

Town of Ladysmith

Waterfront Area Plan



CONSOLIDATED FOR CONVENIENCE ONLY

The amendment bylaws which are included in this consolidated version of the 'Waterfront Area Plan - Schedule B of Bylaw No.1488' are:

1652, and 1811

As on December 17, 2012

This consolidation of the 'Town of Ladysmith Community Plan' and amendments has been prepared exclusively for the use of the Town of Ladysmith for convenience only.

The Town of Ladysmith does not represent that this consolidation is accurate or complete and anyone using this material should confirm its content by reference to the original Bylaws.

Town of Ladysmith Waterfront Area Plan

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Part One Introduction

1. Purpose of the Area Plan

The purpose of this Waterfront Area Plan is to provide detailed guidance for future land use and development in the Ladysmith waterfront. The Official Community Plan (OCP) for the Town of Ladysmith offers general policy direction for the waterfront area, placing this part of the Town in a Waterfront Local Plan Area (LPA) designation. The OCP provides statements of general objectives and policies to be achieved for the waterfront area, as well as guidelines for the issuance of development permits. Policies for specific land use designations, transportation, servicing, and design guidelines applicable to the waterfront plan area are not contained in the Official Community Plan.

This Area Plan for the waterfront refines the OCP and provides specific direction for the form, character and scale of development which may occur in the area. Principles for the overall structure of the waterfront set the direction for more specific objectives and policies that will guide future land use, parks and open space, transportation and servicing in the plan area, as well as urban design guidelines and an implementation strategy.

The future form and character of the waterfront is set out in the Area Plan by the following:

- statement of broad directions and principles for the overall structure of the waterfront;
- description of the waterfront parks and open space system;
- design of a transportation network to ensure mobility for vehicles, pedestrians, and cyclists;
- designation of the location, type and density of land uses;
- identifying the conceptual servicing strategy for sanitary sewer, water, and storm drainage infrastructure;
- urban design guidelines to set out criteria for the evaluation of development;
- approach for implementation of the Area Plan policies.

2. Process

The planning process for the Ladysmith waterfront has been ongoing for several years. The review of the Official Community Plan in 1994 provided the opportunity to consider the future direction of the Town and the waterfront. The OCP process involved public and agency consultation including a series of workshops. A separate workshop and circulation of a questionnaire concerning the planning and development of the waterfront provided the Town with comments from the public specific to the Ladysmith waterfront. Following adoption of the OCP by the Town, a preliminary concept for zoning of waterfront lands was prepared and subject to public meetings.

The recent planning for the waterfront commenced in 1996 and was initiated by Council to ensure a plan is in place to improve public access and use of the waterfront and to determine the location and scale of future development. The preparation of an Area Plan for the waterfront has paralleled the design for improvements to the Esplanade as part of the Island Highway upgrade by the Ministry of Transportation and Highways. The Island Highway upgrade is a critical component in the Town's efforts to enhance the connection and relationship of the waterfront and the downtown. The Area Plan has also been prepared to ensure guidance is in place for the overall waterfront as consideration is given to

the proposal to develop a significant portion of the waterfront - the Slag Point area - for a destination resort and marina.

The current process for preparation of the Area Plan commenced with collection and review of background information and documents. This background review included an assessment of the existing waterfront conditions, the physical, historical and cultural context, transportation and servicing constraints, and market opportunities for land use. The identification of key issues with a Town steering committee and staff, as well as the broad directions contained in the OCP, allowed for the formulation of several alternatives for the waterfront. The alternatives presented options for future land use and a transportation network. A preferred alternative was selected following review with the steering committee and staff, and this formed the basis of a draft Area Plan for the waterfront.

Public consultation for the draft Waterfront Area Plan included two Public Information Meetings held in the first part of 1997. The meetings provided an open house and public meeting format to allow public comment and input to the preparation of the plan. Following this public review process, a final Waterfront Area Plan was submitted to the Town of Ladysmith.

3. Plan Context

The plan area comprises a substantial portion of the waterfront in the Town of Ladysmith, extending approximately 2.5 kilometres from the wharf at Oyster Cove Road to include lands north west of Ludlow Road. The plan area is approximately 105.3 hectares (260.2 acres) in total area, of which 41.9 hectares (103.5 acres) is land and 63.4 hectares (156.7 acres) is water. The waterfront area that is the subject of this plan enjoys a prominent location immediately adjacent and north east of Ladysmith's downtown core. The Esplanade (Island Highway) presently separates these two important areas of the community. The plan area is also bounded by major industrial uses (lumber mills) on the waterfront, located at the end of Ludlow Road. Residential land uses (duplex development) are located at the end of Oyster Cove Road and abutting the south edge of the waterfront plan area. This surrounding land use context presents both significant constraints to use of the waterfront lands, as well as opportunities; especially for providing a new community focal point at the waterfront which is linked to the downtown. The plan area location is illustrated on Map1 - Plan Area Location.

The waterfront plan area consists of both land and water. The harbour area has in the past has been used for industrial port activities associated with the coal and forest industry. Today this part of the harbour provides a public swimming area at Transfer Beach Park and pleasure boating and a small

marina for moorage between the government wharf and Slag Point. The land area within the waterfront is relatively undeveloped and is composed of a series of benches separated by relatively steep and rocky topography. The lower elevations near the water include the currently vacant Slag Point fill area which extends out into the harbour, and a linear bench along the water's edge extending toward Ludlow Road. An upper benchland area rests above Slag Point and stretches from Transfer Beach Park across the waterfront to Ludlow Road. The park and recreation activities at Transfer Beach are the primary public use of the waterfront plan area. An existing RV campground is situated to the north on this upper bench. Further north are the former railway buildings and developed open space associated with the Expo Legacy site. The E&N railway corridor traverses this higher elevation across the entire waterfront, and while limited in use (one passenger train per day and periodic freight use), represents a potential barrier for future land uses and pedestrian/vehicle access on the waterfront. Further up the waterfront, toward the downtown, is a stretch of land that in different locations is at or below the elevation of the Esplanade. Apart from vacant lands, this area contains the Arboretum park area and buildings of possible heritage value - the former George's Restaurant building and the existing E&N train station building. In the area either side of Ludlow Road, in the north part of the plan area, there are several benchlands that rise up from the lumber mill sites. South of

Ludlow Road the two bench areas remain vacant, while adjacent to the north side of Ludlow Road several buildings containing light industrial uses are located on the higher bench area.

4. Description of the Plan

The Waterfront Area Plan is organized into four main parts:

Part One Introduction

- *Outlines the purpose of the Area Plan, the process leading to the plan preparation, the plan area context, and this description of the format of the Area Plan.*

Part Two Area Plan Policies

- *Provides the principles for the overall structure of the waterfront, and the statements of objectives and policies for the following:*
 - ▶ *Parks and open space uses, including existing and proposed parks, a natural open space system across the waterfront, and a trail system;*
 - ▶ *Transportation network, including a circulation system providing access and mobility for each mode of travel - pedestrians, cyclists, and vehicles - together with function and design characteristics of each classification of roadway;*

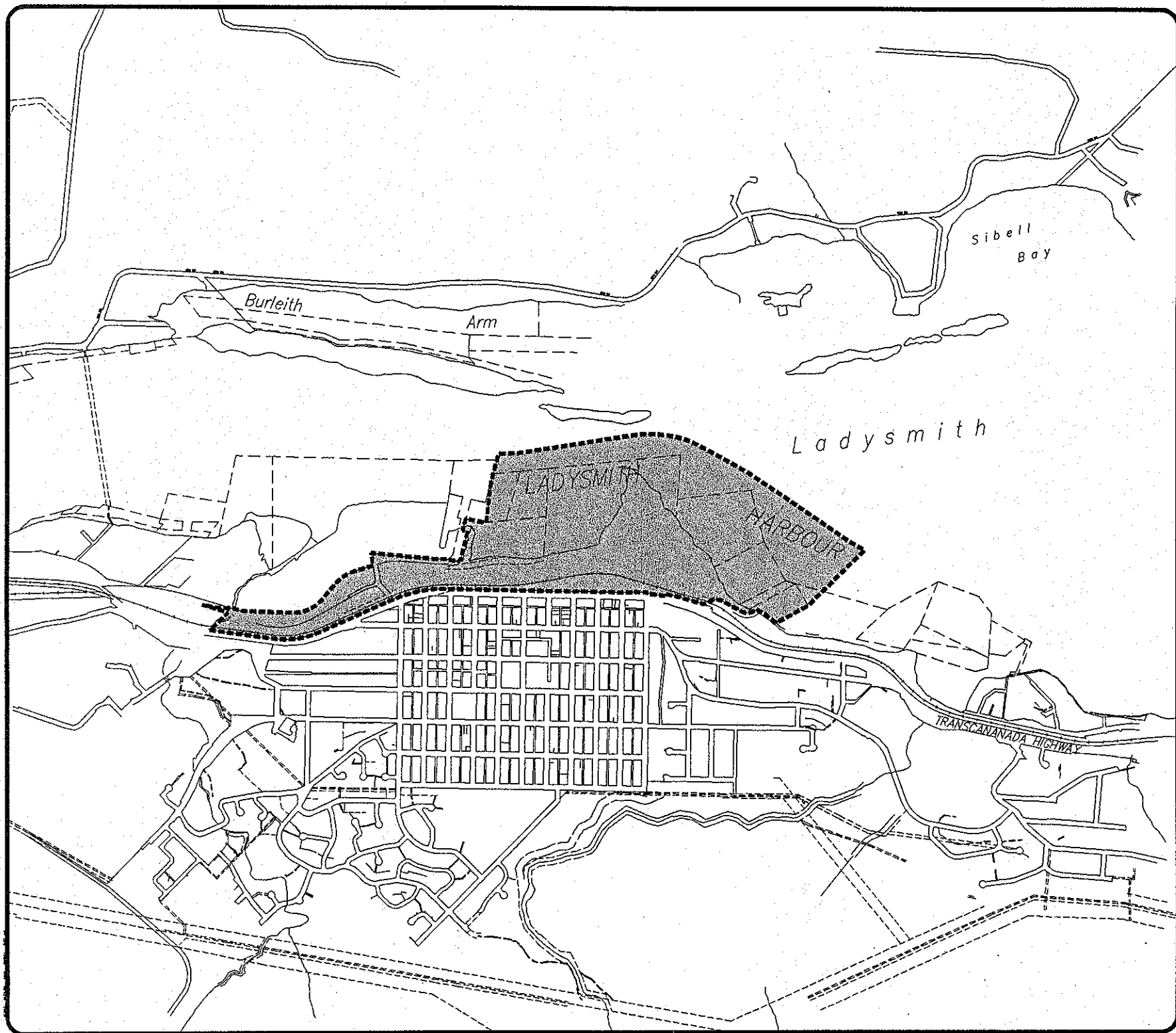
- ▶ *Future land uses and development, including Residential, Commercial, and Industrial land uses. Policies designate specific land use categories, their location in the plan area, and the density and scale of future development; and*
- ▶ *Servicing, including the strategy for providing the sanitary sewer, water, and storm drainage infrastructure to service new development on the waterfront.*

Part Three Urban Design Guidelines

- *Provides urban design guidelines for the waterfront, including functional criteria for development evaluation, addressing matters such as built form, streetscape, open spaces, views and historic references for the waterfront. Guidelines for specific land use types are also provided in this section of the plan.*

Part Four Implementation

- *Describes the methods for implementation of the objectives and policies stated in the Area Plan, including a framework of legislative tools - OCP amendment, Zoning Bylaw strategy - and approaches to the financing, servicing, and the staging of waterfront development.*



TOWN OF LADYSMITH

WATERFRONT AREA PLAN

PLAN AREA LOCATION

--- PLAN AREA
BOUNDARY

MAP 1

DATE: JANUARY 1997

SCALE: N.T.S.

DESIGNED BY
URBAN SYSTEMS

Part Two Area Plan Policies

1. Overall Waterfront Structure

The Ladysmith waterfront is envisioned as a key element of a future Ladysmith community - as a natural extension of a hillside and seaside community.

The area plan sets out a structure for the waterfront that acknowledges the importance of the waterfront to the Town as a connection to the water's edge and harbour area of Ladysmith; and as a place for public use and activity, as a tourist destination, as a neighbourhood with a mix of residential and commercial uses, and also as an area for continued business and industrial use. The future land uses of the waterfront are framed by a system of parks and natural open spaces, and served by a network of transportation routes for pedestrian, bicycle, and vehicular mobility.

The overall structure of the Ladysmith waterfront responds to broad directions and a series of principles that have emerged over the course of the planning process. These principles provide guidance for the waterfront plan area and for specific policy direction contained in the remainder of this plan:

- *A plan for the waterfront area should acknowledge the waterfront as a part of the existing community of Ladysmith and contribute to the extension of the activity of the Town toward the water - emphasizing Ladysmith as a seaside community as well as a hillside community.*
- *The waterfront plan area is viewed as comprising two broad use areas - a mixed use waterfront area and an industrial area. The mixed waterfront in the south east, and the industrial area in the north west, are intended to function separately. Policies should provide for a land use transition buffer and ensure transportation routes serve these areas independently to limit any potential conflicts between these broad use areas.*
- *The land use and future development nodes on the waterfront should be organized within the framework of a parks and natural open space system and a transportation network.*
- *Public access to the waterfront and shoreline is to be enhanced through provision of direct linkages to the downtown, a continuous waterfront linkage, protection of view corridors, and a circulation network throughout the waterfront.*

- *A range of land use types should be permitted on the waterfront to provide for year round use and enjoyment of the waterfront area by both residents and visitors to Ladysmith.*
- *Community uses and amenities should be provided in the waterfront area for residents and visitors, and include park, recreation, natural open spaces and pathways as well as meeting/gathering spaces.*
- *The scale of future development on the waterfront should reflect the scale and character of the Town. Development is expected to be of a moderate scale and generally limited to a maximum of three storeys in building height.*
- *An emphasis on pedestrian orientation and accommodation of all modes of travel (ie. pedestrians, cyclists, and vehicles) on the waterfront will ensure a safe, active, and vibrant area for Ladysmith.*

2. Parks and Open Space

The Ladysmith waterfront is an important location in the Town for residents to enjoy both active and passive recreation opportunities. Transfer Beach Park is currently the focus of most of the formal recreation activity on the waterfront. Transfer Beach is a community-wide park facility which currently offers a beach and swimming area, a children's play area, a horseshoe pitch, as well as places for passive recreation. The Arboretum located near the Esplanade contains examples of exotic and indigenous trees and offers a small natural park setting. In addition to the park areas, residents make use of the undeveloped parts of the waterfront for informal recreation purposes, such as walking and hiking.

The natural landscape of the waterfront area - the varying benches and steep slope topography, the existing mixed deciduous, coniferous and scrub vegetation (there are a few smaller stands of arbutus and fir trees), the shoreline and the harbour - forms the basis of a natural open space framework for land use and future development on the waterfront. The natural setting and elevation difference affords opportunities for preserving significant view corridors and establishing scenic viewpoint areas. The harbour itself, as part of the waterfront plan area, represents a natural amenity for activities as varied as marine habitat protection and marine recreation uses such as swimming, pleasure boating, and fishing.

The parks and open space system proposed for the waterfront plan area ensures a continuous protected and publicly accessible shoreline and comprises the following major components. Retain the existing Arboretum and Transfer Beach Park areas, with an expanded park area adjacent to Transfer Beach. A new community park for passive recreation purposes is to be located in the Slag Point area. A continuous linear pathway along the extent of the waterfront edge, and connected to a community-wide trail system, is identified as a key element of the open space system. Natural open space areas, including steep slope ravines, significant vegetation, scenic views and the water's edge foreshore, are protected from development and contribute to a continuous open space system through the waterfront. Another key element of the open space system includes the pedestrian walkways and bicycle lanes located within the multi-modal corridors of the transportation network. Finally, the water represents a major attraction and location for both active and passive open space uses of the waterfront.

The objectives and policies for parks and open space within the Waterfront Plan Area are presented in this section.

2.1 Objectives

- *To ensure public access and use of the waterfront and harbour, and continue to provide both active and passive recreation opportunities on the waterfront for residents and visitors to Ladysmith.*
- *To preserve and protect significant natural vegetation, steeply sloped areas, and the shoreline of the waterfront from development.*
- *To establish view corridors to the Town and to the harbour and protect these from encroachment by development.*
- *To provide for a system of trails and walkways, including a continuous linear shoreline pathway, within the waterfront plan area and connecting to a community-wide trail system.*

2.2 Policies

2.2.1

Provide for parks and open space uses within the waterfront to serve residents and visitors by developing the parks and open space system as shown on Map 3 - Parks and Open Space.

2.2.2

Community Park designations are provided for the existing Arboretum, Transfer Beach Park and adjacent expansion, and a proposed new park on the west side of Slag Point.

2.2.3

The Arboretum will continue to provide for passive recreation and, with improvements, will function as a casual gathering place for residents and resting area for tourists, as well as providing a natural entrance feature to the waterfront.

2.2.4

Transfer Beach Park continues as the primary Community Park area on the waterfront, providing both active and passive recreation opportunities.

2.2.5

The proposed use of the undeveloped land (Lot 6G) north of the existing Transfer Beach Park will be subject to further review as part of a Park Master Plan. Specific uses of this future park area, such as public assembly uses, an amphitheatre, or limited commercial use complementary to park uses, will be determined through the Park Master Plan.

2.2.6

The proposed new Community Park area at Slag Point is intended for passive recreation use. The park is to comprise several inter-tidal lagoons surrounded by a pathway for walking, cycling, and harbour viewing. A number of viewing/interest points are proposed, culminating in a lookout point at the tip of Slag Point.

2.2.7

Areas within an **Open Space** designation are to be retained in their natural state to allow for protection of steep slope ravines, significant tree stands, scenic views and the foreshore area of the waterfront.

2.2.8

Establish a continuous linear pathway along the water's edge within the waterfront plan area to connect to a community-wide trail system beyond the plan area. The waterfront trail system, as shown conceptually on Map 3 - Parks and Open Space, should provide pedestrian and cycling linkages between the shoreline pathway and the trails and multi-use transportation corridors of the waterfront lands, as well as linkages across the Esplanade and into the downtown.

2.2.9

View corridors as part of the open space system and circulation network are identified in order to preserve view opportunities from the Town and Esplanade to the harbour, and from the water in to the waterfront and Town beyond. The parks and open system and circulation network elements serve to protect scenic views from encroachment by future development.

2.2.10

A **Water Recreation** designation is provided for the portion of the harbour within the plan area, as shown on Map 2 - Land Use Plan, that is intended to allow for water based recreation and open space uses. This area complements the Transfer Beach Park area and the Slag Point proposed park and marina, and may include *swimming and beach areas, boating, recreational fishing, public wharf and pier* as permitted uses.

2.2.11

The Part Three-Urban Design Guidelines establish the design direction for development of the parks and open space system in the waterfront.

3. Transportation

The current transportation system that services the waterfront is limited. The presence of the Island Highway (Esplanade), which runs the length of the waterfront plan area, effectively separates the waterfront from the remainder of the Town. At present there are only two access routes to the plan area. Oyster Cove Road is an unsignalized road entrance and exit that separates near the Esplanade and serves a residential development to the south and Transfer Beach Park to the north. The other access route to the waterfront is Ludlow Road in the north west, which primarily serves industrial traffic to/from the lumber mills. The internal transportation network is restricted to the Oyster Cove Road and Ludlow Roads, with a series of informal gravel and narrow paved roads traversing portions of the waterfront.

The E&N railway corridor runs the length of the waterfront plan area. The railway currently provides for a limited passenger train service between Victoria and Nanaimo. The rail corridor presents some impediment to development of the transportation network for the waterfront, however there is also the potential for multiple use, including parking areas, within the rail corridor.

There is a need for a full transportation network to be provided on the waterfront to accommodate traffic from future development and to provide functional connections to

the downtown and residential neighbourhoods of Ladysmith. Safety for pedestrians, cyclists, and vehicles accessing the waterfront and downtown area from the Esplanade requires that additional access routes into the waterfront be provided. Future development of the waterfront for a range of land uses will necessitate an internal transportation network to serve the plan area.

The transportation system for the waterfront is planned to facilitate connections to the downtown and provide for the safe and efficient movement of all modes of travel on the waterfront. The emphasis is on a pedestrian orientation and design of multi-use transportation facilities to accommodate vehicles, cyclists and pedestrians. Two new major access routes are planned - Roberts Street and Buller Street are extended from the downtown into the southern area of the waterfront. Ludlow Road will function as the major access route into the industrial area to the north west. The separation between the two broad use areas - the mixed waterfront in the south east and the industrial area - is reinforced by not providing a through road connection between Ludlow Road and the mixed use waterfront area further south.

The internal transportation system proposed consists of a hierarchical circulation network of collector roads, local roads, and lanes. Roberts Street will function as the principal

entrance collector road into the waterfront, extending to a gateway intersection from which an internal circulation network of collector roads serves the upper benchlands, Transfer Beach Park and the Oyster Cove area, and traverses the waterfront to connect to the Buller Street entrance collector road. Local roads include the section within Transfer Beach Park, a loop access through the Slag Point area from the collector road on the upper benchlands, a local road extending north from the new Buller Street and terminating in a cul-de-sac, and local roads to serve the area north of Ludlow Road. A lane is provided between the collector roads on the upper benchlands. In addition to bicycle lanes and sidewalks within the transportation network, an open space pathway system is also planned to allow pedestrian and bicycle movement in throughout the waterfront.

Several changes to the existing railway corridor are needed to accommodate the proposed transportation network. At grade crossings of the rail line for pedestrians, bicycles, and vehicles are required at the Roberts and Buller Street extensions. Realignment of the rail line and corridor, to shift toward the waterfront, is necessary to extend Buller Street into the waterfront.

The objectives and policies for a transportation system within the Waterfront Plan Area are presented in this section.

3.1 Objectives

- *To provide a transportation system for the waterfront which offers mobility for all modes of travel and accommodates future traffic conditions.*
- *To improve access to the waterfront and the connection with the downtown and residential neighbourhoods of Ladysmith.*
- *To ensure a safe and efficient pedestrian and cycling environment while providing roadways which meet the requirements for vehicular traffic.*

3.2 Policies

3.2.1

Develop a transportation system for the waterfront to provide access and mobility for all modes of travel, both to and within the waterfront lands, as shown on Map 4 - Circulation Network.

3.2.2

As part of the Island Highway improvements to the Esplanade being conducted by the Ministry of Transportation and Highways, encourage the following upgrades for the waterfront transportation system:

- Extend Roberts Street into the waterfront from a new signalized intersection at Esplanade through to the gateway intersection and along the east side of the railway to link with Oyster Cove Road;
- Design for a future extension of Buller Street to include a signalized intersection and a connection into the waterfront;
- Intersection improvements to Symonds Street/Esplanade and Roberts Street/Esplanade to ensure adequate traffic operations as identified to implement the design for the Island Highway.

3.2.3

Explore with the appropriate rail authority the proposed realignment of the E&N Railway line corridor at the time of the Butler Street extension into the waterfront.

Investigate with the rail authority the possible use of portions of the railway right-of-way corridor for public parking and parking associated with waterfront development. This could be achieved through an overlap of the road and rail corridor right-of-ways.

3.2.4

Provide for a circulation network which consists of a hierarchy of roads which are classified according to function and design as **collector roads, local roads, and lanes**. All roadways are to be designed as multi-use facilities to afford pedestrian, bicycle and vehicle movement.

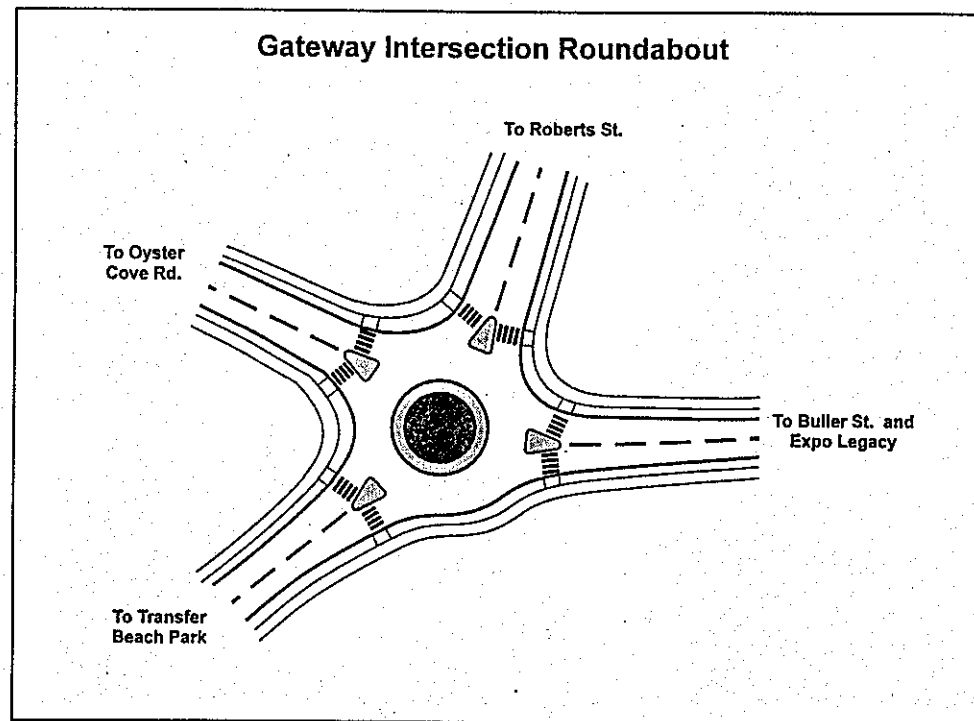
3.2.5

The Part Three-Urban Design Guidelines establish the design direction for street, parking, and streetscape elements of the future transportation system.

3.2.6

Collector Roads as shown on Map 3 - Circulation Network shall have the following major function and design characteristics:

- Collector roads on the waterfront will function as the primary connection to the Esplanade (an arterial road under provincial jurisdiction) and as the routes for through traffic within the waterfront. Direct access to adjacent properties may be permitted.
- A gateway intersection in the form of a modern roundabout (single lane traffic circle) is proposed as a major entrance feature to the waterfront from the Roberts Street entrance collector road.



