THE JOHNSON STREET BRIDGE & CYCLING

A report submitted to the City of Victoria

June 10, 2010

Susanna Grimes
Greater Victoria Cycling Coalition
INTRODUCTION

This report summarizes all available bicycle traffic survey data over the Johnson Street Bridge from 1998 to 2010, within a regional context and compared to other modes of transportation. Its primary purpose is to provide objective, quantitative measures of current and future growth in cycling as it pertains to the Johnson Street crossing of the Inner Harbour. Some interpretation of results, and identification of problems and suggestions for improvement are included.

ABOUT THE AUTHOR

Susanna Grimes has been a transportational cycling advocate, educator and promoter in the CRD since 1998. For several years she coordinated the region’s Bike to Work Week and education programs for the Greater Victoria Bike to Work Society. A cycling instructor, she has also worked as a bicycle tour guide, bicycle mechanic and bicycle courier, as well as managed the Victoria Car Share Co-op. She was the initial coordinator of the Cycling Tourism Advisory Committee and the coordinator of Victoria’s International Car Free Day events. For several years, she served on the board of the Greater Victoria Cycling Coalition and the City of Victoria’s Cycling Advisory Committee.

Improving the Johnson Street Bridge for cyclists has been her #1 project since '98, for which she has organized Bridge awareness campaigns and numerous traffic counts.
Cycling is a viable mobility choice for an increasing number of residents in the Capital Region; a welcome trend that deserves encouragement.

The CRD Origin and Destination surveys reveal a 7.4% annual increase in bicycle trips between 2001 and 2006, with a 6% growth in the number of commuter cyclists per year between the same time points reported by Census Canada (Table 3).

In fact, the growth in cycling outpaced that of all other transportation modes. Over the same five year span, auto trips grew only 1.6% per year, transit trips by 1.5%, while trips on foot fell 1.7%. Trips by ‘other’ modes grew 6% per year (e.g. school bus, taxi and ferry).

The CRD TravelChoices Strategy indicates that bicycles have the greatest potential to replace cars for the many short trips that residents make. The average length of all trips in the region was 6.7 km (2006), a distance that can be easily accomplished by a fair-weather cyclist within 30 minutes.

If bicycle trips continue to grow at the same rate (7.4% per year), they could constitute 10% of all trips in the region by 2026 (170,000 per day).

**Bicycle and pedestrian traffic over the Johnson Street Bridge**

Traffic counts conducted by the CRD and Greater Victoria Cycling Coalition (GVCC) over the Johnson Street Bridge (Bridge) also reflect the growing trend in bicycle use, showing a steady 6% increase in trips per year from 1998 to 2010 (Table 1).

The Bridge is an excellent location to monitor the ‘pulse’ of regional cycling traffic for a number of reasons: It funnels ~10% of all regional bicycle trips (during the high season). It is one of two bridges that connect Victoria West to downtown, where many people in the region work and play. Compared to the Bay Street Bridge, it is a more direct route to downtown; an important feature for cyclists who typically travel a few kilometres per trip. It is also directly connected to the busy Galloping Goose Regional Trail, a cross-town “bicycle highway” that draws cyclists from adjacent neighbourhoods and municipalities.

The midweek afternoon commute – the focus of traffic counts cited in this paper – is a standard traffic engineering measure, being stable and capturing the highest concentration of traffic over 24 hrs.

During the high season, there are nearly 4000 daily bicycle trips over the Bridge (Graph 1) and over the entire year, nearly one million trips. Pedestrian trips more than match the number of bicycle trips, to make a combined 8000+ trips per day and 2 million per year. Active transportation (cyclists and pedestrians) represents nearly 30% of all Bridge traffic (Graph 3).
By 2026 – the planning horizon of the CRD Regional Growth Strategy – there could be 8000 bicycle trips per day, 16,000 trips by active transportation, for a mode share approaching half of all traffic.

A spike in the demand for cycling and walking over the Bridge is also imminent. The E&N Rail Trail – when completed – could channel thousands more cyclists and pedestrians over the Bridge, along with additional numbers from the various residential developments, currently under construction in Vie West. The six percent growth observed to date could be well exceeded within a few years.

There is also latent demand from residents who will only cycle over the Bridge if it is made safer to use.

Problems with the Bridge

Despite the current heavy use of the Bridge by cyclists and pedestrians, it provides woefully inadequate service to both in terms of safety, convenience, and capacity, and is an obstacle to the expansion of active transportation into the downtown core.

From a cyclist’s point of view, the shortcomings of the Bridge and ‘Bridgehead’ are numerous: intimidating streams of speeding vehicles in close quarters, suddenly narrowing and merging roadway lanes, convoluted and substandard access and egress routes, impractical and confusing regulations regarding dismounting, and slippery, uneven surfaces. It is not for the faint of heart.

Traffic counts done by the GVCC reveal that a substantial portion (~40%) of cyclists shun the bridge deck altogether, sacrificing convenience for safety by travelling on the pathway of the railway bridge; where they by and large peaceably coexist with pedestrians.

Eastbound cyclists in particular (~80%) prefer the pathway, even though it puts them in a troublesome situation after crossing the bridge: facing either a ride along a sidewalk followed by two sets of traffic lights, or a dash across three lanes of traffic to head south along Wharf Street. However, the alternatives are worse: a left-turn onto busy Esquimalt Road followed by a blind corner in a tunnel, or a convoluted detour and bunny-hop off a curb onto Esquimalt Road, followed by a white-knuckle uphill ride with vehicles squeezing by in a suddenly-narrowing lane, and finally over the bridge itself. Here, cyclists face a slippery latticework surface next to railings, where cars and trucks often speed, tend to follow too closely and have been known to pass over a double-yellow line into oncoming traffic.

Westbound cyclists access the train path from either the northbound sidewalk or by diverting from the roadway just prior to the bridge deck through a narrow break in the chain link fence.

In fact, one-quarter of all cyclists go through this gap in either direction. Congestion is common during rush hour at this point, with both southbound cyclists and pedestrians clustered around the narrow opening waiting for a break in traffic, and westbound cyclists manoeuvring through it to the train path. Westbound vehicles on the roadway must regularly brake and even stop at this
point to avoid collision with a cyclist, while some eastbound vehicles stop out of misguided courtesy, to encourage cyclists and pedestrians to cross the eastside lanes.

Hazardous situations abound in the Bridge/Bridgehead area, and will only become worse with the impending increase in active transportation.

**Solutions**

A bridge to the City’s downtown core must encourage cyclists and pedestrians by being safe, convenient and inviting. The GVCC offers these recommendations for a bike-friendly Johnson Street Bridge/Bridgehead:

- Bike lanes on the roadway of 1.5 metre minimum width, ideally physically separated
- Multi-use path for pedestrians, cyclists and other non-motorized transport
- Separate pedestrian-only paths/sidewalks that accommodate wheelchairs/electric scooters
- Approaches to the bridge that are seamless, safe and easy to use.
- Clear and highly visible directional signage
- Road surfaces that are safe for bicycles

The GVCC would be happy to share information (including detailed traffic count data) and ideas with the City of Victoria, and conduct any requested additional Bridge counts that may be useful.

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**Graph #1: Bicycle trips over the Johnson Street Bridge – 24 hrs, weekday, 1998-2026**

**Table #1: Bicycle trips over the Johnson Street Bridge, 1998 - 2010**

<table>
<thead>
<tr>
<th>start end</th>
<th>time period</th>
<th>24 hrs projected*</th>
<th>done by</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues July 7, 1998</td>
<td>3:00pm</td>
<td>604</td>
<td>1775</td>
<td>CRD</td>
</tr>
<tr>
<td>Oct, 2000</td>
<td>4:00pm</td>
<td>464</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4:15pm</td>
<td>342</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thurs March 20, 2003</td>
<td>--</td>
<td>538</td>
<td>1995</td>
<td>CRD</td>
</tr>
<tr>
<td></td>
<td>6:00pm</td>
<td>366</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thurs July 17, 2003</td>
<td>--</td>
<td>263</td>
<td>1385</td>
<td>GVCC showers, windy in afternoon</td>
</tr>
<tr>
<td></td>
<td>4:00pm</td>
<td>4:15pm</td>
<td>2365</td>
<td>GVCC</td>
</tr>
<tr>
<td></td>
<td>4:15pm</td>
<td>449</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tues Jan 10, 2006</td>
<td>--</td>
<td>276</td>
<td>1020</td>
<td>CRD</td>
</tr>
<tr>
<td></td>
<td>6:00pm</td>
<td>207</td>
<td></td>
<td>poor weather all day</td>
</tr>
<tr>
<td>Tues May 9, 2006</td>
<td>784</td>
<td>632</td>
<td>2305</td>
<td>CRD</td>
</tr>
<tr>
<td></td>
<td>4:15pm</td>
<td>453</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed June 28, 2006</td>
<td>--</td>
<td>746</td>
<td>2765</td>
<td>CRD</td>
</tr>
<tr>
<td></td>
<td>6:00pm</td>
<td>517</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tues Sept 12, 2006</td>
<td>--</td>
<td>777</td>
<td>2880</td>
<td>CRD</td>
</tr>
<tr>
<td></td>
<td>5:30pm</td>
<td>556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tues April 28, 2009</td>
<td>--</td>
<td>485</td>
<td>2555</td>
<td>GVCC</td>
</tr>
<tr>
<td></td>
<td>6:00pm</td>
<td>485</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thurs Mar 18, 2010</td>
<td>679</td>
<td>549</td>
<td>2000</td>
<td>GVCC</td>
</tr>
<tr>
<td></td>
<td>3:00pm</td>
<td>376</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed Apr 28, 2010</td>
<td>885</td>
<td>717</td>
<td>2605</td>
<td>GVCC windy in afternoon</td>
</tr>
<tr>
<td></td>
<td>4:00pm</td>
<td>495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wed May 12, 2010</td>
<td>--</td>
<td>795</td>
<td>2990</td>
<td>GVCC</td>
</tr>
<tr>
<td></td>
<td>5:30pm</td>
<td>568</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thurs June 3rd, 2010</td>
<td>--</td>
<td>1075</td>
<td>3980</td>
<td>GVCC Bike to Work Week</td>
</tr>
<tr>
<td></td>
<td>6:00pm</td>
<td>750</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The projected # of trips over 24 hrs is based on the 2006 CRD Origin & Destination study, which found that 34% of all weekday bike trips are made during 3:00 to 6:00pm.
Graph #2: Transportation mode share over the Johnson Street Bridge

Assumptions:
- Bicycle and pedestrian trips grow at 6% per year
- Auto trips are assumed to remain constant at 25,000 trips per day
- The # of pedestrian trips is ~13% higher than bicycle trips (2006, 2010 data)

Table #2: Transportation mode share over the Johnson Street Bridge, 4\textsuperscript{th} to 6\textsuperscript{th} pm

