, as found in the *City of Windsor Landscaping Manual*.

- The **eventual size and shape** of each tree should be carefully considered before planting to ensure each tree will have adequate room to achieve its mature size and shape, and to not interfere with other streetscaping elements.
- All plant materials should be selected to **suit the climate, soil type and environment** in which they are planted. The selection of trees for the City Centre planning district should also be based on their ability to endure stressful conditions: high levels of pollution, salting, snow storage and potential for automobile- and pedestrian-inflicted damage.
- Trees should have a single, upright trunk, produce a minimal amount of fruit and seeds and have a medium to long life expectancy.
- The **height** of street trees at maturity should be appropriate to the height of the buildings on the street, with consideration given to the fact that these trees will never reach their normal mature height because of their placement in a sidewalk condition.
- Trees should be **strong**, resistant to most diseases, insects and require little maintenance. Monocultures will not be permitted.
- Tree **placement** and extent of the tree canopy should relate to the architecture, block patterns, curb cuts, lighting standards and building entries

The following are recommended street trees:

NAME	COMMON NAME
Amelanchier spp.	**Serviceberry** White spring flowers
Prunus virginiana	**Shubert Chokecherry** White spring flowers, hardy
Pyrus calleryana (& variety)	**Callery Pear** Spring flowers, fall colour
Syringa amurensis japonica	**Japanese Tree Lilac** Cream colour summer flowers
Acer platanoides "Columnaire"	**Columnar Norway Maple** Tall, narrow, salt tolerant
Aesculus carnea 'Briotti"	**Ruby Red Horse Chestnut** Medium size, fruitless, pink flowers
Celtis occidentalis	**Hackberry** Unique bark on mature trees
Corylus colurna	**Turkish Hazel** Hardy, medium size, pyramidal shape
Gleditsia triacanthos "Inermis"	**Thornless Honey Locust** Hardy, makes light dappled shade
Liriodendron tulipfera	**Tulip Tree** Fast growing
Platanus acerifolia	**London Plane Tree** Large, mottles exfoliating bark
Querqus Alba	**White Oak** Hardy and adaptable
Querqus macrocarpa	**Bur Oak**
Tilia cordata	**Little Leaf Linden** Medium size, versatile

Trees, more than any other planting, are "built-in" seasonal features.



Example of Street Tree planted in a ***Sub-Surface Pit***

8.1
STREET TREES IN SUB-SURFACE PITS

TREES IN SUB-SURFACE PITS are an attractive way to plant street trees in a paved environment, especially in high volume pedestrian traffic areas.

This is the preferred installation method for planting all new street trees within the redeveloped streetscape.

DESIGN CRITERIA – "How It Functions"

- The installation method consists of a large subsurface pit for the root system, a metal grate cover to protect the roots below and to support the brick pavers above that are installed flush with the sidewalk surface.
- Planting street trees in sub-surface pits prevents soil compaction around the trees.
- Trees planted in the public right-of-way should be large and mature enough at the time of planting to add substantial greenery and shade to the street.
- At the time of planting, street trees should be 70mm caliper minimum to become established (rooted) in such an environmentally stressful environment.

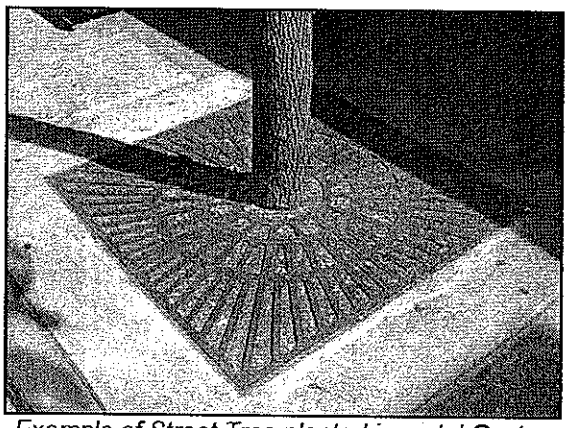
PLACEMENT – "Where It Goes"

- Trees will be planted within the curb side zone of the boulevard.
- Trees should be planted at 9.0m to 12.0m (30' to 40') intervals along the street frontage, although reduced spacing may be appropriate depending on the space available and proposed species.
- Trees should be installed so they are regularly spaced and their trunks make a straight line along the street side, even if the width of the pedestrian path varies.

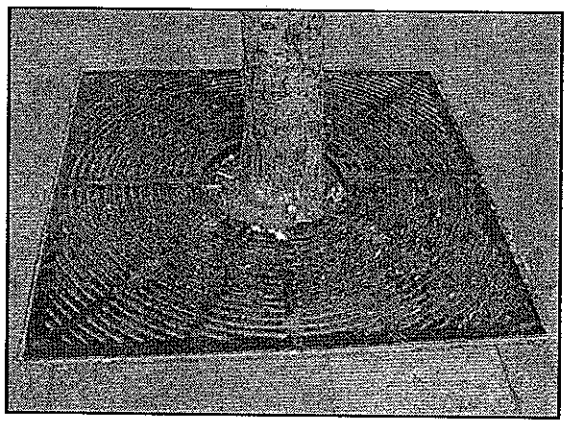
SPECIFICATIONS

Schedule A: **Figure 8.1.1**: To be Completed

8.2
STREET TREES IN GRATES



Example of Street Tree planted in metal ***Grate***



Example of Street Tree planted in metal ***Grate***

STREET TREES IN GRATES prevents soil compaction around the base of the trees, especially in high volume pedestrian traffic areas.

This is the preferred <u>retrofit</u> method only for retaining existing street trees currently in grates within the redeveloped streetscape.

DESIGN CRITERIA – "How It Functions"

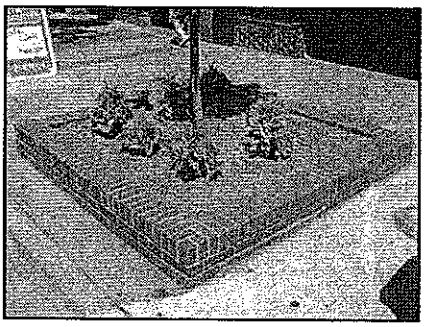
- Tree grates are placed on a subsurface steel frame to contain the topsoil and mulch located at the tree base and allow for air and water to percolate to the tree roots.
- Tree grates should be at least 1.5m by 1.5m (5' by 5') in dimension with slots no wider than 0.6cm (1/4") in width.
- Tree grates should be designed to allow for tree trunk growth (removal of rings) and be constructed of ductile iron.
- Tree grates should be flush mounted and even with the surrounding paving materials to maintain a barrier-free pedestrian environment.

PLACEMENT – "Where It Goes"

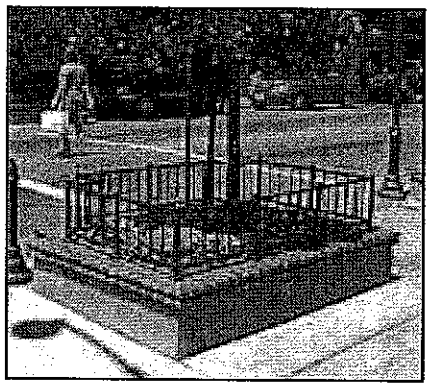
- Tree grates will be used on existing grated street trees that are to remain as part of the redeveloped streetscape.

SPECIFICATIONS

Schedule A: **Figure 8.2.1**: To be Completed



Example of Existing Street Tree in a ***Fixed Planter Bed***



Example of Street Tree in a **Retrofitted Fixed Planter Bed**

8.3

STREET TREES IN FIXED PLANTER BEDS

STREET TREES IN FIXED PLANTER BEDS is the best growing environment for trees but presents recurring obstacles in the high pedestrian traffic areas of the downtown streetscape.

This is the <u>least preferred</u> method for retaining existing street trees within the redeveloped streetscape.

DESIGN CRITERIA – "How It Functions"

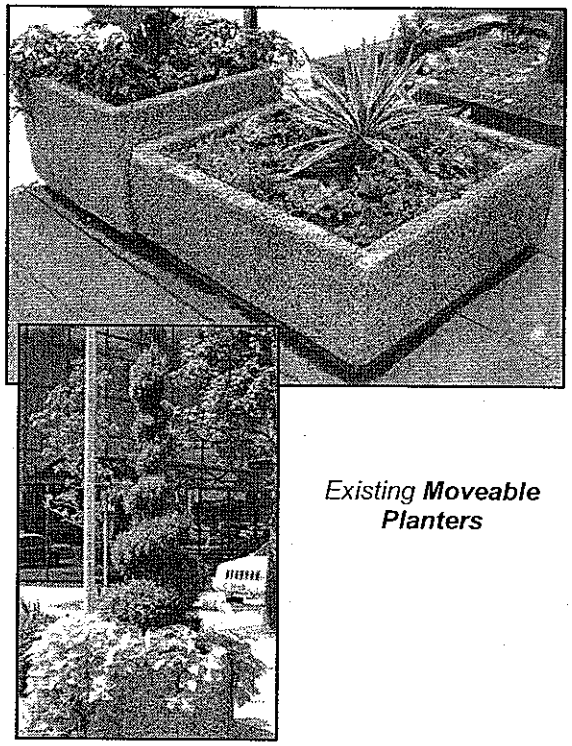
- Existing street trees in fixed planter beds may be retained as part of the redeveloped streetscape only under the following conditions:
  - the location of a planter bed within the boulevard does not significantly restrict the net open width of the pedestrian path such that pedestrian mobility and barrier free movement will be impaired.
  - the planter beds will be slightly reduced in overall surface area above the sidewalk grade, but large enough to ensure the survival of the street tree.
  - the walls of the planter beds are raised to a height of 0.46m (18") so the enclosures do not become trip hazards and the edges of the planters can be used as informal seating areas.
  - retrofit the planter beds with enclosures that are of a more consistent material, shape and colour with other streetscaping elements.

PLACEMENT – "Where It Goes"

- Existing street trees in fixed planter beds may be retained in certain current locations (subject to the recommended modifications) where their impediment to pedestrian travel and other public use of the sidewalk is minor.

SPECIFICATIONS

Schedule A: **Figure 8.3.1**: To be Completed



Existing ***Moveable Planters***

8.4
VEGETATION IN MOVEABLE PLANTERS

VEGETATION IN MOVEABLE PLANTERS provide an added dimension and additional colour to the overall landscaping scheme for the streetscape. Planters should contain ornamental grasses, evergreen shrubs, seasonal plant materials, annual flowers and various groundcover plants.

Large moveable planter pots are the <u>preferred</u> planting approach for vegetation over the fixed planter boxes given the greater flexibility for repositioning.

DESIGN CRITERIA – "How It Functions"

- Moveable planters should occupy a surface area of at least 0.37m^2 (4 square feet). Planters to be used as additional seating areas should be between 0.4m and 0.5m (16" and 20") in height with a rim of at least 0.4m (16") in width.
- Good planter design incorporates the following:
  - the container size and design reflects the type of greenery to be planted (root growth and spread) and weighted to prevent easy movement;
  - the materials are coordinated with the of other elements of street furniture and/or adjacent buildings;
  - provides adequate watering and drainage, with consideration for reducing instances of staining on the nearby paving surface from planter drains.

PLACEMENT – "Where It Goes"

- Moveable planters can be located to direct pedestrian traffic, create focal points and provide resting areas.
- Moveable planters must not block other streetscaping elements and pedestrian mobility. Moveable planters are restricted to the curb side zone and or building side zone – not within the pedestrian path and corners of intersections.

SPECIFICATIONS

Schedule B: **Figure 8.4.1**: To be Completed

8.5
VEGETATION IN FIXED PLANTERS

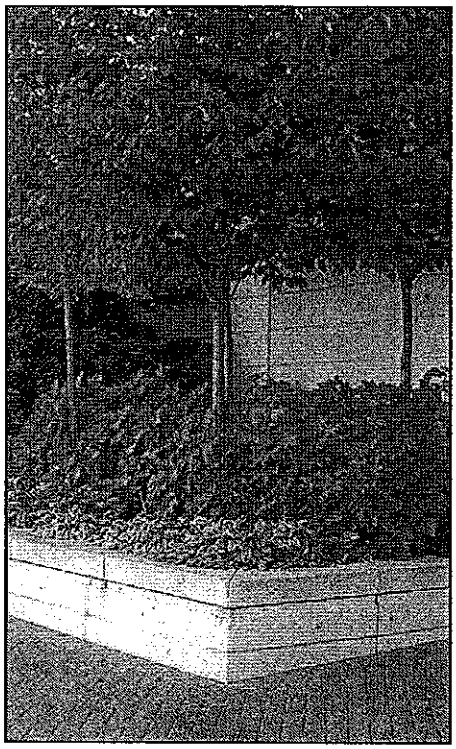
Existing
Fixed Planters

VEGETATION IN FIXED PLANTERS provides an added dimension and additional colour to the overall landscaping scheme for the streetscape. Fixed planters should contain ornamental grasses, evergreen shrubs, seasonal plant materials, annual flowers and various groundcover plants.

Fixed planters are the <u>least preferred</u> planting approach over moveable planters unless there is adequate space on the boulevard to accommodate their use and the existing enclosures are modified to prevent tripping.

DESIGN CRITERIA – "How It Functions"

- Existing fixed planter beds may be retained as part of the redeveloped streetscape under the following conditions:
  - the planter beds are reduced in overall surface area to ensure all planned activities can continue to occur on the boulevard.
  - the walls of the planter beds are raised to a height of 0.46m (18") so the enclosures do not become trip hazards and the edges of the planters can be used as informal seating areas.
  - retrofit the planter beds with enclosures of a more consistent material, shape and colour with the other streetscaping elements.
  - the size and density of plantings are maintained in a manner that retains sightlines and does not attract litter or vandalism.