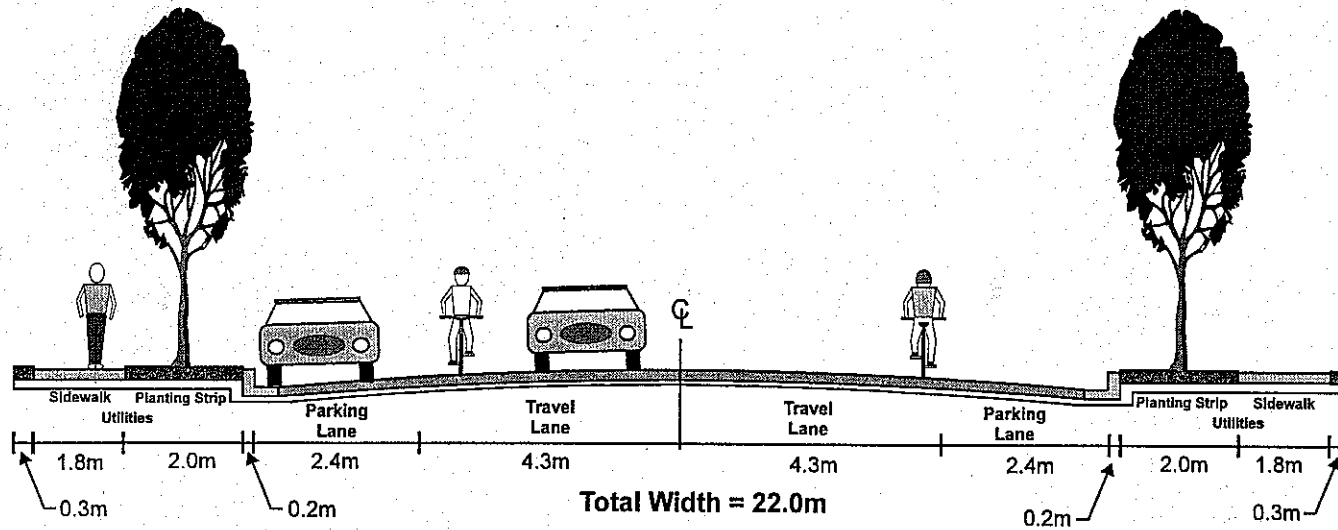
- The design characteristics for the collector roads in the waterfront plan area, including illustrative cross-sections, are provided below:
 - One 4.3m travel lane in each direction to allow shared vehicle and bicycle use of roadway.
 - Road right-of-way widths to range from 17.0m - 22.0 metres depending on the road section.
 - On-street parking lanes on either one side or both sides.
 - Curb bulges at intermittent locations to calm traffic and reduce pedestrian crossing distances.
 - Sidewalks and planting/utility strips on each side of the roadway.

Collector Roads

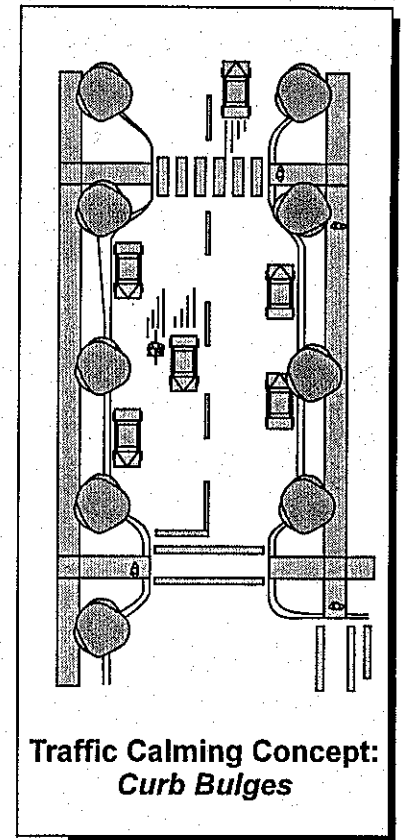
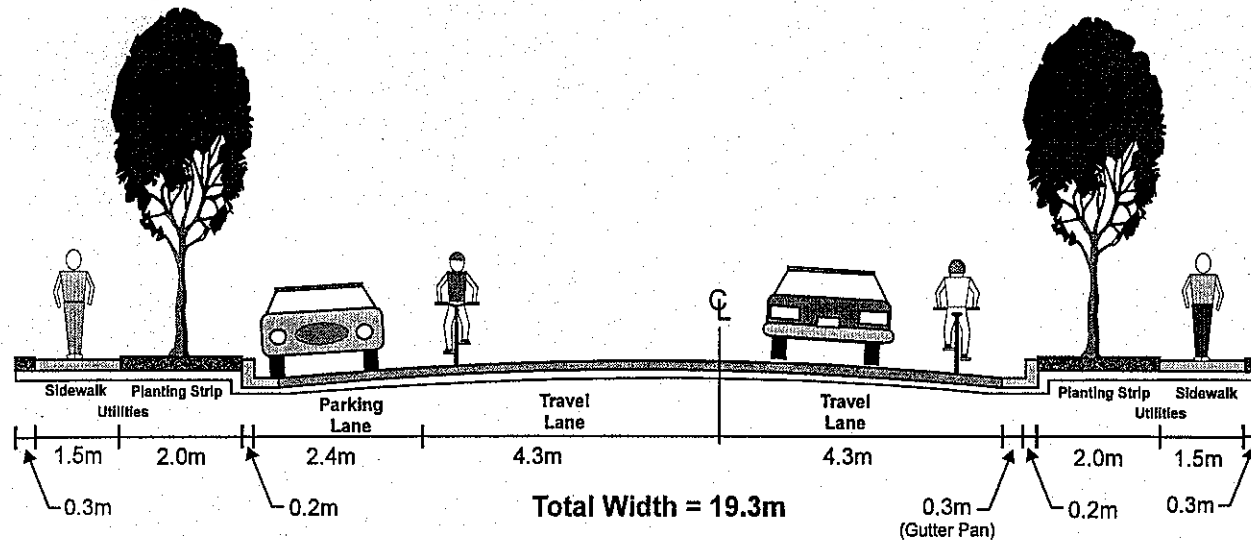
Collector Road Sections	Travel Lanes		On-Street Parking	Bicycles, Pedestrians	Pavement Width	R-O-W Width	Cross-Section Illustration
	#	Width					
Roberts St. to gateway intersection	2	4.3 m @	None	Shared Use roadway, sidewalks	9.6 m	17.2 m	Refer to c.)
Gateway intersection to Transfer Beach to Oyster Cover Rd.	2	4.3 m @	One side (west)	Shared Use roadway, sidewalks	11.7 m	19.3 m	Refer to b.)
Gateway intersection to Oyster Cove Rd.	2	4.3 m @	One-side (east)	Shared Use roadway, sidewalks	11.7 m	19.3m	Refer to b.)
Expo Legacy Corridor South	2	4.3 m @	Both sides	Shared Use roadway, sidewalks	13.8 m	22.0 m	Refer to a.)
Expo Legacy Corridor North	2	4.3 m @	One-side (west)	Shared Use roadway, sidewalks	11.7 m	19.3 m	Refer to b.)
Buller Street	2	4.3 m @	None	Shared Use roadway, sidewalks	9.6 m	17.2 m	Refer to c.)
Ludlow Street	2	4.3 m @	None	Shared Use roadway, sidewalks	9.6 m	17.2 m	Refer to c.)

Collector Roads

a.) Parking Both Sides

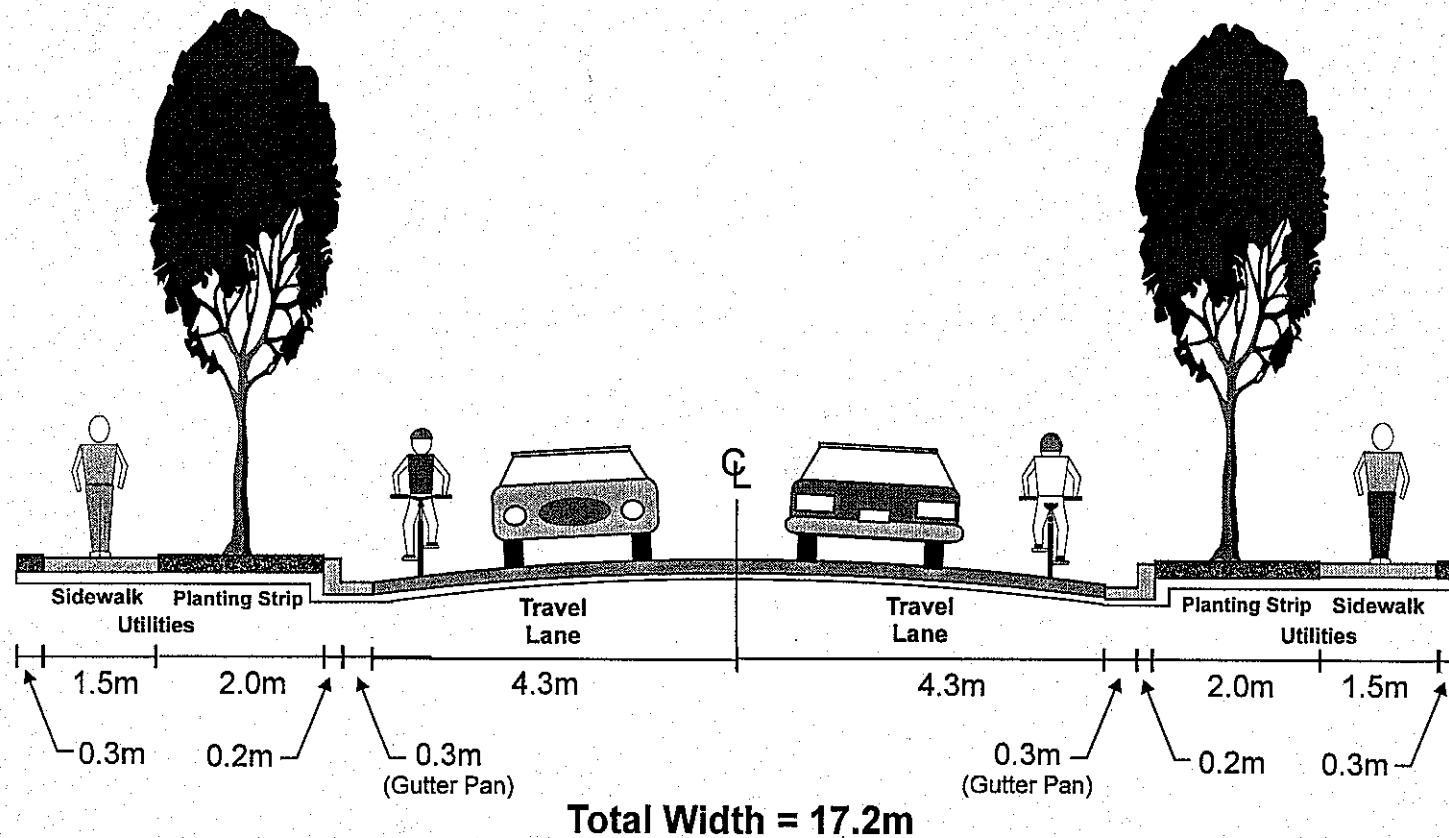


b.) Parking One-Side



Collector Roads

c.) No On-Street Parking



3.2.7

Local Roads as shown on Map 3 - Circulation Network shall have the following major function and design characteristics:

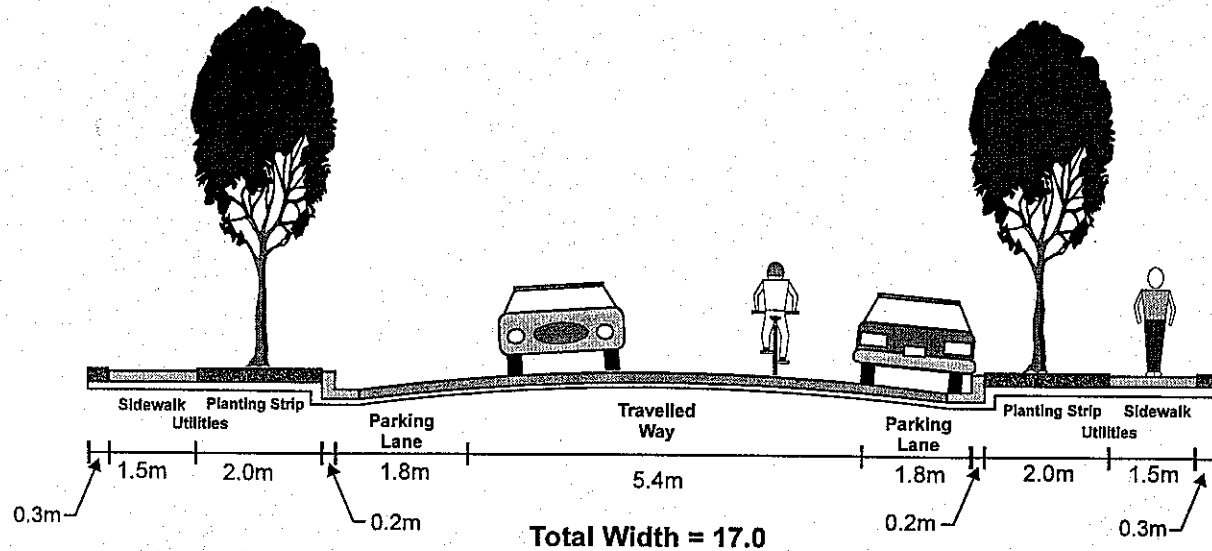
- Local roads on the waterfront will function to provide direct access to adjacent properties and as routes to connect a minimum amount of through traffic to the collector roads.
- The design characteristics for local roads in the waterfront plan area, including illustrative cross-sections, are provided below:
- A 5.4m travelled way providing a lane in each direction for shared vehicle and bicycle use.
- Road right-of-way widths to range from 17.0m - 19.5m for the mixed use waterfront to a range of 19.0m - 22.0m for the industrial area.
- On-street parking lanes on either one side or both sides.
- Curb bulges at intermittent locations to calm traffic and reduce pedestrian crossing distances.
- Sidewalks and planting/utility strips on each side of the roadway.

Local Roads

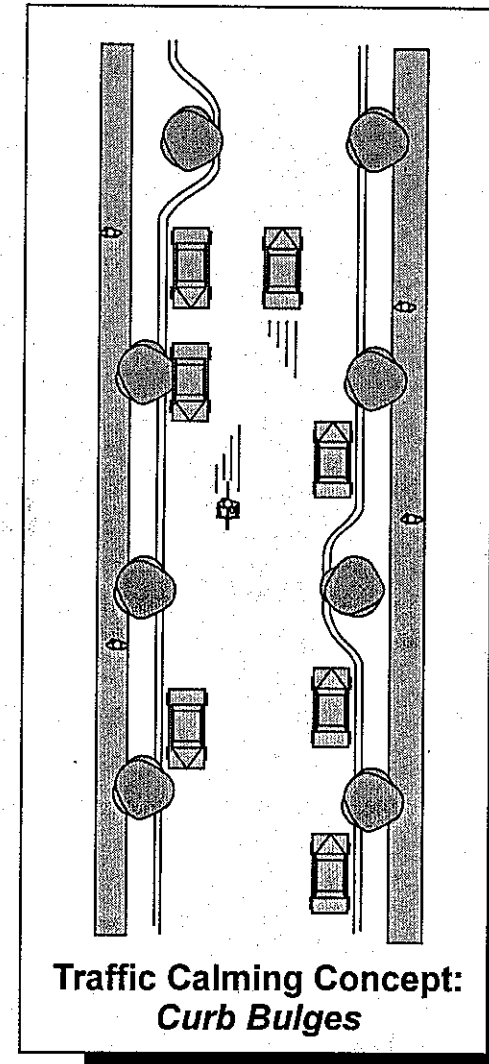
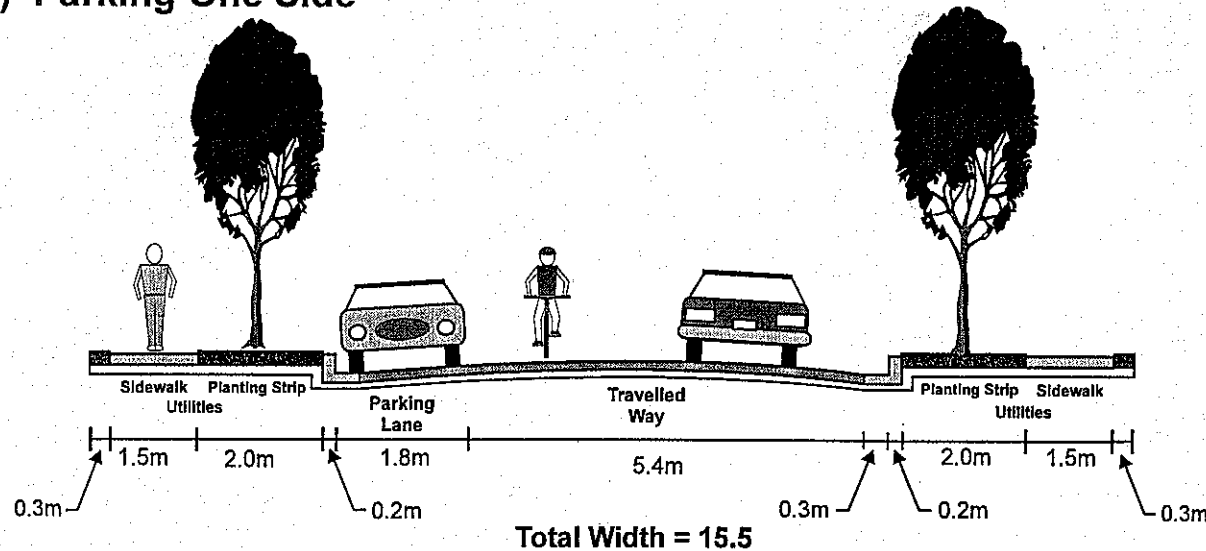
Local Road Sections	Travel Lanes		On-Street Parking	Bicycles, Pedestrians	Pavement Width	R.O.W. Width	Cross-Section Illustration
	#	Width					
Local Road Section							
Slag Point Loop	1	5.4 m	Both sides	Shared use of roadway, sidewalks	9.4 m	17.0 m	Refer to a)
Transfer Beach to Oyster Cove Rd.	2	4.3 m @	One-side (water side)	Shared Use roadway, sidewalks	11.7 m	19.3 m	Refer to Collector b.)
Cul-de-sac (north of Buller)	1	5.4 m	Both sides	Shared use of roadway, sidewalks	9.4 m	17.0 m	Refer to a)
Nicholson Road (south segment)	2	4.3 m @	Both sides	Shared use of roadway, sidewalks (1.5 m)	13.8 m	21.4 m	Refer to Collector a)
Nicholson Road (north segment)	2	4.3 m @	One side (water side)	Shared use of roadway, sidewalks	11.7 m	19.3 m	Refer to Collector b)
Lower Loop (Ludlow-Nicholson)	2	4.3 m @	One side (water side)	Shared use of roadway, sidewalks	11.7 m	19.3 m	Refer to Collector (b

Local Roads

a) Parking Both Sides



b) Parking One Side



3.2.8

Lanes as shown on Map 3 - Circulation Network shall have the following major function and design characteristics:

- Lanes on the waterfront will function to provide direct access to adjacent properties and to connect traffic to local or collector roads.

- The design characteristics for lanes in the waterfront plan area, including illustrative cross-sections, are provided as follows:

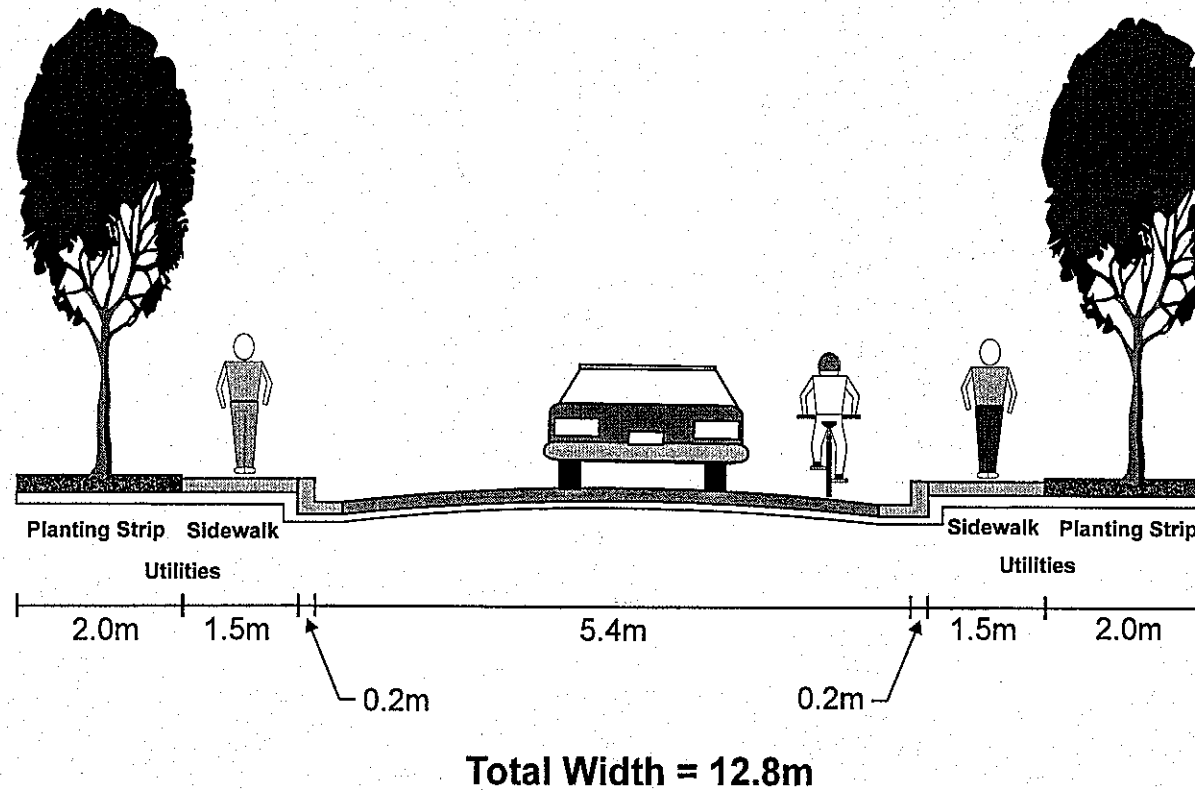
- A 5.4m travelled way providing a traffic lane in each direction for shared vehicle and bicycle use.
- Road right-of-way widths of 12.8m.
- No on-street parking.
- Sidewalks and planting/utility strips on each side of the roadway.

Lanes

Lane Collector Road Sections	Travel Lanes		On-Street Parking	Bicycles, Pedestrians	Pavement Width	R.O.W. Width	Cross-Section Illustration
	#	Width					
Upper Bench Lane	1	5.4 m	none	Shared use of roadway, sidewalks	5.8 m	12.8 m	Refer to a)

Lanes

a.) No On-Street Parking



4. Land Use

4.1 Residential

Housing is considered an appropriate form of development for certain locations on the waterfront. The upper benchlands area is well suited for a small scale mixed residential and commercial neighbourhood that reflects the character of Ladysmith. The nearby parks and water, views to the harbour and islands, and the accessibility of this part of the waterfront makes it a particularly good location for a permanent waterfront neighbourhood.

Residential development on a portion of the waterfront, together with supporting commercial uses, would complement the seasonal destination resort development that is anticipated for the Slag Point area adjacent to the harbour. Permanent residents living in the waterfront will provide year round activity, stability and vibrancy for the waterfront area. Policies of the Official Community Plan provide for multi-family housing and for residential uses in the waterfront. Demand for waterfront housing continues to be strong on the east coast of Vancouver Island. The growth in the population of Ladysmith has been steady in recent years, and is projected to continue over the next decade, producing increasing demands for affordable single family and multi-family housing in the Town.

The plan area is proposed to accommodate a new waterfront neighbourhood consisting of residential and mixed residential/commercial land uses. Multi-family residential and mixed use development is expected to comprise approximately 2.4 hectares (6.0 acres) of the plan area. Small scale apartment residential or mixed apartment with first floor commercial uses are the forms of development anticipated for this part of the waterfront. Community care facility uses may be permitted in appropriate locations in the waterfront area to meet the special needs housing objectives of the Town. High-rise multiple residential development is not considered appropriate. Buildings of up to three storeys in height can be located in this area of the waterfront.

The objectives and policies for future residential uses within the Waterfront Plan Area are presented in this section.

4.1.1 Objectives

- *To provide for a future mixed use neighbourhood in the waterfront of a modest scale and in keeping with the character of Ladysmith.*

- *To allow multi-family housing in the form of apartment residential and mixed use apartment residential/commercial development that is of a high quality design and respects the waterfront setting.*

4.1.2 Policies

4.1.2.1

Permit multi-family residential and mixed use development in the areas shown on Map 2 - Land Use Plan for residential and supporting commercial uses.

4.1.2.2

Areas designated **Multi-family Residential** on Map 2 - Land Use Plan allow for multi-family residential development with *apartments* as the permitted use. The maximum permitted density is 74.1 units per hectare (30 units per acre). Apartment buildings in this designation shall not exceed three storeys in height.

4.1.2.3

Areas designated **Mixed-Use Residential/Commercial** on Map 2 - Land Use Plan allow for multi-family residential and supporting commercial development with *apartments* and *ground floor commercial*, and *community care facility*, as the permitted use. The maximum permitted density is 74.1 units per hectare (30 units per acre) for the residential

component and a floor area ratio of 0.50 f.a.r. for the commercial component of the development. The gross floor area of individual commercial units shall not exceed 465 square metres (5,000 sq.ft.) Mixed-use buildings in this designation shall not exceed three storeys in height. However, site specific height regulations may be considered as part of a comprehensive rezoning proposal, but shall not exceed 4 storeys, excluding underground parking.

Bylaw 1652

4.1.2.4

New development in the Multi-family Residential and the Mixed-Use Residential/Commercial designations is to be provided with municipal services, including roads, sanitary sewer, water, and storm drainage.

4.1.2.5

Multi-family residential and mixed-use residential/commercial development is subject to the Development Permit Policies of the Official Community Plan and the Part Three - Urban Design Guidelines contained within this Area Plan.