<table>
<thead>
<tr>
<th>Date</th>
<th>bikes</th>
<th>peds</th>
<th>bikes+peds</th>
<th>vehicles</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tues Jan 10, 2006</td>
<td>276</td>
<td>376</td>
<td>652</td>
<td>4013</td>
<td>4665</td>
</tr>
<tr>
<td></td>
<td>6%</td>
<td>8%</td>
<td>14%</td>
<td>86%</td>
<td>100%</td>
</tr>
<tr>
<td>Tues Sept 12, 2006</td>
<td>777</td>
<td>767</td>
<td>1544</td>
<td>3832</td>
<td>5376</td>
</tr>
<tr>
<td></td>
<td>14%</td>
<td>14%</td>
<td>29%</td>
<td>71%</td>
<td>100%</td>
</tr>
<tr>
<td>Thurs Mar 18, 2010</td>
<td>549</td>
<td>689</td>
<td>1238</td>
<td>3754</td>
<td>4992</td>
</tr>
<tr>
<td></td>
<td>11%</td>
<td>14%</td>
<td>25%</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td>Wed April 28, 2010</td>
<td>717</td>
<td>790</td>
<td>1507</td>
<td>3866</td>
<td>5373</td>
</tr>
<tr>
<td></td>
<td>13%</td>
<td>15%</td>
<td>28%</td>
<td>72%</td>
<td>100%</td>
</tr>
</tbody>
</table>
### Table #3: Selected transportation regional data

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
<th>Increase per yr*</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>345,050</td>
<td>360,450</td>
<td>0.9%</td>
<td>1</td>
</tr>
<tr>
<td># Trips per day, weekdays</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>all modes</td>
<td>1,160,000</td>
<td>1,241,020</td>
<td>1.4%</td>
<td>1</td>
</tr>
<tr>
<td>bicycle</td>
<td>28,180</td>
<td>40,240</td>
<td>7.5%</td>
<td>1</td>
</tr>
<tr>
<td>other**</td>
<td>21,110</td>
<td>27,660</td>
<td>6.0%</td>
<td>1</td>
</tr>
<tr>
<td>automobile (driver or passenger)</td>
<td>897,340</td>
<td>969,790</td>
<td>1.6%</td>
<td>1</td>
</tr>
<tr>
<td>transit</td>
<td>73,260</td>
<td>79,090</td>
<td>1.5%</td>
<td>1</td>
</tr>
<tr>
<td>on foot</td>
<td>137,540</td>
<td>124,240</td>
<td>-1.7%</td>
<td>1</td>
</tr>
<tr>
<td>Commuting by bicycle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of all trips that are made by bicycle</td>
<td>2.4%</td>
<td>3.2%</td>
<td>6.0%</td>
<td>1</td>
</tr>
<tr>
<td>% commute trips made by bicycle</td>
<td>6.2%</td>
<td>7.7%</td>
<td>4.5%</td>
<td>1</td>
</tr>
<tr>
<td># bicycle commute trips 3-6pm, weekdays</td>
<td>5,530</td>
<td>7,740</td>
<td>7.0%</td>
<td>1</td>
</tr>
<tr>
<td># who ride to work regularly</td>
<td>6,745</td>
<td>9,035</td>
<td>6.0%</td>
<td>2</td>
</tr>
<tr>
<td>% who ride to work regularly</td>
<td>4.8%</td>
<td>5.7%</td>
<td>3.5%</td>
<td>2</td>
</tr>
<tr>
<td>Trip length</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average length of bicycle trips</td>
<td>4.2 km</td>
<td>4.7 km</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>average length of all trips, all modes</td>
<td>6.6 km</td>
<td>6.7 km</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

* Compounded per year  
** School bus, taxi, ferry, etc.

Sources: 1: CRD Origin and Destination surveys  
2: Census Canada
CITY OF VICTORIA GREENWAYS MAP:
Existing Greenways and Greenways to be improved according to city of Victoria Greenways plan, 2003.

ROUTE MAP LEGEND

Shared - City of Victoria Greenways
(Designed for Pedestrian, Bicycle and other non-motorized rolling traffic, Motorized Vehicle. This type of Greenway will occur on streets classified as primary and secondary arterial and primary collectors.)

People Priority - City of Victoria Greenways
(According to city of Victoria Greenways Map 2003: Pedestrian, Bicycle and other non-motorized rolling traffic, Motorized Vehicle. This type of Greenway will occur on streets classified as secondary collectors and local.)

People Only - City of Victoria Greenways
(Designed for Pedestrian, Bicycle and other non-motorized rolling traffic. No Vehicular traffic is permitted except emergency or maintenance vehicle.)

Bicycle Route (on Street) - Victoria Harbour Pathway

Pedestrian Only Route - Victoria Harbour Pathway

Pedestrian / Bicycle Combined Route - Victoria Harbour Pathway

Future Potential Waterfront Route - Victoria Harbour Pathway

Proposed Bridge - Victoria Harbour Pathway

Harbour Ferry Landing - Victoria Harbour Pathway

(V - Possibility, only if land use changes in the future)
The following Harbour Pathway Planning and Design Principles have been developed by the consultant team in consultation with the client staff committee and with senior City management input:

- The harbour pathway design should aspire to excellence, with the aim of becoming Victoria’s preeminent public space.
- The harbour pathway shall follow the shoreline as the ultimate preferred priority, while ensuring that existing working harbour access is not compromised.
- The harbour pathway shall be mostly a “People Only Greenway” (i.e. no motor vehicles) intended for pedestrians, cyclists and other rolling modes (including motorized individual scooters).
- The harbour pathway shall utilize and build on those existing pathway sections that warrant being retained.
- The harbour pathway will vary in width according to existing/future circumstances, with a target width of 7.0 m for combined pedestrian and cyclist sections, and 5.0 m for pedestrian only sections.
- The harbour pathway should vary in character and design in different sections of the route, to reflect the varying “character zones” along the route, with a range of technical/physical solutions.
- Maintain flexibility in combining or separating cyclists and pedestrians, with some sections of the harbour pathway having separate bicycle and pedestrian routes.
- The harbour pathway shall explore a range of relationships to the water, including:
  - bridging over water
  - floating on the water
  - fixed structure in the water
  - on-grade beside the water
  - separated from the water (inland)
- Create “Special Places” along the harbour pathway route.
- Provide public facilities and amenities along the harbour pathway route (e.g. public washrooms)
- The harbour pathway should be an opportunity for education and interpretation: cultural, historical and natural.
- The harbour pathway routing should be established before upland development plans, and new waterfront projects should be required to integrate this pathway routing in their site plans.

ROUTE MAP LEGEND

- Bicycle Route (on Street)
- Pedestrian Only Route
- Pedestrian / Bicycle Combined Route
- Future Potential Waterfront Route
- Proposed Bridge
- Harbour Ferry Landing

(° - possibility, only if land use changes in the future)

- The harbour pathway plan shall accommodate both interim and ultimate solutions, recognizing that construction will be phased over time and that some sections may involve short term solutions.
- The harbour pathway should be planned and designed to be extended in future.
- The harbour pathway design should include certain specific common elements to help define continuity.
- The harbour pathway should be a model of environmental sustainability and shall improve the natural environment.
- Aim for universal access wherever practically possible.
- Identify key viewpoints (lookouts) and view corridors (street-end views) to be protected and enhanced.
- Identify key connections to the upland street network and develop these as enhanced public spaces.
- The harbour pathway shall be designed with public safety and comfort in mind, taking into consideration principles of Crime Prevention Through Environmental Design.
- With respect to edge protection, the harbour pathway design shall balance reasonable risk management with careful consideration given to not blocking views or limiting experience of the water: the existing typical bollard an chain solution is considered a generally appropriate edge treatment precedent.
Welcome to the second Open House for the Harbour Pathway project.

The Harbour Pathway project is being undertaken to guide the implementation of a multi-use public pathway along Victoria’s harbour waterfront between Ogden Point and Rock Bay. The Harbour Pathway is the first priority of the city-wide Greenways Plan approved by Council in 2003. An interdisciplinary urban design team has been working with stakeholders and City staff to prepare plans for the pathway.

A first Open House was held in November 2007 at which the team presented initial route options and design ideas for public feedback. Based on this feedback, the design team has now finalized the route plan and developed detailed design concepts for the Harbour Pathway. We have also developed environmental strategies and a suite of design details for pathway lighting, paving materials, landscaping and furniture.

The following display illustrates – through plans, cross-sections and design detail drawings – the full range of design solutions to the diverse site conditions found along the pathway.

The Harbour Pathway is planned as a major public amenity for the entire city. It will provide public access to the entire harbour waterfront, with the exception of properties that currently require water access, such as marine industrial businesses located around Rock Bay. In these areas the surrounding street system will be upgraded to improve pedestrian and bicycle connectivity, until there is a change in land use.

A key objective of the Harbour Pathway project is the completion of gaps in the existing waterfront pathway between Ogden Point and Rock Bay. The Harbour Pathway will complement and extend those sections of waterfront pathway that exist, such as the Inner Basin causeway, rather than replacing them.

Please take the time to review the display material. Then fill in the comment form and let us know what you think. We look forward to hearing from you. It is anticipated that the final plan will be submitted to Council later this spring.
BACKGROUND
Cumulative impacts from a long history of industrial activity have had significant effects on subtidal, intertidal, riparian, and upland habitat in the Victoria harbour. Existing habitat quality in the majority of the study area is very low, with only a few small undisturbed areas remaining.

APPROACH
Our approach will be consistent with the recently developed “Green Shores” guiding principles, which include:

- Preserving the integrity or connectivity of coastal processes;
- Maintaining or enhancing habitat diversity and function (on a local or regional scale);
- Minimizing or reducing pollutants to the marine environment; and
- Reducing cumulative impacts to the coastal environment.

GOALS
We propose to minimize Pathway impacts while maximizing opportunities for habitat protection and enhancement along the Pathway and throughout the harbour. Our primary goals will include:

- Providing a net increase in both the quantity and quality of fish and wildlife habitat in the harbour area;
- Increasing the fish and wildlife species diversity in the harbour area; and
- Improving the overall ecological rating of the Harbours Ecological Inventory and Rating (HEIR) shore units in the Pathway project area.

PRELIMINARY ENVIRONMENTAL STRATEGIES
Our preliminary suggestions/recommendations for meeting these habitat protection and enhancement goals along the Pathway and throughout other areas of the harbour include:

- Avoiding, protecting, and restoring the few remaining natural habitats;
- Removing invasive plant species;
- Creating and/or augmenting upland habitat;
- Planting native vegetation along the existing top-of-bank wherever possible, in as wide a strip as conditions permit. This includes:
  - Planting in areas where the Pathway is not located near the waterfront;
  - Planting in any areas where the Pathway can be pulled back from the top-of-bank;
  - Planting on the water side of the Pathway wherever possible (including the use of planter boxes with overhanging vegetation.);
- Planting native vegetation in “ecopockets”:
  - Within any new riprap placements; and
  - In existing riprap areas where creation of pockets is feasible
- Softening the shoreline wherever possible by:
  - Removing sheet piling and/or retaining walls; and
  - Creating vegetated banks.
- Creating intertidal marsh habitat;
- Creating subtidal “hard surface” (reef) habitat;
- Establishing pocket beaches wherever possible;
- Orienting “above-water” portions of the Pathway in north-south direction to minimize shading impacts;
- Recycling concrete slabs/sections as “hard surface” subtidal reef habitat;
- Cantilevering sections of the Pathway to reduce intertidal impacts;
- Minimizing “on-water” (floating) Pathway areas to reduce shading impacts;
- Daylighting historic streams by removal of culverts wherever possible;
- Providing interpretive signage along the Pathway route on topics such as:
  - Fishing industry;
  - Fish (resident and migratory);
  - Riparian habitat;
  - Intertidal habitat;
  - Subtidal habitat (especially in areas of reef creation);
  - Wildlife.