Example of
Retrofitted Fixed Planter

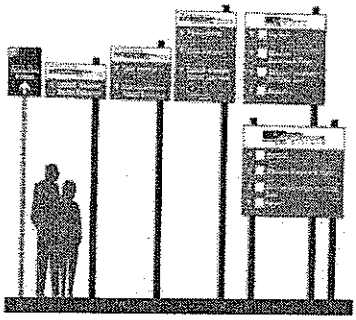
PLACEMENT – "Where It Goes"

- Existing fixed planter beds may be retained in certain current locations (subject to the recommended modifications) where their impediment to pedestrian travel and other public use of the sidewalk is minor.

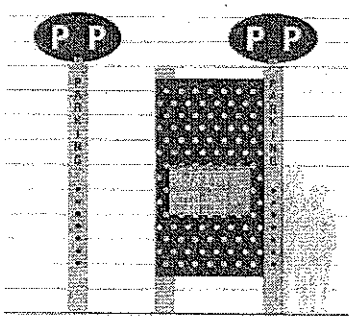
SPECIFICATIONS

Schedule A: **Figure 8.5.1**: To be Completed

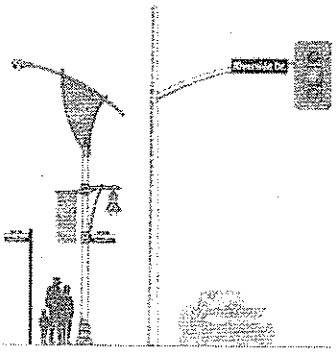
9.0 ORIENTATION SIGNAGE STANDARDS



Proposed ***Trailblazing*** *and* ***Wayfinding Signs***



Proposed ***Parking Identification Signs***



Proposed ***Street Name Signs***

Orientation signs are streetscaping elements used to establish and maintain a safe and orderly street for pedestrians, commercial activity and automobiles. It is important that the signs and markers are identifiable, very visible, easily read and the information is understandable.

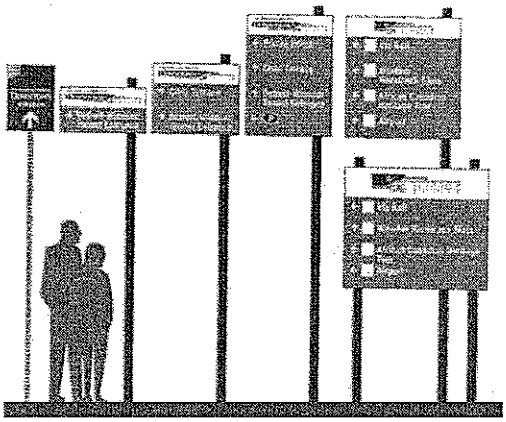
Orientation can be accomplished with an organized signage system that fits within the streetscape, minimizes visual clutter and provides understandable guidance that contributes to one's wayfinding ability.

'Efficiency of information' is the ultimate goal in the establishment of the following design attributes for developing orientation signage:

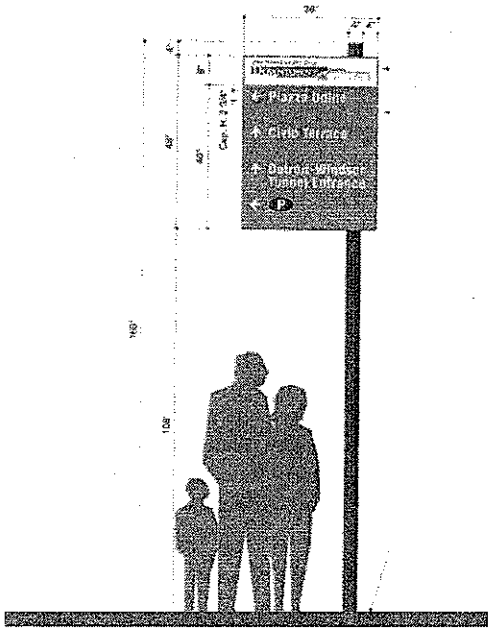
- *Strength of Identity – consistency + uniformity*
  [public space with a strong identity – know where you are]
- *Consideration of Environment and Land Use*
  [install signs only where necessary]
- *Sign Hierarchy*
  [distinction between signs geared to different users]
- *Consistent Appearance*
  [signs easy to find and reduces search time]
- *Contrast with the Environment*
  [signs stand out from their surroundings – yet unobtrusive]
- *Consistent Placement Standards*
  [reduce frustration in searching for sign and information]
- *Differentiate between User Groups*
  [geared to pedestrians versus drivers]
- *Attain Maximum Legibility*
  [a great amount of information easily understood]

Orientation Signage Standards

9.1	Trailblazing and Wayfinding Signs
9.2	Parking Area Signs
9.3	Orientation Signs
9.4	Street Name Signs
9.5	Gateway Markers
9.6	Heritage Interpretation Signs



*Proposed **Trailblazing** and **Wayfinding Signs***



*Detail of **Proposed Wayfinding Sign***

SPECIFICATIONS

9.1
TRAILBLAZING + WAYFINDING SIGNS

TRAILBLAZING SIGNS are intended to direct vehicular traffic towards the City Centre and are sited along major streets outside of the district.

WAYFINDING SIGNS are the basic type of orientation sign for directing users to significant visitor/tourist attractions, services and destinations within the core area.

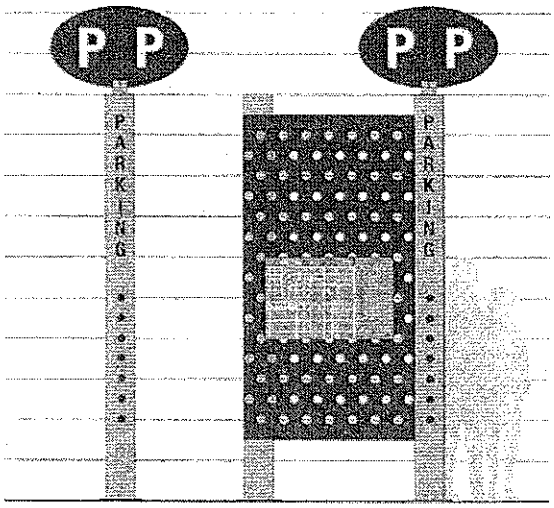
DESIGN CRITERIA – "How It Functions"

- Trailblazing and Wayfinding Signs contain a highly readable font and are characterized by an attractive, distinctive and readily discerned colour palette based on the City Centre BIA logo.
- A range of Wayfinding sign sizes will be utilized, determined by the number of messages required at each location to a maximum of four (4) destinations identified per sign.

PLACEMENT – "Where It Goes"

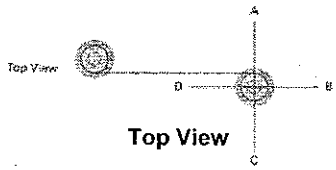
- Trailblazing and Wayfinding signs will be located at significant decision-making points within the City Centre planning district where they will be mounted as stand-alone elements.
- Trailblazing and Wayfinding signs are not to be attached to light standards.
- Wayfinding signs may be placed on building walls at certain locations with the owner's approval.

DRAFT EDITION
[CCBA Orientation Signage Program Design Standards Manual]
[December 2003]



Type A Type B

*Proposed **Parking Area Identification Sign***



Top View

Detail of top view of Proposed
Parking Area Identification Sign

SPECIFICATIONS

9.2
PARKING AREA IDENTIFICATION SIGNS

PARKING AREA IDENTIFICATION SIGNS clearly identify and provide directions to parking lots and parking garages within the commercial district.

DESIGN CRITERIA – "How It Functions"

- The oval-shape containing the "P" is branded as the downtown Windsor parking logo. The brand must be distinctive and stand out in the urban environment with colours consistent with the orientation signage program.
- The oval-shape "P" is designed to rotate, providing a kinetic and eye-catching component, which will function like a weather vane.
- **Type A**: consists of a single yellow aluminium pole with blue lettering and rotating oval "P".
- **Type B**: consists of a perforated aluminium panel (painted blue) attached on either side to aluminium posts (painted yellow) with blue lettering and rotating oval "P". In some situations, these signs can be integrated into architectural features of adjacent buildings (parking structure) or be outfitted with a downtown district map.

PLACEMENT – "Where It Goes"

- **Type A**: to be positioned as stand-alone markers to attract the attention of oncoming vehicular traffic and used in situations where minimal space is available.
- **Type B**: to be placed where more space is available at or near parking area entries to attract oncoming vehicles.

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[CCBA Orientation Signage Program Design Standards Manual]
[December 2003]

9.3
PEDESTRIAN ORIENTATION SIGNS

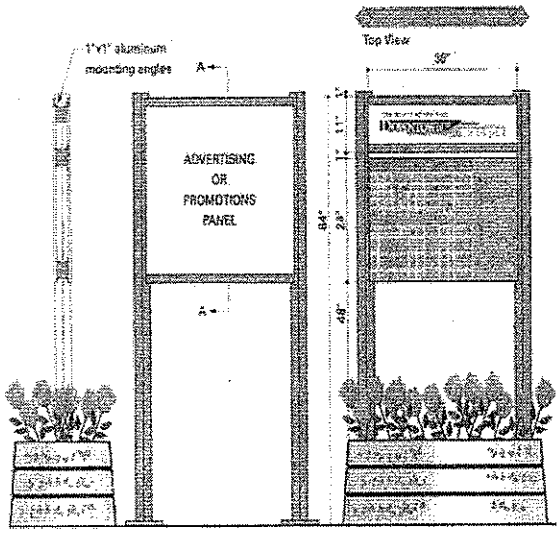
PEDESTRIAN ORIENTATION SIGNS are designed to assist in directing pedestrian movement to major public and tourist-type destinations within the commercial district. These signs form a critical component in the comprehensive wayfinding system as they visually display the key pedestrian routes.

DESIGN CRITERIA – "How It Functions"

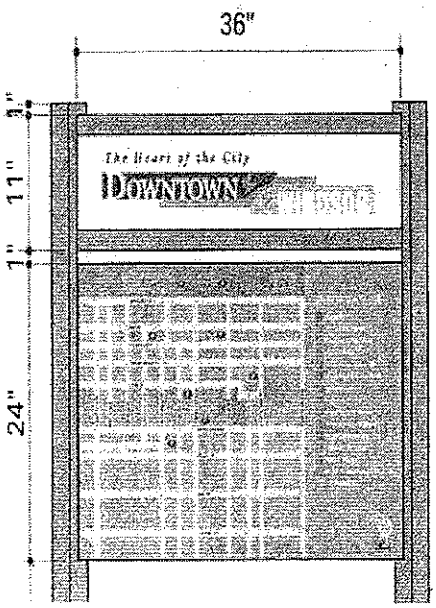
- The primary face of the sign will display a map graphic that is designed to be user-friendly and visually appealing.
- The graphic panel must be easily edited, removed or replaced as new features and facilities are introduced in the district.
- The secondary face of the sign could contain a directory of destinations (attractions, shopping, eating, entertainment facilities, etc.) or serve as promotional space for events within the district.

PLACEMENT – "Where It Goes"

- Orientation signs should be placed along key pedestrian routes and in gathering places throughout the CCBA district.
- Orientation signs can be placed on the back of wayfinding signs at appropriate locations (for example, the Tunnel Exit on Park Street East).



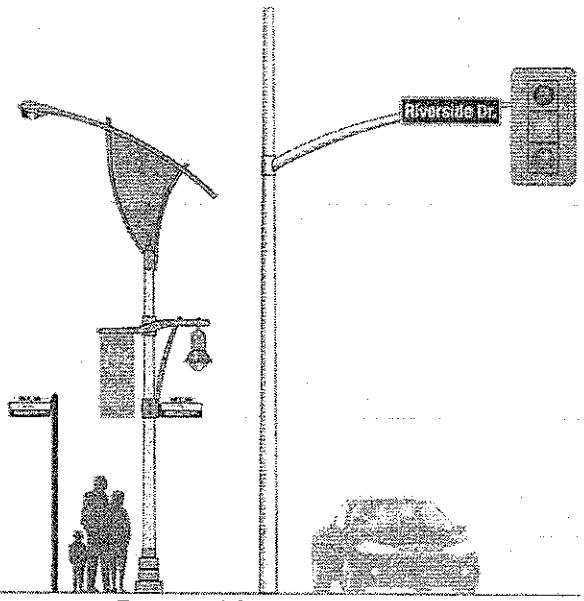
Proposed ***Pedestrian Orientation Sign***



Detail of Mapping on
Proposed ***Pedestrian Orientation Sign***

SPECIFICATIONS

DRAFT EDITION
[CCBA Orientation Signage Program Design Standards Manual] [December 2003]



Proposed ***Street Name Signs***

9.4
STREET NAME SIGNS

STREET NAME SIGNS identify the streets and public rights-of-way of the business district.

DESIGN CRITERIA – "How It Functions"

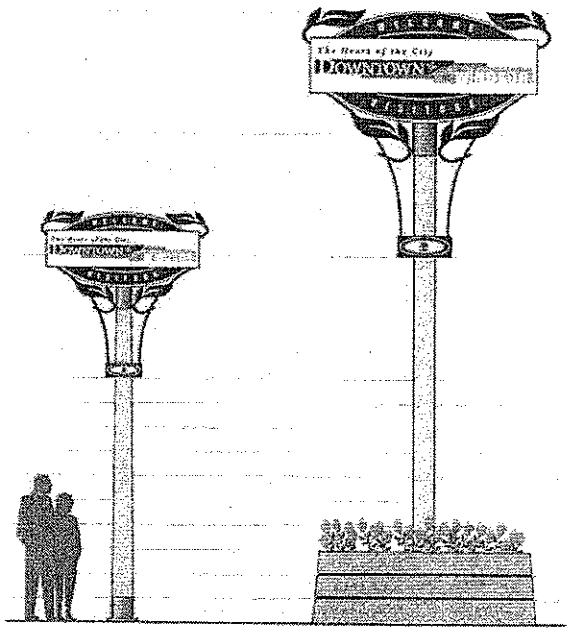
- Street Name Signs, incorporating the colours and logo of the City Centre Business District, will assist in highlighting the unique character and reinforce the boundaries of the district.