4.2 Commercial

Commercial development that is oriented to serving the waterfront and the special setting it affords will become an important element in reclaiming the waterfront in Ladysmith. The redevelopment of underutilized portions of the waterfront promotes opportunities for increased access and use by residents and visitors. Commercial development which respects the character of Ladysmith and serves the

demand by a growing local and waterfront population is expected to enhance the Town as a seaside community.

Commercial activity in the waterfront is expected to be in a variety of forms. The primary focus of uses of this nature will be the resort development proposed for the Slag Point area of the waterfront. As the major destination resort for the waterfront, commercial use of this area will comprise a resort hotel and marina, together with retail and service uses that are complementary to the resort and marina. The demand for resort and recreation property is projected to increase on Vancouver Island; and the Ladysmith waterfront is well situated to serve this market demand as other resort areas on the Island approach completion. In the longer term it is anticipated there will be the need for another marina in the harbour, to complement the existing marina and the proposed Slag Point marina, to be located in the area adjacent the existing government wharf.

The lands along the east side of the Esplanade have the potential to function as a signal to the presence of activity and destination uses on the waterfront. The development of limited sections between Kitchener Street and Buller Street on the waterfront side of the Esplanade for tourist commercial uses would serve to complete this side of the Esplanade and assist in extending the Town into the waterfront. A sensitive combination of existing and new buildings, park and open space features, and retaining a small scale character would present a welcoming entrance to the waterfront and to Ladysmith.

The Expo Legacy building and immediate surrounding area is one of the most identifiable features of the present waterfront landscape. The building and area has been improved and could function as a cultural and community focal point for the waterfront. Community oriented commercial uses, such as markets, small-scale retail shops, a heritage museum, in association with developed public spaces, would contribute to the activity and use of this prominent area of the waterfront.

The plan area is proposed to contain a range of commercial development and activity that is oriented to the waterfront residents, visitors and vacationers, and will be a secondary focus to commercial development in Ladysmith's downtown core and existing shopping centres. Commercial uses on the waterfront include tourist commercial along the Esplanade, destination resort and marina development at Slag Point (and a possible future marina adjacent the Federal wharf), supporting commercial uses for the residential neighbourhood, and community oriented commercial uses in the Expo Legacy area. The scale of commercial development is expected to reflect the character of existing development in adjacent areas, and be appropriately scaled for the natural waterfront setting.

The objectives and policies for future commercial development within the Waterfront Plan Area are presented in this section.

4.2.1 Objectives

- *To provide for commercial development in the waterfront area to serve the tourist and recreation, community and neighbourhood, demand for commercial uses, and as a secondary focus for commercial development in Ladysmith.*
- *To promote the waterfront as an active, vibrant part of Ladysmith through development of several commercial focal points, including the Esplanade, Slag Point, and the Expo Legacy area.*

4.2.2 Policies

4.2.2.1

Permit commercial development in the areas shown on Map 2 - Land Use Plan for local and tourist-oriented commercial uses.

4.2.2.2

Areas designated **Tourist Commercial** on Map 2 - Land Use Plan allow for limited commercial development oriented to tourists and visitors to the waterfront and Ladysmith. Permitted uses include *tourist-oriented retail and services, restaurants, recreation entertainment complex, heritage exhibit and visitor information offices*. The maximum commercial floor area ratio is 0.50 f.a.r. and the

gross floor area of individual commercial units shall not exceed 200 square metres (2,150 sq.ft.). Buildings in this designation shall not exceed two storeys in height.

4.2.2.3

Areas designated **Resort Commercial** on Map 2 - Land Use Plan allow destination resort development for tourist and vacation accommodation to include *hotel, resort condominium, and complementary resort hotel and marina retail, services, restaurants and neighbourhood pubs* as permitted uses. The maximum density for resort development is a floor area ratio of 0.60 f.a.r., excluding floor area used for underground parking, and the gross floor area for individual commercial units shall not exceed 465 square metres (5,000 sq.ft.). Buildings in this designation shall not exceed four storeys plus a loft. However, site specific height regulations may be considered as part of a comprehensive rezoning proposal, but shall not exceed six storeys, excluding underground parking.

Bylaw 1652

4.2.2.4

Areas designated **Community Commercial** on Map 2 - Land Use Plan allows for the establishment of a community and cultural focal point Town residents and visitors to the waterfront. Permitted uses may include a *market, limited retail, heritage museum, cottage industry, community meeting rooms and offices, and civic plaza and open space* uses. The maximum permitted density is a floor area ratio of 0.30 f.a.r. and the gross floor area for individual commercial units shall not exceed 100 square metres (1,075 sq.ft.). Buildings in this designation shall not exceed two storeys in height.

4.2.2.5

Areas designated **Marina** on Map 2 - Land Use Plan allow for marina development catering to Ladysmith waterfront visitors, vacationers, and residents. Permitted uses include *marina* and associated uses such as *boat moorage* and *service facilities*, *boat sales and repair*, *public and private wharf*, *floating homes*, *marine museum*, and *restaurants*. The scale of marina development should be limited and maintain a small scale harbour character for Ladysmith.

4.2.2.6

Commercial development in the Tourist Commercial, Resort Commercial, and Community Commercial designations is to be provided with municipal services, including roads, sanitary sewer, water and storm drainage. Marina development is to be provided with municipal sanitary sewer and water service.

4.2.2.7

Commercial development is subject to the Development Permit Policies of the Official Community Plan and the Part Three - Urban Design Guidelines contained in this Area Plan.

4.3 Industrial

The Ladysmith waterfront has historically been used for industrial, marine and railway activities associated with the coal industry, and more recently, the forest industry. Industrial use of the waterfront continues today in the area adjacent to the waterfront plan area, north and west of Ludlow Road and the Federal wharf, with the operating lumber mills and associated marine activity. There are several light industrial uses on the north side of Ludlow Road that serve the areas' forest industries.

Future industrial development for activities which support primary industries, such as the forest manufacturing industry, are expected to be one of the strongest industrial growth sectors on the Island. Ladysmith can be expected to capture a portion of this light industrial market, particularly for forest sector businesses such as remanufacturing and small companies providing supply and repair services, as well as small manufacturing businesses. The lands on either side of Ludlow Road on the waterfront could serve as the next light industrial area in Ladysmith, complementing the existing forest industrial uses to the north and providing locations for new light industrial and larger scale service commercial uses. Service commercial uses (eg. retail building supply stores, trade contractors, and automotive sales and repairs) will likely be those focused on the local urban area and serving the residents of the Town.

The plan area is proposed to contain an industrial park area at Ludlow Road to provide a location for light industrial development. There is a total developable land area of approximately 5.25 hectares (13.0 acres) in the plan area that is designated for light industrial use. The light industrial uses will complement the current industrial development on the lower waterfront. The location of light industrial development in this part of the plan area, together with an open space vegetation buffer, will assist in providing a land use transition from the mixed waterfront uses anticipated further to the south and east. Service commercial uses will also be provided for within the light industrial area, to allow locations for larger scale service commercial uses which can take advantage of the good visibility, accessibility, and parcel sizes that can be made available in this part of the Town.

The objectives and policies for future industrial development within the Waterfront Plan Area are presented in this section.

4.3.1 Objectives

- *To ensure adequate lands are designated in appropriate locations of the Town for future light industrial development.*
- *To encourage the development of an area of the waterfront for light industrial use to complement existing industrial development and provide a buffer between the mixed use waterfront area and the industrial area.*

4.3.2 Policies

Bylaw 1811

4.3.2.1

Permit industrial development in the areas shown on Map 2 - Land Use Plan for light industrial and service commercial uses.

4.3.2.2 Areas designated **Light Industrial** on Map 2 - Land Use Plan allow for light industrial development to include *small scale manufacturing and assembly, lumber remanufacturing, warehousing, wholesaling and storage*, and service commercial uses including *building supply stores, trade contractor's automotive sales and repairs*. The maximum floor area ratio for industrial development is 0.30 f.a.r. Buildings in this designation shall not exceed two storeys in height.

The property located at 1030 Oyster Bay Drive (Lot 1, District Lot 24, Oyster District, Plan VIP72824 except part in plan VIP81529) is designated as **Light Industrial** and will continue to provide significant floor area for light industrial uses. Additional service commercial uses are permitted at 1030 Oyster Bay Drive to take advantage of the visibility to the highway and to complement other land uses in the industrial and commercial areas. Permitted uses may include limited retail, offices, and complementary commercial services. The maximum gross floor area for individual service commercial units shall not exceed 465 square metres (5,000 sq. ft.) and the total service commercial use may comprise no more than one-half of the light industrial gross floor area.

4.3.2.3

New development in the Light Industrial designation is to be provided with municipal services, including roads, sanitary sewer, water, and storm drainage.

4.3.2.4

Industrial development is subject to the Development Permit Policies of the Official Community Plan and the Part Three-Urban Design Guidelines contained in this Area Plan.

5. Servicing

Future development of the waterfront will necessitate extension and improvements to the current infrastructure servicing for the waterfront plan area. The existing infrastructure servicing levels for sanitary sewer, water, and storm drainage are limited and reflect the present undeveloped condition of the majority of the waterfront plan area.

Municipal sanitary sewer service can be provided by connection to the Sewage Treatment Plant (STP) through an existing trunk sewer located along the E & N railway corridor in the waterfront. The existing trunk sewer line (600mm diameter) has sufficient capacity without any upgrades to service the anticipated waterfront development. The Town's wastewater is treated at the STP, which has a rated capacity of 1.342 million gallons per day. The actual capacity is estimated at 1.0 million gallons per day, and is already surpassed by the current sanitary flows of the Town. The waterfront plan area will produce additional sanitary sewer flows to the existing sewage treatment plant. Improvements to inflow and infiltration conditions of the existing sanitary sewer system can reduce the flows to the STP. Once the necessary improvements to address the infiltration conditions have been completed, the STP will accommodate both the Town population and waterfront development.

Development within the waterfront plan area will connect to the existing sanitary trunk sewer. Only a portion of the plan area is at an elevation that allows gravity flow to the trunk sewer. The majority of the waterfront plan area will require the use of pump stations, and a combination of forcemains and gravity sewers, to service the development areas. Sanitary sewer service for the waterfront is essentially divided to serve the industrial area and lands further north with a single pump station, and then the remainder of the mixed use waterfront area with a pump station located at Slag Point. A sanitary sewer system consisting of two pump stations and the associated gravity sewers and forcemains to connect to the existing trunk sewer and the STP is proposed to service development in the plan area.

Municipal water service to the waterfront plan area is limited at present. There are existing watermains in the south portion of the waterfront - serving the RV park and the Oyster Cove residential development - and in the north within Ludlow Road - serving the industrial marine areas. A watermain extension from Gatacre Street provides service to the existing waterfront marina. The water supply for the Town, and in future for the waterfront lands, is derived from two sources - Stocking Lake and Holland Creek. The Town of Ladysmith is covered by four water pressure zones. The waterfront plan area is within all of pressure Zone 2, and is also within the lowest end of pressure Zone 1. There is

sufficient capacity in the water supply to provide adequate water flows and pressures for the Town. However, pressures in the upper areas of the Town will likely drop as a result of adding waterfront development demand to the water supply system. To accommodate development of the waterfront, upgrading to further increase the capacity of the Town's water supply is necessary. A program of water system upgrading is currently being undertaken by the Town.

A system of watermain through the waterfront and connected to existing and proposed extensions of watermain in the present water system is recommended to provide water service to the plan area. This will ensure a suitable level of water service for future development, provide for sufficient fire flows, and strengthen the looping system for the Town's water network.

The currently undeveloped waterfront performs an informal storm drainage function for areas of the Town that are upstream from the waterfront. Culverts crossing the Island Highway convey storm drainage to the waterfront where stormwater drains naturally to the shore in various unnamed tributaries, and then discharge into the harbour. As the waterfront develops a formal municipal storm drainage system will be required to provide stormwater management for the uplands and the developing waterfront lands.

The storm drainage system proposed for the waterfront area will include surface water drainage collection to storm sewers located within the proposed roadway network. Storm

sewers would then direct stormwater to discharge into the harbour at four storm outfall locations. The roadways will serve as the catchment boundaries for flows toward the harbour. The largest three of the storm outfall locations allow stormwater to leave the storm sewers in the roadways and surface discharge over natural open space areas prior to entering the ocean at the outfall locations. This allows natural cleansing of stormwater through the vegetation in the open space drainage path. The smallest of the four outfall areas will discharge into Rocky Creek and then flow into the harbour. Control of surface water quantity and quality prior to entering the storm sewer system will be addressed by individual developers of lands on the waterfront.

The objectives and policies for the provision of infrastructure services to the Waterfront Plan Area are presented in this section.

5.1 Objectives

- *To provide for adequate servicing infrastructure to allow for the extension of the Town and future development of the waterfront area.*
- *To ensure sufficient water supply and fire flow protection for water service delivery to the waterfront, while maintaining adequate service to existing areas of Town.*

- *To continue improvements to the sanitary sewer system with respect to water inflow and infiltration, in order to ensure sanitary sewer service is available for waterfront development.*
- *To ensure stormwater management prevents increased flooding and erosion and to mitigate any impact of future development on the marine environment.*

5.2 Policies

5.2.1

New development in the waterfront plan area shall be serviced by municipal sanitary sewer, water, and storm drainage systems.

5.2.2

Ensure that a municipal sanitary sewer system is provided for new development in the plan area, which is to include the existing trunk sanitary sewer and the proposed gravity sewers, pump stations, and forcemains as shown on Map 5 - Sanitary Sewer.

5.2.3

Complete the infiltration program to ensure the Sewage Treatment Plant facility will meet the anticipated sewage flow capacity demand of the waterfront plan area.

5.2.4

Require new development in the waterfront area to plan and construct the necessary sanitary sewer infrastructure for proposed developments, including connection to the Sewage Treatment Plant, trunk sewers and distribution sewers.

5.2.5

Ensure that a municipal water system is developed to provide for new development in the plan area, delivering adequate supply and fire flow protection, which is to include the proposed watermains and connections to the existing water supply system as shown on Map 6 - Water Servicing.

5.2.6

Continue the program of upgrading the existing water supply system to ensure adequate capacity is available to service development in the waterfront plan area.

5.2.7

Require new development in the waterfront area to plan and construct the necessary water system infrastructure for proposed developments, including connections to the existing water system, new watermains and water distribution lines.

5.2.8

Ensure that stormwater management is addressed for new development in the plan area, including surface water collection into storm sewers located within roadways and then discharged to a series of storm outfalls to the harbour, as shown on Map 7 - Storm Drainage.

5.2.9

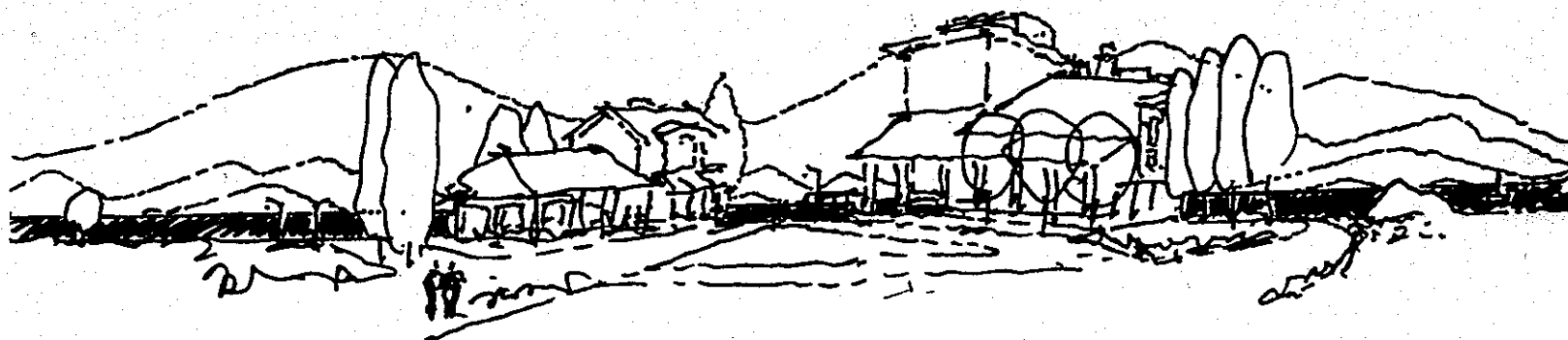
New development will be required to conduct a *detailed stormwater management study* for proposed developments to determine the specific method of stormwater management. Best Management Practices should be incorporated into all new developments to assist in water quality enhancement.

Part Three

WATERFRONT

Urban Design Guidelines

Town of Ladysmith, BC



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1.0 Introduction

The **Ladysmith Waterfront Urban Design Guidelines** has been compiled as part of the *Town of Ladysmith Waterfront Area Plan*, and will eventually become a working part of the zoning by-law and development approvals process for the Ladysmith waterfront. It is intended to guide developers and their architects toward a design direction that will be inspired by its specific waterfront location, local history, natural environment, site topography, local architectural precedent and the social and cultural influences of the area's habitants and avoid importing of themes, and stylistic elements from other places and/or times.

Context

Ladysmith is a small seaside town located on the east coast of Vancouver Island approximately 100km north of Victoria along the tourist belt between the island's two main ferry terminals in Nanaimo and Victoria. The growing population, of 6,500, is made up of approximately 50% families and 50% retirees, with a seasonal tourist population.

Historically Ladysmith has had a strong relationship with the water's edge. The Government wharf, the marinas, Transfer Beach Park and views from the residential areas serve to continue this relationship. This connection to the waterfront has been eroded by the increasing volume and speed of traffic on the Island Highway.

The current character of the under-used the Ladysmith waterfront is largely dependent on the form and detail design of its existing buildings, the steep topography and the abundant vegetation.

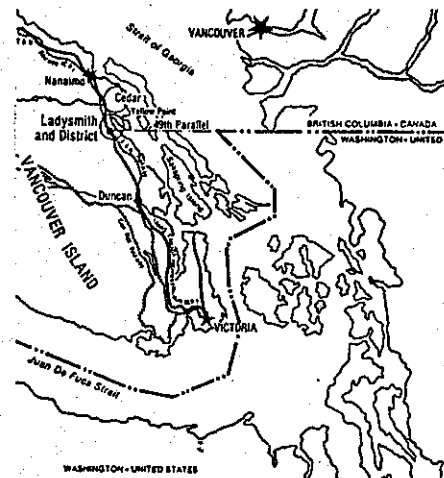
Site Description

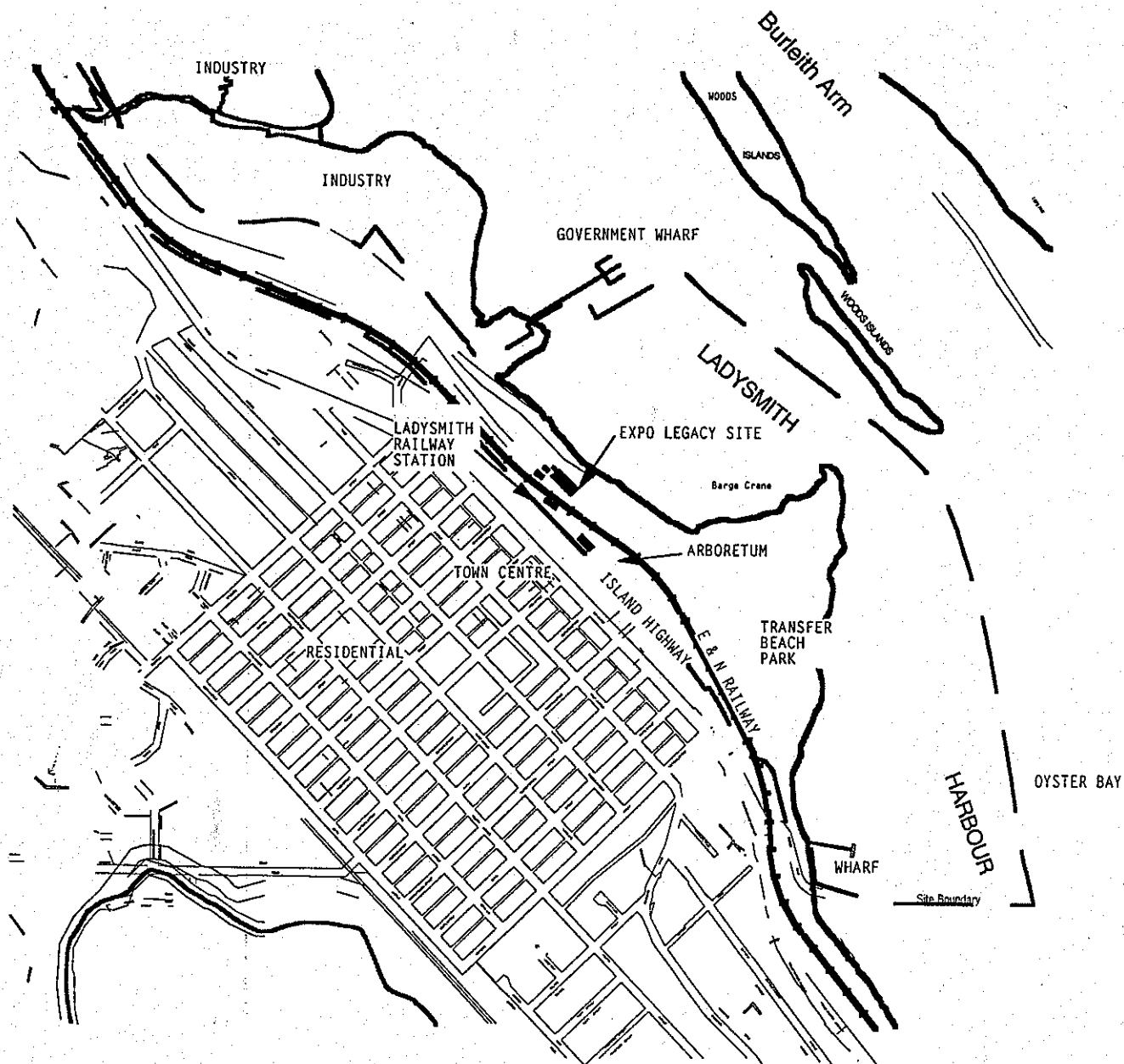
The Ladysmith Waterfront area is an approximately 100 acre parcel of land with a variety of zonings. It is located to the east side of the Island Highway along the shore of Ladysmith Harbour, in a thin strip which is visually screened from the town by heavy vegetation.

The waterfront site is predominately made up of open space with few buildings and a number of other structures.

The E&N Railway right-of-way and the Island Highway both run parallel between the original gridded town street system and the central waterfront.

[See page 3-5 for Current Uses]





CURRENT USES

LADYSMITH WATERFRONT, B.C.
October, 1996

de Hoog D'Ambrosio architects

Ladysmith Waterfront

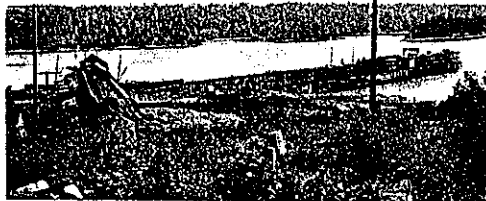
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3-5

History

Originally a coal port with a number of wharves for shipping the coal mined from a nearby area known as Extension, Ladysmith was one of the many communities that grew up around the mines of central Vancouver Island.

Ladysmith's rapid population growth occurred during the turn of the century. The domestic and American demand for coal was strong and led to the growth of Ladysmith from a camp site to a small town centre by the 1920s. Many of the miners' homes and some other buildings were relocated by train from Extension to Ladysmith as Ladysmith became more popular. By 1916 civic boundaries, streets and the commercial district were surveyed and built in what is now called the Old Town.

Repeated labour strikes, and W.W.I marked the end of the growth of Ladysmith during the coal era. By 1931 the coal mines had closed permanently. It wasn't until after the town had experienced several years of depression that it experienced a second recovery with the growth of a major forest industry. Despite the change in economic base and the influx of new people into Ladysmith, the town was never to become a logging community. [ref.: R. Goodacre, *Ladysmith Heritage Inventory*, 1990]

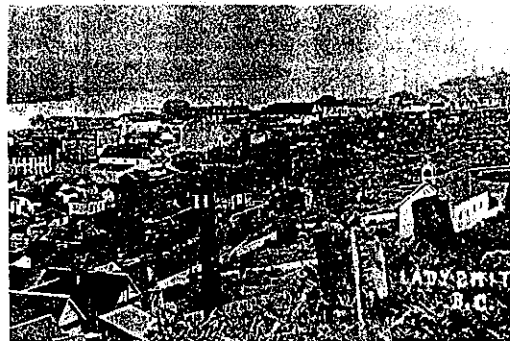


Coal bunkers(left), and the long wharf. Ray Knight collection.

Site History

The Ladysmith waterfront has played an important role in the history of Ladysmith and continues to function in part as an industrial area.

The waterfront has at one time or another been the site for a variety of port, rail and industrial buildings and marine structures. Most of these buildings were pre-W.W.I, wood framed structures and have largely been either demolished or burnt down. Remaining buildings and remnants are important to preserve and interpret as part of the waterfront development. [see drawing: *Historic Context*, page 3-7].



Early view of Ladysmith looking down from Third Avenue, showing stumps in the cleared area. Building in the right foreground is the first Catholic church. Ray Knight collection.

Today

Its history in coal, and then lumber qualifies Ladysmith as a heritage industrial town. Today residents and tourists are beginning to reshape its' image into a seaside tourist destination.

Residential and some commercial expansion has occurred, since the 1970s, along the southern, western and northern borders of the historic street grid. The only residential use along the waterfront occurs to the immediate south of the central waterfront area and consists of a small number of single family lots in a gated community. This highly restrictive and exclusive housing type is not seen as an appropriate model for the rest of the waterfront.



The Abbotsford(right) and Grand(centre) hotels, both brought from Wellington and rebuilt on the Esplanade at Ladysmith, 1900-1901. Ray Knight collection.