Preliminary Environmental Recommendations are based on investigation undertaken by Pottinger Gaherty Environmental Consultants Ltd. Initial study ‘Harbour Pathway: Environmental and Land Use Inventory and Analysis’ (Jan. 2007) was undertaken by Westland Resource Group.
**Other Environmental Protection and Enhancement Opportunities**

* At locations where the pathway is not located at the waterfront, remove invasive plant species from riparian foreshore and top of bank areas and replant with native grass, shrub and tree species.

* At locations where the pathway is not located at the waterfront, explore opportunities to create riparian ecopockets, marsh benches and pocket beaches.

* Conduct subtidal biophysical surveys at selected locations in the harbour to determine appropriate locations for creation of subtidal “hard surface” (reef) habitat.

* Recycle concrete slabs as “hard surface” (reef) habitat.

* Provide interpretive signage along the pathway route on a variety of topics, including:
  - Fishing industry;
  - Fish (resident and migratory);
  - Riparian habitat;
  - Intertidal habitat;
  - Subtidal habitat (especially in areas of reef creation);
  - Wildlife.

**KP 0.1 – KP 0.65**

* Revegetate the grassy bank adjacent to Fisherman’s Wharf with native tree and shrub species.

* Augment riparian habitat at the top of bank along the foreshore with native plant species.

* Create ecopockets in the existing riprap foreshore adjacent to Fisherman’s Wharf wherever possible. Ecopockets would be planted with native vegetation, and could be designed to augment existing riparian and/or intertidal marsh habitat.

* Remove invasive plant species and replant with native species at selected locations along the waterfront.

* Daylight a portion of the stormwater culvert terminating in Heron Bay to create an open watercourse with a small riparian fringe.

* Avoid impacting natural beach and riparian habitat areas in Heron Bay.

* Terminate boat cleaning operations in Heron Bay.

* Design the bridge over Heron Bay at a height to reduce shading impacts.

* Design the bridge immediately east of Raymur Point at a height to reduce shading impacts.

* Replace invasive vegetation upland of the small pocket beach immediately east of Raymur Point with native species, and restore the pocket beach.

**KP 1.25**

* All equipment and materials from the natural bedrock shoreline.

* Replace asphalt and replace with permeable pavers.

* Plant native shrub and tree species at the top of bank.

**KP 2.15**

* Pile-supported boardwalk above the water immediately west of the shoreline will provide a good interpretive opportunity, and will preserve the natural bedrock shoreline. (North-south orientation of this boardwalk will minimize shading impacts on subtidal habitat).

* Remove invasive plant species and plant with native shrub and tree species.

* Create ecopockets in existing riprap north of the beach, and plant with native grass or shrub species.

**KP 2.65 – Johnson Street Bridge**

* Pile-supported boardwalk above the water immediately west of the shoreline will provide a good interpretive opportunity, and will preserve the natural bedrock shoreline. (North-south orientation of this boardwalk will minimize shading impacts on subtidal habitat).

* Remove invasive plant species and replant with native species at selected locations along the natural bedrock shoreline.

**KP 3.05 – KP 3.08**

* Plant native shrub and tree species at selected locations along the top of bank.

* Plant native grass and shrub vegetation in ecopockets at selected locations along the top of bank.

* Create intertidal marsh benches.

**ENVIRONMENTAL RECOMMENDATIONS**
THE WATERFRONT EXPERIENCE

This study should be considered as a component of the long term planning strategy for the waterfront.

The Harbour Pathway is about more than just a waterfront route for cyclists and pedestrians. It is about experiencing the waterfront as a special place in the city. It is a place for gathering, celebrating, special events, watching the marine based activities, enjoying nature and landscape and participating in a vibrant public realm for the city.

As one moves along the Harbour Pathway one will engage in a variety of places, landscape and activities. Many of these exist and many will come in the future as redevelopment along the much of the route occurs. The pathway should respond to these conditions to provide a range of interesting and engaging places and experiences.

SPECIAL PLACES

The Harbour Pathway is intended to link a series of special, engaging public places. The special places along the route correspond to both existing conditions and future opportunities for enhancing public use of Victoria’s urban waterfront. For example, the Harbour Pathway proposes to extend Bastion Square right down to the waterfront, with broad flights of stairs and terraces that provide Public access from Wharf Street to the water’s edge. This will become a key public entry point to the Harbour Pathway, and extend the Bastion Square public open space to the water.

Another example of a special place is the opportunity to develop Ship Point as a public space for festivals, concerts and other special events.

NEW DEVELOPMENT

The Harbour Pathway also both anticipates and accommodates new development on several key sites along the route. While this study is not a land use study, this work does inform longer term land use planning and supports potential future changes in land use along the route. Development of these sites will bring more diverse uses to the waterfront, and these new uses will front onto and help animate the Harbour Pathway.

Key adjacent sites that are expected to redevelop in the near future, and some possible uses, include:

- Fisherman’s Wharf area (expected to add tourist commercial operations, a pub, and a performance area)
- Belleville Street ferry terminal site (expected to be redeveloped as a marine gateway transportation hub with a mix of supporting uses including retail, restaurants, tourist attractions, etc.)
- City of Victoria owned parking lot along Wharf Street between Humboldt and Broughton streets (envisioned to be redeveloped as a public celebration space with arts performance area, First Nations longhouse and tourism/commercial operations)
- Provincial Capital Commission owned parking lot along Wharf Street between Fort Street and Bastion Square (envisioned to be redeveloped as a mixed use, active public area, with a mix of tourist commercial, retail and food services)

Taken together, redevelopment of these and other adjacent sites will bring a more diverse, lively, active range of uses to Victoria’s waterfront. The Harbour Pathway, with its generous width, is specifically designed to accommodate and support these uses and the increase in pedestrian and cyclist traffic that will accompany them. The Harbour Pathway can also provide other opportunities to expand and improve existing commercial uses of the water itself such as for kayak launches, canoe rentals, ecotourism, whale watching, additional ferry services, etc.

PROGRAMMING

A key aspect of the success of the proposed Harbour Pathway will be the intensive programming of spaces along the pathway. Programming of the Harbour Pathway could include such elements as:

- Mobile food/drinks/crafts vending kiosks;
- Tourist Information kiosks;
- Public Washrooms;
- Public Art installations or temporary displays;
- Arts and Cultural Festivals
- Special events
- Seasonal flower displays/hanging baskets
- Busker program
- Sports events such as fundraiser walks, jogging races, etc.
- Environmental Interpretive program (signs and plaques)

The Harbour Pathway is designed to support a wide range of intensive programming. Locations for the infrastructure (e.g. electric power, lighting) and facilities (e.g. public art sites, gathering spaces, bike racks) required to support such programming will be included at various sites along the length of the pathway. The pathway is sufficiently wide (typically 7.0 m) to ensure that such programming should not impede the flow of pedestrians.

EPHEMERAL VERSUS PERMANENT

The Harbour Pathway route plan recognizes that there are both short term or interim conditions and longer term conditions. For example, the pathway route around Rock Bay cuts inland onto City streets to avoid compromising the water access requirements of existing industrial uses. At the same time, the plan identifies the long-term preferred pathway route along the waterfront when such land uses change.

Similarly, the pathway is designed with built-in flexibility to accommodate a wide range of ephemeral uses or activities within its undifferentiated 7.0 m width, such as busking locations, mobile kiosks, craft stalls, temporary art displays, etc. These ephemeral uses can be added, relocated or terminated as required by program managers.
OGDEN POINT
- Southern terminus of the Harbour Pathway
- Connects to Ogden Point Breakwater and south shore beaches, cliff top walk
- Ogden Point pavilion (shops and café)

FISHERMAN’S WHARF
- Marine commercial and tourist hub
- Fish market, shops, restaurants and marina
- Major tourist destination on the Harbour Pathway
- Public access onto water, with floating walkways

HERON COVE
- Relatively intact natural tidal bay
- Natural shoreline, beach and rocky outcrops, mature landscaping
- High ecological rating and marine habitat rating
- Potential for pedestrian bridge across entry

SHIP POINT
- Completes north side of Inner Basin
- Excellent views out over harbour
- Currently a concrete wharf and pier extension
- Used for temporary boat moorage
- Surface treatment is ill-defined, poor quality materials

BASTION SQUARE
- Major public open space between Government Street and Wharf Streets
- Excellent views out over harbour
- Currently very weak connection to waterfront (narrow wooden stairway)
- Potential to extend major public open space down to waterfront Harbour Pathway

CANOE CLUB
- Adaptive re-use of heritage waterfront industrial building
- Attractive waterfront pub/restaurant with outdoor seating adjacent Harbour Pathway
- Connects Harbour Pathway and upland street work via Swift Street

BARCLAY POINT
- Northern terminus of the Harbour Pathway
- Formerly a rocky islet in the bay, now a prom (through landfills)
- Excellent views south over harbour
- Potential for a future pedestrian bridge across Bay Street
- Former marine industrial site, being reme
- Currently inaccessible, but could become park with future redevelopment

LAUREL POINT
- Significant promontory
- Outstanding panoramic views across harbour
- Major waterfront parkspace
- Very low ecological rating but high to medium marine habitat rating

BELLEVILLE
- Major redevelopment site (ferry terminal)
- Potential for significant public/tourist attraction and waterfront access
- Currently inaccessible to public
- Development would extend Inner Basin urban experience

INNER BASIN
- Victoria’s formal “front door”
- Heart of the Harbour Pathway
- Well established tourist attraction
- Generous design, high quality materials, consistent streetscape treatment
- Focus of public spectacles and special events

SPECIAL PLACES
- Barclay Point
- Canoe Club
- Bastion Square Bridge
- Johnson Street Bridge
- Bastion Square
- Ship Point
- Inner Basin
- Belleville
- Laurel Point
- Heron Cove
- Fisherman’s Wharf
- Ogden Point

LEGEND
- Key Viewpoints
- Street End Views
- Remnant Ecological Area
- Special Places
The study area has been divided into a number of distinct Character Zones:

**ROCK BAY INDUSTRIAL**
- Characterized by heavy industrial operations and areas of inactive industrial lands
- Shoreline is a mix of working industry, wharfs and abandoned former industrial sites
- Surrounding streets have narrow concrete sidewalks with few trees
- No existing waterfront pathway in this zone