PLACEMENT – "Where It Goes"

- Street Name Signs will be mounted in locations that are visible to both drivers and pedestrians.
- Street Name Signs have three (3) mounting possibilities depending on the sign location and signage situation:
  - as a stand-alone element on specifically designed poles.
  - incorporated onto street and pedestrian combined lighting fixtures, which will also take advantage of the existing illumination levels for the signs.
  - on City traffic signalization standards at intersections within and along the boundary of the City Centre Business District. (Note, the background colour used on these signs is green).

SPECIFICATIONS

DRAFT EDITION
[CCBA Orientation Signage Program Design Standards Manual]
[December 2003]



TYPE A TYPE B

Proposed ***Gateway Markers***

9.5
GATEWAY MARKERS

GATEWAY MARKERS are landmark elements located at the entry points that introduce visitors to the City Centre of Windsor. Markers must be attractive and interesting from both the street and the sidewalk to be effective at both the pedestrian and vehicular scales.

DESIGN CRITERIA – "How It Functions"

- Gateway markers will be implemented on an individual basis where site conditions are deemed feasible or appropriate, and under the following design criteria:
  - the scale and proportion of the gateway markers should relate to the width of the street, nearby buildings, the significance of the location and any additional physical constraints or opportunities.
  - the materials and detailing of gateway markers should be coordinated with the other streetscape elements within the district and embody the characteristics that identify the area.
  - the site and surrounding elements of gateway markers should be carefully designed to reinforce the gateway and role in the wayfinding system -- enhanced through the appropriate use of landscaping, lighting and signage.
  - there is great potential for creative illumination techniques to enhance the uniqueness, impact and visibility of gateway markers during the night.

PLACEMENT – "Where It Goes"

Type **A**: To be located in dense urban areas where limited space is available.

Type **B**: To be located along major roadways where open space is available, along viewing distances and at significant vistas

SPECIFICATIONS

DRAFT EDITION
[CCBA Orientation Signage Program Design Standards Manual]
[December 2003]

Existing ***Heritage Interpretation Sign Structure***

9.6
HERITAGE INTERPRETATION SIGNS

HERITAGE INTERPRETATION SIGNS are installed adjacent to or on sites of historic and cultural value and contain information that provides interpretation by "telling the story" of the former and/or existing property and associated events, by emphasizing their contribution and role in the development of the City Centre.

DESIGN CRITERIA – "How It Functions"

- The existing heritage interpretation signs are designed with the single-sided sign face contained in a plexi-glass frame supported by a two-post system.
- All existing heritage interpretative signs are scheduled to be replaced with new sign faces and sign structures based on the following design criteria:
  - place text + graphics on both sign faces;
  - remove glazing over sign face to achieve greater visibility and reduce glare;
  - use materials that discourage graffiti and other forms of vandalism; and
  - incorporate colours compatible with the City Centre Business Association logo and comprehensive signage system.
- All new heritage interpretative signs will be manufactured and installed based on the design criteria outlined above.

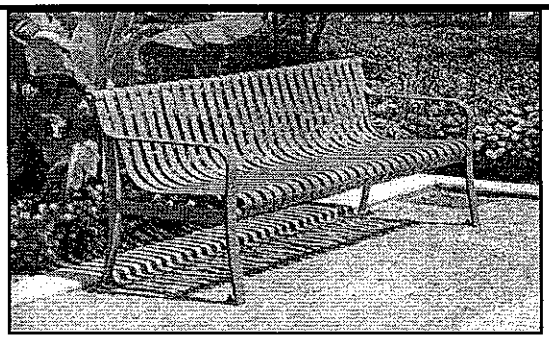
PLACEMENT – "Where It Goes"

- Heritage interpretative signs will be installed adjacent to or on sites of historic and cultural value.
- Heritage interpretative signs will be placed in highly visible locations to discourage vandalism.
- Locating heritage interpretative signs is dependent on the availability of space on the streetscape for gathering around the sign and visibility – but **not** located within the pedestrian path.

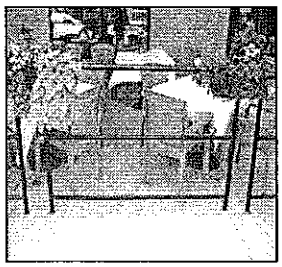
SPECIFICATIONS

Schedule B: **Figure 9.6.1**: To be Completed

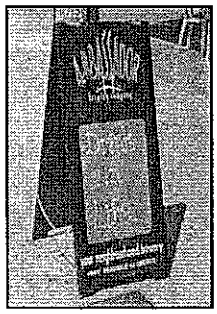
10.0 STREET FURNISHING STANDARDS



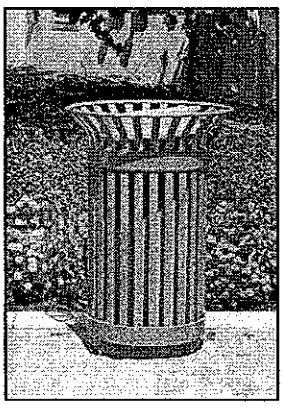
Bench



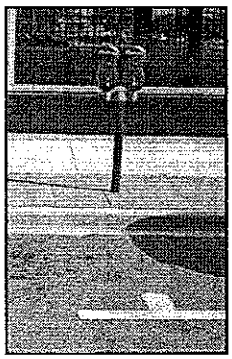
Café Enclosure



Sidewalk Sign



Parking Meter



Trash Receptacle

Banner Poles with a Banner Flag

Street furnishings such as seating, bicycle racks, and trash receptacles are important functional amenities along the streetscape that create a liveable pedestrian environment.

All furnishings placed within the boulevard should be of high quality, designed for outdoor use and require minimum maintenance.

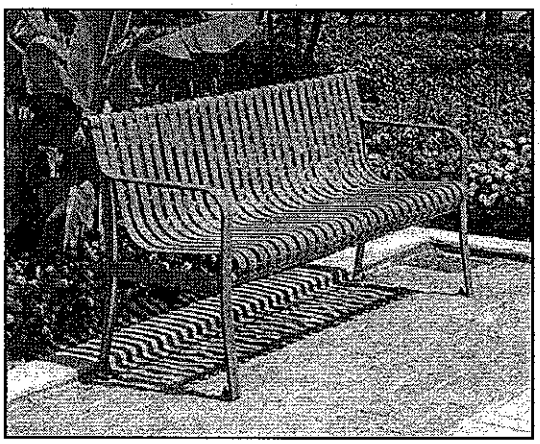
- **Comfort:** Furnishings are designed for ease of use and are easily accessible from the pedestrian path;
- **Safety:** The consistency of the placement of street furniture adjacent to the pedestrian path establishes a sense of predictability. Consider any moving parts on the furniture that can make the streetscaping element unsafe or hazardous;
- **Maintenance:** Street furniture should be designed to be durable, easy to maintain with standardized parts and easy to remove for maintenance or replacement.
- **Crime Prevention:** Street furniture should be constructed with materials and finishes that resist and discourage vandalism and do not attract excessive loitering.

Street Furnishings

10.1	Benches
10.2	Waste Receptacles
10.3	Bicycle Racks
10.4	Parking Meters
10.5	Bollards
10.6	Transit Shelters
10.7	Telephone Booths
10.8	Newspaper Vending Racks
10.9	Mail Collection and Storage Boxes
10.10	Sidewalk Cafe Enclosures
10.11	Sidewalk Signs
10.12	Information Kiosks
10.13	Banner Poles
10.14	Decorative Banners
10.15	Screening Devices

10.1
BENCHES

Bench



BENCHES provide opportunities for seating along the streetscape.

DESIGN CRITERIA – "How It Functions"

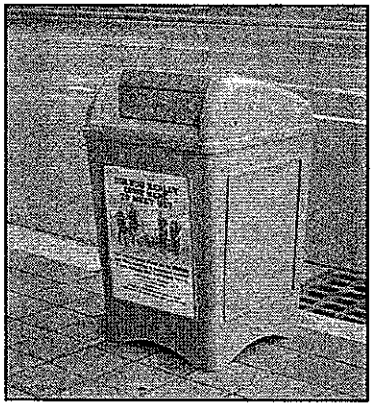
- The benches selected are:
  - designed to be durable and comfortable;
  - complementary to the style of the surroundings and other selected street furnishings; and
  - permanently secured to the ground (paving) for stabilized sitting and to avoid theft and/or vandalism.

PLACEMENT – "Where It Goes"

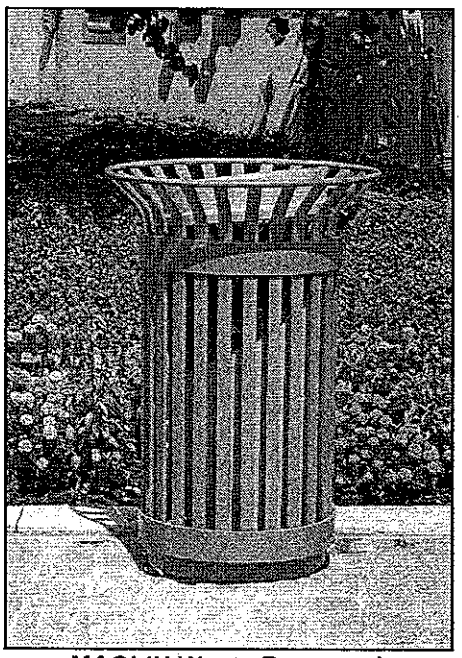
- Benches will be provided along the streetscape in the curb side zone and the building side zone where space allows and that the clear pedestrian path remains unobstructed by providing a separate area for seating.
- Benches will be located where they will not interfere with planting materials or pedestrian circulation.

SPECIFICATIONS

Schedule B: **Figure 10.1.1**
Model: **MLB510** [MAGLIN Furniture Systems Ltd.]



ECOLAD Waste Receptacle
(to be phased out by January 2008)



MAGLIN Waste Receptacle
(Selected Standard to be phased in)

SPECIFICATIONS

10.2
WASTE RECEPTACLES

WASTE RECEPTACLES are designed and positioned so they are unobtrusive and easily accessible for use by pedestrians and for trash collection.

The contract for the provision of the existing (interim) ECOLAD waste receptacles expires December 31, 2007.

The selected MAGLIN receptacles will be phased into all streetscape improvement areas until the end of the contract time period. In January 2008, the official waste receptacle standard will be the MAGLIN **MLRW 200-20**.

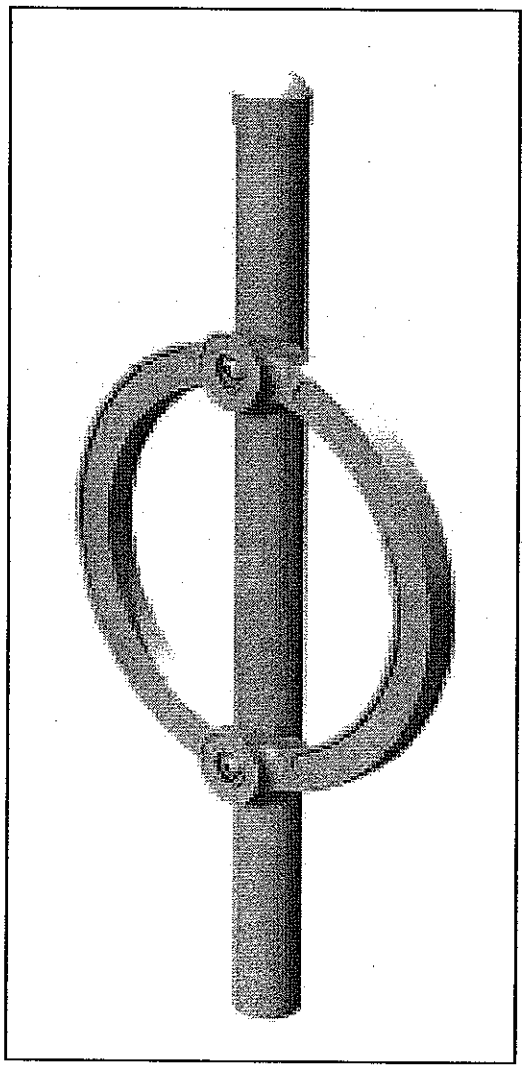
DESIGN CRITERIA – "How It Functions"

- Waste receptacles are designed with the following features:
  - two separate pieces – an inner container to contain the trash and ensure easy removal and an outer shell that blends aesthetically with other streetscape elements;
  - covered tops and sealed bottom to keep the contents dry, contained and out of sight at all times; and
  - firmly attached to the paving surface to avoid vandalism.

PLACEMENT – "Where It Goes"

- Waste receptacles will be positioned within the curb side zone of the boulevard where they are easily accessible for use and collection. Receptacles will be strategically arranged with other streetscape elements into functional clusters.
- Waste receptacles will be placed where trash originates or is likely to be deposited. Typical locations include bus stops, parking lots, major pedestrian street crossings, restaurants and places where people lunch outdoors.

Schedule B: **Figure 10.2.1**
Interim Model: **ECOLAD** Heavy Duty Trash Receptacles
Selected Model: **MLWR 200-20** [MAGLIN Furniture Systems]



Bicycle Rack

SPECIFICATIONS

10.3
BICYCLE RACKS

BICYCLE RACKS are provided as on-street parking spaces for bicycles to encourage bicycle transportation use to and through the district. The installation of all bicycle racks must comply with the ***Policy for Bicycle Parking on Public Parking*** (CR724/2004).