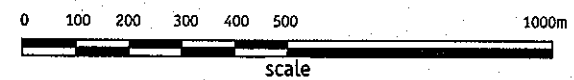
HERITAGE SITES:

1. Comox Logging and Railway Shops.
Built 1943.
2. Comox Logging & Railway Office.
Built 1946.
3. Ladysmith Railway Station
Built circa 1900
4. 'The Short Line'
Built 1902
- 5a. Coal Transfer Wharfs.
Built 1898-1900
- 5b. Coal Slag Pile Remains
6. Foundry & Iron Works
Built 1901
7. Shingle Mill
Built 1903. Burnt down 1928.
8. The Smelter
Built 1902
9. City Power Plant
Built 1910. Dismantled 1942
10. Old Shore Line
11. "The Beaches"
12. Extension Hotel [apartments]
Built c. 1904
13. Old Post Office
Built 1908
14. Town Hall
Built early 1950s
15. The Aboretum
Opened 1962
16. Jones Hotel [Museum]
17. Old Telephone Office
Built 1903
18. Barge Crane Pier Remnants

HISTORIC CONTEXT

LADYSMITH WATERFRONT, B.C.
October, 1996

de Hoog D'Ambrosio architects



Ladysmith Waterfront

Urban Design Guidelines
3-7

Current Use

The Ladysmith waterfront is predominantly used by local residents and those visitors who are aware of its presence. Those who are physically able to transverse the steep escarpment at one of its few pedestrian access points can get down to the foreshore. The water's edge has limited visibility from the Esplanade/ Island Highway and its main attractions are Transfer Beach Park, moorage at the Government wharf and as a place for walking or 'hanging out'.

[see page 3-5]

Recreation Opportunities

Transfer Beach at the southern end of the waterfront offers the most comprehensive area for both passive and active recreation along the waterfront. This area includes a camping/ RV/ park, a boat launching area, swimming, open space for unstructured activities, a children's play area and a horseshoe pitch.

Further north there is moorage at the government wharf and a staging area for scuba divers and fishermen.

Slag Point, which lies between Transfer Beach and the government wharf, is currently used as a passive recreational and 'hanging out' area.

Site Accessibility

Physical steepness and absence of well-marked and well-maintained accessways along the waterfront prevents pedestrians from easily walking down to the foreshore. It is, however, far less strenuous to walk from the Island Highway edge of the Town Centre to the top of the escarpment for a view of Oyster Harbour.

The steepness of the landform at Ladysmith means that few people are seen cycling up the east-west streets. Trips along the relatively flat north-south avenues and the waterfront flats are less strenuous. Uneven gravel roads within the waterfront area means that few cyclists use this area. There is the possibility of connecting a new waterfront cycleway into existing cyclepaths.

The high volume of north-south main local and visitor traffic on the Island Highway disconnects the Town from the Waterfront. Secondary local traffic travels down the east-west streets to First Avenue or the Island Highway. There are no signposted vehicular accessways to the waterfront. As a tourist one would have to be somewhat determined to drive down to the waterfront.

Parking is available at Transfer Beach, at the toe of the escarpment adjacent to the Government wharf and along The Esplanade/ Island Highway. Casual parking also occurs at various other locations on the waterfront site along the existing gravel roads.

The Island Highway & Traffic Patterns

Without a doubt the most important consideration with regard to traffic calming and one of the most important site issues is the Island Highway.

The recent realignment of the Island Highway around the old town centre on First Avenue down to the Esplanade and the widening and upgrading of the Island Highway from Victoria to Campbell River has meant that the traffic problem through the town centre has been alleviated but that there is now a new "speed tunnel" along the Esplanade which serves to split the residential and commercial town centre from the waterfront.

While the road has been reduced from four lanes to two lanes to the immediate south of Ladysmith, the Esplanade is an overly wide road with parking along each side. As a pedestrian it is a very difficult stretch of asphalt to negotiate.

The Town of Ladysmith with the assistance of its Green Streets program has begun to traffic-calm the main streets. This model will be a good example for any development undertaken on the foreshore and along the waterfront site.

The Railway Line

The E & N Railway line was completed in 1886 connecting Ladysmith north to Nanaimo and south to Victoria. It's proximity to Ladysmith Harbour was useful to bring the coal down from Extension to the Port of Ladysmith for exporting to the mainland and to America.

In 1902-5 the Short Line was laid by the Dunsmuir Company for the sole purpose of transporting coal and miners between Extension and the Port of Ladysmith.

Today the line services a daily train between Victoria and Courtenay which stops at the Ladysmith Railway Station [built c. 1900]. This line together with the Island Highway serves to split the town centre from the waterfront.

The Short Line lies unused and in remnant sections adjacent to the E & N line.

Tourism

Vancouver Island and the west coast of Canada is rapidly growing as a prime tourist destination for increasingly discerning Canadian and international tourists alike. Ladysmith is in an enviable location close to two ferry lines from the mainland, the Nanaimo airport and situated on the E & N Railway and the Island Highway.

Accommodation in Ladysmith at present is limited to private guest houses and several downtown 1 & 2 star hotels/motels. There is, however, an abundance of tourist accommodations in neighbouring Nanaimo, Parksville, Duncan and Yellow Point, all within a 20 minute radius by car.

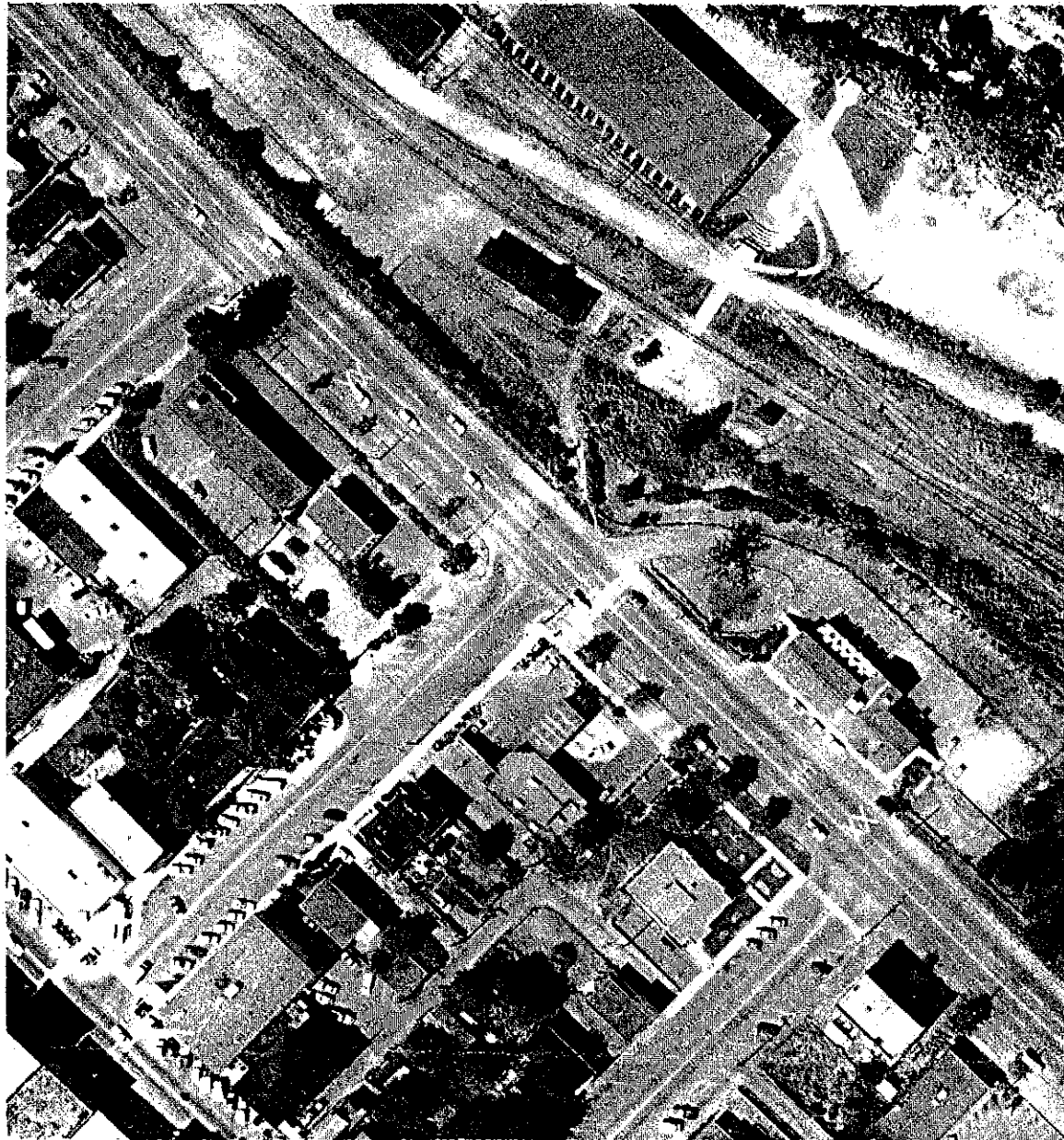
Ladysmith has been recognised with a number of awards including the "Most Beautiful Community on Vancouver Island" and the National Main Street Canada award. It is without a doubt a town with much tourism potential. Currently, however, there are few obviously/visibly available tourist services or attractions, and much could still be done to support the needs and interests of the tourist trade.

Economic Growth

Ladysmith largely operates as a 'bedroom' community providing affordable and attractive housing in a small-town environment. The working age population largely commutes to work to Duncan, Nanaimo, and surrounding towns and production mills. Local employers include the Pacific Timber and Sawmill, commercial fishing licensees, and the Crofton Mill, as well as the tourist and local service industries.

Tourism and recreation in Ladysmith, as for most parts of Vancouver Island, have the potential for growth. In particular, eco-tourism is enjoying a surge in interest.

2.0 Urban Design Objectives



Objectives

1. To develop the waterfront as an active, beautiful, useful, year-round place for local residents and tourists of all ages and capabilities.
2. To link the town centre and residential areas to the waterfront by providing increased physical and visual connection across the Esplanade.
3. To design whenever possible for views from the Old Town, from the Island Highway, and from the top of the waterfront escarpment to Oyster Harbour and beyond.
4. To define the size and shape of the Ladysmith and encourage residential development in the waterfront and Old Town area versus suburban sprawl at the upland fringe of Ladysmith.
5. To plan for vehicle circulation after pedestrian movement is considered.
6. To protect, rehabilitate and restore as much as possible of the natural environment and the local wildlife in the waterfront area.
7. To retell and commemorate the history of Ladysmith's waterfront.
8. To encourage the growth of tourism activities and services in the waterfront area.
9. To encourage economic growth.

3.0 Design Guidelines

The Ladysmith Waterfront Urban Design Guidelines are intended to provide clear and functional criteria, along with the zoning bylaw, for development within the distinct architectural character of this area.

These guidelines have been prepared to inform prospective residential, commercial, recreational and industrial developers and their architectural designers of the special elements, qualities and characteristics that site and building designs should contain.

Allowances for variances from the zoning bylaw will be made based on the design merit of individual proposals. Innovative and creative proposals will be encouraged and supported.

These guidelines place an emphasis on pedestrian scale, on the visibility of building function, and on neighbourliness to other buildings and open spaces. The development of a coherent image and a distinctive roofscape are also key objectives.

By following these guidelines, new development can make an important contribution to the overall beauty and character of the Ladysmith Waterfront.

New architecture in this area should be authentically inspired by this history, by the built history of existing buildings on and adjacent to the site, the waterfront location and the vital marine and industrial activity of the past and the present.

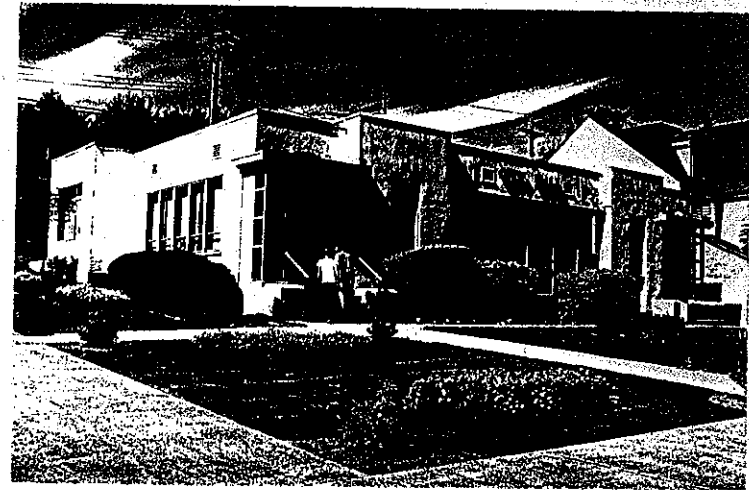
BUILT ENVIRONMENT:

There are few buildings sited on the waterfront study area. Most of the original industrial buildings were pre-WWI, wood framed structures and have been either demolished or burnt down.

The old town centre and residential area is sited on a regular grid first surveyed at the turn of the century and lies to the west side of the waterfront area. Small lots with one and two storey wood-framed houses and two to three storey wood and/or brick commercial buildings are separated from the waterfront by the Esplanade/Island Highway.

To the immediate north of the waterfront site lies an industrial area which is the home to a number of typical industrial style metal sheds and smaller timber structures to the water's edge.

Along the waterfront there are several industrial, marine and railway structures which range from small timber sheds to larger structures such as the Ladysmith Railway Station, the Comox Logging and Railway Main Office, the Dominion Jetty and remnant fragments of railway lines and wharf pylons. Of greatest size is the recently erected wood framed and clad, Expo legacy shed which houses a steam train engine.



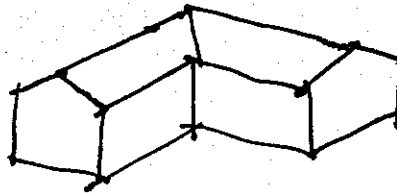
Form

New developments should be designed in sympathy with the scale, form and lot patterns of the adjacent town centre.

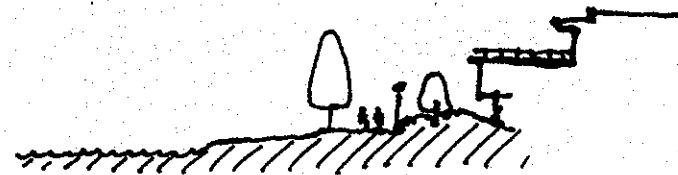
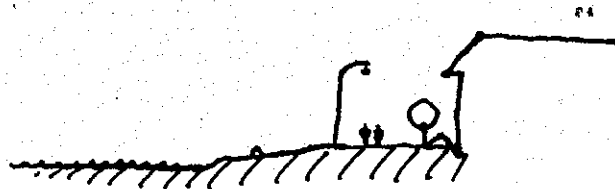
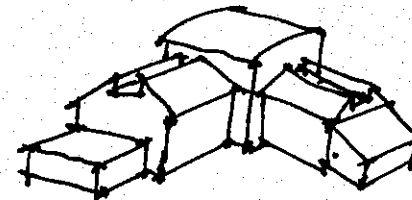
Building forms should recall those of the existing town and step up in height as they get further away from the water's edge.

Within large buildings, several steps may be necessary to achieve this form, add interest, and diminish apparent size.

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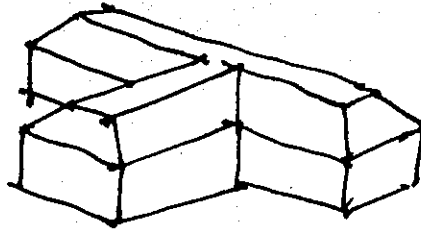


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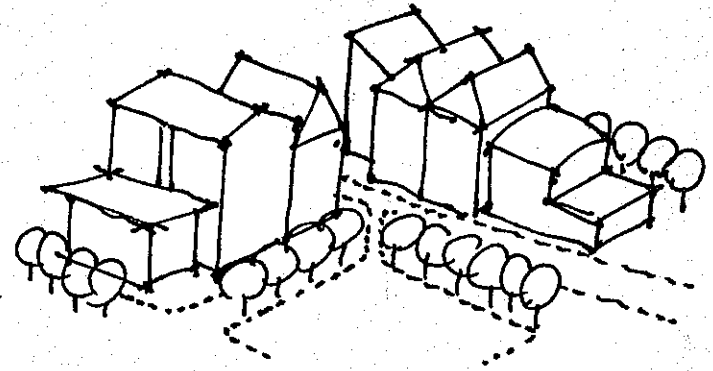


Structure

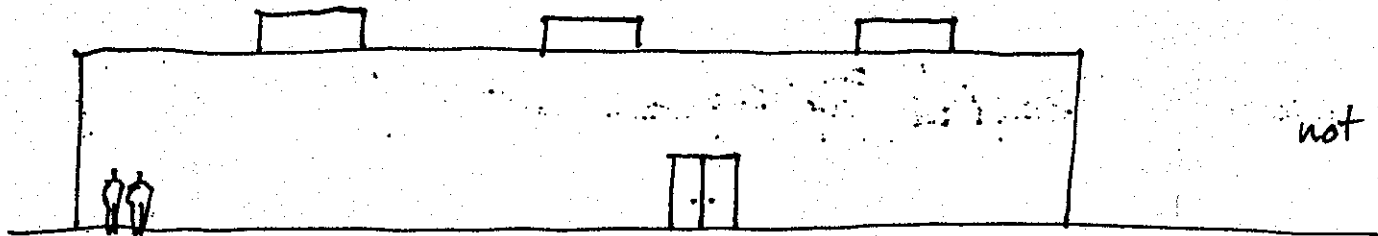
Expression of the structural forces and the supporting elements is encouraged. A vocabulary of form derived through the honest expression of materials and structural systems is preferred. This means that the construction of artificial structure [purely ornamental columns, fake pediments etc.] or large expanses of blank, unarticulated wall, is discouraged.



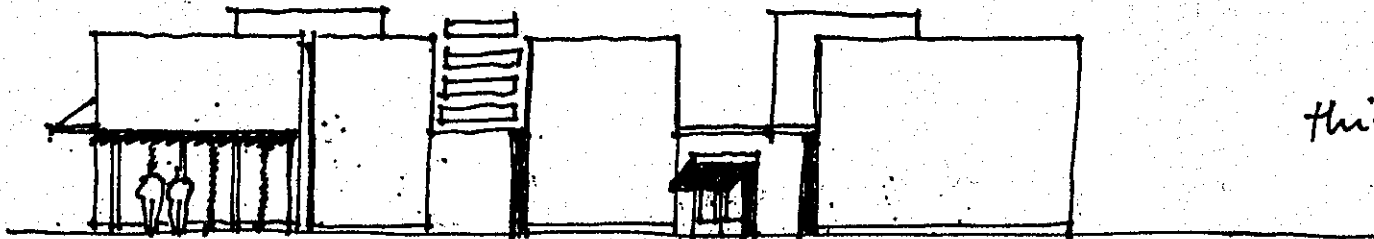
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Massing & Composition

Building massing and the proportion of building height to setback distance have a major impact on the character and scale, or 'feel' of the street and open spaces. Appropriate massing will optimise street proportions, minimise shadowing and retain or enhance views.

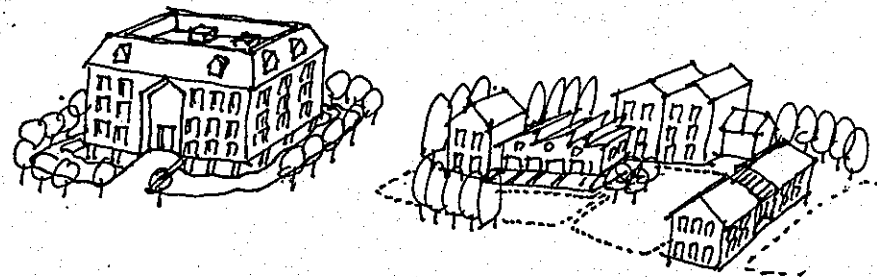
The residential and commercial character of the town suggests that groupings of smaller buildings are designed. Building floor plates should be broken into smaller areas with a maximum size equal to or less than that of the pre-existing residential, industrial or commercial buildings in and adjacent to the waterfront area.

Street edges should be defined through minimal setbacks, an emphasis on vertical proportions and the development of distinctive roof silhouettes.

Larger and longer buildings should be visually broken into "human-scaled" proportions.

Design considerations such as framing of views, establishment of orienting landmarks, and careful proportioning of streets have all contributed to the proposed building massing.

BUILDING MASSING AND COMPOSITION:



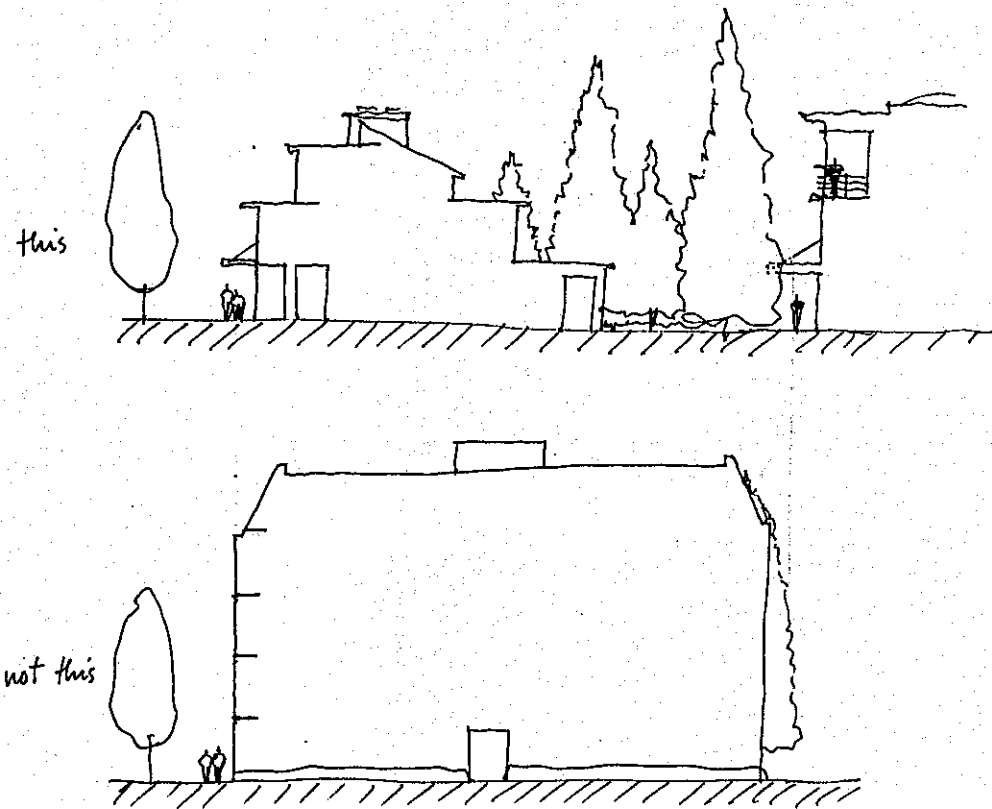
OFTEN, BUILDING ECONOMICS SEEMS TO COMPEL DEVELOPMENT TO TAKE BULKY FORMS AT A SCALE THAT DOMINATES THE SITE AND DISCONNECTS A BUILDING FROM THE PLACE IT IS BUILT. IF THIS 'BOTTOM-LINE ONLY' ATTITUDE TOWARD DEVELOPMENT IS REPLACED WITH A MORE THOUGHTFUL APPROACH, THE RESULT CAN BE BOTH VIABLE AND MORE LIVABLE.

VARIED BUILDING FORMS AND SIZES, INTEGRATED OUTDOOR SPACES AND A CAREFULLY COMPOSED LANDSCAPE ARE ALL POSSIBLE IF THE SITE IS CONSIDERED WHOLISTICALLY. A MIX OF USES AND EVEN INCREASED DENSITY CAN CONTRIBUTE TO A BETTER URBAN ENVIRONMENT.

Building Height

An important consideration for development on a steep slope with distinctive views is the maintenance of sight lines. By imposing height limits and designing for the views with stepped, articulated, well-positioned buildings views can not only be spared, but also framed for enhanced vistas.

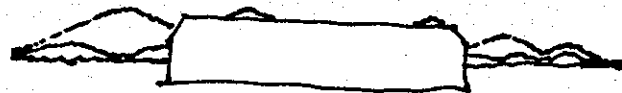
The township of Ladysmith is largely made up of 1 to 3 storey buildings with the occasional 4 storey apartment building. It would be inappropriate to exceed this height given the expressed desire of the town's residents to maintain the small scale character created by the modest height of buildings in Ladysmith.



Location

The Ladysmith waterfront site is made up of a number of varied areas with differing physical conditions. New development should respond to the particular topographical and historical local context of each sub-site.

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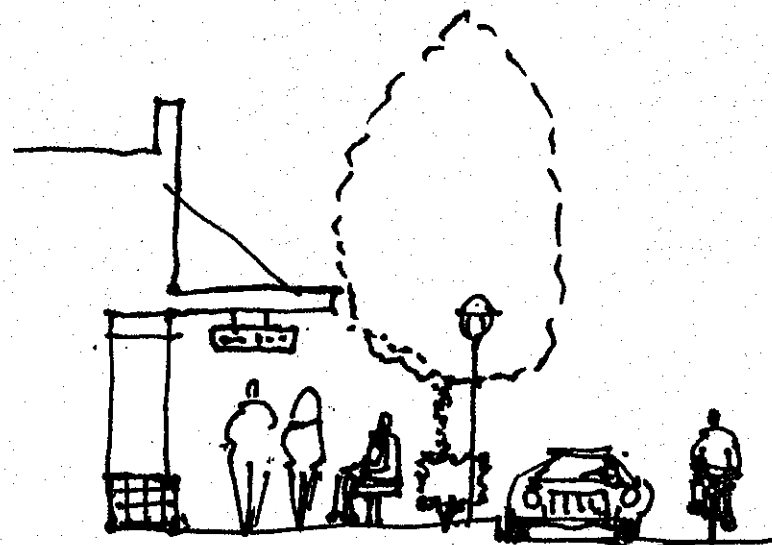


FRAMING VIEWS

Views to and from buildings and views between buildings should be carefully considered during the design stage. Framed or glimpse views can be as powerful as sweeping panoramas.

Buildings should define street edges and make positive outdoor space. The use of a simple street pattern, and the use of build-to lines as well as setbacks, will ensure a good relationship between buildings and streets and the outdoor spaces they form.

Building siting which creates a series of sunny pedestrian places, protected from the prevailing winds, will encourage people to use the outdoor open space during all seasons.



Building Entrances

The entrance should be clearly expressed through architectural means. Entrances offer special design opportunities. The provision of weather shelter and interest through use of canopies, trellises, covered walkways, and screening can mark an entrance and help modulate the building mass.