**DESIGN DISTRICT**
- Characterized by a mix of large warehouse and older industrial buildings, some of which have been converted into lifestyle shops, design offices and restaurants
- Transition zone between Rock Bay industrial to north and Downtown to south
- Very limited connections to upland street grid

**DOWNTOWN 'OLD TOWN'**
- Characterized by a mix of older industrial and commercial buildings, a multi-storey waterfront hotel and large surface parking areas
- Built form is a mix of older small masonry buildings, the multi-storey Regent Hotel, and floating transportation-related structures
- Existing shoreline pathway is largely continuous but under-scaled, and very poorly defined adjacent to the parking lots
- Connections to the upland street grid rely on access through parking lots

**TOURIST / INSTITUTIONAL / CEREMONIAL**
- The most formal character zone along the entire harbour shoreline, attracting the highest concentration of tourists
- Characterized by a strong sense of containment, a consistent formal edge treatment, and generous scale of interconnected public waterfront spaces
- Built form consists of large, formal heritage structures, utilitarian transportation structures, and smaller waterfront pavilions
- Shoreline has been modified to create a formal public edge treatment flanked by hard-edged working wharfs on both the south and north sides of the Inner Basin

**TOURIST / RESIDENTIAL / PARK**
- Characterized by several hotels and residential buildings, and substantial sections of waterfront park space arrayed along a picturesque, irregular shoreline.
- Includes several coves and inlets, some of which have preserved their natural shoreline environment
- Shoreline has been modified in some sections, but largely follows its original alignment, with several inlets, bays and promontories including Laurel Point
- Connections to the upland street grid mostly rely on mid-block easements across private properties

**FISHERMAN'S WHARF**
- Characterized by the tourist-oriented Fisherman's Wharf marina and fish market
- Adjacent to public park
- Built form consists of a number of wharfs and floating homes and other structures at Fisherman's Wharf
- Significant conflicts between vehicle traffic and pedestrians

**JAMES BAY / DALLAS ROAD**
- Characterized by a residential neighbourhood along the inland side of Dallas Road, and large institutional uses along the water side
- Dallas Road is characterized by rows of mature trees on both sides of the street and a broad landscaped boulevard along the west side, extending south to Ogden Point
- The proposed harbour pathway route in this area is integrated with the existing street grid along Dallas Road
- No existing waterfront pathway in this zone
ROCK BAY INDUSTRIAL / BARCLAY POINT ZONE

Characterized by heavy industrial operations and large areas of obsolete post-industrial lands. Built form consists of widely spaced, large footprint, low industrial buildings.

Rock Bay has been substantially modified for industrial waterfront industrial uses, and is heavily contaminated. The shoreline has been heavily modified, and almost no natural shoreline remains intact. Low habitat value.

Shoreline is a mix of working industry, wharfs and abandoned former industrial sites.

Dominant shoreline materials are: rip rap, heavy timber wharfs, concrete seawalls, tidal mudflats.

Surrounding streets (Bay Street, Government Street, Pembroke Street) have narrow concrete sidewalks with limited trees.

ROUTE MAP LEGEND

- Bicycle Route (on Street)
- Pedestrian Only Route
- Pedestrian / Bicycle Combined Route
- Future Potential Waterfront Route *
- Proposed Bridge
- Harbour Ferry Landing
- Distance Marker (Kilometre Point)
- Section Marker

(* - possibility, only if land use changes in the future)

EXISTING SECTION: ROCK BAY INDUSTRIAL KP: 3.25 - BARCLAY POINT

PROPOSED SECTION: ROCK BAY INDUSTRIAL KP: 3.25 - BARCLAY POINT

EXISTING SECTION: GOVERNMENT STREET KP: 3.78

EXISTING SECTION: GOVERNMENT STREET KP: 3.88 NO CHANGE RECOMMENDED

ROCK BAY INDUSTRIAL / BARCLAY POINT ZONE
JOHNSON STREET BRIDGE / DESIGN DISTRICT ZONE

Characterized by a mix of large warehouse and older industrial buildings, some of which have been converted into lifestyle shops and design offices, and some emerging residential and restaurant uses.

Built form is a mix of older masonry industrial buildings, large industrial sheds, and a more recent multi-storey residential block.

Transition zone between Rock Bay industrial to north and old downtown to south.

Shoreline has been largely modified for water-dependent former industrial uses, with a small remnant natural rocky outcrop (KP 3) and intertidal mudflat beach (KP 2.8).

Dominant shoreline materials are: heavy timber and concrete wharfs, timber decking on piles, natural rock outcrop, tidal mudflat beach.

Very limited connections to upland street grid (via Swift Street, KP 2.9).
DOWNTOWN / ‘OLD TOWN’ ZONE

Characterized by a mix of older industrial and mercantile/commercial buildings, a 1970s era multi-storey waterfront hotel and large surface parking areas that occupy most of the waterfront lands south of Bastion Square.

Built form is a disparate mix of older small masonry buildings (KP 2.7, KP 2.3), the multi-storey Regent Hotel (KP 2.6), and floating transportation-related structures (KP 2.5, KP 2.2).

Wharf Street closely parallels the shoreline, forming the edge of the historical downtown core. Upland land uses are varied, with a fine-grained street grid and several street-end views over the water (Johnson, Yates, Bastion Sq., Fort, Broughton, Courtney). There is a substantial elevation change between the shoreline and the adjacent old downtown.

Shoreline has been largely modified for water-transportation and urban uses, with small natural shoreline remnants and rocky outcrops (KP 2.7, KP 2.3). The shoreline is complex and varied in surface treatment. The existing shoreline pathway is largely continuous but under-scaled, and very poorly defined adjacent to the parking lots.

Dominant shoreline materials are: dressed stone retaining walls, rip rap, heavy timber and concrete wharfs, timber decking on piles, remnant natural beach.

Connections to the upland street grid rely on access through parking lots.
DOWNTOWN / ‘OLD TOWN’ ZONE

Characterized by a mix of older industrial and mercantile/commercial buildings, a 1970s era multi-storey waterfront hotel and large surface parking areas that occupy most of the waterfront lands south of Bastion Square.

Built form is a disparate mix of older small masonry buildings (KP 2.7, KP 2.3), the multi-storey Regent Hotel (KP 2.6), and floating transportation-related structures (KP 2.5, KP 2.2).

Wharf Street closely parallels the shoreline, forming the edge of the historical downtown core. Upland land uses are varied, with a fine-grained street grid and several street-end views over the water (Johnson, Yates, Bastion Sq., Fort, Broughton, Courtney). There is a substantial elevation change between the shoreline and the adjacent old downtown.

Shoreline has been largely modified for water-transportation and urban uses, with small natural shoreline remnants and rocky outcrops (KP 2.7, KP 2.3). The shoreline is complex and varied in surface treatment. The existing shoreline pathway is largely continuous but under-scaled, and very poorly defined adjacent to the parking lots.

Dominant shoreline materials are: dressed stone retaining walls, rip rap, heavy timber and concrete wharfs, timber decking on piles, remnant natural beach.

Connections to the upland street grid rely on access through parking lots.

EXISTING SECTION: DOWNTOWN ‘OLD TOWN’ Bastion Square KP: 2.48

PROPOSED SECTION: DOWNTOWN ‘OLD TOWN’ Bastion Square KP: 2.48

PROPOSED PLAN SKETCH: DOWNTOWN ‘OLD TOWN’ Bastion Square KP: 2.4

DOWNTOWN / ‘OLD TOWN’ ZONE

ROUTE MAP LEGEND

Bicycle Route (on Street)
Pedestrian Only Route
Pedestrian / Bicycle Combined Route
Future Potential Waterfront Route
Proposed Bridge
Harbour Ferry Landing
Distance Marker (Kilometre Point)
Section Marker

(* - possibility, only if land use changes in the future)
TOURIST / INSTITUTIONAL / CEREMONIAL ZONE

This area is the most formal character zone along the entire harbour shoreline. It attracts the highest concentration of tourists.

Characterized by a strong sense of containment, a consistent formal edge treatment, generous scale of interconnected public waterfront spaces, and formal gardens fronting large iconic buildings (e.g. Empress Hotel, BC Legislature) arranged around the Inner Basin. It includes the Belleville Ferry Terminal, which is slated for redevelopment as a marine gateway and mixed-use tourist facility.

Built form consists of large, formal heritage structures (KP1.7-2), utilitarian transportation structures (KP 1.3-1.6), and smaller waterfront pavilions (KP 1.7, KP 2).

The shoreline has been modified to create a formal public edge treatment flanked by hard-edged working wharfs on both the south and north sides of the Inner Basin.

Dominant shoreline materials are: dressed stone/concrete retaining walls, concrete wharfs, timber decking on piles.

Connections to the upland streets are via stairs up from the lower level causeway to Government and Belleville streets. Surrounding streets have narrow asphalt sidewalks (especially Belleville Street) with very few street trees.
TOURIST / RESIDENTIAL / PARK ZONE

Characterized by several hotels and residential buildings, and substantial sections of waterfront parkspace arrayed along a picturesque, irregular shoreline. It includes several coves and inlets, some of which have preserved their natural shoreline environment. It also includes the tourist-oriented Fisherman’s Wharf marina and fish market.

Built form consists of a series of newer multi-storey residential/hotel structures facing the water (KP 0.4 – 1.2), two remnant older single-family residences (KP 0.3), and a number of small floating structures at Fisherman’s Wharf (KP 0.1).

The shoreline has been modified in some sections, but largely follows its original alignment, with several inlets, bays and promontories including Laurel Point.

Dominant shoreline/pathway materials are: rip rap, concrete or heavy timber piers and wharfs, dressed stone walls, timber decking, asphalt paving, natural rock shoreline and tidal pocket beaches.

Connections to the upland street grid (St. Lawrence, Kingston, Montreal, Pendray streets) mostly rely on mid-block easements across private properties.
**FISHERMAN’S WHARF ZONE**

Characterized by the intensive tourist-oriented Fisherman’s Wharf marina and fish market. This is a major tourist destination.

The area is adjacent to Fisherman’s Wharf Park.

The built form consists of a number of wharfs and floating structures at Fisherman’s Wharf marina.

There are significant conflicts between vehicle traffic and pedestrians.

Most of the shoreline has been modified to accommodate boat moorage and the marina. However, it also includes Heron Cove, which has preserved its natural shoreline environment.

**PROPOSED SECTION:**

**FISHERMAN’S WHARF  KP: 0.1**

**EXISTING SECTION:**

**FISHERMAN’S WHARF  KP: 0.04**

**PROPOSED PLAN SKETCH:**

**FISHERMAN’S WHARF  KP: 0.1 - OPTION TWO**

- Widen steps from park to Wharf
- Enhanced paving material at pedestrian crossing
- 5m one-way vehicle route
- Additional seating in park

**ROUTE MAP LEGEND**

- Bicycle Route (on Street)
- Pedestrian Only Route
- Pedestrian / Bicycle Combined Route
- Future Potential Waterfront Route
- Proposed Bridge
- Harbour Ferry Landing
- Distance Marker (Kilometre Point)
- Section Marker

(*) - possibility, only if land use changes in the future
JAMES BAY / DALLAS ROAD ZONE

The proposed harbour pathway extension in this area follows Dallas Road, not the actual shoreline.