DESIGN CRITERIA – "How It Functions"

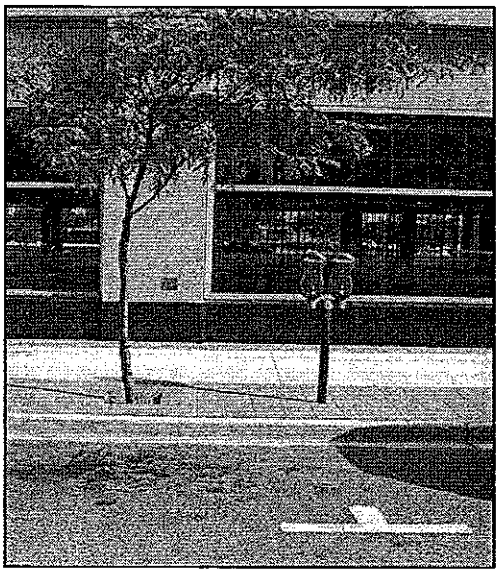
- The bicycle rack selected consists of a single post and ring design. In some instances, the ring can be combined with a parking meter and/or sign post.
- Key features in the bicycle rack design include:
  - simplicity in the style;
  - slim design to prevent intrusions onto the pedestrian path; and
  - ease of use in providing a temporary place to securely lock the frame and at lest one wheel of a bicycle.
- The bicycle rack can be 'personalized' for the district though raised lettering on the ring and various finish colours to complement the other streetscape elements and urban surroundings.

PLACEMENT – "Where It Goes"

- Bicycle racks will be placed in the curb side of the boulevard where they will not present a tripping hazard on the pedestrian path.
- Bicycle racks will be distributed in small numbers widely throughout the City Centre district where parked bicycles will be visible and can be easily monitored, and in the following general locations:
  - near public building entrances;
  - near formal and informal gathering places;
  - designated and protected spaces within a vehicle surface parking lot and/or adjacent to a parking garage.

Schedule B: **Figure 10.3.1**
Model: **MBR200** [MAGLIN Furniture Systems Ltd.]

Examples of ***Parking Meters***



SPECIFICATIONS

10.4
PARKING METERS

PARKING METERS regulate the use of on-street vehicle parking spaces throughout the district to assure a high turnover rate of available parking spaces.

DESIGN CRITERIA – "How It Functions"

- Designate one parking meter per on-street parking space.
- Wherever possible, mount double-headed meters on each meter pole installed to service two (2) on-street parking spaces.
- Alternative paint colours and/or base covers on the meter poles to indicate the time limit for that particular meter:
  - 5 to 15 minute meters have red posts;
  - 2 hour meters have green posts;
  - 3 hour meters have grey posts; and
  - 4 hour meters have blue posts.

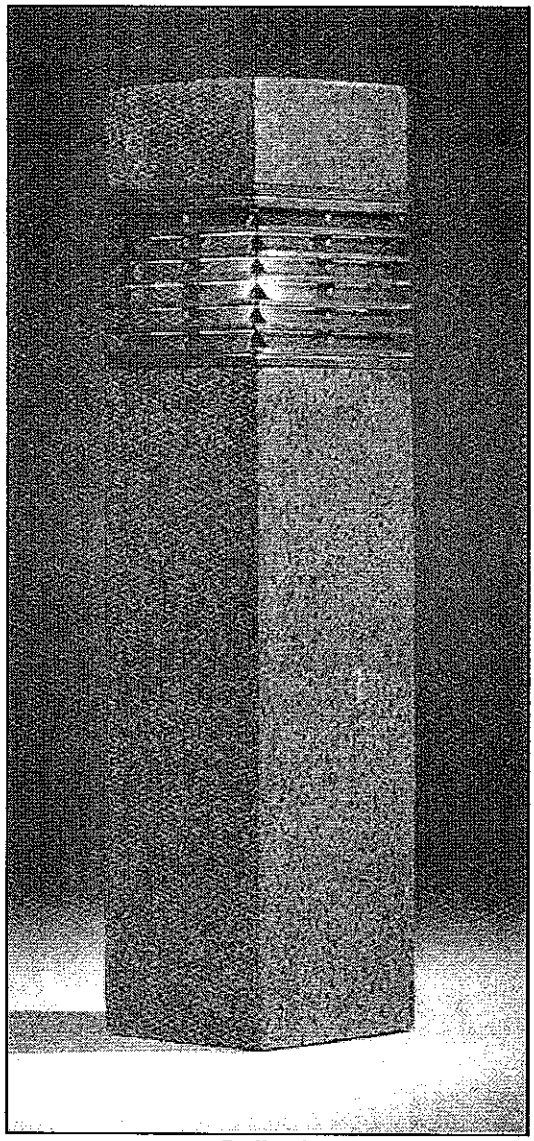
PLACEMENT – "Where It Goes"

- Parking meters are located within the curb side zone of the boulevard to be in alignment with other furnishings, to minimize clutter and to eliminate obstructions in the pedestrian path.
- Parking meters should be consistently located within the curb side zone, approximately 0.46m (18") behind the curb to provide a clearance for door swings.

SIGNAGE

- All on-street parking spaces must be signed with the regulations of use. The information may be contained within the parking meter fixture, attached to the meter post or located in a separate, yet highly visible location.
- All barrier-free parking spaces should be signed to clearly indicate the restrictions of usage.

Schedule B: **Figure 10.4.1**: To be Completed



Bollard

SPECIFICATIONS

10.5
BOLLARDS

BOLLARDS create low, semi-transparent barriers where it is desirable to separate vehicular and pedestrian traffic and to direct circulation patterns.

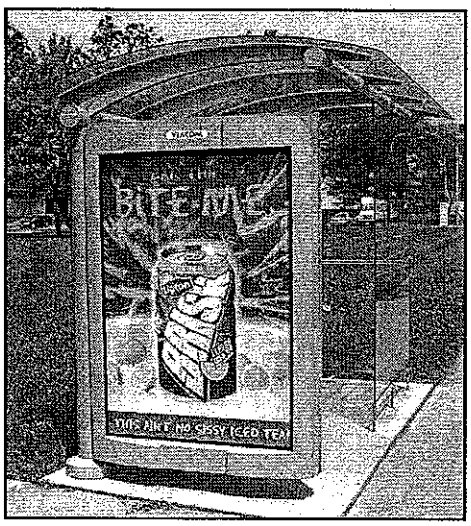
DESIGN CRITERIA – "How It Functions"

- The bollard style selected is of the same material and finishes as the decorative pre-cast concrete lighting standards and complements the other streetscaping elements.
- Depending on the location and the desired effect, a bollard can contain a luminaire to provide low-level illumination to highlight or limit access to a special feature, such as a pathway or monument.

PLACEMENT – "Where It Goes"

- Bollards are permanently installed elements. Bollards will **not** be installed within the pedestrian path.
- Removable bollards will be used in locations where service and emergency vehicles require periodic access.
- Clearances between bollards, or between a bollard and any other structure or pole, must be 1.0m (39") at a minimum, but not wide enough to permit the passage of a motorized vehicle.
- Clearances to permit pedestrians to pass between bollards or a bollard and a structure must be 1.5m (60") at a minimum.

Schedule B: **Figure 10.5.1**
Model: **Martello Square** [StressCrete Group]



Example of a proposed ***Transit Shelter***

10.6
TRANSIT SHELTERS

TRANSIT SHELTERS are provided for transit riders at major transfer points within the City Centre district. Shelter structures may be provided at transit stops where extended waiting times are experienced or where the stop is not adequately shielded from prevailing weather conditions.

DESIGN CRITERIA – "How It Functions"

- The size of the transit shelter installed should reflect the number of boarding passengers expected for that stop and the space available on the boulevard.
- Transit shelters are enclosed in a transparent material (usually glass) so transit riders can clearly see arriving busses and the sightlines of drivers are not obstructed.
- Transit shelters are oriented so that the 'doorways' are facing away from the roadway to prevent waiting patrons from being trapped.

PLACEMENT – "Where It Goes"

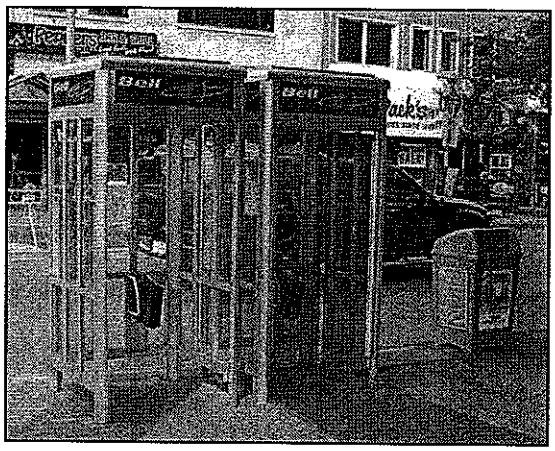
- Transit shelters are positioned in the curb side zone of the boulevard, at a minimum of 0.47m (18") from the curb face (0.6m or 24" separation is preferred where possible).
- Transit shelters are positioned so they do not interfere with the surrounding pedestrian path.
- Where possible, position transit shelters so access to underground utilities can be easily achieved.

SIGNAGE

- Signage required for transit stops consists of:
  - "No Parking" signs with "Bus Stop" clearly printed, which are visible to oncoming vehicular traffic.
  - Transit Route information displayed on or within the shelter structure detailing the bus arrival and departure times and contact information for schedules.

SPECIFICATIONS

Schedule B: **Figure 10.6.1**: To be Completed



Telephone Booths

10.7
TELEPHONE BOOTHS

A **TELEPHONE BOOTH** is a small structure furnished with a payphone and designed for a telephone user's convenience.

DESIGN CRITERIA – "How It Functions"

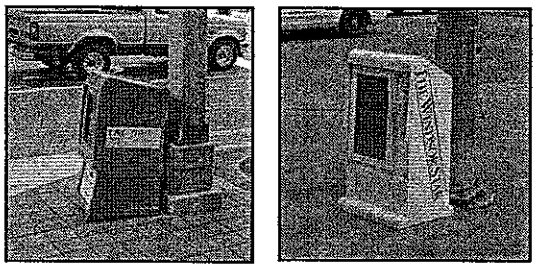
- Telephone booths usually have a door to provide privacy and window panels to let others know if the booth is in use.
- Telephone booths may be made of metal and plastic to withstand the elements and heavy use.
- Most outdoor booths feature the name and logo of the telephone service provider for immediate recognition.

PLACEMENT – "Where It Goes"

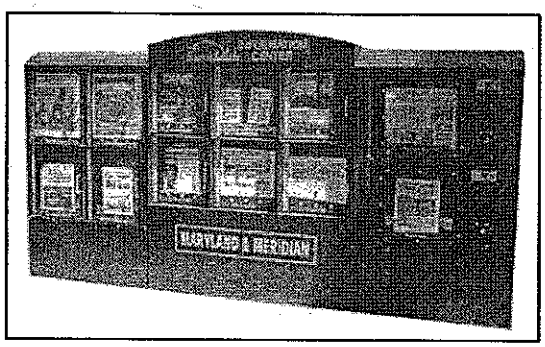
- Telephone booths should be positioned in the 'building-side' portion of the boulevard, which is dependent on the available space surrounding the installation site.
- Telephone booths should be positioned in highly visible locations and at natural gathering areas within the City Centre district.
- Telephone booths should be adjacent to, but not conflict with, the main pedestrian entrances of buildings.

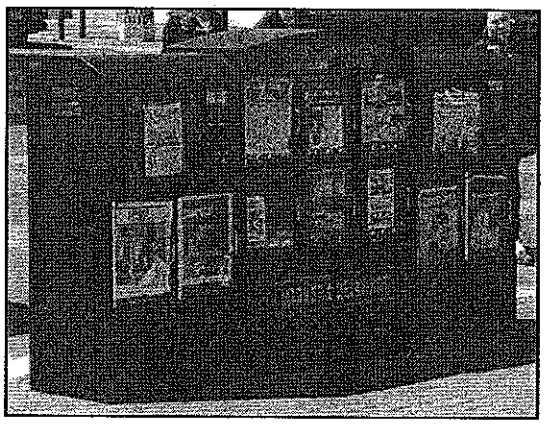
SPECIFICATIONS

Schedule C: **Figure 10.7.1**: To be provided by Bell Canada



Newspaper Vending Rack "DON'TS"





Examples of possible
Newspaper Vending Rack Centres

SPECIFICATIONS

10.8
NEWSPAPER VENDING RACKS

NEWSPAPER VENDING RACKS are boxes the contain newspapers or free press materials and are oriented towards pedestrian traffic/customers.

DESIGN CRITERIA – "How It Functions"

- Although newspaper companies provide newspaper vending racks as part of their advertising program, individual racks should be painted a neutral colour to complement the streetscape.
- Where a number of newspaper vending racks are needed at a single location, they should be consolidated into a single rack.
  - Screening can minimize views of the newspaper vending racks from the street.
  - Constructing decorative frames or boxes into which the standard newspaper vending racks would fit provide screening. The external box should complement the style and design of the other street furniture.