Primary entrances should be clearly visible and directly accessible from the principal frontage street. If this is not possible, an architectural element such as a gateway may be used to signify and indicate the location of the entrance.

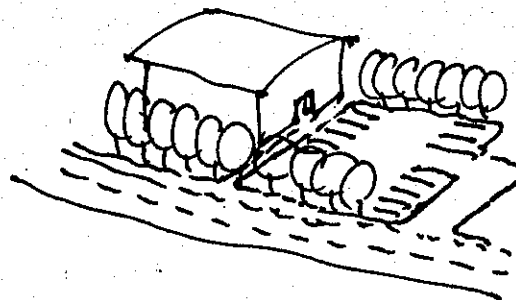
Secondary entrances may be located along pedestrian paths or adjacent to public open space.

Entrances to and from parking garages should be designed with special care for safe pedestrian flow. User safety and opportunities for positive social interaction should be considered.

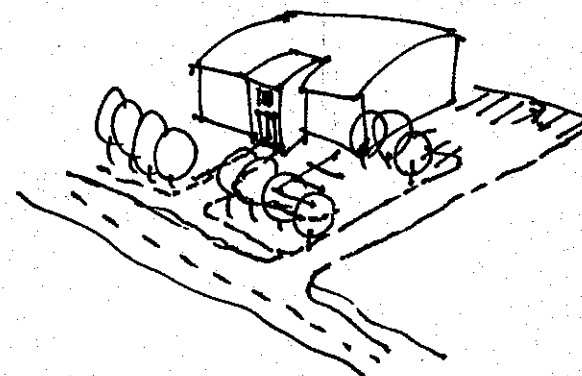
Stoops, porches or alcoves are encouraged for residential and retail areas to help provide a transition from the public street to the semi-private realm of the house, apartment block or commercial building.

Porch and entry design should be in scale and character with the building and carefully integrated with the overall architectural approach.

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CLEARLY EXPRESSED ENTRY

Doors, Windows And Canopies

Entrance elements such as doors, windows and canopies may provide an excellent opportunity to provide interest and detail to an otherwise functional building elevation.

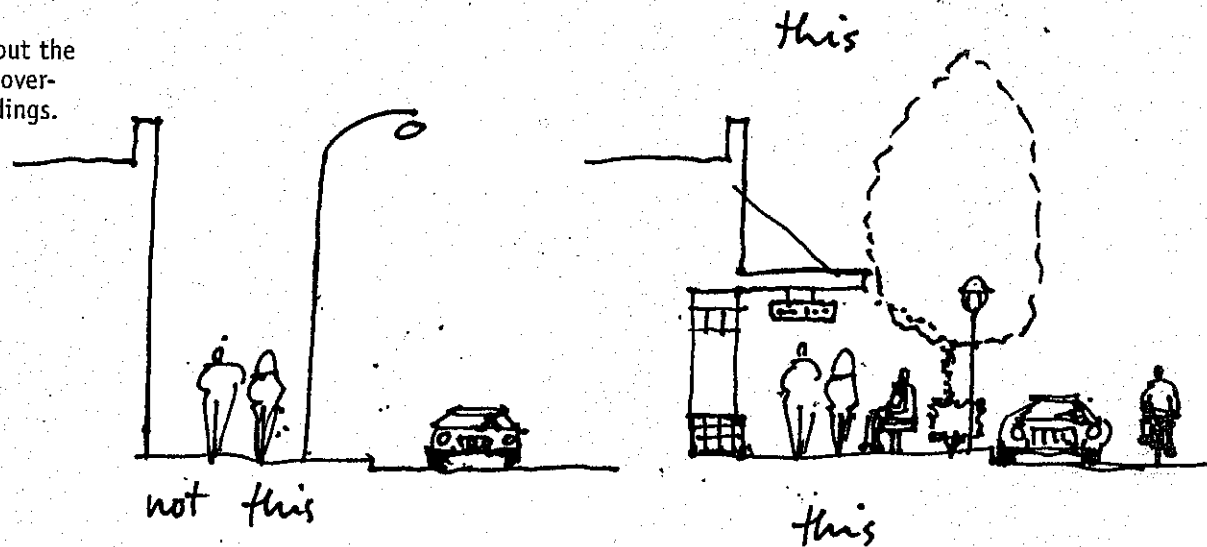
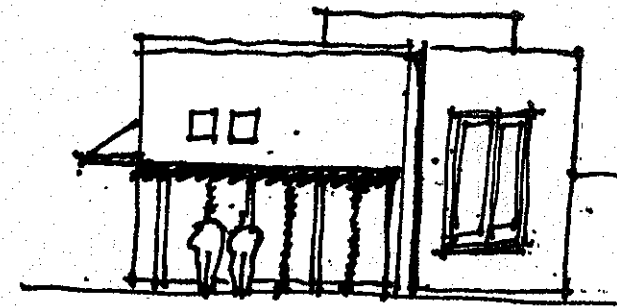
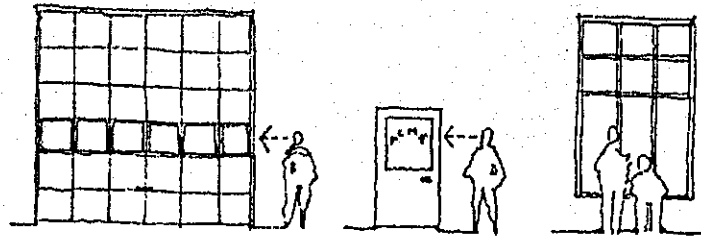
All exterior doors should have a certain amount of clear or translucent glazing.

Windows must be glazed with clear glass, transparent solar-tinted glass, or patterned obscure glass. Mirror glazing is not permitted.

Window sill heights permitting views into and from the building are recommended along streets and lanes.

Overhead protection may be made of glass and/or metal and may be supported through such means as steel frameworks, heavy timber structures, tensioned steel rods.

To add to personal security throughout the site, all pedestrian areas should be overlooked by windows of adjacent buildings.



Platforms, Decks And Terraces:

Great views to Ladysmith Harbour and the surrounding vegetation, encourage the extensive use of decks and viewing terraces from public and private realms.

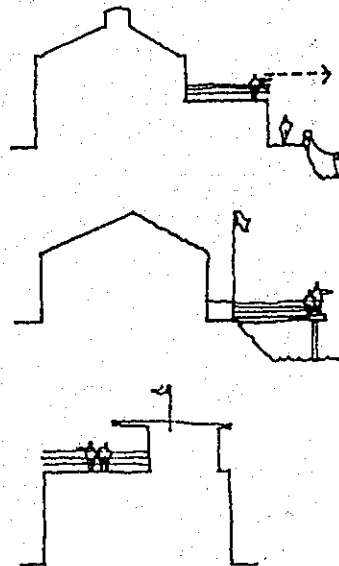
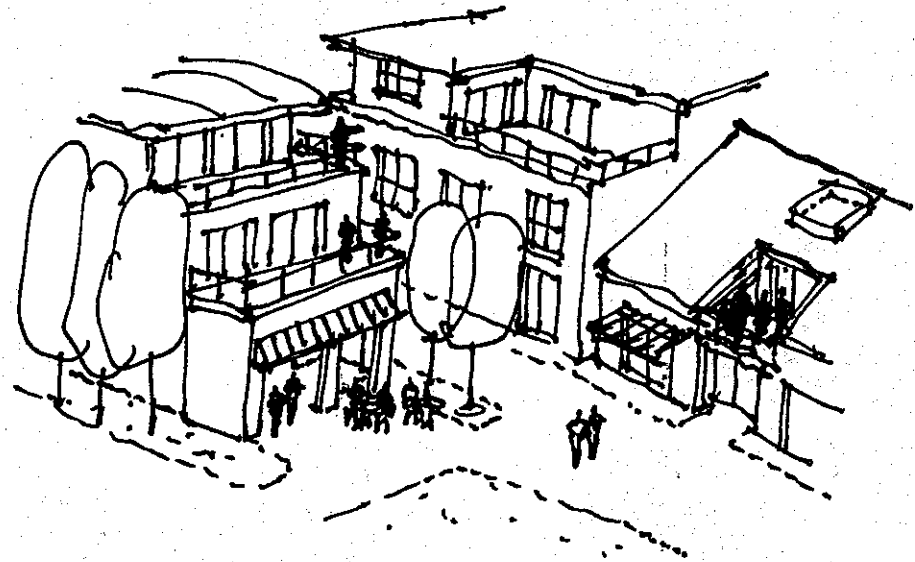
Wherever possible, viewing areas or platforms, especially on sites near the water, should be provided for public appreciation of interesting marine or industrial activities and of the harbour itself.

Flat roofed areas should be decked and accessible.

Decks and viewing areas should be integrated into the built or natural environment by way of design and similar material use.

Public viewing decks should be incorporated into mixed-use areas to encourage surveillance and vibrancy in those areas.

Terraces and decks for viewing, sheltering, and gathering should be incorporated into the network of walkways/cycleways.



Roofs

The roofscape of the waterfront area will be highly visible from The Esplanade and higher elevations in the town area.

The town typology stems largely from the miners cottages and retail street where pitched roofs dominate.

Roof forms should strongly relate to existing forms and provide skyline interest.

Extensive use of flat roofs is discourage. Flat roofs may be used if at least 50% of the roof is usable and there is easy access from the interior or exterior of the building.

Traditional industrial roof forms are suggested as appropriate inspiration.

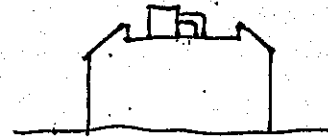
Allowable roof forms will include shallow sloped, butterfly, sawtooth, with or without light monitors, and raised ridge for industrial and commercial buildings and residential roof forms for the tourist commercial, resort residential and residential development.

Preferred materials include metal, slate tile and shakes.

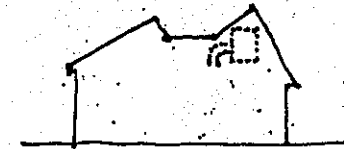
Rooftop mechanical equipment should be well-integrated into the roofscape, either through careful design of the equipment installation or through screening devices.

Brightly coloured roofing is discouraged.

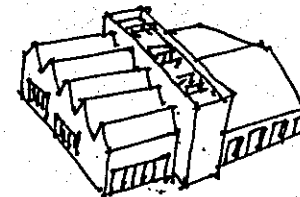
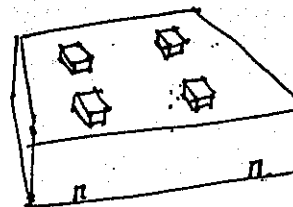
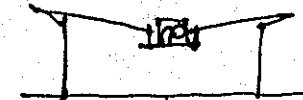
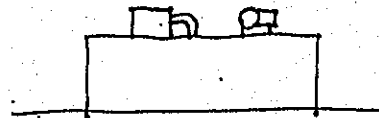
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ROOFTOP HVAC INCORPORATED



ROOFSCAPE

Fences And Walls:

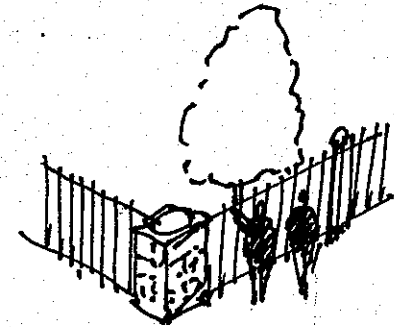
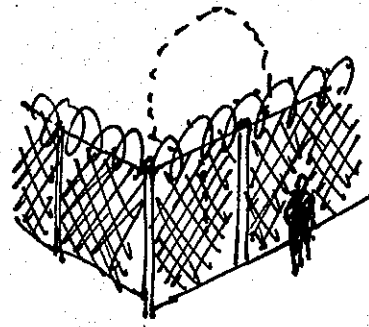
Because fences and walls play a major part in defining the public realm, they should be as carefully designed as the buildings themselves. The design and materials of fences and walls should be complimentary to the building's architecture.

Appropriate materials for fences and screen walls will be related to the building cladding and may include brick, timber, stone, concrete masonry, well-detailed chainlink or combinations thereof. Hedges are other landscaping elements are acceptable devices for screening and separation.

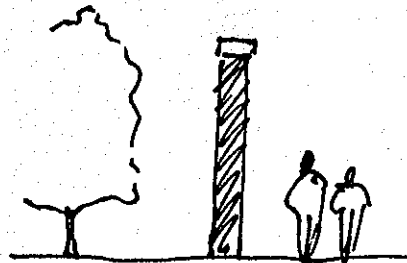
Fences and walls should be kept to a minimum height to allow for surveillance and prevent the creation of enclaves and unsafe areas.

Long lengths of wall should be articulated in plan and/or in profile.

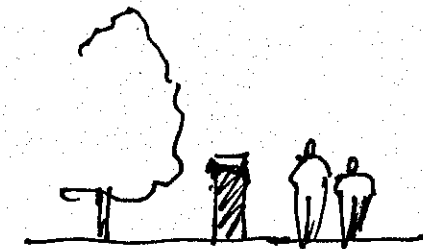
The use of fences and walls to privatise views and large areas of land along the waterfront is discouraged. Private gated enclaves should not be created.



VISUAL ACCESSIBILITY



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Wall Cladding

Cues may be taken, for types of wall cladding or face structural materials, from the older existing buildings along the waterfront area and in the neighbouring residential and retail area of Ladysmith.

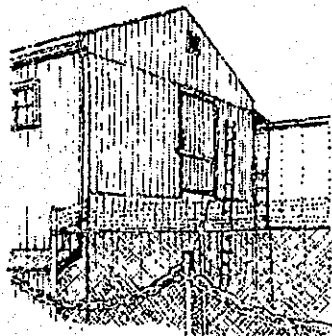
Exterior cladding materials should be durable, textured, and consistent with the industrial/marine character.

While conventional prefinished building materials are expected, naturally-coloured materials which acquire a patina over time are desirable.

Brick, concrete, stone, wood siding and metal are all examples of recommended cladding materials.

Vinyl siding, mirrored glass, and exterior insulation finish are discouraged.

Artificial materials [those that are made to appear as something they are not] are not permitted.



Colour

The distinctive character and coherent image of the Ladysmith waterfront area will be enhanced by adherence to a colour selection schedule which will specify a wide range of colours for wall, roof and trim.

Naturally coloured materials including stone, galvanised metal, concrete, brick, natural and treated timber etc. are encouraged.

Where the use of colour is appropriate the Benjamin Moore Paint Charts will be used as the colour selection palette for the waterfront area.

Paving Materials

Alternatives to asphalt paving for parking lots, driveways and walkways are desired, from both an aesthetic and environmental point of view. Combinations of sand set unit paving and concrete are recommended. Creative mixing and patterning of pavement is encouraged. Paving materials should be consistent with those used in adjacent public open space in order to integrate public and private open space.

Site Works

Private driveways and lanes should be paved and detailed in a complementary manner to neighbouring public streets in the waterfront area.

Surface parking and driveways should be considered primarily pedestrian places, with vehicle access permitted. Design and detailing should take this priority into account. Appropriate materials include stone setts, concrete, precast pavers, and rock set in concrete.

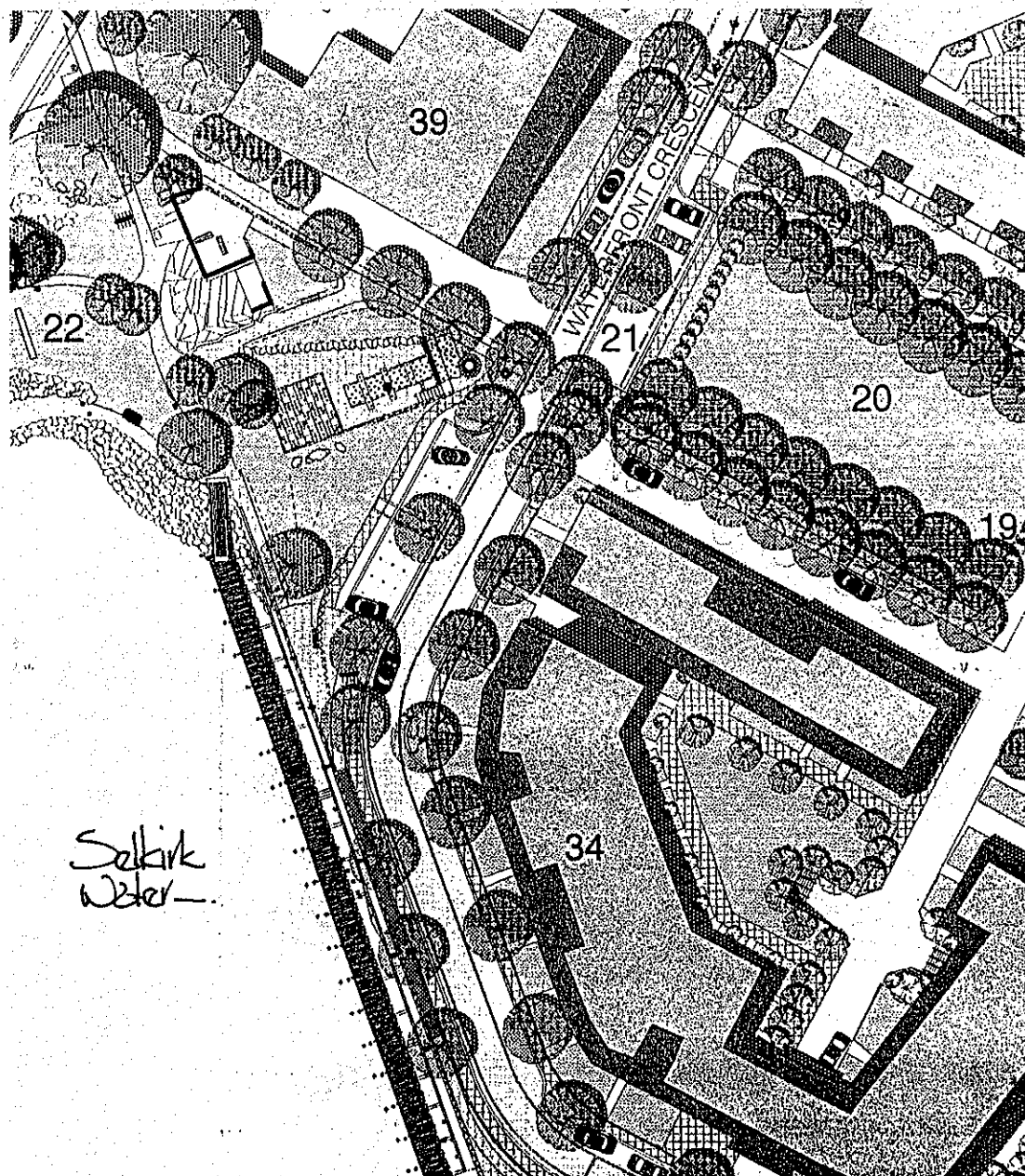
Changes of colour, material and pattern should be used to distinguish or integrate driving, parking and pedestrian uses.

Surface parking spaces should be marked with a material or colour change, or with individual domed studs, rather than with painted lines.

Bollards are a recommended means of vehicle control, traffic separation and tree protection.

Care should be given to the design and integration of traffic control signs on private sites, if they are required.

3.0 Streetscape



STREETSCAPE

Streetscape concerns the overall character and appearance of a street and its buildings. It is important that proposed buildings will compliment existing buildings and the streetscape. This does not mean that the buildings should look alike, but that they should relate to the desired and existing residential character of the area in terms of:

- articulation and massing of the building;
- type and location of windows and openings;
- type and colour of building materials;
- setbacks;
- porches and entry; and
- garages and carports.

Walkways/ Bikeways

A continuous route through and around the site is proposed as part of a network of public open space and accessways. This pathway will serve to provide physical links across and to the site from the rest of Ladysmith.

Encourage mixed-use pathways and boardwalks for pedestrians, cyclists, rollerbladers and motorists by making the paths wide enough to support all types of activities.

Connect a main pathway from Gatacre Street, which will bring people safely across The Esplanade from the town centre, to the waterfront.

Design a variety of widths to indicate level of importance, multi-purpose use and as appropriate for different amounts of use.

The use of different textures, materials, and colours can help to assist in traffic calming for pedestrian dominance as appropriate.

Materials used should be durable and natural where possible, including brick, naturally coloured concrete pavers, "grasscrete" pavers etc. The use of high quality materials for accessways should prescribe, by example, a high quality of all developments.

The use of materials should integrate with existing situations.

Pathways should connect into the existing and proposed town trails, as well as along

the waterfront and through the proposed mixed-use development areas.

A variety of seating and viewing areas should be located along the trail way to provide rest and shelter. These should occur at a minimum of every 100m, and more closely in steep sections of the waterfront area. These areas should be adequate in size and design to double as gathering spaces for street performers, sites for heritage markers, food vendor, information stands, and people watching.

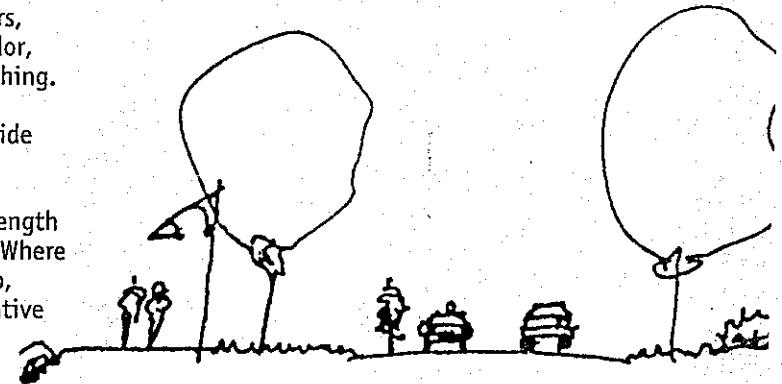
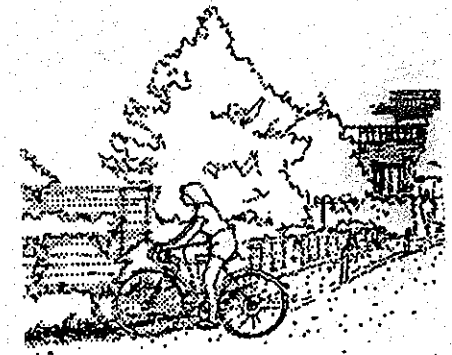
Lighting should be adequate to provide safety for dusk and night-time use.

Pathways should be of a grade and length to allow for use by all capabilities. Where steps might provide for a shorter trip, ramped inclines must enable alternative use over the site.

Design pathways to double as view corridors.

Provide public bike parking facilities at various appropriate points along the pathway, including adjacent to tourist/commercial areas and near recreational areas.

Consider the use of boardwalks where pathways lie adjacent to flood tides and high tides and where vegetation needs protecting and would be better left to grown under a raised boardwalk.



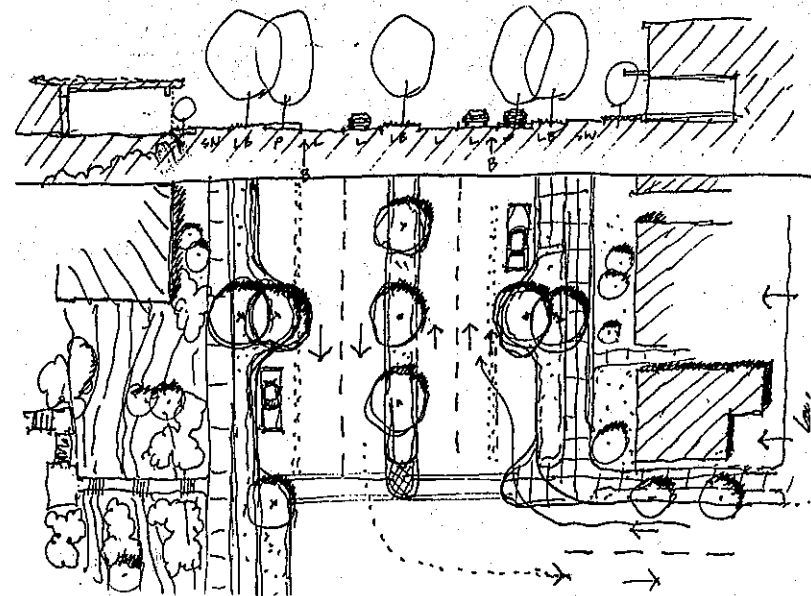
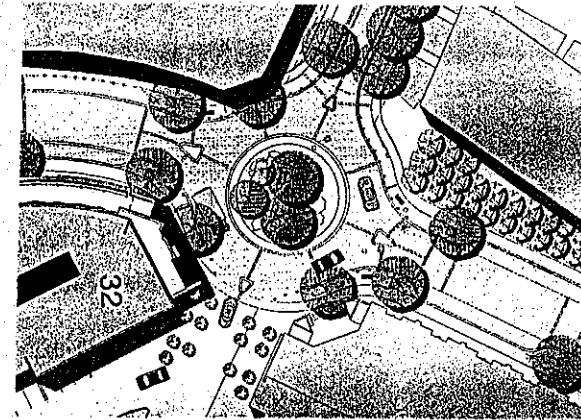
Streets & Traffic Calming

The waterfront area is envisioned as a North American version of the "matrix" approach allowing the potential for pedestrians and cyclists to share the same pavement area with cars without necessarily segregating them. As required by law, cars will be expected to respect the right of cyclist and pedestrians to use the street. In addition, various techniques will be proposed which will encourage an enhanced level of respect and co-operation between drivers, pedestrians and cyclists.

The use of traffic calming devices in urban areas is a key strategy for improving the quality of urban life. Safer, quieter and more usable streets are the result of reductions in vehicle speed. Reduction of the severity of vehicle accidents and injuries as well as increased use of public transit can be positive consequences of slower traffic speeds.

To encourage slow traffic speed the following methods are proposed:

- Sensory methods;
- Traffic islands & landscaped medians;
- Raised intersections & speed control;
- Textured pavement;
- Meandering roads without straight site-lines;
- Narrower road-widths; and
- Lack of definition between sidewalk and road. Where required for safety, separation of driving or parking lanes from pedestrians will be achieved through the use of bollards.



Parking

Currently parking on the Ladysmith waterfront area is largely accommodated in unstructured parking areas.

In particular the Transfer Beach area provides for a number of unsightly, unsurfaced parking zones which have allowed for the destruction of a sizeable amount of the natural environment and a decreasing amount of usable park area.