Characterized by a low-rise residential neighbourhood along the inland (east) side of Dallas Road, and large institutional uses along the water (west) side (Canadian Coast Guard headquarters, Ogden Point cruise ship terminal, heliport). Dallas Road itself is characterised by rows of mature trees on both sides of the street and a broad landscaped boulevard along the west side, extending south to the Ogden Point Breakwater.

Built form consists of low- and mid-rise residential buildings on the inland side of the street, and large institutional or transportation-related structures on the waterfront side.

The original shoreline has been comprehensively modified to accommodate the active working uses, which are expected to remain for the foreseeable future.

The proposed harbour pathway route in this area is integrated with the existing street grid.

ROUTE MAP LEGEND

- Bicycle Route (on Street)
- Pedestrian Only Route
- Pedestrian / Bicycle Combined Route
- Future Potential Waterfront Route
- Proposed Bridge
- Harbour Ferry Landing
- Distance Marker (Kilometre Point)
- Section Marker

(* - possibility, only if land use changes in the future)
JAMES BAY / DALLAS ROAD ZONE
Option two with bicycle on Dallas road

JAMES BAY / DALLAS ROAD ZONE
Option two with bicycle on Dallas road

EXISTING SECTION: DALLAS ROAD LOOKING NORTH D-2

PROPOSED SECTION: DALLAS ROAD LOOKING NORTH D-2 OPTION TWO

EXISTING SECTION: DALLAS ROAD LOOKING NORTH D-3

PROPOSED SECTION: DALLAS ROAD LOOKING NORTH D-3 OPTION TWO

ROUTE MAP LEGEND
Bicycle Route (on Street)
Pedestrian Only Route
Pedestrian / Bicycle Combined Route
Future Potential Waterfront Route
Proposed Bridge
Harbour Ferry Landing
Distance Marker (Kilometre Point)
Section Marker

(KP = possibility, only if land use changes in the future)
PATHWAY DESIGN AND FURNITURE ELEMENTS

A range of design elements are proposed for the Harbour Pathway. Taken together, they will create a unique design language that identifies the Harbour Pathway as a distinctive part of the City’s public realm.

The design language and materials palette takes its cues from the surrounding context and Victoria’s sense of place, using locally familiar components.

The design of the Inner Basin will remain, as it has been identified as a heritage landscape. Outside the Inner Basin the route will reflect the design vocabulary as outlined on the following panels. It includes a vocabulary of traditional and existing detail integrated with a contemporary expression. (Light, railing, bridges, bollards)

Special places along the water have opportunities for unique design solutions within the overall pathway characters. These include bridges and some of the potential redevelopment areas.

DIVERSITY OF EXPERIENCE

The Harbour Pathway will offer a wide diversity of experience along its +5 km length. Reflecting the varied shoreline conditions and urban contexts, the pathway will be physically diverse, with different experiences through different sections of the route.

Much of the pathway length will be 7.0 m wide. Other sections of the route will be 5.0 m wide. For much of its length, recreational cyclists and pedestrians will typically share the route.

In some sections cyclists may be separated onto existing adjacent roads. Certain sections are proposed as high-clearance bridges over inlets or coves such as across the mouth of Heron Cove and Raymur Bay. Other sections are planned as low level boardwalks built out over the water or even under Johnson Street Bridge.

Where the Harbour Pathway intersects with points of access to the upland street network, opportunities for creating expanded public areas and special places are included.

EDGE DETAIL 1: granite paving strip both sides, plus granite curbstone along water side

EDGE DETAIL 2: Bollard chain & stone curb along water side

RAILING 1: Bollard and chain rail

RAILING 2: Metal guard with timber rail

EDGE DETAIL 3: Metal guard with timber rail

EDGE DETAIL 4: fir bull rail along water side

RAILING 1: Bollard and chain rail

RAILING 2: Metal guard with timber rail

• DESIGN VOCABULARY •

DETAILS AND FURNISHINGS 1 OF 2
BRIDGE EXAMPLES

3 bridges are proposed for the Victoria Harbour Pathway as well as a number of boardwalk over water.

The boardwalk are intended to follow condition indicated in “Pathway types”.

The bridges are intended to be unique expression of metal timber or other materials.

SITE FURNISHINGS EXAMPLES

SEATING TYPE 1: Standard wooden bench (catalogue selected) located on inland side granite paving strip

SEATING TYPE 2: Concrete seating steps leading down to water

SEATING TYPE 3: Wooden seating strip fixed on top of concrete retaining wall

BIKE RACK: Loop steel model (catalogue selected)

TRASH RECEPTACLE: Standard model (catalogue selected) located on inland side granite paving strip, specific locations TBD by City staff
SITE LIGHTING / DIRECTIONAL SIGNAGE

Located along length of pathway on inland side, at regular intervals (approx. 10 m), except for those sections over water

Custom designed powder coated steel lamp pole

typ. 3.6 m height

individual solar powered (top mounted panel)

LED strip light set into length of pole

Directional signage bracket option

INTERPRETIVE / EDUCATIONAL SIGNAGE

LOW LEVEL LIGHTING AT CURB:

Alnog stone curb, Edge Type 1, or bull rail edge, Edge Type 4.

STEPLIGHT AT CHEEKWALL:

Recessed step light in concrete retaining wall

STEPLIGHT AT CHEEKWALL:

Recessed light in concrete stair sidewalk

LOW LEVEL SIGNAGE AT CURB EDGE:

Stainless steel plaque set into top of granite curbstone on water side.

MID. LEVEL SIGNAGE AT RAIL:

Stainless steel plaque set into top of metal guard with timber rail.
• Design Vocabulary •
PATHWAY TYPES 1 OF 2

VICTORIA HARBOUR PATHWAY • CITY OF VICTORIA

This path type is the typical condition on grade above the existing shoreline, in the more central urban character areas.

This path type is the typical condition on grade above the existing shoreline, in the outlying sections of the route beyond the central urban area.

This path type occurs at special places, and where the water's edge is amenable to direct access.
**Design Vocabulary • Pathway Types 2 of 2**

**Plan: Walkway Type 4**
- Concrete Pathway
- Granite Edging
- Bollard and Chain Barrier

This path type is the typical condition on grade above the existing shoreline, where the vertical drop to the shoreline is greater than 0.6 metres, less than 2.0 metres.

**Plan: Walkway Type 5**
- Boardwalk Pathway
- Timber Bull Rail
- No Guardrail / Handrail

This path type is the condition in those sections of the route where a wooden boardwalk is proposed above the existing shoreline, and the drop is less than 0.6 metres.

**Plan: Walkway Type 6a**
- Boardwalk Pathway
- Guardrail w/ Metal Stanchions and Timber Top Rail

This path type is the condition in those sections of the route where a wooden boardwalk is proposed adjacent to an existing walkway, and the drop is greater than 0.6 metres.

**Plan: Walkway Type 6b**
- Boardwalk Expansion of Existing Pathway
- Guardrail w/ Metal Stanchions and Timber Top Rail

This path type is the condition in those sections of the route where a wooden boardwalk is proposed adjacent to an existing walkway, and the drop is greater than 0.6 metres.

*Victoria Harbour Pathway • City of Victoria*
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1.0 OVERVIEW

The City of Victoria and various community organizations have long sought to retain a marine industrial presence and ensure that a working harbour is maintained in the Upper (Working) Harbour. The retention of the area’s marine industrial character is reflected in the City’s Zoning Bylaw, Official Community Plan and the Victoria Harbour Plan. The Harbour Road Design Guidelines use these documents as their framework.

The overall goal of the City’s planning policies is to preserve the Working (Upper) Harbour as a characteristic of Victoria, while supporting its importance as part of the economy. Achieving this goal has become more complex as the harbour has changed. It involves ensuring the economics of marine industrial use can be supported, while balancing the integration of new waterfront uses, including the desire for public access.

Currently, the Harbour Road Industrial Waterfront area has a predominantly marine industrial character. Ship repair is a central feature, with the vessels themselves contributing a major visual element. Associated buildings, equipment and structures are large and include a central turntable. These features impart a distinct identity, provide an interesting industrial landscape.

Locals, residents, passersby and visitors mainly view the area from the street level of Harbour Road, from across the Working (Upper) Harbour on the Swift Street waterfront and from the Johnson Street Bridge (See Images 1 to 4).
1.1 Purpose

The purpose of these design guidelines is to direct future development of the Harbour Road Industrial Waterfront Area.

The guidelines assist the City in regulating the form and character of buildings, as well as exterior design, finishes and landscaping.

These guidelines are intended as a reference for future designers to understand the community’s values and the City’s goals, objectives, and site design principles for high quality marine industrial development, as well as to assist Council’s decision-making with respect to future development proposals.

1.2 Plan Area

The City-owned Harbour Road Industrial Waterfront site (5.3 hectares) is located in the Victoria West neighbourhood, between Harbour Road and the Upper (Working) Harbour. It is located directly adjacent to the north side of the Johnson Street Bridge, and east of the Dockside Green development, facing the northern reaches of Downtown (See Map 1).

1.3 How To Use These Guidelines

Guidelines applicable to the entire site are included in the Overall Design Guidelines section, while those specific to sub-areas are included in the Development Area Specific Design Guidelines section.

These guidelines use the 2007 zoning boundaries when describing sub-areas of the site. The City of Victoria Zoning Bylaw separates the site into three zoning districts (See Map 2, page 5).

The Shipyard District, S-PH ZONE refers to the northern portion of the site. The remainder of the site is separated into two Dockside Districts; the central area is designated SD-2 ZONE and the southern portion is SD-1 ZONE.

In these guidelines, the three districts are named DEVELOPMENT AREAS (DAs): DA - NORTH for the S-PH ZONE, DA - CENTRAL for the SD-2 ZONE and DA - SOUTH for the SD-1 ZONE (See Map 3, page 9).

Buildable areas have been identified for each development area and form the basis for two architectural building layout options for each of the development areas.
1.4 Plan Interpretation

Must, Will and Shall

Throughout this document the terms *must*, *will*, and *shall* are used to describe mandatory guidelines or provisions, which must be met. There is no recourse for negotiation as long as these items remain part of these guidelines.

Figures and Illustrations

Figures have been included to assist in the explanation and description of certain concepts. Those titled *illustrative view* are representational only, providing an *artist’s concept* of the character and ambiance of future buildings and landscapes; actual buildings and landscapes are subject to change. Similarly, *illustrative plans* are included to provide an *artist’s concept* of the overall layout of the Harbour Road industrial waterfront area; these should not be considered actual plans or drawings of the area. Building shapes, sizes, forms and locations are subject to change.