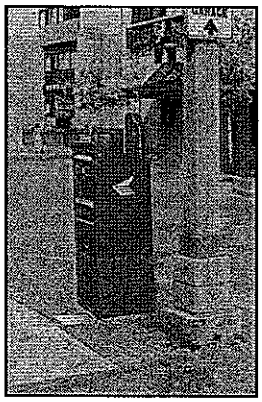
PLACEMENT – "Where It Goes"

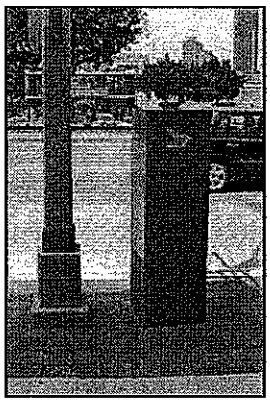
- Newspaper vending racks should be clustered and placed within the building side zone so that they do not interfere with pedestrian circulation.
- Newspaper vending racks should be located adjacent to pedestrian activity nodes and positioned so they do not obstruct the view of drivers at intersections or block views of building openings.
- Newspaper vending racks should never be attached to the street light fixtures, other streetscape elements or fixed to the pavement or building wall.
- Each newspaper vending rack must be located according to the provisions outlined in the licensing agreement and/or encroachment agreement for that particular rack.

Schedule C: **Figure 10.8.1**: To be Completed

10.9
MAIL COLLECTION AND STORAGE BOXES

*Example of **Mail Collection and Storage Boxes***





MAIL COLLECTION and STORAGE BOXES facilitate in the collection and distribution of mail within the City Centre district

DESIGN CRITERIA – "How It Functions"

- Mail collection and storage boxes are designed for pedestrians depositing mail and for Canada Post staff collecting mail.

PLACEMENT – "Where It Goes"

- The location of mail collection and storage boxes should be coordinated with Canada Post during the selection and installation phases to minimize clutter and obstacles on the streetscape, especially within curb-side zone and adjacent to the pedestrian path.
- Mail collection boxes should be placed within the curb side zone of the boulevard with access from the pedestrian path.
- Mail storage boxes should be positioned in the building side zone of the boulevard as they are intended to blend with their surroundings and do not generate much pedestrian traffic or usage.
- Mail storage boxes should be placed in open, highly visible locations to discourage vandalism and graffiti.

SPECIFICATIONS

Schedule C: **Figure 10.9.1**: To be provided by Canada Post

*Example of **Sidewalk Café Enclosure***

10.10
SIDEWALK CAFÉ ENCLOSURES

The extent of a **SIDEWALK CAFÉ ENCLOSURES** should be defined by enclosures that clearly distinguish the private use from the pedestrian path.

DESIGN CRITERIA – "How It Functions"

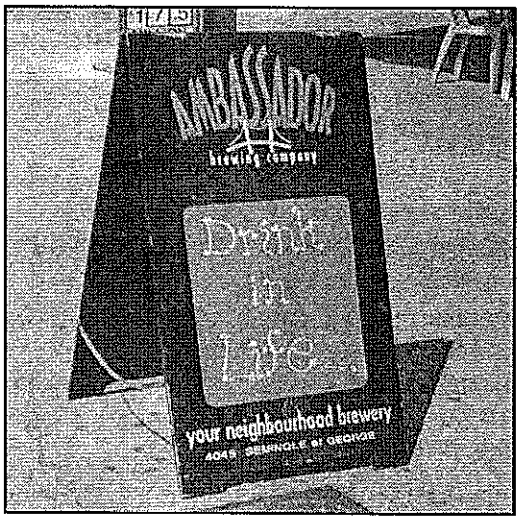
- All sidewalk cafes must have perimeter enclosure, which should appear 'open' to give the impression that it is part of the streetscape and contributes to the overall image of the area.
- Sidewalk café enclosures must be consistent with the ***Sidewalk Café Handbook*** (2004):
  - Enclosures should be a minimum of 1.1m (42") in height with intermediate rails, balusters, ornamental or patterned infill.
  - All railings for the enclosures are designed to support loads in both the horizontal and vertical directions of 50 pounds per linear foot.
  - The width of any access opening in the enclosure shall be no less than 1.5m (5') and no greater than 2.0m (6.5').
  - Enclosures are constructed a sturdy material and are easily removed during the off-season.
  - Dark painted, ornamental iron or aluminum enclosures are preferred. Wood enclosures are not permitted.
  - Enclosures shall not penetrate the surface of the sidewalk (footings), although bolt attachments are acceptable.

PLACEMENT – "Where It Goes"

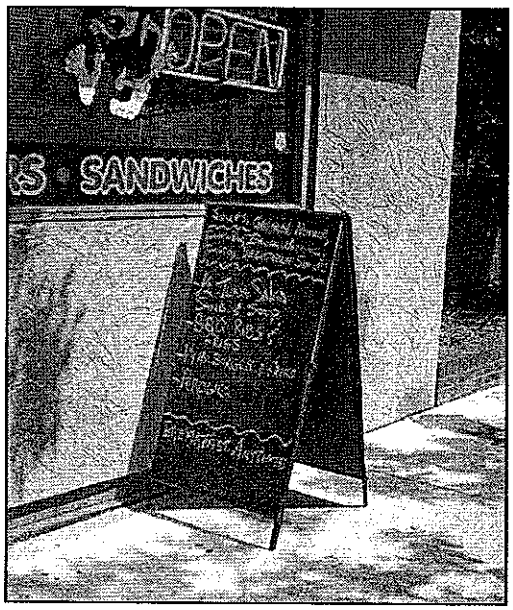
- Sidewalks are first and foremost the public's space and cafes cannot interfere with their use. Sidewalk cafes are located within the building side 'encroachment' zone of the boulevard and must not block or obstruct the free flow of pedestrian traffic.
- Additional sidewalk clearance width (greater than 2.4m or 8') may be required near intersections to allow ample space for pedestrians to congregate.

SPECIFICATIONS

DRAFT EDITION
City of Windsor ***Sidewalk Café Handbook*** (2005)



*Example of **Sidewalk Signs***



SPECIFICATIONS

10.11
SIDEWALK SIGNS

SIDEWALK SIGNS are temporary signs placed directly in front of commercial premises to identify the business and advertise the goods and services available inside. Sidewalk signs are also commonly known as "A-Frame Signs" and "Sandwich Board Signs".

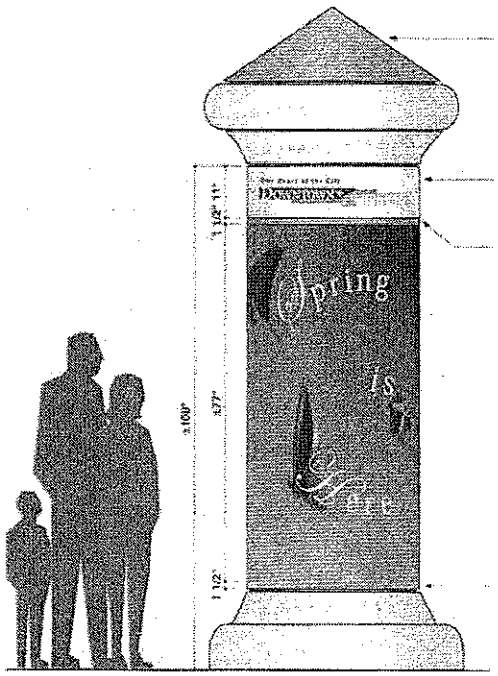
DESIGN CRITERIA – "How It Functions"

- Sidewalk signs cannot be permanently anchored to the ground and must be constructed in a manner and of materials to permit easy repositioning and/or removal.
- The regulations to display sidewalk signs on private and public property are outlined in Section 7.2 and Section 8.3.3 of **By-Law 250-2004**.
- Regulations for sidewalk signs on the public right-of-way include:
  - illumination, animation and rotation of the sign are not permitted;
  - 1 sign is permitted per occupancy with a maximum sign face area of 1.0m^2 (10.7 square feet) and a maximum sign height of 1.2m (4.0');
  - sign can only be displayed during hours of business operation and removed at all other times;
  - sign cannot be attached to any fence, tree or street furniture; and
  - sign must be displayed according to the provisions of the required Encroachment Agreement.

PLACEMENT – "Where It Goes"

- Sidewalk signs will be permitted where there is adequate space within the building side encroachment zone of the boulevard to accommodate the sign and maintain a clear, unobstructed pedestrian path.
- The provisions for locating and placing each sidewalk sign on the public right-of-way will be outlined and enforced through the Encroachment Agreement for that sign.

Section 7.2 and Section 8.3.3 of **By-Law 250-2004**



*Existing **Information Kiosk** with Proposed Signage and Decoration*

10.12
INFORMATION KIOSKS

INFORMATION KIOSKS are intended to serve as collection and reference points for information on upcoming events, to direct and orient pedestrian traffic and to organize the outdoor space along the streetscape.

DESIGN CRITERIA – "How It Functions"

- The information kiosks are designed and positioned within the streetscape environment to meet the following criteria:
  - compatible with and complementary to the surrounding architecture and other streetscape furnishings;
  - become the focal point in an open area and may be combined with other streetscape elements;
  - facilitate the posting and easy removal of notices;
  - easily accessible from all sides; and
  - adequately illuminated.

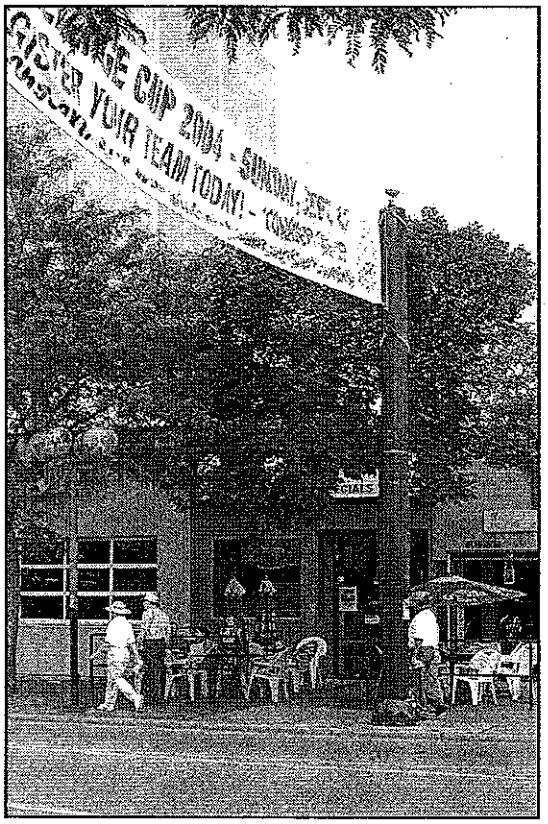
PLACEMENT – "Where It Goes"

- Information kiosks will be used sparingly where they are needed at specific locations to impart community information.
- Locating information kiosks is dependent on available spaces in the streetscape and at natural places of gathering.

SPECIFICATIONS

Schedule B: **Figure 10.12.1**: To be Completed

10.13
BANNER POLES



Example of existing ***Banner Poles***

BANNER POLES are used as a mounting mechanism to display community and special event banner signs and other streetscape decorations that are suspended for a temporary period of time across the public right of way.

DESIGN CRITERIA – "How It Functions"

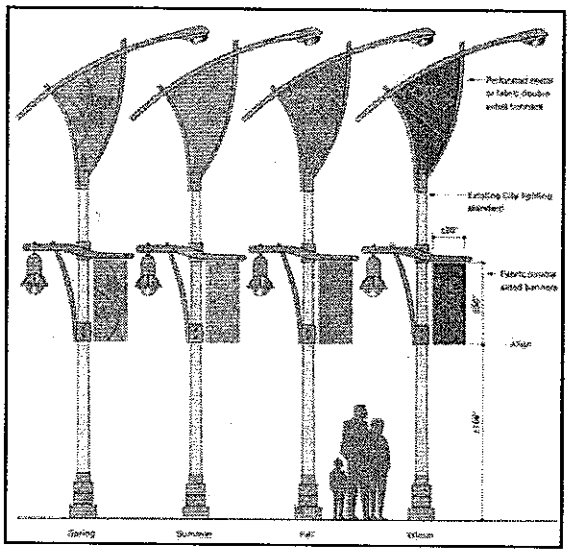
- Two existing banner poles within the district will be painted to match the other streetscaping elements until they are replaced.
- All new banner pole will be constructed of the same material and finishes as the decorative pre-cast concrete lighting standards and will complement the other streetscaping elements.
- Banner poles are engineered to support the live loading of the banner sign (and other attached decorative elements) at its maximum allowable size and through various environmental conditions.
- Banner poles are designed to be functional and attractive streetscape elements, which can also display various permanent and temporary decorative and artistic attachments to reflect the character of the district.
- The new banner poles can contain electrical outlets to allow for the display of illuminated decorations.

PLACEMENT – "Where It Goes"

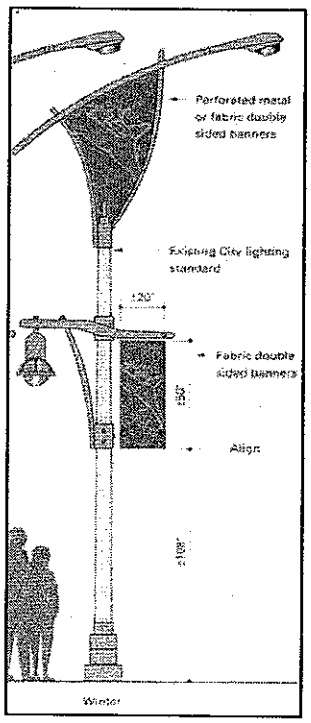
- Banner poles are installed within the curb side zone of the boulevard in parallel positions to each other on opposite sides of the roadway and at the same setback from the curb as the lighting standards.
- Banner poles are typically placed at gateway areas into the City Centre to signify special areas or corridors within the larger district.

SPECIFICATIONS

Schedule B: **Figure 10.13.1**: To be Completed



*Example of Proposed **Decorative Banners** on Lighting Standards*



SPECIFICATIONS

10.14
DECORATIVE BANNERS

DECORATIVE BANNERS provide colour, character and impact throughout the urban streetscape on a programmed or seasonal basis.