Along the rest of the waterfront area haphazard parking takes place as and when necessary.

Solving parking issues for this development will mean finding a compromise between conventional suburban expectations for highly convenient private automobile use and a more pedestrian-oriented and tourist environment. This means that in some cases the provision of larger parking lots in immediate proximity to businesses, resort accommodation and recreational areas is a necessary objective but not an overwhelming priority, particularly where it threatens other aspects of the project urban design. Lack of perceived parking convenience can be balanced by a high-quality pedestrian environment with safe, easy and enjoyable access to most parts of the site. Quality of the pedestrian environment should not be damaged by auto storage considerations.

Surface parking should be accommodated in small lots defined by landscaping and screening elements. The maximum amount of parking in one uninterrupted area will be limited. Parking areas must be subdivided with vertical landscape elements, walls or buildings. Significant

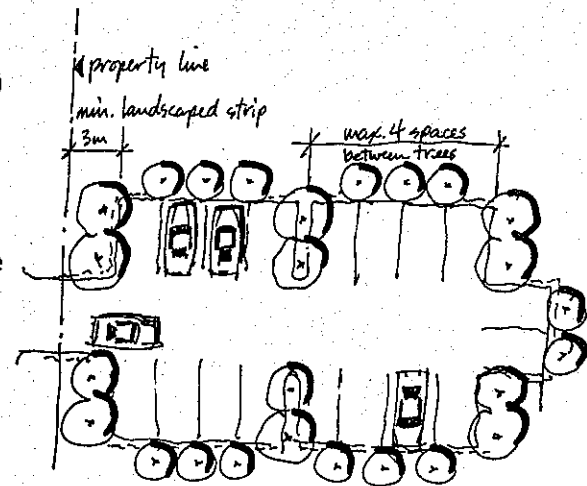
numbers of trees must be planted at regular intervals to soften the appearance and screen high level views of lots. Trees must be protected with bollards or wheel stops.

Parking areas should not be sited between the building and the street. A maximum of one two-way or two one-way driveway entrances will be permitted per designated development site, to prevent an excess of curb cuts. Adjacent properties should share access to minimise curb cuts.

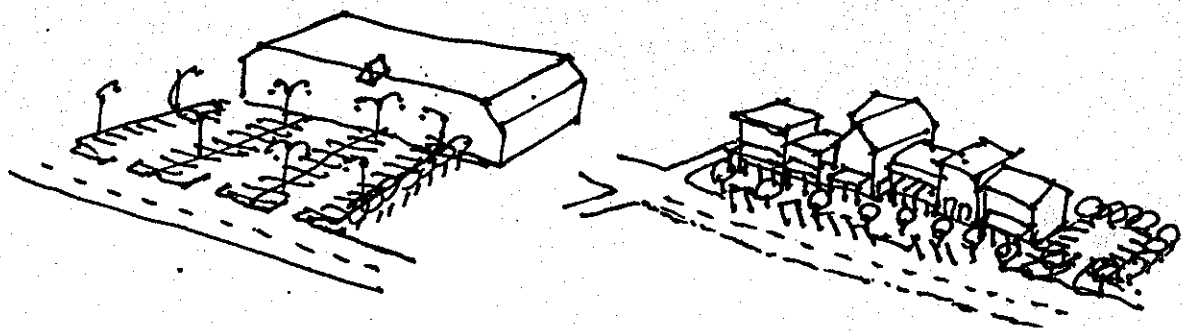
Parking garages should not be sited along street frontage.

Entries should be designed to harmonise with adjacent buildings. Garages should be architecturally integrated with buildings and employ natural lighting and ventilation where practical. Ventilation equipment should be located to minimise noise in surrounding public areas. Natural surveillance from nearby streets and public areas is highly desirable.

Parking areas should be designed to facilitate public use after business hours.



typical parking area showing trees and landscape screening space and aisle dimensions to conform to Town bylaws.



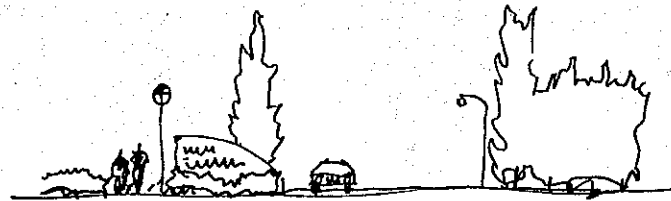
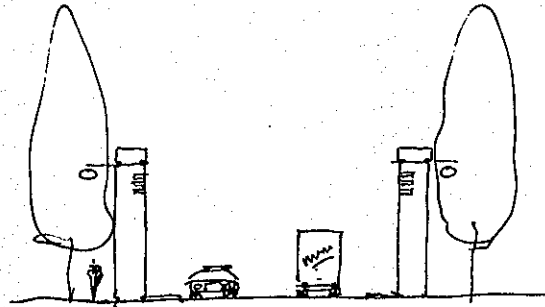
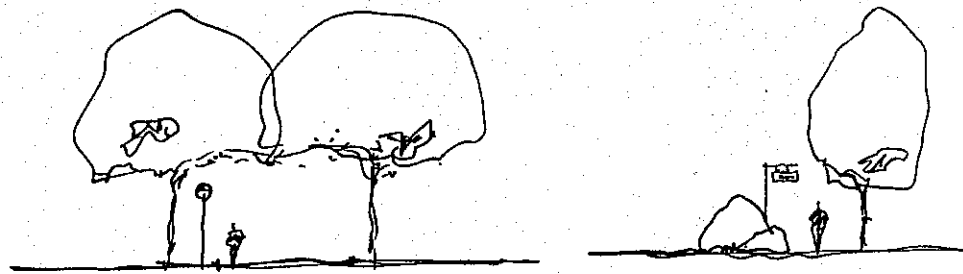
Gateways

While the Esplanade straightens-out between the old town street grid and the waterfront area, there is otherwise very little sense of arrival in Ladysmith. It is difficult to determine where the town centre or the waterfront is to those who are not familiar with the town.

The use of gateways serve to announce the arrival at a special place, and the passing through of that place. This will help to provide containment and denote importance of that area.

Erect or plant gateways and historic markers along the Island Highway to announce the arrival or the motorist to Ladysmith.

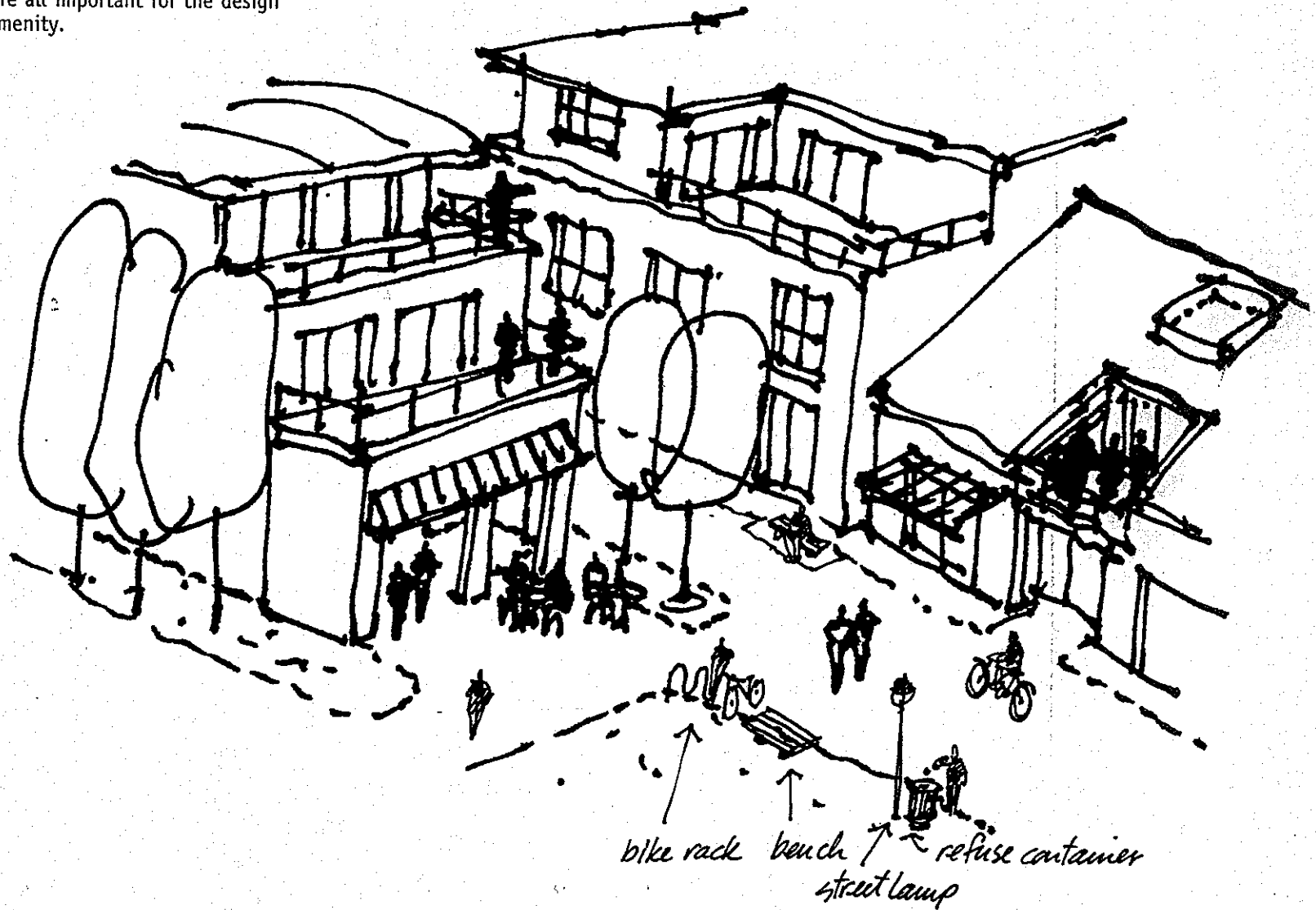
Use building location and design to delineate the edges of special areas, like the heritage railway precinct or the arena precinct.



formal and less formal
gateways marking boundaries between districts
using architectural and/or landscape elements.

Street Furniture

Places to sit, to be sheltered from the elements, lighting for security, bike lockups, refuse containers and water fountains are all important for the design of street amenity.



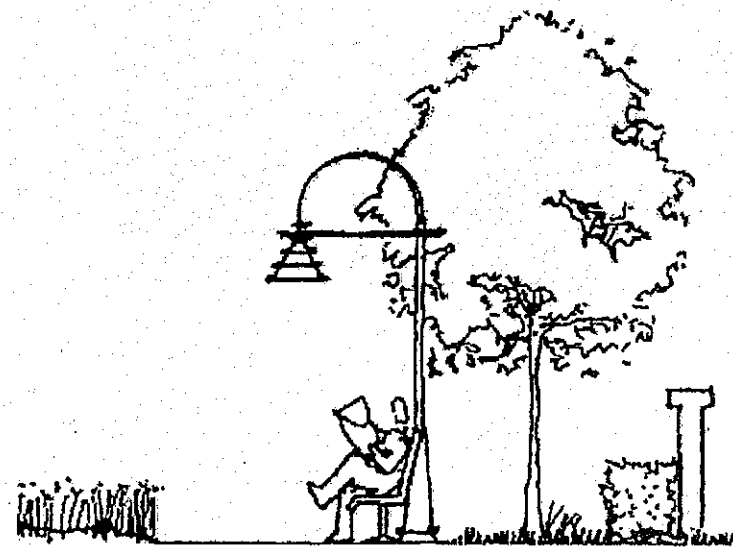
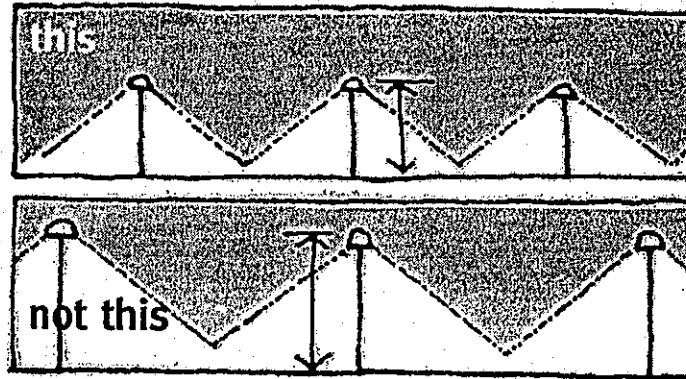
Site Lighting

Lighting can be used to announce the entrance to an area, light up a special tree[s] and by necessity provide the necessary safety to the waterfront in the evening for 24 hour use.

To avoid the harsh and washed-out look of over-lighting, illumination levels should be kept to safe minimum. Low bollard lighting and/or low polemounted fixtures are desirable. In general, lighting designs should employ lower fixtures space more closely together.

Fixture selection should be inspired by the marine/ industrial character of the Ladysmith waterfront and kept in scale with the relevant building.

By using similar lighting fixtures throughout Ladysmith, the waterfront can be visually and physically linked to the town centre.



Signs

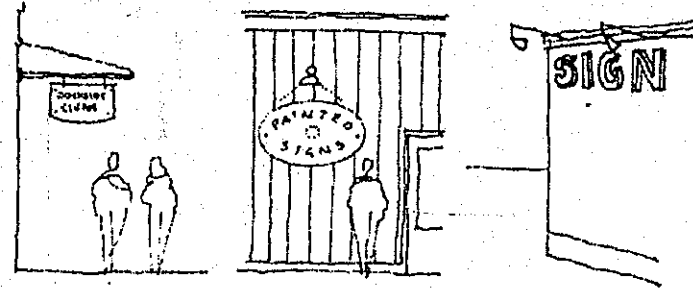
In keeping with the industrial character and human-scale of the waterfront area, all signs should be surface applied to walls or hanging sign boards, and front-lit.

Back lighted sign boxes are not permitted. Neon tube lighting will be permitted in most areas of the site if carefully designed and appropriate in scale to the surroundings.

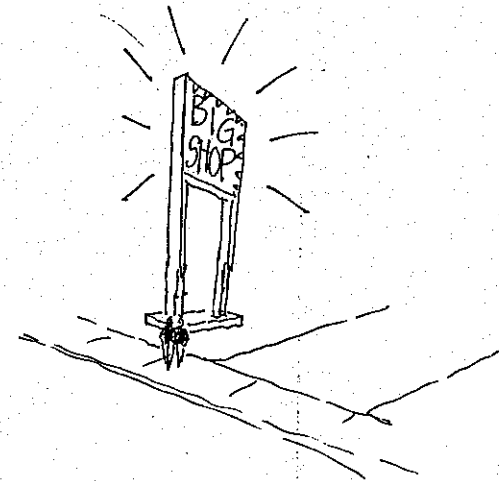
Suitable sign materials include enamelled metal, painted wood or metal and three-dimensional metal or wood letters.

Because of the important contribution good signs can make to the quality of the urban environment, developers and designers are encouraged to take care with the design and construction of their signs.

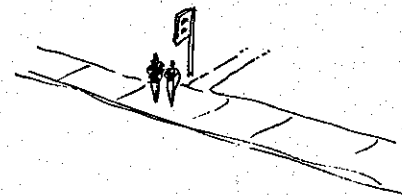
Sign construction, dimensions and location are required to be shown on all development submissions.



not this



this



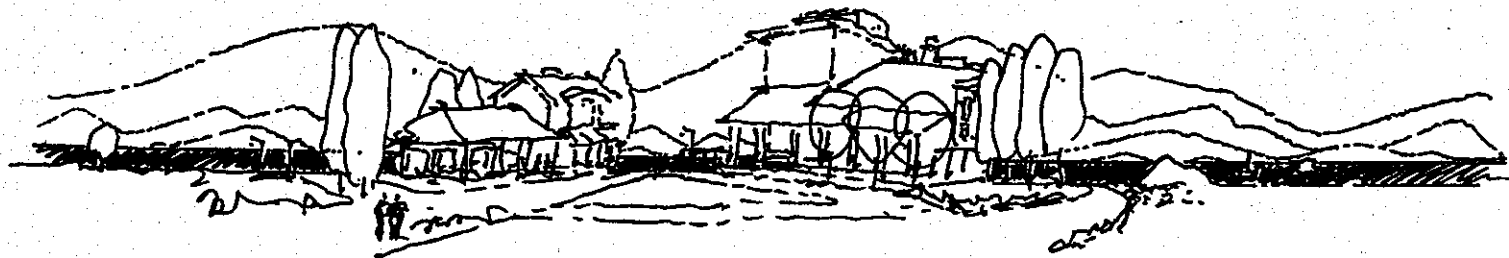
VIEWS:

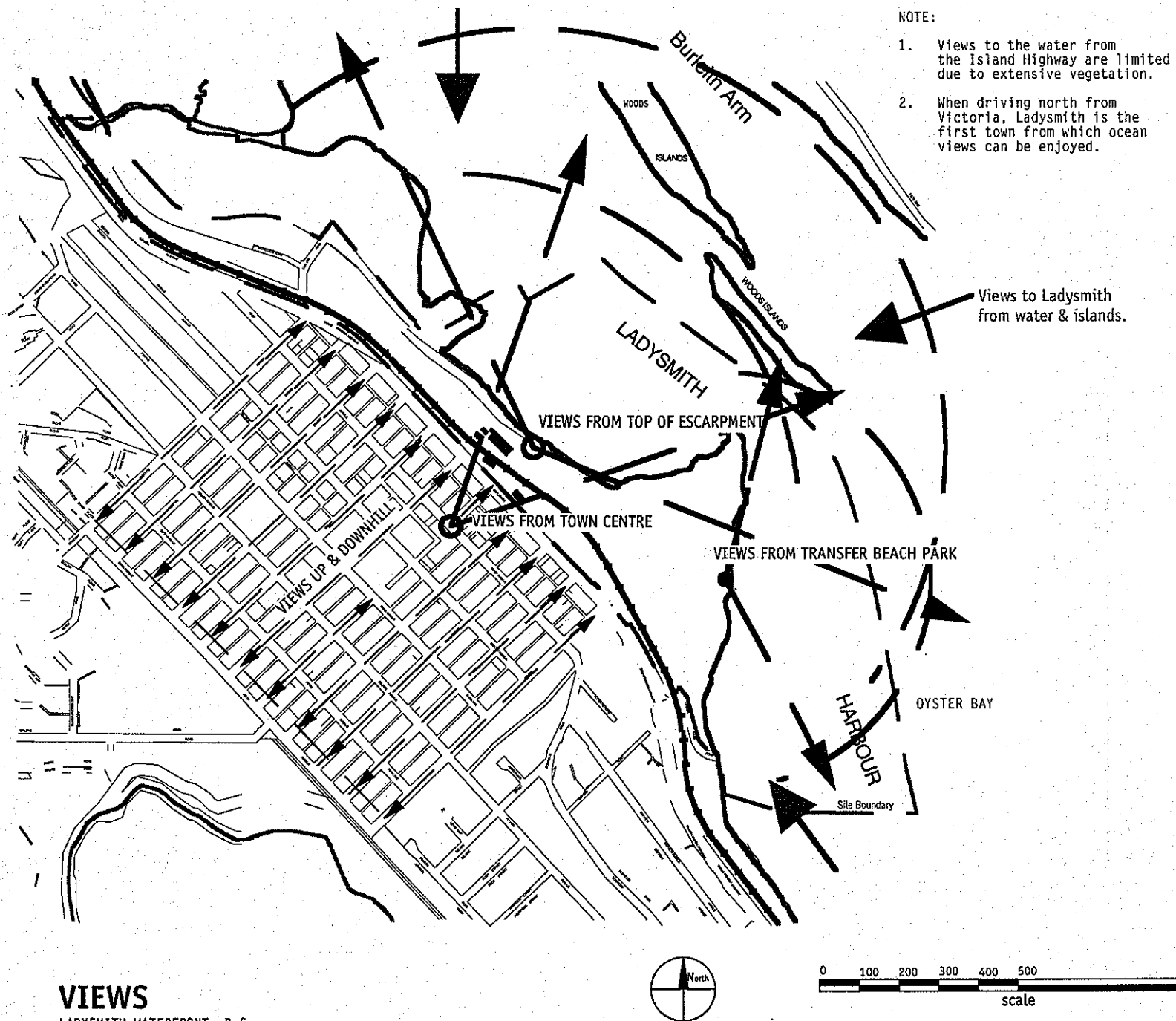
Currently, the extensive vegetation on the escarpment and along the highway prevents expansive distant views of Oyster Harbour from the Esplanade or from the Town Centre. Panoramic views are, however, abundant and beautiful at the water's edge. Water and natural vegetation views dominate with moorage wharves and the Pacific Lumber Company operations to the north, some housing on the native Indian reserve on the west side of the peninsula facing Ladysmith and islands in the distance to the south-east.

The steepness of the waterfront area provides the potential for great views to be captured from the Esplanade and top of the escarpment down to the water's edge and beyond to Thetis Island.

Presently, the best viewing place for the distant views is higher up the in the residential area and at the top of the escarpment where occasional viewing points, which are overgrown and have limited panoramic views, have been created.

{Views to and from the Ladysmith Waterfront, see page 3-36}





VIEWS

LADYSMITH WATERFRONT, B.C.
October, 1996

de Hoog D'Ambrosio architects

Ladysmith Waterfront

Views are a very important design consideration in the waterfront area. There are three different view types to consider:

1. Views to the water from the water's edge and lower flat area including Transfer Beach.
2. Views from the top of the escarpment out over Ladysmith Harbour and beyond to Thetis Island.
3. Views from many of the downhill streets in the old town centre.
4. Views from the island Highway to the over the waterfront, down to the waterfront and out to the Harbour and beyond.
5. Views from the water to the waterfront and back up the escarpment to the town.

Views to the water from the Island Highway and the tourist/ civic nodes are encouraged. Public viewpoints should be developed within private sites, if possible. Sight lines from the Esplanade between buildings and along public access ways should frame water views.

The siting of seating, open spaces, and circulation routes should take advantage of water views.

Views to industrial, marine and rail activity should be provided. Where security is necessary transparent fencing such as chain-link will maintain visibility. Where practical, outdoor activities of public interest should be located in areas visible from public access ways.

Facades of buildings facing the upper level residential areas should be detailed and interesting. Parking areas seen from these higher levels must be screened by significant tree planting throughout the lot.

HISTORIC PRESERVATION/ INTERPRETATION/ COMMEMORATION:

Use historic markers, sites and the memory of heroes to interest and educate locals and tourists about the past history of Ladysmith.

If nothing remains of a building or site of historic significance the developer should identify the historical memory with written text, a sculptural piece or an interpretative work at that site.

Integrate historic sites into new developments as working opportunities.

Promote the protection of building stock and productivity of heritage societies and groups to 'build' and retain the memory of Ladysmith for future generations.

The Town should act as leaders in heritage restoration to show by example the value in retaining heritage properties and maintaining continuity of the historical memory of a place.

Design to preserve and/or reuse existing remnants of the past. e.g. The Short Line, the barge crane piers in Oyster Bay.

Commemorate the 'natural' shoreline with a heritage walk, heritage markers, art works etc.

Engage artists to tell the history of Ladysmith through the highway markers, street art, with markers along the heritage walks etc.

Preserve the historic industrial and railway buildings to create museum pieces

de Hoog D'Ambrosio architects

and a memory of the reason for which Ladysmith came into existence.

Create celebratory days or events which commemorate local heroes and events, including the 'burning of the bonds, James Dunsmuir, native history. These events could be appropriately celebrated in the industrial waterfront area.

Reuse the Comox Logging and Railway Office, built in 1946 by well-known Vancouver architect, C B K Van Norman, as a tourist information building.

Design for a historic precinct area to include the Ladysmith Railway Station and the Comox Logging and Railway Maintenance Shops [the Expo Legacy Site]. This could include a revival in the use of the Ladysmith Railway Station, promoting Ladysmith as a tourist destination by train and a Railway Museum which could be managed by the Ladysmith Railway Historical Society.

Develop interpretative programmes and walking tours through the waterfront area and Old Town which describes the built and natural heritage and economic and social history of Ladysmith. These could be managed by the Ladysmith Historical Society.

A self-guided walking tour could be laid out for interested tourists.

The Town could recognise renovations of historic buildings and sites with merit plaques or similar.

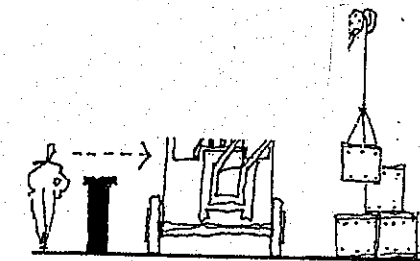
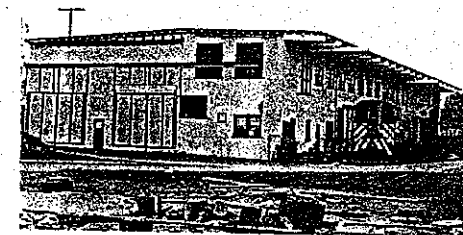
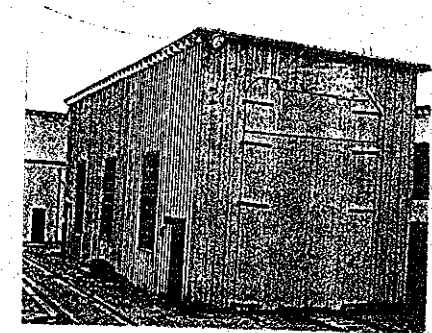
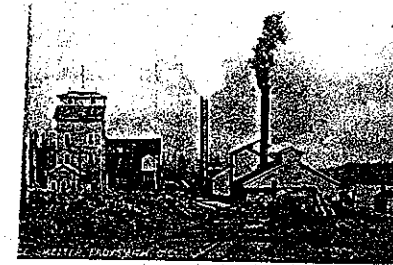


4.0 Special Area Guidelines

A: Industrial

Light industrial and marine based industry currently exists along the waterfront, and between the waterfront and the railway line along the northern end of the site. It is proposed that further light industry be developed along either side of Ludlow road, as shown in the blue area on Map 2. The location of this industrial park for light industry and related commercial development will serve to provide a transition between the mixed-use area/historic areas and the timber industrial uses to the north.