Plan Precedence

These guidelines form part of a series of regulatory documents that, when combined will direct future development on the site. Readers should refer to Section A.4 Relevant Planning Regulations in the appendices of this document for an overview of existing City policies.

Once adopted, these guidelines will form part of the *Official Community Plan*, which along with the *Zoning Bylaw*, take precedence over previously developed planning policies.

Changes to the Document

This document may be amended as required. Always refer to the City’s Planning and Development Department to ensure this version contains all of the adopted amendments.

1.5 Timeframe

The timeframe for the Harbour Road Industrial Waterfront Design Guidelines is intended to be long-term, extending beyond the lifespan of the existing buildings. After adoption, portions of the guidelines may be amended from time to time through a formal bylaw amendment process.
2.0 OVERALL DESIGN GUIDELINES

2.1 The Future of the Lands: Existing Zoning and Implications

Although the site has a predominantly marine industrial character, the area is split into three zones, each permitting different building heights, development densities and land uses.

The Shipyard District S-PH ZONE (DA - North) covers approximately one third of the site and is zoned mostly for marine industry.

The Dockside Districts- SD-1 and SD-2 ZONES (DA - South and DA - Central), are very similar to each other, permitting marine industries and also restaurants, clubs, neighbourhood pubs and cabarets, as well as public amenities such as parks, museums and cultural facilities (See Map 2, page 5).

At this time, the Ralmax Properties Ltd. (Point Hope Shipyard) lease extends over the DA-North, the middle DA-Central, and a portion of the southerly DA-South.

Zoning for the overall area could lead to two quite different land use areas. Although there is a common theme of marine industry, the S-PH ZONE of DA-North permits marine industrial use and largely discourages public access. The zoning for the SD-1 and SD-2 ZONES in the DA-South and DA-Central clearly envisages a people place, complete with public access and a range of commercial uses.

As leases expire on the southerly lands of DA-South, Council will face choices about the land uses it wishes to encourage through new leases. If Victoria City Council chooses land uses that under the current zoning allows for commercial activities and extensive public access, then design should reflect this. However, Council may choose to support an extension of the marine industrial uses existing on the Ralmax Properties (Point Hope Shipyard) lands.

These guidelines have been structured to recognize existing zoning, as well as possible future alternatives for the site which are captured in two development options for each development area.

Development Option 1 accommodates marine industrial use, whereas Development Option 2 suggests an alternative use as a “people place”.
Map 2: Zoning Districts and Development Area Designations
2.1.1 **The Dockside Districts**

The *Dockside Districts* refer to the *SD-1 and SD-2 ZONES* on the southern portion of the site, adjacent to the Johnson Street Bridge, (designated *DA-South* and *DA-Central*). Building height maximum in the *Dockside Districts* is 10 metres, with a floor space ratio of 0.75 to 1.

While including many marine industrial uses, zoning for the *Dockside Districts* also permits restaurants, clubs, neighbourhood pubs and cabarets, as well as public amenities like parks, museums and cultural facilities. The *Dockside Districts* are envisioned as mixed-use areas with public access.

The *Dockside Districts, SD-2 ZONE (DA-Central)* and a portion of the *SD-1 ZONE (DA-South)* are currently leased to Ralmax Properties Ltd. (Point Hope Shipyard) exclusively for shipyard operations. The lease expires in April 2045.

Should there be a new leaseholder before 2045, the use of this area can remain marine industrial, or change to commercial and cultural uses, without rezoning.

The remainder of the *SD-1 ZONE (DA-South)* is leased to Western Subsea Technology Ltd. on a month-to-month basis, to the Sail and Life Training Society – SALTS (lease expires November 2008), and to Carmanah Technologies Corporation (lease expires August 2011).

In the event the City leases the remainder of the *Dockside District SD-1 ZONE (DA-South)* to a new leaseholder, with a commercial or cultural use focus and major public/cultural use is placed in this area, consideration should be given to use a contemporary architectural style that would be distinctive, but still speak to some of the materials and colours of this marine industrial area and generally adhere to the height guidelines (See Images 5 to 8).

These guidelines address this possibility by including an alternative design theme for built form and massing, character, signage and access strategies.
2.1.2 The Shipyard District

The Shipyard District refers to the S-PH ZONE (DA-North), which permits a range of marine industrial uses. Maximum building height is 15 metres, with a floor space ratio of 1 to 1.

This property is currently leased to Ralmax Properties Ltd. (Point Hope Shipyard), with the lease expiring in April 2045. The lease indicates exclusive use of the property as a shipyard operation.

Should there be a new leaseholder before 2045, the use of this property remains marine industrial, according to the Zoning Bylaw.

2.2 Site Design Principles

The following site design principles are based on the objectives of the City and the community for the future development of the Harbour Road Industrial Waterfront area:

1. Improve the aesthetics, function and business vitality of the area; design for the industrial, commercial and public realm with the use of building materials, signage and landscaping theme.

2. Build on the existing marine character and diversity with a coherent architectural style; enhance character with colour and material schemes, fenestration, lighting and distinctive roof lines.

3. Ensure appropriate height and massing are consistent with the site’s location along the Upper Harbour.

4. Respect and enhance the site’s maritime past through authentic building forms and detailing.

5. Ensure the protection of key view corridors and vistas (including those noted in the Dockside Area Design Guidelines), through the site from Harbour Road, the waterfront and the Johnson Street and Point Ellice Bridges.

6. Provide visual interest along Harbour Road and the waterfront edge with a variety of building heights and roofscapes.

7. Create waterfront focal points and access on both ends of the site for the public.

8. Promote visibility of functions and activities via building placement and physical openings into buildings.

9. Establish a link to the existing local network of pedestrian/cyclist pathways.

10. Ensure future design compatibility with the Dockside Green development through site planning, building forms and heights, view corridors, site landscaping, building designs and materials.

11. Design Harbour Road and site access for safety and security.

12. Apply the City of Victoria Green Building Policy standards, wherever possible.
2.3 The Public and Private Domains

These guidelines have been structured to recognize existing zoning, as well as possible future alternatives for the site which are captured in two development options for each development area. It is recognized that there are two domains within the Harbour Road Industrial Waterfront area, the public and private domain.

The Public Domain

Areas within the public domain such as Harbour Road, potential parkland areas and trails, and some viewing platforms are largely the responsibility of the City of Victoria. Guidelines for these areas focus on lighting, landscaping, signage, surface materials and parking. The DA - SOUTH lands may be leased out for private use and, under the existing zoning, may permit public access and, therefore, become part of the public domain.

The Private Domain

In these guidelines, the term private domain refers to the lands predominantly used by private industry and, for the most part, restrict public access. The building structures of the industrial operations characterize these lands and, therefore, the guidelines focus on these structures and their overall visual impact, including massing, locations, colours and view corridors.

2.3.1 The Public Domain: Roads, Paths and Open Space

The following illustrations on Map 3 (page 9) display the Public Domain of the Harbour Road Industrial Waterfront area.

The public domain of roads, pathways, open spaces and amenities in and surrounding the Harbour Road Industrial Waterfront, includes:

• Harbour Road;

• A possible access road connection into the DA-South that may become public;

• Galloping Goose Trailhead Park (adjacent to the Johnson Street Bridge);

• A future waterfront path connection under the Johnson Street Bridge; and

• Public amenities, including viewing platforms and interpretation signage along Harbour Road, the water’s edge and within green space areas.
2.3.1.1 Harbour Road

As a public road and the main vehicular access to the industrial waterfront area, Harbour Road will be the interface between these lands and the Dockside Green development. Harbour Road serves a number of functions, accommodating a wide range of users, including industrial and commercial traffic, private vehicles, pedestrians and significant cyclist traffic drawn to the Galloping Goose Trail and waterfront. Upon completion of the Dockside Green development and the proposed extension of Harbour Road to connect to Tyee Road, traffic along Harbour Road is expected to increase significantly over the next ten years.

The regional Galloping Goose Trail is a hiking and cycling path running within the Harbour Road right-of-way, along the entire length of the industrial waterfront area. It is used as a major corridor for pedestrian and cyclist activity (See Image 9).

When designing Harbour Road:

- Safe design for all modes of transportation, traffic and pedestrians should be incorporated by introducing designated bicycle and pedestrian pathways, as well as associated signage, lights, changes in pavement patterns and temporary barriers.
• Build on the concept of watching industrial activities through observation windows and view platforms at the north and south ends; protect existing and add additional view platforms.

• Incorporate the marine industrial character of the area in the landscaping design by using hard landscaping and complementing, rather than dominating the streetscape, with boulevard trees and shrubbery. The extension of the existing boulevard tree design and spacing is recommended.

• Harbour Road has a total right-of-way of approximately 16 to 17 metres with 4.8 metres for each travel lane, including surface bike lanes of 1.8 metres on each side. A 2.5 metre sidewalk should be installed along the eastern side of Harbour Road up to the property line, which requires a possible easement south of the observation point.

• There must be no gravel strips along the sidewalk and the Harbour Road Industrial Waterfront area property line. Curbs should be utilized to keep debris off the sidewalks and bike lanes for safety reasons.

• Street lighting and signage should be installed along Harbour Road in vehicular and public site access areas and on view platforms.

• Surface street parking on the eastern side of Harbour Road, adjacent to the industrial waterfront area, cannot be provided within the road right-of-way.

• The cycling portion of the Galloping Goose Trail will be accommodated within the travel lanes of Harbour Road (1.8 metres each side).

• When redevelopment occurs, it is recommended that the overhead wiring would be buried underground along the entire length of Harbour Road.

2.3.1.2 Public Access - Pedestrian/Cyclist

Unrestricted public access to the Harbour Road Industrial Waterfront area is both a safety and a security concern, even though the zoning for the Dockside Districts (DA-South and DA-Central) envisions public access to a mixed-use area.

In total, three locations for public access (PA) have been identified (See Map 3, page 9). These locations should be accessible by pedestrians and cyclists only. Vehicles should be limited to the site road access, designed with signage and surface materials that discourage major use by private cars.

Public Access Area #1 - PA #1

In order to gain access from the south, via Songhees Point Park, a new pedestrian waterfront walkway, extending underneath the Johnson Street Bridge into the southern docks of the DA-South, is required. A possible level path could be considered to connect the waterfront path with Harbour Road.

Public Access Area #2 - PA #2

Depending on the future uses of DA-South and DA-Central, site access needs to be formalized through a road that may become private or public. Consideration should be given to a short access road into DA-South from Harbour Road to the waterfront, and the southern dock area as a “pedestrian/cyclist only” extension of the site entrance road.
Public Access Area #3 - PA #3

A preferred third public access area could be from Harbour Road to the northern water’s edge of DA-North. This access could be accommodated in a 10-metre right-of-way on level grade with the road.