DESIGN CRITERIA – "How It Functions"

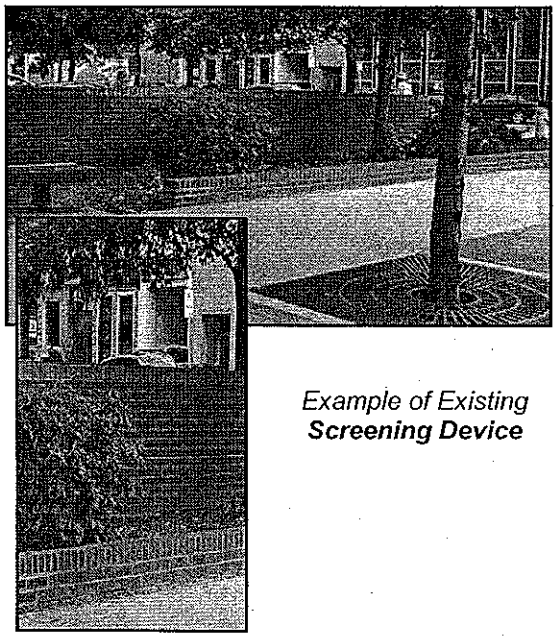
- The installation of decorative banners can be used to:
  - define the edges, roadways and pedestrian routes within the district;
  - advertise or promote the district using the Business Association's colours and logos;
  - illustrate themes for current or upcoming events and civic programs; and
  - provide historical information or references through logos and images.
- Decorative banners should be positioned to prevent the reduction of illumination output from the lighting standard to which it is attached or cast an undue degree of shadow.

PLACEMENT – "Where It Goes"

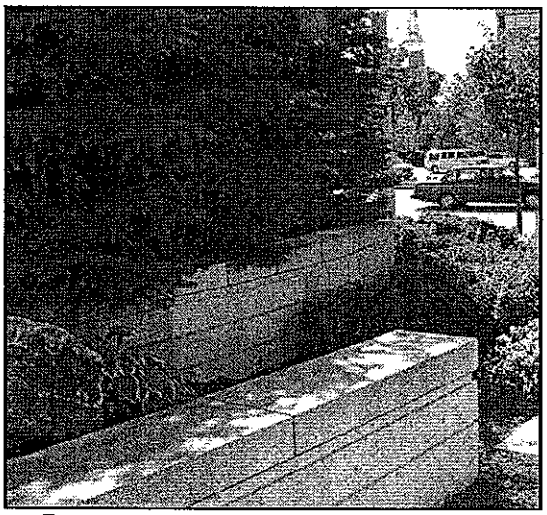
- Decorative banners are attached to the lighting standards in two (2) possible locations:
  - displayed on the pedestrian lighting fixture's mounting arm and suspended over the roadway; and
  - displayed within the open space created by the structure of the roadway lighting fixture's mounting arm.

Schedule C: **Figure 10.14.1**: To be Completed

10.15
SCREENING DEVICES



Example of Existing ***Screening Device***



Example of Proposed ***Screening Device***

SCREENING DEVICES are used to shield an undesirable view, such as a surface parking lot, and to create a continuous building edge along the boulevard that defines and unifies the streetscape.

DESIGN CRITERIA – "How It Functions"

- Screening devices can be low walls, fences and landscaping elements. The use of solid screening devices should be discouraged as they generally restrict visibility for security purposes.
- Screening devices are designed based on the following criteria:
  - screening devices should have an ornamental character as well as utilitarian function.
  - the materials selected for screening devices must relate to the surrounding building architecture through the use of same or similar design details and reinforce the character of the overall district.
  - the height of screening devices should be 0.8m to 1.1m (2.7' to 3.5') to allow for viewing into the adjacent space as a security measure without creating an area of entrapment.
  - where necessary, the screening device should have openings measuring 1.5m to 2.0m (5.0' to 6.5') in width to provide for . pedestrian access to the sidewalk and that is barrier free.

PLACEMENT – "Where It Goes"

- Screening devices are located on the property line between the public right-of-way and the abutting private property containing a use that must be screened (typically a surface parking lot). Corner cuts-offs at intersections may be required to enhance driver and pedestrian visibility.

SPECIFICATIONS

Schedule C: **Figure 10.15.1**: To be Completed

Schedule A

		Page
A	Specifications for ...	A.1

Figure		
5.X.X		A.1
X.X.X		A.2
X.X.X		A.3
X.X.X		A.4
X.X.X		A.5
X.X.X		A.6
X.X.X		A.7
X.X.X		A.8
X.X.X		A.9
X.X.X		A.10

FIGURE 5.3.1: SIDEWALK CORRIDOR CURB SIDE TO BUILDING WALL

PLAN: SIDEWALK CORRIDOR

Concrete Unit Pavers	Cast-in-Place Concrete
DIMENSIONS:	
0.2m x 0.2m x 0.8m 5 paver courses	varies
FINISH:	
▪ Timberwood colour ▪ Manufacture's Finish	▪ Tooled Edge ▪ Broom Finish
MISC:	
	Control joints Expansion joints

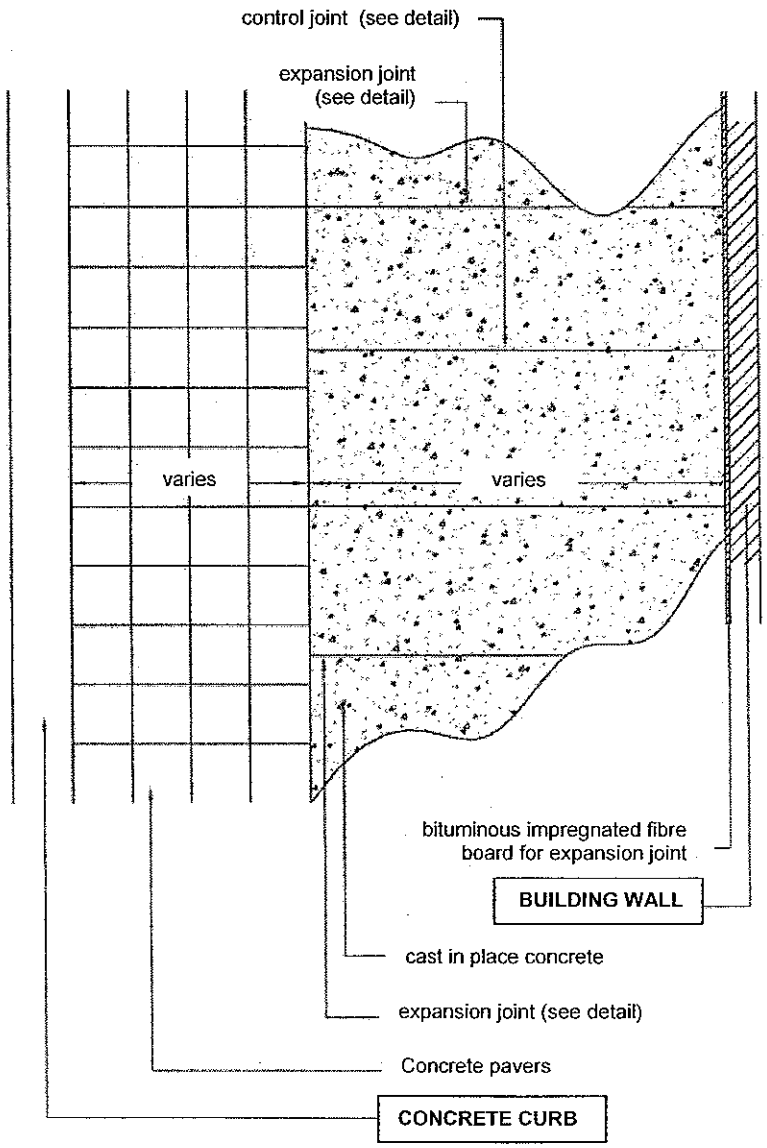


FIGURE 5.3.2: SIDEWALK CORRIDOR CURB SIDE TO BUILDING WALL

SECTION: SIDEWALK CORRIDOR

MATERIALS:	DIMENSIONS:	FINISH:	MISC:
Concrete Unit Paver	0.2m x 0.2m x 0.8m 5 paver courses wide	Timberwood colour Manufactured finish	
Cast-in-Place Concrete	varies	Tooled edge Broom finish	Control joints Expansion joints

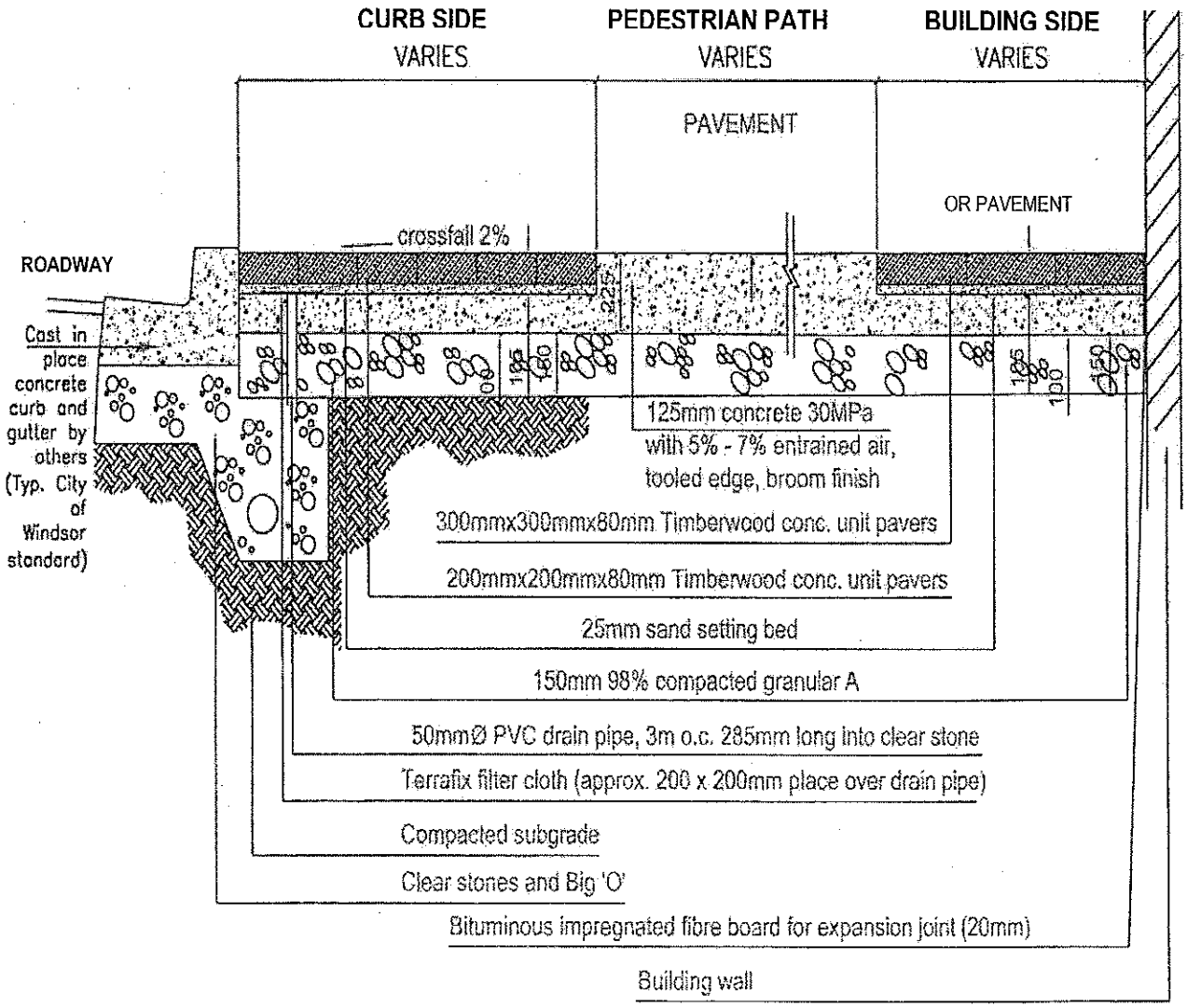
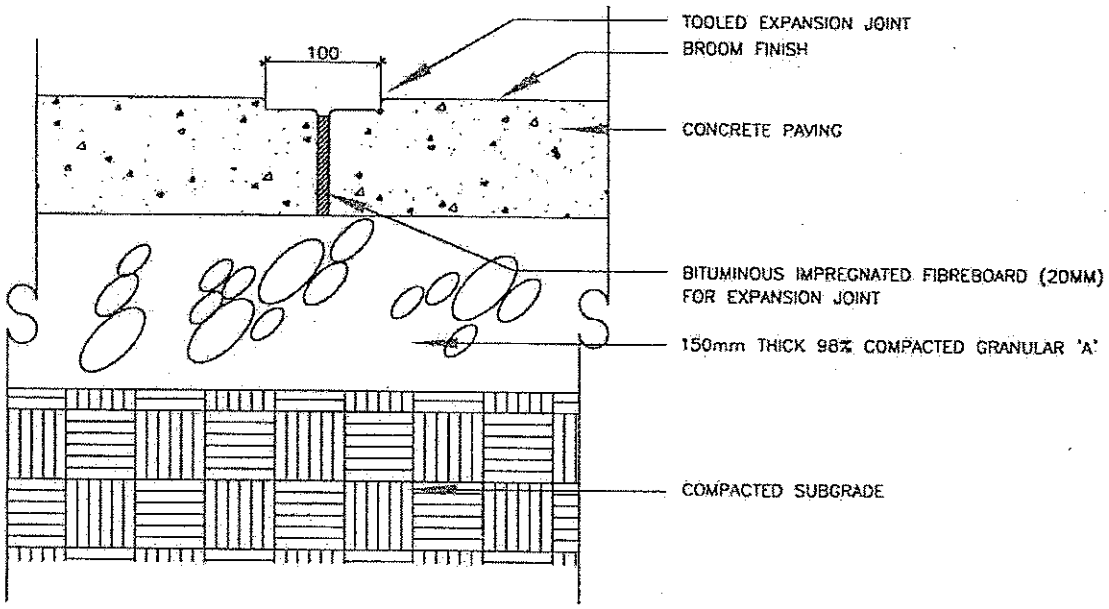