- A vegetation buffer strip should be planted between the light industrial/service commercial area and the Island Highway with discrete signing to the industrial park off Ludlow Road. Individual signage will not be permitted.
- It is inappropriate for industrial buildings to mimic residential or other non-industrial type structures, therefore simple forms and utilitarian materials traditionally used for industrial buildings are recommended ie. metal siding, steel windows, concrete and wired glass are acceptable and should be used to reinforce the architectural character of the area.
- Large building facades adjacent to areas that are visible from non-industrial areas, ie. water's edge or upland, can be made aesthetically acceptable by careful use of interesting colours, graphics, articulated surfaces and landscaping.
- Building colour can provide interest, delineate architectural details and acknowledge a building's use. It should be co-ordinated with the building form.
- Buildings in this area shall not exceed two storeys in height.
- Wherever possible, viewing areas or platforms, especially on sites near the water, should be provided for public appreciation of interesting marine or industrial activities. Interpretative material at these points is also desirable to explain the activity in view. Flat roofed areas could be decked and accessible for viewing.
- Marine industry on the water's edge should be small-scaled, and articulated to maintain view corridors. Structures can be designed on piers over the water's edge as appropriate.
- Public accessways should be allowed to pass through, or over any buildings long the water's edge with access beyond to other commercial developments along the piers. ie. a scuba diving school or fresh fish store.
- Provide a reasonable environment for the workers during the work day. Good street amenity, landscaping, sidewalks, views where possible, access to retail/ commercial/ mixed-use areas provide for a more satisfying work place.

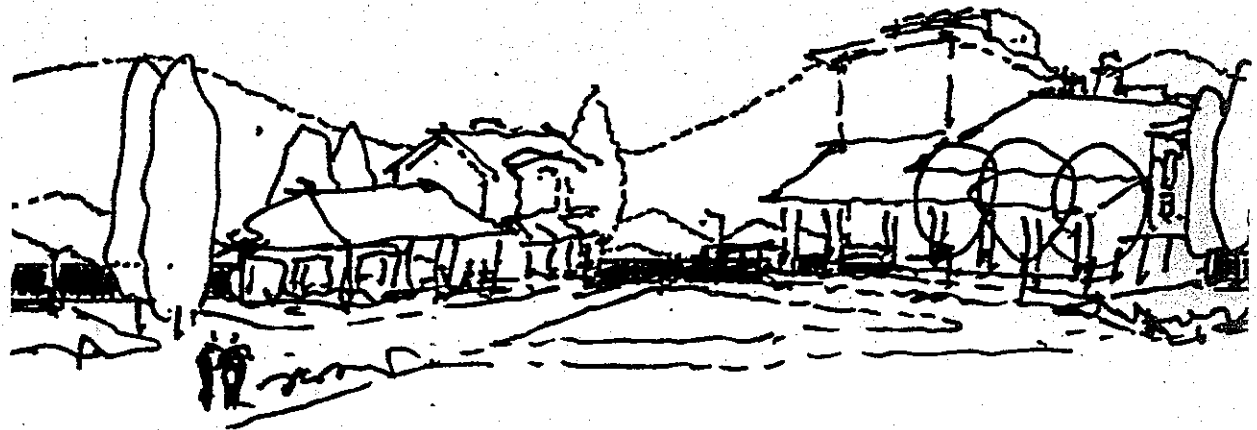


ALLOW VISUAL CONTACT WITH INTERESTING WORK ACTIVITIES

B: Resort

Land for potential resort development has been designated in the lower bench area along the foreshore. [shown on map 2]. As a major destination resort location this area could comprise a resort hotel and marina, together with retail and associated services.

- The distinguishing features of buildings in this resort area should be their relationship to the site. Sun-path, wind direction, views and proximity to the water should be the determinants for window locations, sun-shading, outdoor terraces and semi-enclosed or open spaces.
- Buildings should be modern, designed in the west-coast vernacular, and inspired by, but not mimicking, historic architecture of the region.
- Due to the resort's proximity to both the new waterfront district and the historic town upland, efforts should be made to harmonise with their built form.
- Buildings of up to 3 storeys in height can be located in this area of the waterfront.
- Distinguishing features that would identify the recreation and tourist uses in this area should be at the pedestrian scale, such as gate houses, landscape perimeters/ enclosures, entranceways, private and active outdoor areas adjacent to uses such as conference rooms and ballrooms etc.
- As in the other areas, materials should relate to those used historically in the region and should be appropriate to the climate and local availability. Materials common to resort areas typically found in the south, i.e. adobe, stucco mission style etc. should be avoided.
- Avoid creating an expression of a private enclave. Allow views to resort landscape areas and other features that would contribute to the adjacent public domain. Avoid interrupting access to public pathways, and views.
- Resort parking should be below or behind buildings and parking lots should be screened from any public areas with planting or walls and fences. [See 'parking' in Design Guidelines]



C: Mixed-Use

The upper benchlands area is well suited for a small scale mixed residential, commercial and tourist neighbourhood that is linked to the town centre yet retains its own distinctive character.

A mixed-use development offers the potential for residents and tourists/visitors to shop, work, socialize and reside in the same area. It can also contribute to the activity at the waterfront.

Successful integration of uses depends on a number of conditions. It is important to have a range of uses. In principal, different but compatible uses will be allowed in adjacent buildings, and where appropriate, within the same structure as long as measures are taken to avoid negative effects from one on the other.

- Encourage residential over ground floor commercial/ retail and parking. The plan can provide a range of urban environments, from all-residential buildings or townhouses on quiet streets to apartments over a store.
- Modest scale of development only. One developer building out the entire development would not be encouraged. This could potentially lead to a monotony of style and character.
- Maximum of 3 storey buildings permitted.
- Building uses should be allowed to change over time. An urban design which considers potential change is

important both economically and socially. By providing good vehicular and pedestrian circulation in and around buildings, well-defined entry points, adequate open spaces and appropriate landscaping, a neighbourhood can accommodate a range of future uses.

- The mixed-use area should be centred on a public square or gathering place with buildings overlooking and addressing the public areas. Outdoor decks and terraces should be adjacent to cafes and offices, and provide natural surveillance into the space.
- Care should be taken to make an architectural distinction between residential entries and shopfronts, commercial or institutional entrances. Where residential entries and commercial entrances occur on the same building, proper separation and clarity of their identities is essential.

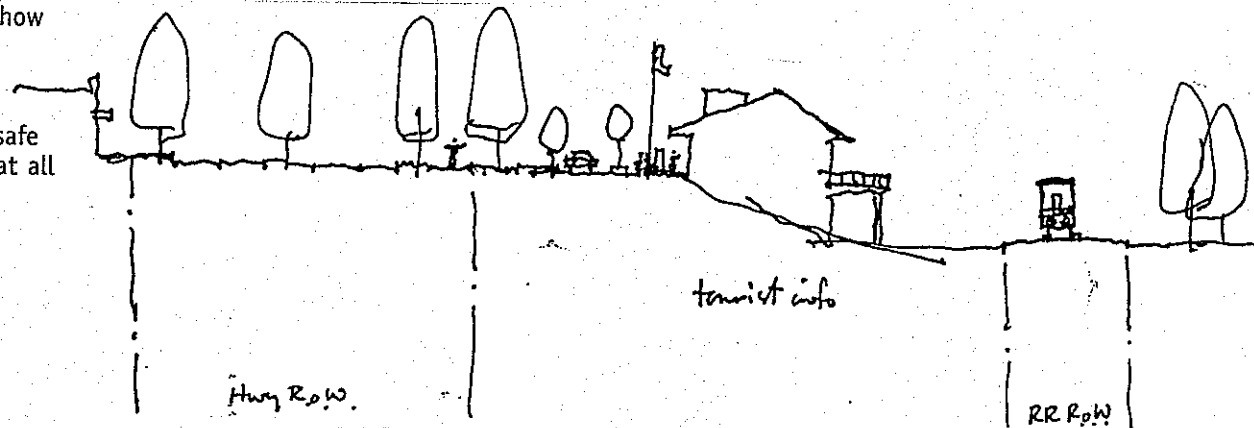
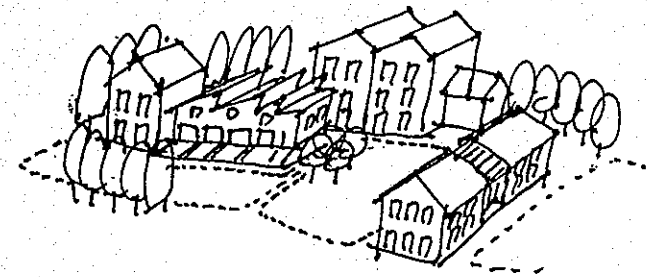
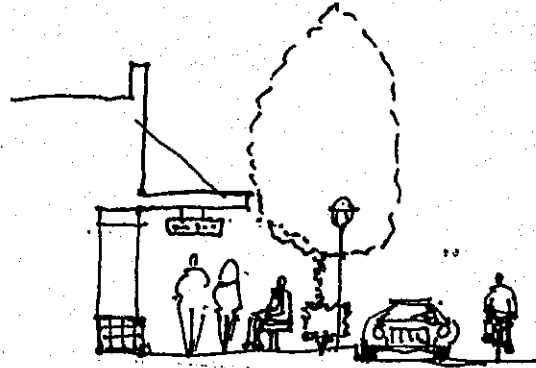
- Special care should be taken to enhance and frame views from the public square and public decks/viewing areas.
- Design for acoustic and visual privacy as appropriate and possible.



D: Tourist Commercial

Areas adjacent to the resort, The Esplanade and the future marina will be appropriate locations for tourist commercial development.

- Tourist commercial should be adjacent to public r.o.w. streets, squares, pathways etc. to contribute to the life of the area. It should serve the general public and tourists alike.
- Heavily themed and seasonal stores should not dominate the tourist commercial.
- Stores should be designed to be comfortable and accessible in all weather, this means canopies and awnings should be used to shelter adjacent pedestrian areas.
- Imported themes or aesthetics for the buildings should avoid importing ideas from elsewhere.
- Shops should be designed with show windows to encourage window shopping in off-hours
- Adequate lighting should allow safe use of tourist commercial areas at all hours.



E: Historic Buildings and Sites

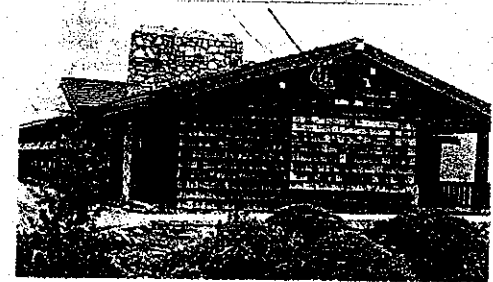
There are a number of historic buildings and sites within the waterfront area. In particular there is a core group of buildings centred on the railway line near the town centre and which are related to the coal mining history of Ladysmith. These buildings were largely built from timber siding and shingles.

- An adaptive reuse approach is recommended to restore the integrity of the structure, cladding, roof and openings of the abandoned railway and industrial buildings and their surroundings.
- Additions to these historic buildings is acceptable but only if distinguished from the original building and considered as an harmonious addition to the composition in both building and landscape architecture terms.
- Colour schemes should adhere to the heritage building colour palette as recommended by the town. [*Benjamin Moore Paints - heritage selection*] Unless otherwise directed by the town.
- Mimicry or imitations of historic facades attached to modern structures are not acceptable.
- The Comox Logging and Railway Office designed by Vancouver architect, C.B.K. Van Norman in 1946 should be restored, as much as possible, to its original condition and adapted for a civic or public use such

as a tourist information/interpretative centre. Its prominent location along the Esplanade and adjacent to the arboretum make it a natural landmark and gateway to the waterfront.

- The railway right-of-way and the railway's intersections with pathways for pedestrians, vehicles and cyclists, should be designed with the assumption that rail traffic will continue twice a day [passenger] and expand in future. It is desirable to support rail transportation, including the possible reactivation of a railway stop in the future at the original station.
- In the interim the railway buildings could provide facilities for heritage, arts and cultural organizations. Local and provincial funding initiatives could be used to design for an historic precinct area to include the Ladysmith Railway Station and the Comox Logging and Railway Maintenance Shops [the Expo Legacy Site]. This could include a revival in the use of the Ladysmith Railway Station, promoting Ladysmith as a tourist destination by train and a Railway Museum which could be managed by organizations such as the Ladysmith Railway Historical Society.
- The Short Line and any other historical rail sections and machinery should not be built over without due consideration for their importance. Interpretative markers can be used to highlight historical importance.

- An historical walk through this area could be designed to encourage an interest in the coal mining and lumber history of Ladysmith.
- If nothing remains of a building or site of historic significance the developer should identify the historical memory with written text, a sculptural piece or an interpretative work of public art at that site.



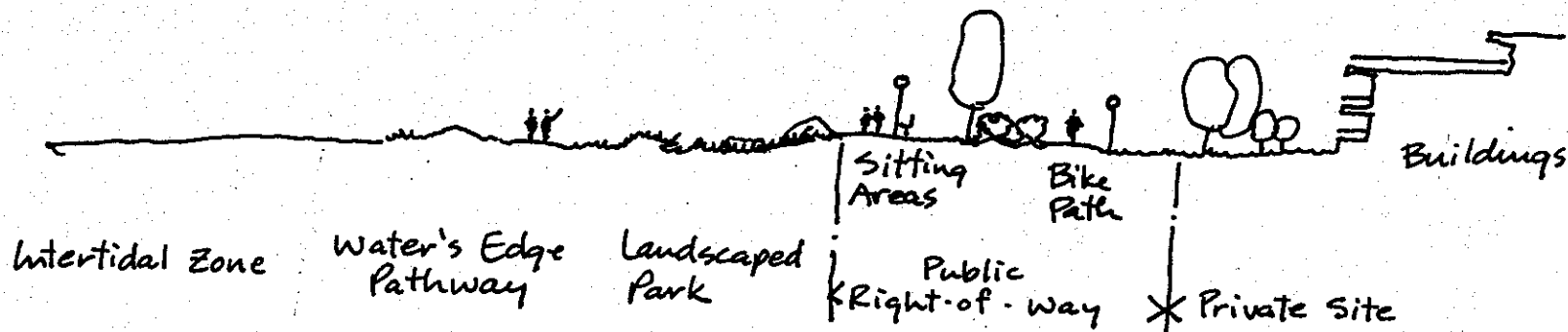
F: Water's Edge

The water's edge is the single most important element that characterizes this area of the town and therefore it should be considered the principle unifying and orienting part.

- It is important that the town is connected to the water's edge by extending the pattern of streets through the site to the shoreline, and then along the water's edge connecting into the regional bike network. These connections can also be extended, at special points, out into the water with piers, floats and viewing platforms. These routes to and from, and along the water's edge should inspire the aesthetic expression. In addition, views from the water and across the water are an important part of this and should be equally considered.

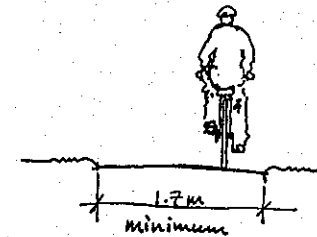
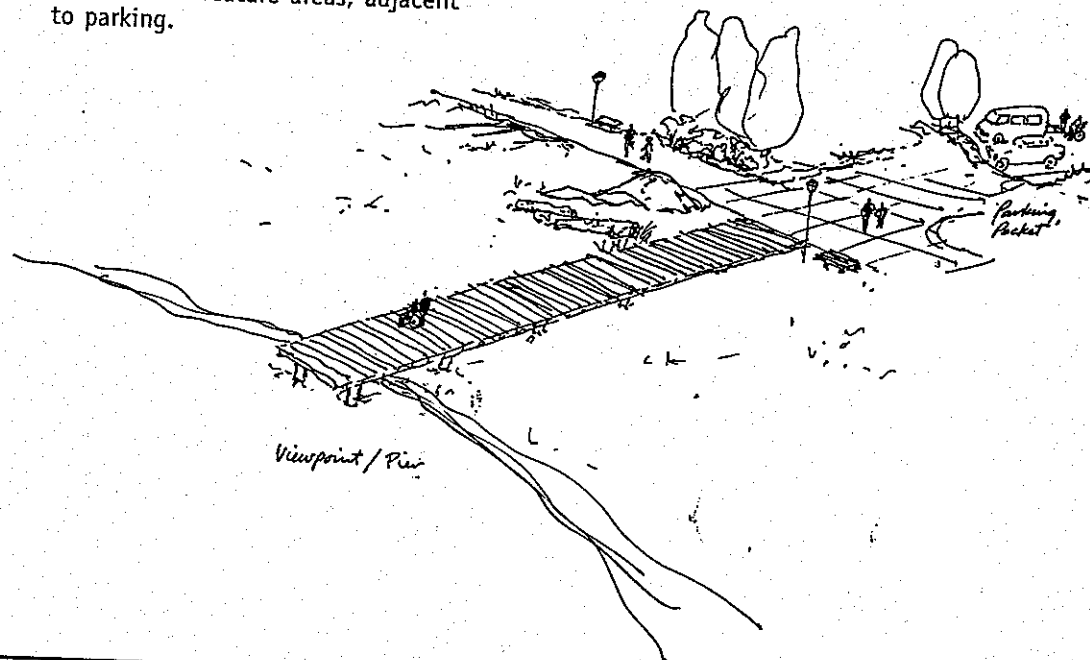
- In general, the nature of pathways and roadways in the waterfront area are considered as shared right-of-way, that is, additional width has been provided. Separation of the cyclists from the pedestrians and/or cars can be achieved by change in paving surfaces, colour, material or texture. This can be further designated by delineating and signage.
- Encourage use of the area by cyclists. It is desirable that the new network of bike paths be linked to the regional bike path network and to the waterfront streets. Provide bike racks at regular intervals and at key locations.
- It is desirable to locate amenities at regular intervals along the pedestrian and bike pathways and to locate view points or special areas at intersections with other paths, landmarks, parking areas and view corridors.

- There should be a variety of public seating available every 75m along the water's edge. Provide bulges in the walkway where the seating can be located and where people are encouraged to stop and stay for a while.
- If lighting is required by the town, appropriate spacing shall be determined by a lighting design consultant. All lighting fixtures shall be located on the upland side of the water's edge pathways to avoid conflict with views. The light source should be top shielded to avoid excess light dispersion. The maximum height of the lighting poles should be 4m.

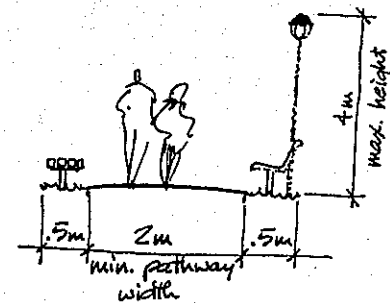


- Pedestrian pathways can be surfaced in a variety of ways. It is desirable that special areas, which will receive high traffic, be constructed with hard surfaces i.e. concrete unit pavers, stone paving and exposed aggregate concrete. Asphalt should be avoided in special areas and along the water's edge. Stone screenings [finely crushed rock] and cement-stabilised gravel can be used as an informal self-draining pedestrian and bicycle path surface.
- Access to the waterfront for the physically challenged, especially along the pathways and to feature/special areas, is important. Special surfaces and/or structures can be incorporated at view points and within other feature areas, adjacent to parking.

- Provide a variety of landscape treatments for character, shade and shelter.
- Provide landmarks which make intermediate destinations apparent and lead the eye along the path. These could be historical markers, viewpoints or other landscape devices.
- Provide pocket parking areas throughout the waterfront in small lots rather than larger ones. Maximum parking of 8 cars per diagonal or orthogonal parking area. Landscape these parking areas. [see page 3-30, for Parking]



Bicycle Pathway
(USA CLASS II)



Pedestrian Pathways, 3m min.
(with seating every 75m
along the entire path)

Part Four Implementation

1. Plan Implementation

The Waterfront Area Plan provides a statement of the overall principles, the objectives and policies, for the parks and open space, transportation, future land use, and servicing the waterfront. Urban design guidelines are contained within the plan for criteria to evaluate development of the waterfront. The implementation of the objectives and policies presented in this plan is undertaken through a series of methods and legislative tools to ensure the plan is achieved. This part of the Area Plan sets out the methods for implementation, including the legislative framework, the approach and costs of servicing development, and directions for the phasing of waterfront development.

1.1 Amendment to the Official Community Plan

The Waterfront Area Plan should be adopted by the Town as a Local Area Plan amendment to the Town of Ladysmith "Official Community Plan Bylaw 1993, No. 1100" in accordance with the provisions of the *Municipal Act*. Adoption of this Area Plan as a new Schedule "B" amendment to the Official Community Plan will allow for the policies of the Waterfront Area Plan to provide specific direction for future land use, transportation and servicing of the waterfront area.

1.2 Development Permit Areas

Designation of the plan area with a number Development Permit Area categories is provided within the Official Community Plan. The OCP "Section 13.0 Development Permit Areas" provides for the control of development within the waterfront through guidelines that are reviewed prior to the issuance of Development Permits. Guidelines are contained in several Development Permit Areas for the waterfront as shown on "OCP Map 2 - Development Permit Areas." This section of the Official Community Plan permits the Town to control development in the waterfront plan area for the protection of the natural environment, the protection of development from hazardous conditions, and the establishment of objectives and provision of guidelines for the form and character of commercial, multi-family residential, or industrial development.

1.3 Waterfront Urban Design Guidelines

The urban design guidelines that are provided in Part Three of this Area Plan set out the general criteria for the development of both the public realm and private lands within the waterfront. These guidelines are intended to

provide direction for public action and, as part of the development approvals process, to be reviewed at the time of zoning bylaw amendment and to supplement the Development Permit Area guidelines of the OCP prior to issuing development permits.

1.4 Zoning Bylaw

The zoning bylaw for Ladysmith, the "Town of Ladysmith Zoning Bylaw No. 1160", as amended, is a key implementation tool for the Waterfront Area Plan. Zones contained in the existing zoning bylaw, together with several new zones proposed, will regulate the land use and density of development on the waterfront. Amendments to the zoning bylaw to accommodate proposed development can be carried out to conform to the broad land use designations in the Waterfront Area Plan and apply the appropriate zoning category to a parcel.

For larger parcels of proposed mixed-use development, the use of a Comprehensive Development (CD) zone category may be considered through amendment to the zoning bylaw. The CD zone would complement the zones provided in the existing zoning bylaw, and be used where a single comprehensive development proposes a combination of land uses and specific regulatory requirements that are not addressed adequately by existing zones.

The proposed zoning strategy to implement the Waterfront Area Plan designations is shown in the following table. The proposed zones (existing and new) correspond to the land use designations that are contained within this Area Plan and shown on Map 2 - Land Use Plan. Amendments to the "Town of Ladysmith Zoning Bylaw No. 1160" will be necessary to implement the recommended zoning strategy.

**Waterfront Area Plan
Summary of Proposed Zones**

Area Plan Designation	Zoning Bylaw Category
Parks	P-2 Parks and Recreation (proposed)
Open Space	P-2 Parks and Recreation (proposed)
Water Recreation	W-1 Water Recreational
Multi-family Residential	R-3 Multi-family Residential
Mixed-Use Residential/Commercial	MU-1 Mixed Use Residential/Commercial
Tourist Commercial	C-4 Tourist Recreational Commercial (proposed)
Resort Commercial	RR Resort Residential (proposed) MU-1 Mixed-Use Residential/Commercial
Community Commercial	EL-1 Expo Legacy Site
Marina	W-2 Water Marina
Light Industrial	I-1 Light Industrial C-3 Service Commercial

1.5 Land Use Agreements

A key element of the development approvals process for the Town of Ladysmith involves the use of Land Use Agreements. The Town requires a prospective developer to enter into a Land Use Agreement with the Town of Ladysmith prior to granting rezoning or subdivision approval, and prior to the issuance of a Development Permit. The Land Use Agreement addresses issues of servicing, financing, staging of development, site planning considerations, and other matters or conditions the Town wishes to include in the agreement.

1.6 Financing

The development of the plan area will necessitate the provision of municipal services and facilities. Capital costs associated with infrastructure services (roads, sanitary sewer, water, and storm drainage) and community facilities (parks, open spaces and trails, community buildings) will have to be recovered to accommodate development and provide facilities serve the residents of the Town and waterfront.

To ensure that municipal services and facilities for the waterfront do not place an undue burden on the Town of Ladysmith, there are a number of mechanisms available for addressing the financing and recovery of the cost of these services.

Provincial Grants

Provincial servicing grants are one source for partial funding of services - such as roads, sewer and water services - for new growth and development. The Province has in the past offered grants of up to 50% to address the cost of these types of services. Given the current Provincial funding climate, it should not be assumed that grant funding for services will be forthcoming. The previously assumed 25% Provincial grant amounts for works associated with the Sewage Treatment Plant upgrade and with the Holland Lake Water Supply improvements, both of which will benefit the waterfront, should be reconsidered in light of this new funding situation.

Another important component of Provincial financing with respect to the waterfront is the proposed upgrade to the Island Highway that is currently being undertaken by the Ministry of Transportation and Highways (MOTH). The improvements to the Esplanade and provision of new accesses into the waterfront from the Island Highway are subject to discussions between the Town and MOTH. Provision of improvements and access routes will offset some of the servicing costs for the waterfront.

Municipal Sources

The Town of Ladysmith can make use of several sources to fund the municipal services needed for the waterfront. These sources include the use of current revenues, borrowing, reserve funds, and taxation to pay for capital projects.

Increasing *general taxation* in Ladysmith to provide for development of the waterfront is a funding source that the Town will not likely wish to consider. *Current revenues* and *borrowing* may be appropriate for services that are provided by the municipality and for which development may not be expected to pay (eg. recreation facilities). *Reserve funds* represent an alternative source for the Town to pay for services, and consist of reserve funds that are built up through the collection of development cost charges over a period of time and used to pay for growth related services including roads, sanitary sewer, storm drainage, and open space and parkland acquisitions.

Development Cost Charges

The Town of Ladysmith has implemented bylaws to collect development cost charges (DCC's) to finance infrastructure and services for new growth. Projects for which DCC's can be applied include roads as part of a major road network, water, sanitary sewer, storm drainage systems, and parkland acquisitions and improvements. For the waterfront, the use of DCC's to provide services may involve the Town front ending the servicing costs. This would mean use of municipal funds, such as the reserve funds accumulated from previous developments that contributed DCC's, or from current revenues and borrowed funds. The Town would later collect DCC's from private development that occurred in the waterfront area. Essentially the risk and financial burden of development of the waterfront would be assumed should

DCC's alone be used to finance the provision of municipal services.