When designing public access areas:

- Harbour Road and the surrounding network of paths and trails should physically connect with the industrial waterfront area;
- Safe circulation of industrial, vehicle and pedestrian/cyclist traffic must be accommodated;
- Landscape design should build on the design theme of maritime character (hard landscaping), and include a variety of pavement materials and surface treatments, as well as lighting and street furniture;
- Visual interest should be provided by promoting visibility of the functions involved in the marine industrial operations, or other uses on site and along the water’s edge;
- Provide for signage (building, directional and interpretative);
- Restrict parking to areas outside a 10-metre buffer along the waterfront; and
- Provide barrier free access for an unobstructed path from Harbour Road to the water’s edge for pedestrians and cyclists, as well as wheelchairs and scooters.

2.3.1.3 Viewing Platforms

A public viewing platform has been constructed mid-block on Harbour Road, providing the opportunity to observe marine industrial operations at the turntable location. This viewing platform must be retained (See Map 3, page 9 and Images 10 and 11, page 13).

These design guidelines build on the concept of public access to views of marine industrial operations on the Harbour Road lands, as well as the waterfront activities of the Upper (Working) Harbour and the water’s edge of the Harbour Road Industrial Waterfront. Any newly installed viewing platform or observation area/window should provide views consistent with this concept.

Viewing platforms are to be defined spaces, and include signage describing the history and current uses of the area.

A total of three additional viewing platform locations should be considered as follows (See Map 3, page 9):

- In the DA-South within the Galloping Goose Trailhead Park (Viewing Platform, VP #1). The installation of a viewing platform at the end of the future access road to the site at the water’s edge is optional.
- In the DA-North along Harbour Road (Viewing Platform, VP#3).
- The installation of a viewing platform as part of the future public access to the water’s edge (Viewing Platform, VP #4).
In the case of future development necessitating the removal of any viewing platform and/or observation area/window, that element should be reinstalled in proximity to the previous location.

Amenities to be accommodated in each platform should include (but are not limited to):

- Seating;
- Signage (wayfinding, historic and activity based);
- Safe, secure and barrier free access from Harbour Road and the Galloping Goose Trail;
- Protection/safety railing along the dock edge, with a security fence between the viewing platform and the main site; and
- Adequate lighting (See Section 2.6 for details).

2.3.1.4 Galloping Goose Trailhead Park

The existing Galloping Goose Trailhead greenspace adjacent to the Johnson Street Bridge offers opportunities for redevelopment into a public park (See Map 3, page 9 and Image 12).

Redevelopment opportunities could include a proposed linkage of the Galloping Goose Trail and a path under the Johnson Street Bridge, connecting the Upper (Working) Harbour with the Inner Harbour trail network.

When redeveloping the Galloping Goose Trailhead Park:

- An existing underground Telus installation and right-of-way that runs from the trailhead to the water’s edge will have to be considered;
- A pathway connection, via staircase and bicycle ramp, should be installed to connect the Galloping Goose Trailhead with the future waterfront walkway under the Johnson Street Bridge;
• The landscape design should build on the overall design theme of the Harbour Road Industrial Waterfront, particularly with respect to viewing platforms, interpretive signage and the Crime Prevention through Environmental Design (CPTED) principles (See Section 2.8.2 for details).

• Existing natural environment should be carefully considered.

2.3.2 The Private Domain: Industrial and Commercial

The private domain of the Harbour Road industrial waterfront area relates to overall marine industrial and commercial operations, as well as to the site areas facing Harbour Road and the water’s edge.

The following illustrations on Map 4 (page 15) display the private domain of the Harbour Road Industrial Waterfront area.

2.3.2.1 Harbour Road Streetscape

The industrial waterfront area occupies nearly 500 metres of street frontage, representing a substantial presence to the public along Harbour Road. In general, the Harbour Road streetscape should maintain the marine industrial character of the existing buildings through building colours, materials and forms, with views into the industrial lands and, where possible, to the water.

Specifically, when designing the streetscape along Harbour Road:

• Irregular streetfront of building faces, setbacks, colours and materials should be maintained. Long and monotonous walls and building shapes shall be avoided;

• Landscaping that is inconsistent with the industrial character of the area should be minimized;

• Opportunities for viewing the marine industrial work within the lands should be maintained, by providing views into these areas;

• Signage should be utilized that describes and reflects the marine industrial uses and enhances visual interest (See Section 2.7 Signage Strategy for details);

• Key view corridors from Harbour Road to the water’s edge should be protected and enhanced; and

• If necessary, fencing material should be used that permits views through to the industrial operations.
Map 4: Private Domain
2.3.2.2 Water’s Edge Design: Upper (Working) Harbour

Viewed from the east, the area runs approximately 550 metres in length to the Upper (Working) Harbour. The site can also be viewed at waterfront level from the Inner Harbour, buildings and walkways fronting Swift Street, and from the Johnson Street and Point Ellice Bridges.

Traditionally, the wharves on the water’s edge of the Harbour Road lands were made from wooden pile docks. Sheet pile docks have since replaced wooden ones in DA-North at the northern end of the site. There are currently wooden pile docks in use in the DA-South, which the City anticipates replacing with sheet pile docks.

When redevelopment of the DA-South docks occurs, the character of the traditional pile dock style should be retained where possible to avoid looking at blank walls when viewed from the waterfront across the harbour, and particularly from the water level.

The piling does not need to be functional and is meant to be installed for aesthetic purposes only. Piling material could be steel, concrete or wood. (See Images 13 and 14)

When redeveloping the waterfront of the Galloping Goose Trailhead Park, the soft shoreline should be retained and restored.

In general, the Harbour Road Industrial Waterfront should maintain the existing marine industrial character of the wharves. The minimum building setback from the high water mark, or the seaward edge of any dock or wharf, could be six metres, unless otherwise regulated in the Zoning Bylaw.

Specifically, when designing the waterfront:

• An irregular combination of building faces, heights, forms, massing, setbacks, colours and materials must be maintained. Long and monotonous walls and building shapes shall be avoided wherever possible;

• Multiple opportunities for viewing ships and activities associated with their repair and maintenance must be maintained at the intersections within the public domain wherever possible;

• Landscaping that is inconsistent with the industrial character of the area should be avoided;

• Surface car parking should be avoided whenever possible; and

• Signage in a variety of sizes and forms should be utilized to provide visual interest and reflect the marine industrial use.

Images 13 and 14: Illustrative View/Best Practice – Traditional dock pile-style design, viewed from water level
This also includes large painted lettering on building faces.

2.3.2.3 Vehicular Site Access and Internal Circulation

The main goal when designing for site access and internal circulation must emphasize public safety at the intersections of the public and private domains, as well as internal security and efficiency (See Map 4, page 15):

- The number of vehicle access points to Harbour Road from the industrial lands should be limited to two for DA-North and one each for DA-South and DA-Central.

- When designing the site access, sightlines along Harbour Road should be maintained to ensure maximum pedestrian/cyclist safety.

- Future building location proposals and design should demonstrate and accommodate safe and secure internal circulation flow of industrial, vehicular and pedestrian/cyclist traffic, and accommodate site access points from Harbour Road.

- Truck deliveries and parking are a necessary part of the industrial use of the area, and relate to the functions of the various buildings and internal circulation. In DA-South and DA-Central, future vehicle access may include servicing restaurants and bars.

- Within the area of the Harbour Road Industrial Waterfront lands, internal circulation should accommodate secondary emergency exits along Harbour Road.

- Internal circulation should be unobstructed along the dock edges.

2.4 Landscaped Areas

A combination of soft and hard landscaping should be used to provide a transition between areas that are publicly accessible and those of predominantly industrial use (See Map 5, page 19 and Image 15, page 18).

- Preferred plant materials are to be predominantly indigenous and adaptive species and, depending on the level of public access, not dominate or obstruct the marine industrial operations or Harbour Road.

- Driving, parking, and pedestrian/cyclist areas should be distinguished by changes in material and/or the colour of the paving to provide for the safe interconnection of vehicle, pedestrian and cycle routes in this area.

- While curb and gutter is used to separate traffic and pedestrians on Harbour Road, bollards may be used for vehicle control, traffic separation, and tree protection in other public domain areas (See Image 16, page 18).
• Design of hard and soft landscaping should limit the amount of stormwater run-off. Permeable surfaces should be used wherever feasible outside the working area of industrial operations. The use of permeable surfaces is limited to walkways (See Image 17).

• Landscaping must take into consideration Crime Prevention through Environmental Design (CPTED) principles, and the impacts of greenery location and height have to be considered with safety issues in mind (See Section 2.9.2 for details).

• Provision should be made for the implementation of a signage strategy, as described in section 2.7, including signage materials and design theme, particularly for wayfinding and interpretation signage.

• Ensure street furniture (lights, benches and drinking fountains) is consistent with the marine industrial style.

• When designing waterfront walkways, allow for use by pedestrians and cyclists, as well as wheelchairs and scooters.
2.4.1 Parking

Parking within the Harbour Road Industrial Waterfront area will be regulated according to the City of Victoria’s parking requirements articulated in the City of Victoria’s Zoning Bylaw.

The visual impact of car parking should be minimized, and not be a dominant visual element of the site.

To reduce the visual impact of parking, expansive paved areas between Harbour Road, site access points, buildings and along the water’s edge should be avoided; multiple, smaller lots between buildings should be provided, incorporating landscaping and screening (See Image 18).

2.4.2 Fencing and Screening

- Security fencing should be installed along Harbour Road, and where industrial operations are adjacent to public access, in order to separate the working domain from areas accessible by the public.

- Screening should be architecturally integrated in terms of materials, colours, shapes and sizes, and blend with building design. For areas with security and public safety concerns, a continuous screen is desirable.

- Screening for outdoor storage of building materials should be determined by the height of the material being screened. Chain link fencing with appropriate slatting is an acceptable screening material for areas not visible from the street, the waterfront or the Johnson Street Bridge.

- Outdoor storage, particularly along Harbour Road, should be confined to portions of the site least visible to public view from the waterfront, Johnson Street Bridge and opposing shoreline.

- The design of security fences should enhance the maritime character of the overall architectural theme. Fencing systems, required for safety reasons to separate industrial operations from the public realm, must consider utilizing the black vertical bar railing and wrought iron fencing style theme as established at existing Viewing Platform #2 along Harbour Road (See Images 19 and 20).

- Solid fencing, such as walls of concrete block, steel or wood are not acceptable. There should be no solid fencing along Harbour Road, blocking public views into the industrial site.
2.5 Building Character: Materials, Colours and Roofscapes

The form and character of the Harbour Road Industrial Waterfront lands should reflect the area’s marine industrial use and history. Traditionally, large marine industrial buildings have been constructed from corrugated steel, and smaller buildings have been wood clad.

The building design theme of these guidelines is based on the use of these traditional materials (metal, glass and wood).

2.5.1 Exterior Cladding

To distinguish public-oriented buildings from industrial and commercial buildings, the use of two compatible building material sets are suggested, reflecting historic West Coast wooden waterfront architecture.

Corrugated metal is the preferred dominant cladding material (horizontal and vertical) for large industrial or other large buildings in all the development areas: DA-North, DA-Central and DA-South. This cladding is also appropriate for smaller storage buildings.