FIGURE 5.3.3: SIDEWALK CORRIDOR JOINTS IN CONCRETE

SECTION: TOOLED EXPANSION JOINT



SECTION: SAWCUT CONTROL JOINT

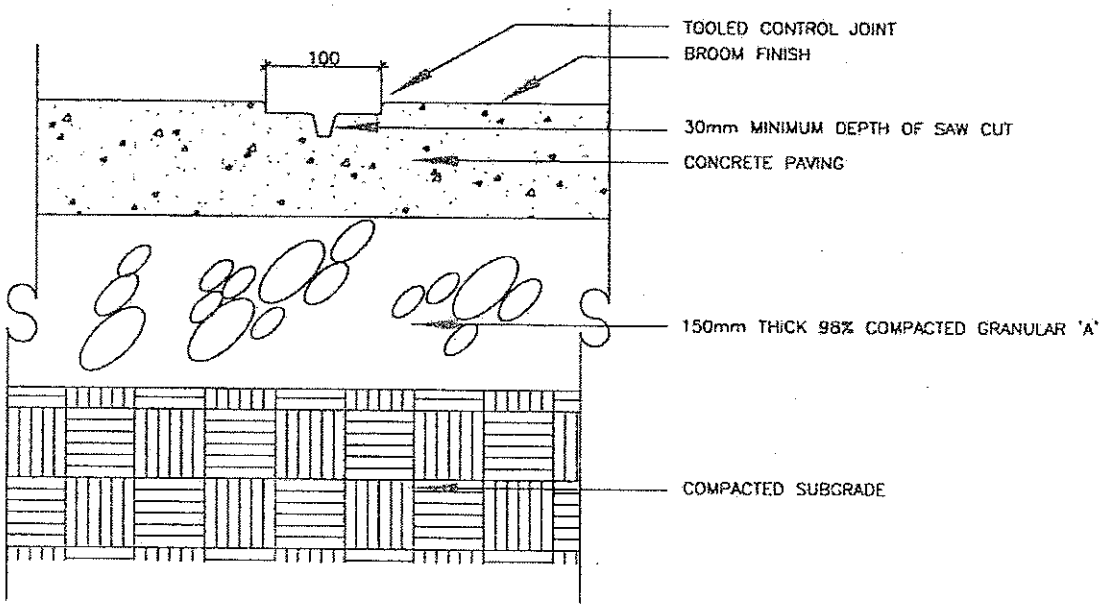
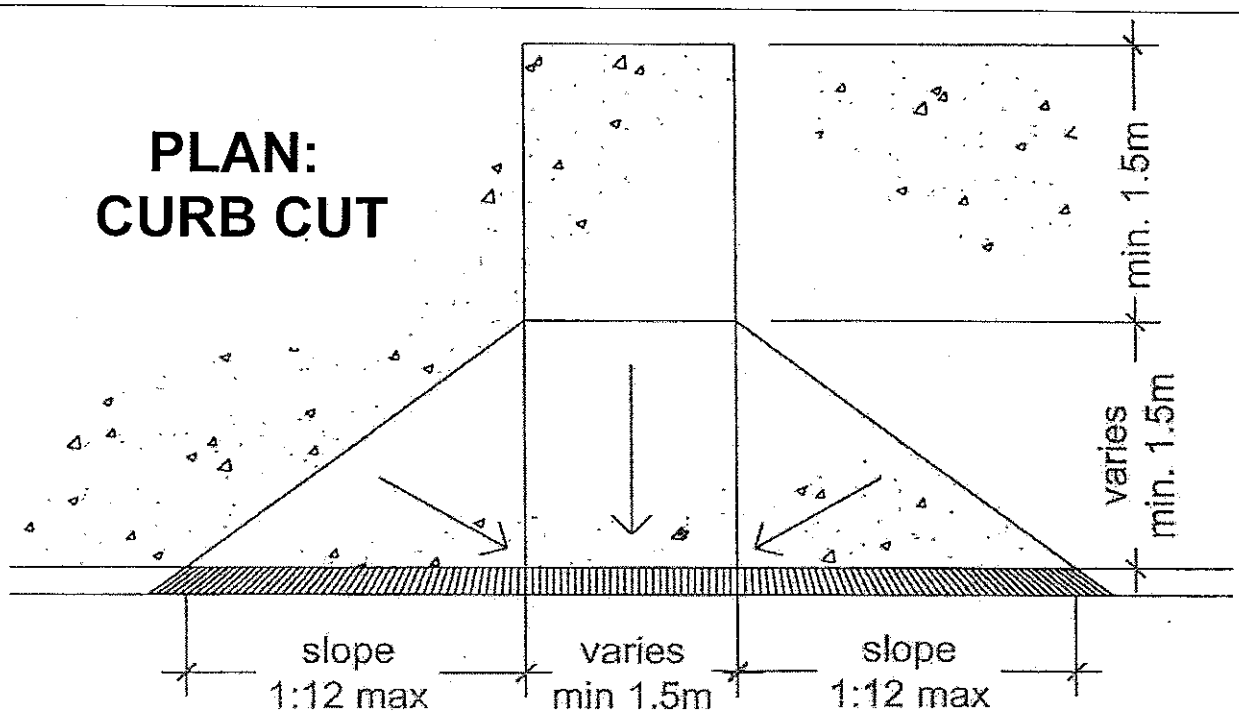


FIGURE 5.5.1: PEDESTRIAN ACCESS CURB CUT

PLAN: CURB CUT



MATERIALS:
Cast-in-Place Concrete

FINISHES:
Tooled edge
Broom finish

SECTION: CURB CUT

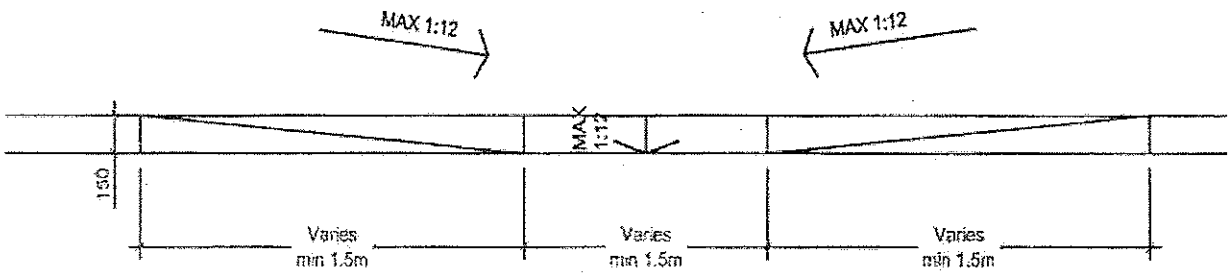


FIGURE 5.6.1: DRIVEWAY ACCESS CUT

City of Windsor Standard

AS-203

CONCRETE COMMERCIAL DRIVE

① ½ inch thick full depth pre-molded joint filler

② ¼ inch thick 2 inches deep pre-molded joint filler required at Y/2 if Y exceeds 16 feet

③ ¼ inch thick 2 inches deep pre-molded joint filler if X exceeds 12 feet

④ curb cut if required, shall be made as directed by the City Engineer

⑤ all work shall conform to City of Windsor specifications

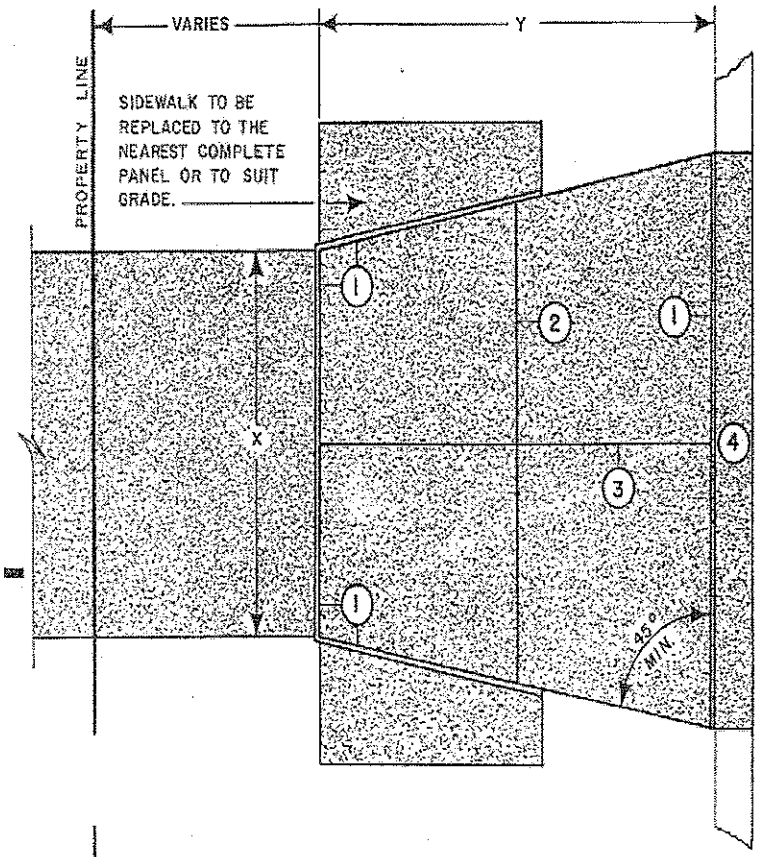
⑥ approach grade shall not exceed 10%

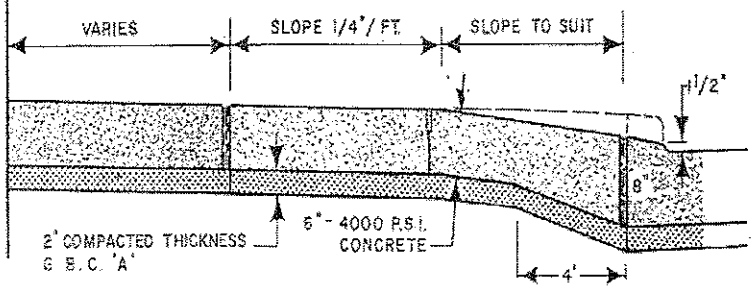
⑦ where approach grade exceeds 10% modify walk to suit

MATERIALS:
Cast-in-Place Concrete

FINISHES:
Tooled edge
Broom finish

PLAN: DRIVEWAY CUT





SECTION: DRIVEWAY CUT

7.1.1 STREET and PEDESTRIAN LIGHTING STANDARD

StressCrete™: Windsor EX3

Type: KW175-III-G-S41

POLE

Section: Square
Colour: S41 Dusty Rose 2 C/W Clear SC3 Acrylic Coating
Finish: Polished

Pole Top: 7" FL/FL
Pole Butt: 9 ½" DIA
Pole Length: 22' 6"

Weight: 1,325 lbs

Pole Classification:

- Minimum Ultimate Transverse Load: 1,200 lbs
- Minimum Ultimate Torque: 4,800 ft-lbs

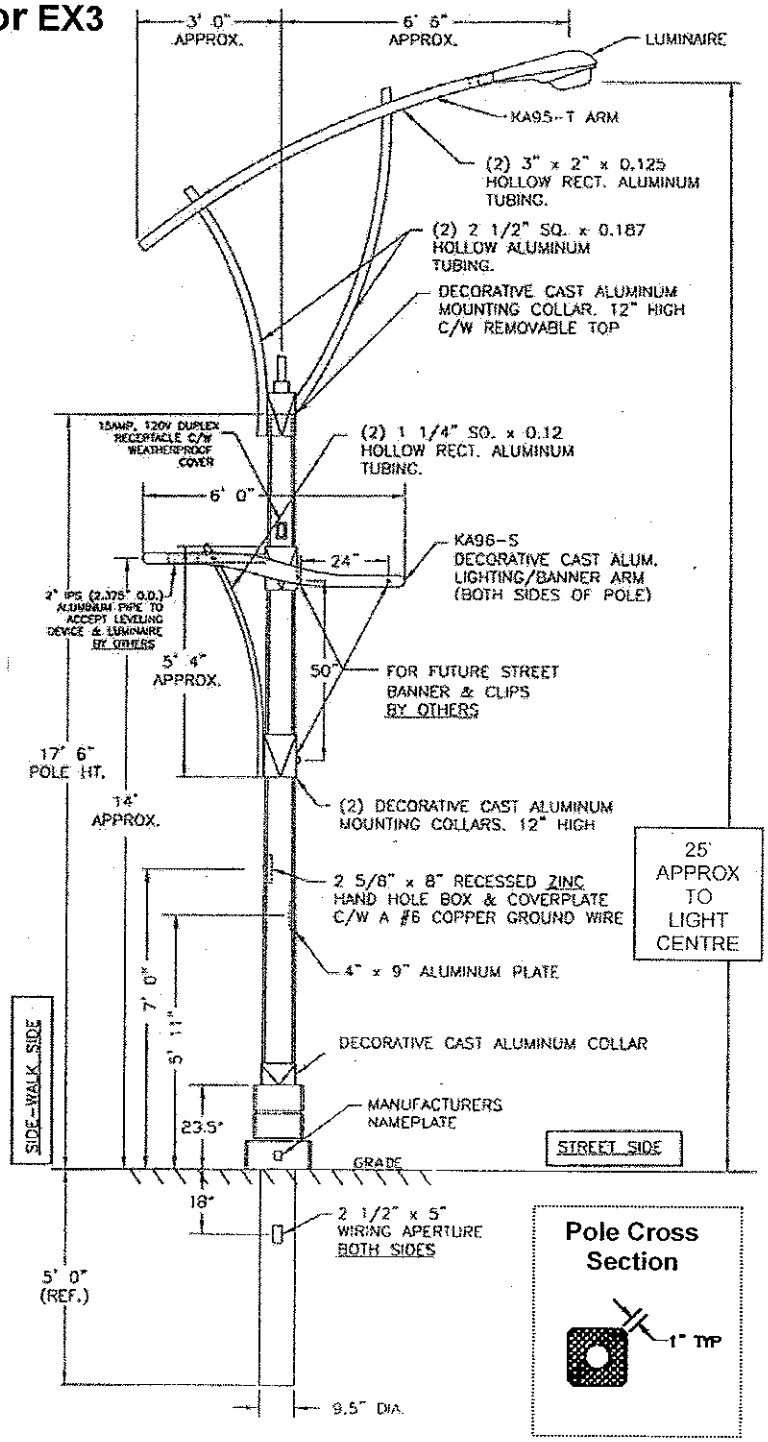
Concrete Strength:
28 day Compressive Strength of 8,000 psi.