Developer Construct

The Town of Ladysmith can impose subdivision servicing requirements as established under Section 989 of the *Municipal Act*. This places the responsibility of constructing municipal services directly on the developer as a condition of subdividing land. The developer construct approach reduces the financial burden to the Town. The developer front ends the costs, minimizing the financial risk to the municipality. This approach would allow development to proceed without impacting the current taxpayers.

Latecomer Payments

The use of latecomer agreements is premised on the developer or owner of land providing the excess or extended services, such as roads, water, sanitary sewer, or storm drainage. Under a latecomer policy, the developer would provide the excess or extended service and the Town would later impose connection charges to other owners that hook up to the services, up to a period of a maximum 10 years. The funds collected are passed back to the initial developer. This approach complements the developer construct approach, and reduces the risk to the municipality.

Parkland Dedication

New parks in the waterfront plan area can be provided for in several ways. Direct purchase and development of land for park areas by the Town is one approach. Funds for this can be drawn from DCC reserve funds or from capital revenues. Another method is through the dedication of lands, or the payment of cash-in-lieu toward a parks and open space fund, at the time of rezoning or subdivision. This mechanism allows the municipality to either receive the lands for park use or to accumulate a fund through contributions to allow for the direct purchase of the lands for park use.

2. Servicing and Cost Estimates

The required infrastructure servicing for development of the waterfront area has been determined in a general manner as part of the preparation of this plan. Preliminary capital cost estimates have been prepared for the provision of the major components of infrastructure services including roads, water, sanitary sewer, and storm drainage. More detailed engineering studies to confirm infrastructure works and specific design parameters will need to be conducted prior to the approval of development. The preliminary cost estimates (inclusive of engineering and contingencies) for improvements to infrastructure services are estimated at approximately \$6.4 million (in 1996 dollars). The total costs for each service are summarized in the following table.

Service	Cost
Roads*	\$1,950,000
Water Mains	\$1,050,000
Sanitary Sewers	\$ 810,000
Pump Stations	\$ 500,000
Storm Sewers	\$2,090,000
Total	\$6,400,000

* estimates do not include costs associated with railway crossing and realignment.

Roads

- The key elements of the transportation network to service the waterfront are the extension of Roberts Street and Buller Street into the waterfront. See Map 4- Circulation Network.
- Additional new collector roads include the construction of a roundabout intersection and loop collector road system to Transfer Beach, Oyster Cove, and back to this intersection. A collector road will also extend across the waterfront, linking Roberts and Buller Streets.
- New local roads include a loop road serving the Slag Point area, a cul-de-sac section north of Buller, and two new local roads off the existing Ludlow Road collector to service this industrial area.
- A lane is to be provided between development areas on the upper benchlands.

Water

- Water supply capacity upgrades at the Holland Lake reservoir are required to service waterfront development and maintain adequate flows to upper portions of the Town.

- Water service to the plan area comprises a system of watermains connected to existing watermains and proposed extensions of watermains in the current water system. See Map 6 - Water Servicing.

Sanitary Sewer

- Sanitary sewer system upgrades will have to be addressed to meet sanitary sewage demand from waterfront development.
- Two new pump stations are required to provide sanitary sewer service to the majority of the waterfront. A south pump station (P1) at Slag Point will service the mixed use waterfront area, while a north pump station (P2) will service the Ludlow Road industrial area. See Map 5 - Sanitary Sewer.
- Trunk gravity sewers are required to collect sewage to the pump stations, and to the existing trunk sewer (as in the case of the lands fronting on the Esplanade). The alignment and size of the gravity sewer in the industrial area will also provide sanitary sewer service for development north of the plan area.
- Forcemain sewers are proposed to allow delivery of sewage from the pump stations to the existing trunk sewer.

Storm Drainage

- Storm sewers within roadways, and sized based on 1:100 year storm flows, are required to service the development areas and to provide for upstream flows. See Map 7 - Storm Drainage.
- Improvements to natural drainage areas and storm outfalls will be assessed as part of detailed stormwater management studies completed by the developer.

3. Phasing of Development

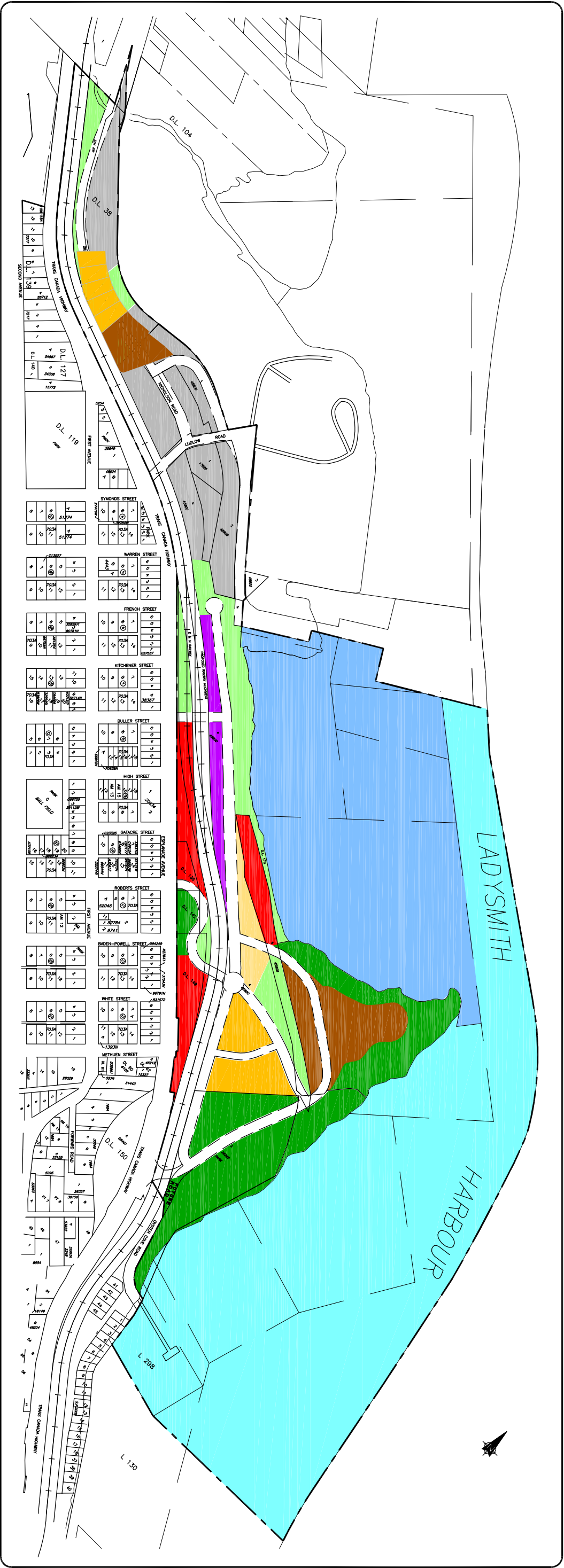
The staging of development and services for the waterfront is a key element in the implementation of the Area Plan. The method for the staging of infrastructure services can have an influence on the timing and sequence of development on the waterfront. The market demand for the different land uses can also have a significant bearing on the anticipated timing and phasing of development. These aspects of the plan have been examined to establish a general phasing strategy to guide future waterfront development.

3.1 Staging of Services

Typically in the development of new growth areas in a community, the extension of infrastructure services will have a strong influence on the direction and timing of development of the area. For the waterfront plan area, this is not entirely the case. The presence of trunk sanitary sewer and a watermain system already within portions of the waterfront allows some flexibility in the provision of these services. For sanitary sewer, the location of the pump stations are critical to servicing the two broad use areas of the waterfront, however these can be built simultaneously and allow development in each of these areas. For water service, it is a matter of connecting to the existing watermains, which is possible at several points along the waterfront. The road system does provide some influence on the direction and timing of development. The extension of

Roberts Street into the plan area will occur as part of the Island Highway upgrade and before the Buller Street extension, therefore it is anticipated development would initially occur in the southern part of the waterfront. Ludlow Road is an existing road that can serve new industrial development in this part of the waterfront. On the basis of infrastructure services alone, development could begin in both the southern part of the waterfront and in the northern part of the waterfront. There are limitations on development commencing in the central part of the waterfront, principally because the P2 pump station would have to be built at Slag Point before development could proceed.

The provision of infrastructure services has been broken down into various stages that service the development nodes on the waterfront. The stages for servicing indicate the works required to service development within each stage area. These stages are illustrated on Map 8 - Development Staging. While the various stages relate to parcel areas that have been identified, they do not suggest a sequence of development. For example services could be provided in Stage 1 and Stage 4 areas at the same time. The following table provides a breakdown and cost estimate of services for the various stages.



TOWN OF LADYSMITH

WATERFRONT AREA PLAN

LAND USE PLAN

LEGEND

LAND USE

PARK

OPEN SPACE

MULTI-FAMILY RESIDENTIAL

WATER-USE RESIDENTIAL/COMMERCIAL

RESORT RESIDENTIAL/COMMERCIAL

TOURIST COMMERCIAL

COMMUNITY COMMERCIAL

WATER

WATER RECREATION

LIGHT INDUSTRIAL

PROPOSED CORRIDOR

PLAN AREA

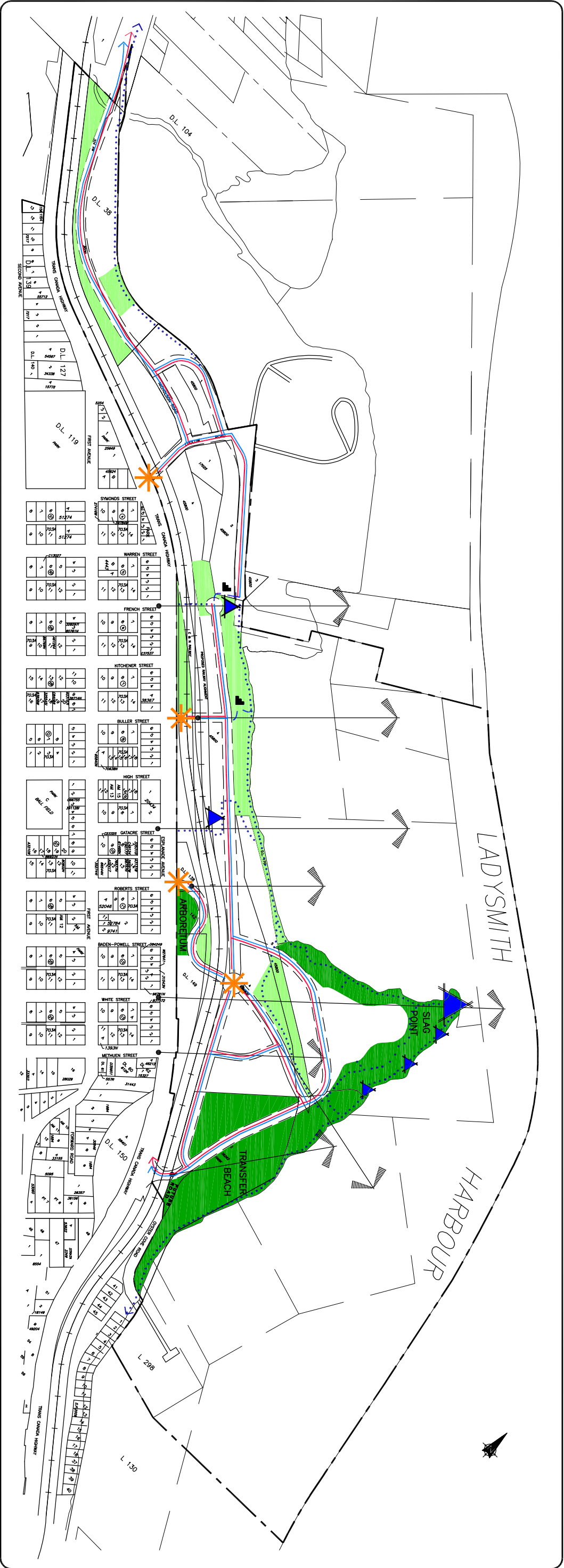
MAP 2

DATE: January 1997

designed: Darinso

drawn: Rome Architects

DESIGNED BY: ROME ARCHITECTS



TOWN OF
LADYSMITH

WATERFRONT
AREA PLAN

PARKS AND
OPEN SPACE

LEGEND

PARK

OPEN SPACE

GATEWAY

VIEWING OR STAGING POINTS

VIEW CORRIDOR

PEDESTRIAN & BICYCLE TRAIL

PEDESTRIAN TRAIL

STAIRS

SIDEWALKS

BICYCLE LANES

PROPOSED CORRIDOR R-O-W

PLAN AREA

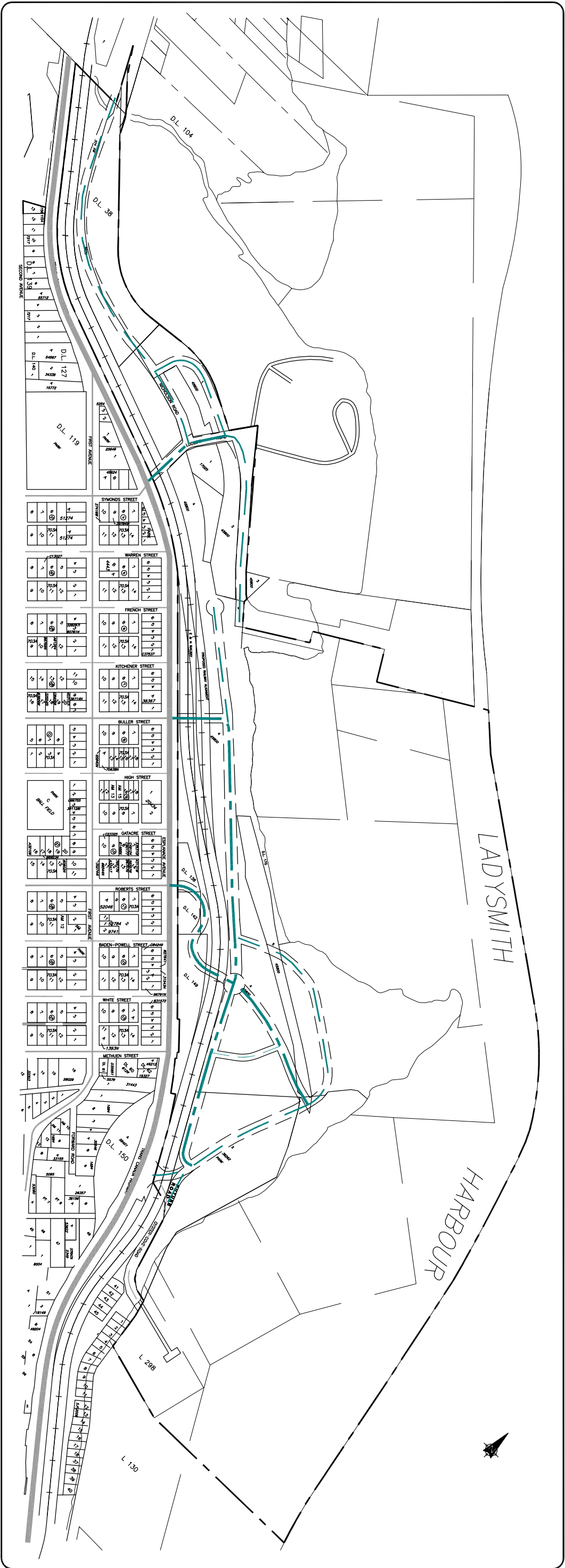
MAP 3

DATE: January 1997

designed by D'Ambrósio

drawn by Rome Architects

DESIGNED BY URBAN SYSTEMS



TOWN OF
LADYSMITH

WATERFRONT
AREA PLAN

CIRCULATION
NETWORK

LEGEND

PROPOSED COLLECTOR

PROPOSED LOCAL

PROPOSED LINK

EXISTING ARTERIAL

EXISTING MAJOR LOCAL

EXISTING LOCAL

PROPOSED CORRIDOR

PLAN AREA

MAP 4

DATE: January 1997

designed: Dario G. Rove Architects

drawn: Dario G. Rove Architects

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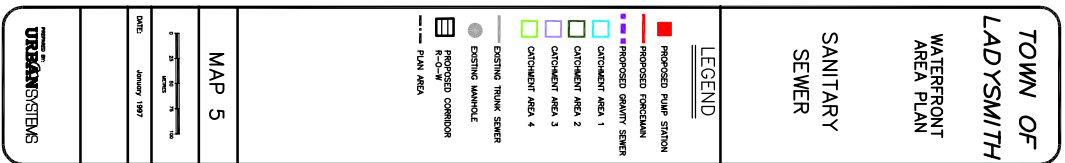
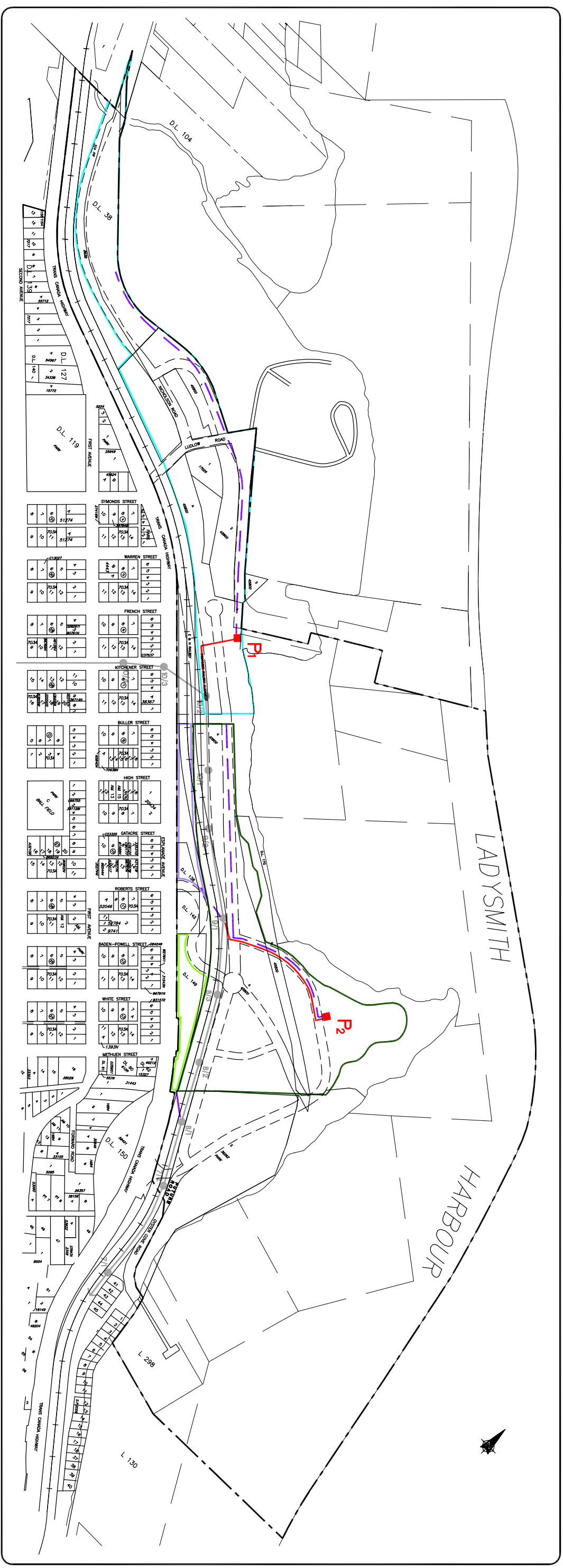
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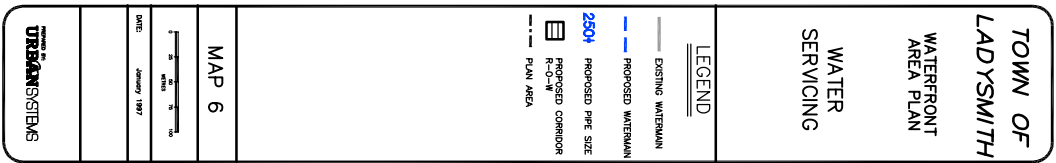
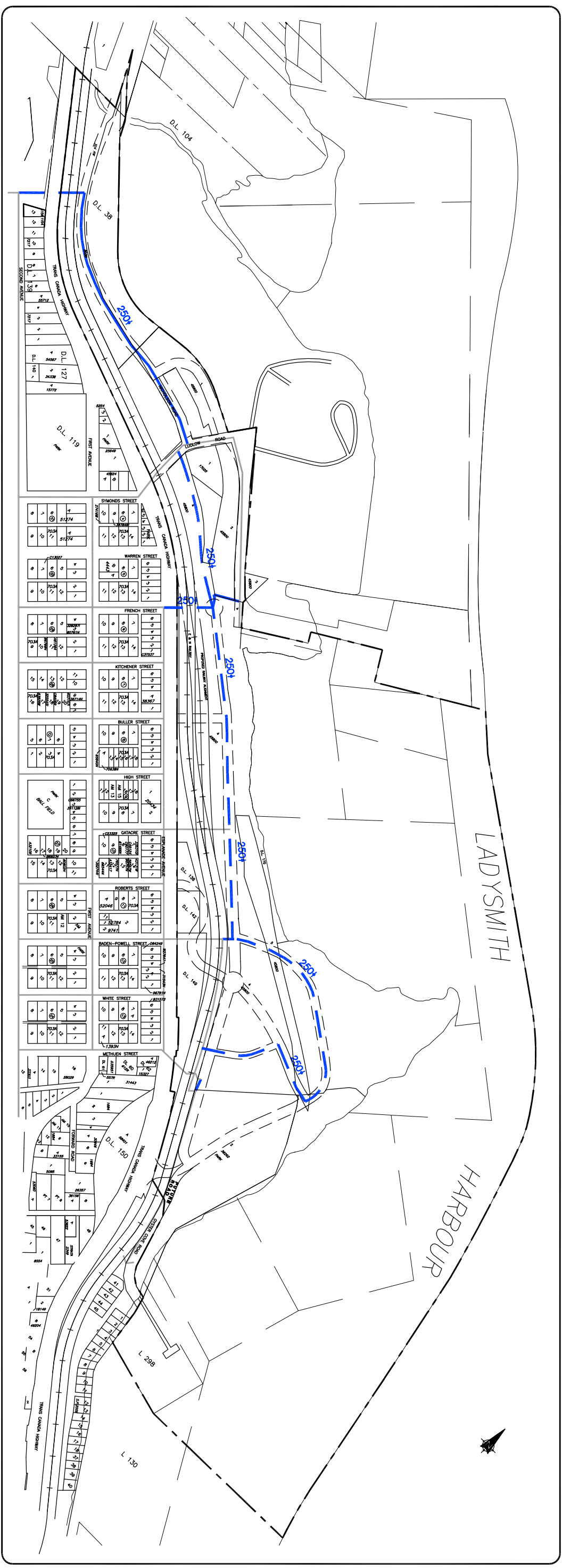
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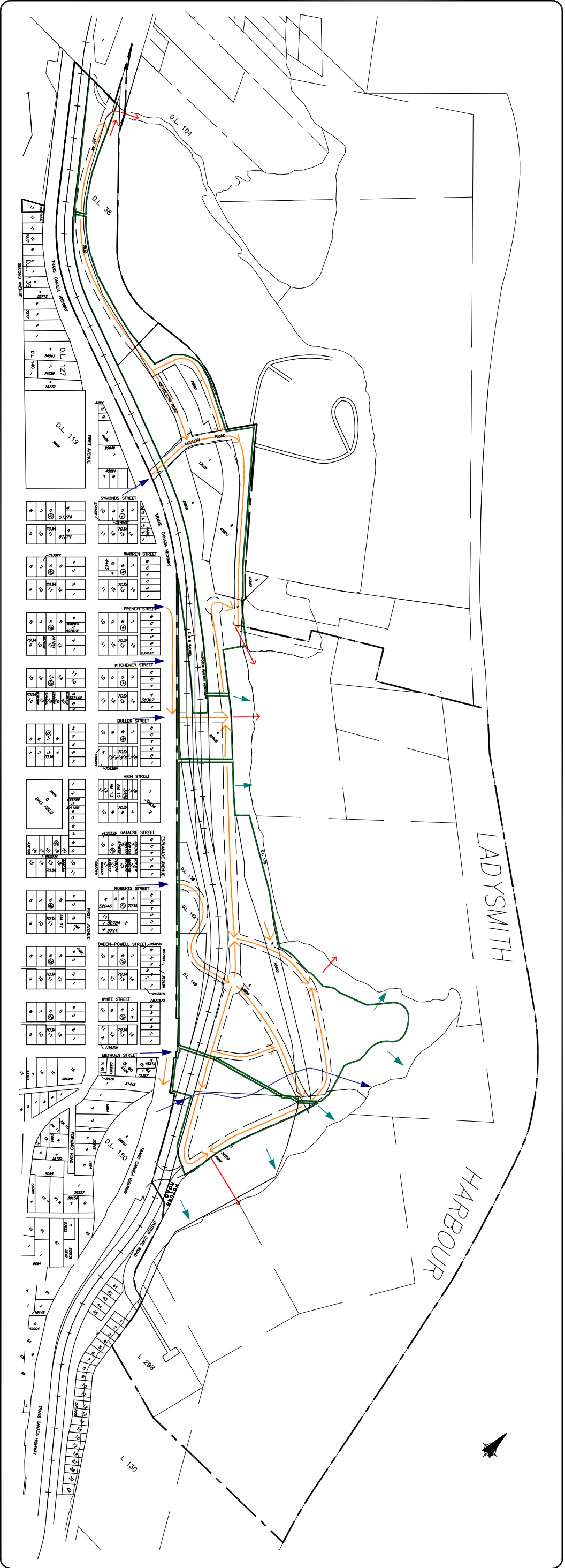
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URBANSYSTEMS

urban systems







TOWN OF
LADYSMITH

WATERFRONT
AREA PLAN

STORM
DRAINAGE

LEGEND

CATCHMENT BOUNDARY

INCOMING FLOW

CONTAINED FLOW

OVERLAND FLOW

OUTFALL

PROPOSED CORRIDOR

R-O-W

PLAN AREA

MAP 7

DATE: January 1997

URBAN SYSTEMS