Raceway: 1.5" DIA Minimum

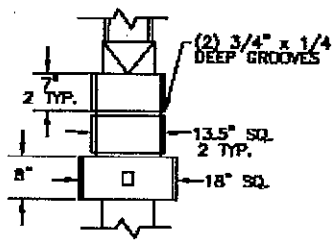
Luminaire/Banner Arm Specs:
Catalogue: KA96-S
Arm Material: Aluminum

Cobra Head Arm Specs:
Catalogue: KA95-T
Arm Material: Aluminum

Paint:
All armature and aluminum castings to be painted a match of RAL 7039



Base Detail



Pole Cross Section

7.2.1 PEDESTRIAN LIGHTING STANDARD

StressCrete™: Windsor EX7

Type: KW175-III-G-S41

POLE

Section: Square
Colour: S41 Dusty Rose 2 C/W Clear SC3 Acrylic Coating
Finish: Polished

Pole Top: 7" FL/FL
Pole Butt: 9 ½" DIA
Pole Length: 22' 6"

Weight: 1,325 lbs

Pole Classification:

- Minimum Ultimate Transverse Load: 1,200 lbs
- Minimum Ultimate Torque: 4,800 ft-lbs

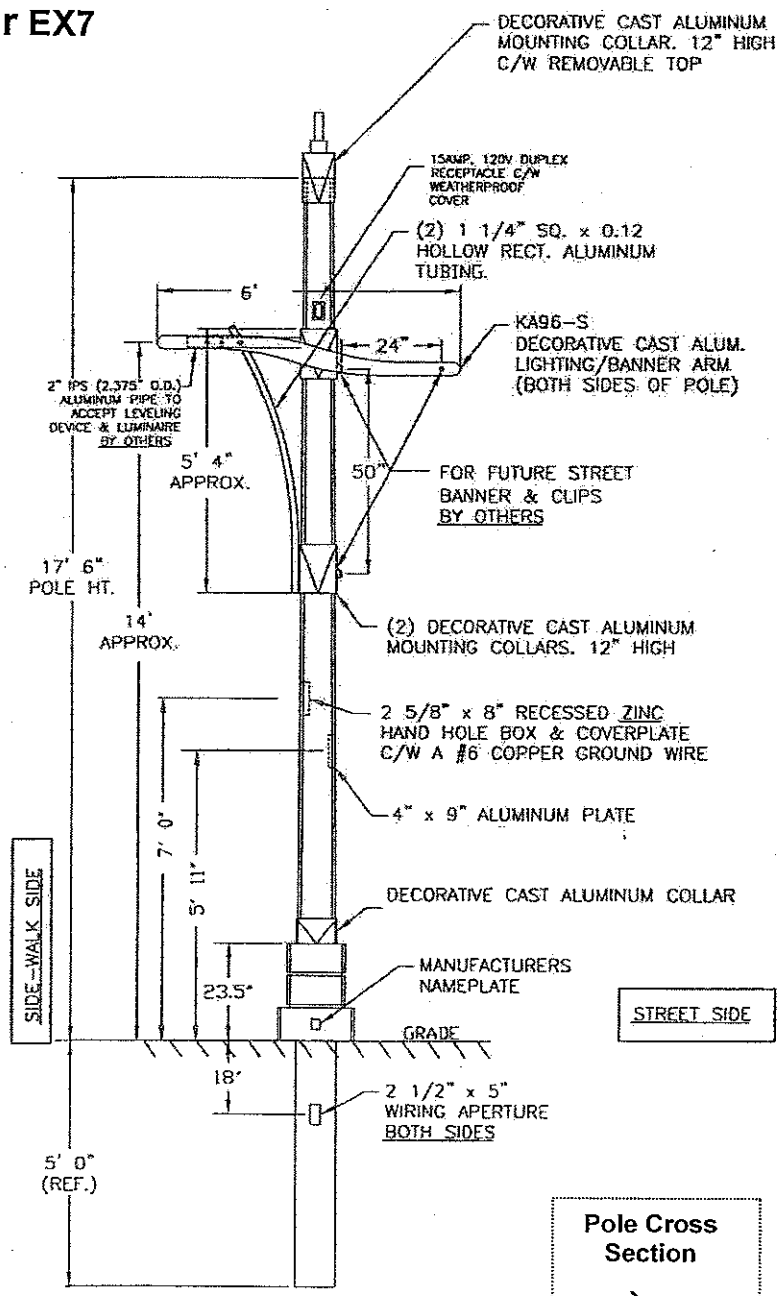
Concrete Strength:
28 day Compressive Strength of 8,000 psi.

Raceway: 1.5" DIA Minimum

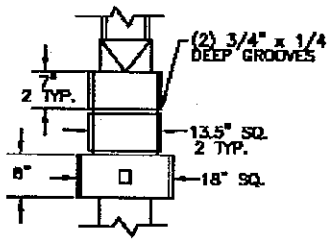
Luminaire/Banner Arm Specs:
Catalogue: KA96-S
Arm Material: Aluminum

Luminaire Specifications:
Magnetek / Advance
1130-605 / 71A55A0

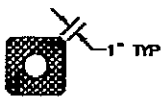
Paint:
All armature and aluminum castings to be painted a match of RAL 7039



Base Detail



Pole Cross Section



7.3.1 SPECIAL AREA LIGHTING STANDARD

StressCrete™: Windsor EX7U

Type: KW175-III-G-S41

POLE

Section: Square
Colour: S41 Dusty Rose 2 C/W Clear SC3 Acrylic Coating
Finish: Polished

Pole Top: 7" FL/FL
Pole Butt: 9 ½" DIA
Pole Length: 22' 6"

Weight: 1,325 lbs

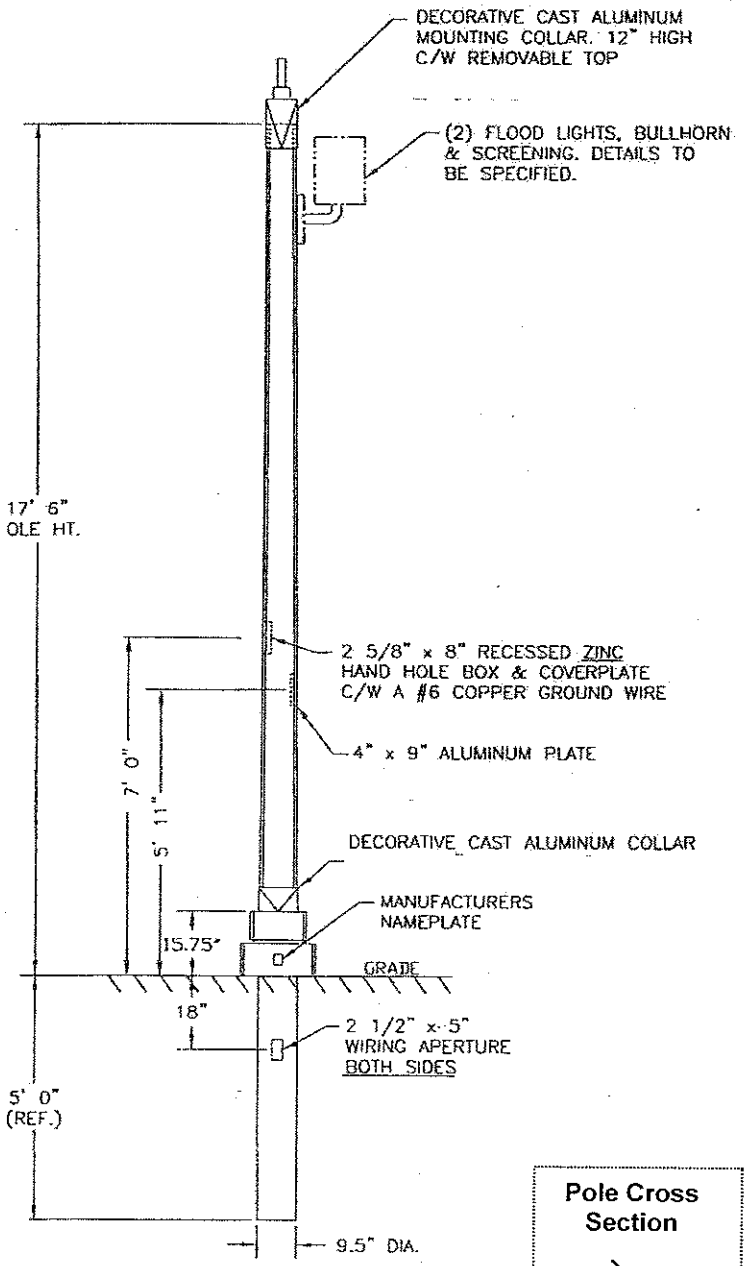
Pole Classification:

- Minimum Ultimate Transverse Load: 1,200 lbs
- Minimum Ultimate Torque: 4,800 ft-lbs

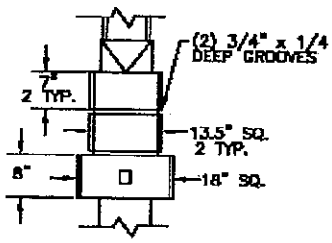
Concrete Strength:
28 day Compressive Strength of 8,000 psi.

Raceway: 1.5" DIA Minimum

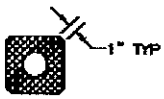
Paint:
All armature and aluminum castings to be painted a match of RAL 7039



Base Detail



Pole Cross Section



7.4.1 PEDESTRIAN LUMINAIRE FIXTURE

King Luminaire: K83 Solitaire Senior

Type: K83-EGS-ST-III-175(MOG)
-MH-120(TT)-KPL20

LUMINAIRE

Globe Material: Glass

Wattage: 175W

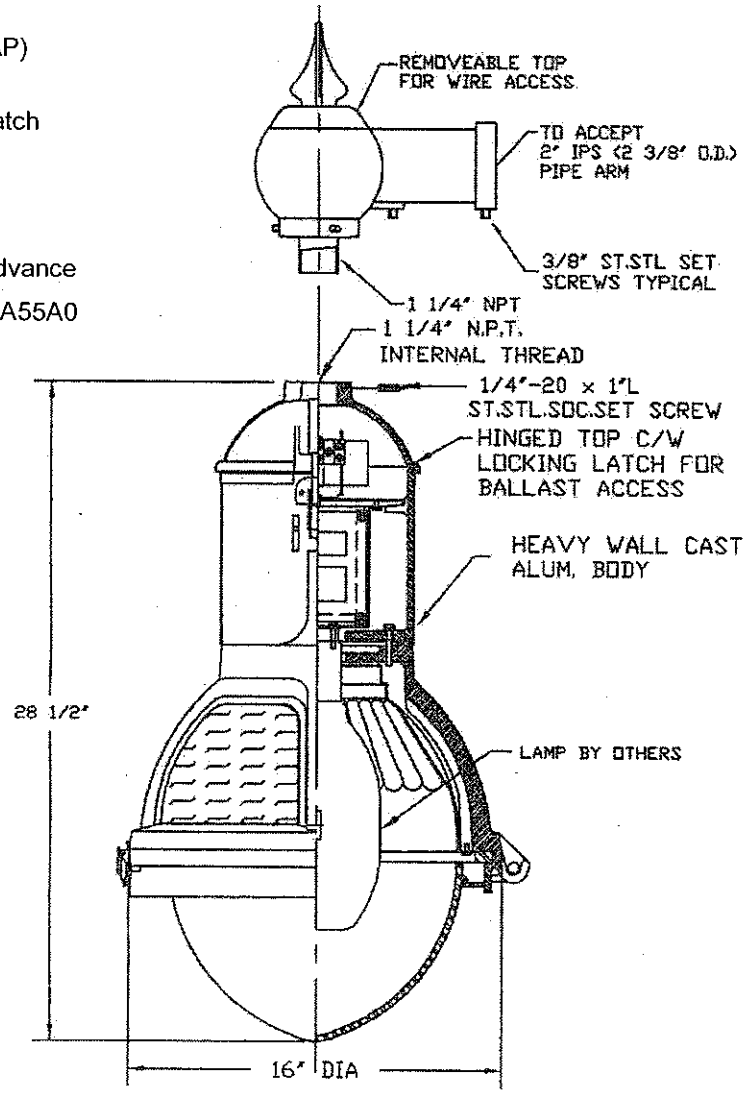
Light Source: Metal Halide

Line Voltage: 120V (TRI/TAP)

Paint: RAL 7039
Light Grey Match

BALLAST INFORMATION

Type: CWA

Manufacturer: Magnetek / Advance

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