In order to enhance the quality and marine character of the industrial and commercial buildings, there should be additional trims and details that augment the standard prefabricated industrial building model. Such detailing should include metal trims to articulate window frames and sills, building corners, cladding seams and joints; extended roof overhangs and thicker fascia panels proportional to building height; industrial glazing with rectangular mullion proportions located low for views into buildings; oversized door openings aligned at each end or through sides for glimpses into and through buildings; high level windows and/or clerestory glazing (See Images 21 to 23).

Horizontal wood siding has been a long-standing cladding material in DA-South and DA-Central. As this area is redeveloped, this cladding, or a manufactured equivalent (wood-look cement fibre board), can be utilized.

Heavy timber framing, with exposed structural elements, is also encouraged.
2.5.2 **Colours**

A variety of colours can be used on buildings. Generally, subdued colours should be used for larger buildings, with brighter colours reserved for accent and detailing; smaller buildings can use brighter colours. All roofs should appear in subdued colours.

2.5.3 **Roofscapes**

These lands are often viewed from elevated positions around the site, and also mark the entrance to the Upper (Working) Harbour.

To provide visual interest and architectural quality, roofscapes should include a variety of roof forms, heights, proportions and pitches that include:

- Traditional roof forms – gable roof enhanced with clerestory windows (See Image 24).
- Roof forms in series – creates rhythm and continuity with the overall site (See Images 25 and 26).
- Proportional roof forms – stepping down roofs of adjacent structures reduces the perceived mass of large buildings; integrated skylights and roof top access contribute to interest and character (See Image 27).

Significant building forms and roof types should be considered in *DA-South* and *DA-Central* to mark the entrance to the site, and to signify the entrance to the Upper (Working) Harbour, north of the Johnson Street Bridge.
2.6 Lighting: Security, Safety and Illumination

The site offers the opportunity for a subdued night-lit landscape, with the illumination of selected buildings, ships and equipment, especially during the tourist season. This, in combination with lighting for security (to minimize unauthorized entrance) and safety and functionality (for night and early morning shifts), can create subtle, but dramatic nightscapes (See Images 28 and 29).

Light management provides for the aesthetic and architectural enhancement of the area at night, and should be used in future developments.

Effective design strategies, using efficient low-energy and long-life technologies, should be employed in the public and private domains of the Harbour Road lands.

Lighting systems should correspond with the overall architectural concept and colour scheme for the area, using colour and contrast for dramatic effects. Lighting on building frontages should reinforce street lighting (See Images 30 to 32). Lighting systems in the public access areas shall match the systems already used in the City of Victoria.

In order to avoid light spillage within and outside the work area, and wherever safety and site operation is not compromised, low-glare, shielded lighting systems with internal optics controls should be used, following Leadership in Energy and Environmental Design (LEED) standards and criteria for exterior lighting (See Section 2.9.1 for details).
2.7 Signage Strategy

The site should be appropriately signed, giving directions to specified areas related to the industrial operations, potential future commercial and cultural uses in DA-South and DA-Central, and to the public domain. Where public access and amenities exist, wayfinding strategies need to be addressed. Signage can be promotional, directional (wayfinding) and informational. A variety of signage sizes and large painted lettering on building faces is encouraged and may include:

- Signage for industrial and commercial operations (typically located at the main entrance), including major destination signage and the industrial area’s signature, a business directory and directional signage to visitor parking, loading, deliveries, materials’ handling and special areas (See Images 33 and 34).

- The marine industrial and commercial identity of the site should be reflected in signage design, providing visual interest and wayfinding by the choice of materials, scale and colour.

- Signage for the public domain includes wayfinding signage, referring to amenities located on site (e.g., directions to the Galloping Goose Trail and links to public walkways in the area), and interpretive signage providing information about the area’s history, geography and industrial operations (See Images 35 and 36).

- Public signage design should correspond and comply with the City’s Sign Bylaw requirements for overall directional and interpretation signage (See Images 37 and 38).

- Readability during the day and at night should be considered in developing the overall signage concept.

- Signage design and locations should be shown on all development submissions and is the responsibility of the applicant.

- Signage is also to be considered as a component of DA-South and DA-Central if commercial uses are developed that are consistent with the zoning for these areas. Signage should contribute to the development of a distinct identity for this area. Consider metal signs; encourage colour and humour, and build on the maritime industrial theme of the area.
2.8 Environmental Design Considerations

The City of Victoria encourages sustainable measures in site servicing, building design and construction, and these measures should be incorporated into the site as it redevelops over time. There are significant opportunities in both the public and private domains for the use of recycled materials in building design elements and stormwater management.

Future design of the shoreline and dock edges of the Upper (Working) Harbour should consider artificial habitat enhancement along the hard shoreline and retention and enhancement of the soft shoreline, wherever possible.

2.8.1 Leadership in Energy and Environmental Design (LEED)

LEED offers a green standard for sustainable design and construction practices in new and renovated buildings. The City of Victoria is managing these standards through its Green Building Policy. (Refer to the Green Building Policy adopted by the City of Victoria).

When undertaking developments in the public domain:

- Consider the use of recycled materials in fencing structure and signage;
- Apply stormwater management strategies and manage run-off from shipyard activities; and
- Utilize permeable surfaces where appropriate.

2.8.2 Crime Prevention Through Environmental Design (CPTED)

Existing patterns of undesirable activities in the local area suggest that design strategies should be implemented to maximize public safety and security, and to minimize unacceptable behaviour or criminal conduct. Among others, these strategies might include: specifications for access, security fencing, sightlines, elimination of blind spots and hidden areas, lighting, electronic surveillance and acoustic interference. For new development CPTED must be considered throughout the site (Refer to CPTED guidelines adopted by the City of Victoria).

2.9 Phased Development

Should development occur in a phased manner, the main intention of a phasing strategy is to keep the site aesthetically pleasing in the intermediate stages.

All visible frontages and accessible areas of completed phases are required to look consistent with site design principles, and provide the opportunity to tie-in future development phases.

Any incomplete structures, street works or landscaping should be physically safe and visually inoffensive. Temporary edges should be finished such that their surfaces have the appearance of being finished. Description of the finishing of any incomplete portions of the development should be required at the time of application for a development permit.
3.0 DEVELOPMENT AREA SPECIFIC DESIGN GUIDELINES

These guidelines have been structured to recognize existing zoning, as well as possible future alternatives for the site which are captured in two development options for each development area. Development Option 1 would better accommodate continued marine industrial life, whereas Development Option 2 would suggest an alternative future of public access and a range of commercial and cultural uses in DA-South.

3.1 View Corridors

The guidelines also recognize primary public views of the site and through the site. The Harbour Road lands can be seen from various locations surrounding the site at street and waterfront levels and – unusual for Victoria - from elevated locations looking down onto the area.

Viewed from street level along Harbour Road, the site offers a streetscape experience providing opportunities to watch marine industrial operations. In addition to views of the site itself and its operations, views through the site from Harbour Road offer glimpses of the water, the east side of the harbour and Mt. Tolmie Park.

The industrial waterfront buildings and docks can be seen at waterfront level from the Upper (Working) Harbour and the Inner Harbour, and from lands, buildings and walkways fronting Swift Street.

Elevated views from the Johnson Street and Point Ellice (Bay Street) Bridges, the Galloping Goose Trailhead greenspace (adjacent to the Johnson Street Bridge), along Tyee Road between buildings, and from the upper storeys of the future Dockside Green development, offer unique perspectives of the site.

In total, there are four (4) primary view corridors from Harbour Road and the Galloping Goose Trailhead Park that should be protected and that should relate to the existing and proposed viewing platforms (See Section 2.3.1.3 “Viewing Platforms” and Maps 6 and 7, page 27):

- View Corridor #1 into DA-South from Galloping Goose Trailhead;
- View Corridor #2 into DA-Central from existing street level of Harbour Road; and
- View Corridors #3 and #4: DA-North from the existing street level of Harbour Road.
3.1.1 **DA-South – View Corridor #1**

From the top of the berm of the Galloping Goose Trailhead Park to the Johnson Street Bridge, the view encompasses the Upper (Working) Harbour and the opposing shoreline, the southern land area and docks of the DA-South, a proposed public access trail to the water's edge, and the Harbour Road streetscape. The existing vegetation within that view corridor needs to be considered when developing the public trail. The view corridor view cone should be a minimum of 15 degrees.

It is the intention in this development area to have an additional, non-mandatory view corridor from the main site entrance through out to the dock edge of the harbour, and across a public or private site access road. However, this point is flexible, depending on the functional needs of the leaseholder (See Map 6, page 27).

3.1.2 **DA-Central – View Corridor #2**

The view from the existing Viewing Platform #2 along Harbour Road into the Harbour Road lands is split into two view cones (See Map 6). The view corridor across to buildings and activities on the Swift Street waterfront should be a view cone of a minimum of 22 degrees. For the view corridor of the ship turntable and across to the Upper (Working) Harbour and Mt. Tolmie Park, the view cone should be a minimum of 15 degrees.

Should redevelopment occurring in this location require the removal of this view corridor from the existing viewing platform as in Option 2, View Corridor #2 may be split into two new view corridors, #2.1 and #2.2, with view cones of 25 degrees each, towards the turntable and to the buildings and marina located at the foot of Swift Street on east side of the Upper (Working) Harbour (See Maps 6 and 7, page 27).

3.1.3 **DA-North – View Corridors #3 and #4**

View corridors from Harbour Road into DA-North are meant to provide glimpses of the Upper (Working) Harbour and are oriented around the main shipbuilding and repair activities on the site.

**View Corridor #3**

This view corridor encompasses Harbour Road to the dock edge and the harbour between future buildings. The view cone should be a minimum of 15 degrees. Location on map is suggestion only and there is flexibility as to its exact location.

**View Corridor #4**

This view corridor encompasses the northeastern dock edge (associated with the 10 metre pedestrian access right-of-way) to buildings and walkways fronting Swift Street, as well as the ship launching activities of the DA-North. The view cone should be a minimum of 25 degrees.

3.1.4 **Dockside Green View Corridors**

Defining and protecting view corridors identified in the Dockside Area Design Guidelines is one of the City’s objectives. These guidelines have accounted for those views, and have identified a number of other view corridors that need to be protected. Buildings in all three development areas of the site should be positioned to preserve these view corridors (See Map 8 and Images 39 to 41, page 29).

Future development proposals should demonstrate that the views from the Johnson Street and Point Ellice (Bay Street) Bridges to the upper levels of the Landmark Building in DA-A and DA-B of the Dockside Green development - identified as Views #6 and #7 in the Dockside Area Design Guidelines - are protected.
Map 8: View Corridors as identified in Dockside Area Design Guidelines (Dockside Green Development)

Image 39: Illustrative View DA-South: Current Zoning Maximum Building Height = 10 Metres; Proposed Maximum Building Height = 15 Metres; Does Not Affect Dockside Development View Corridors

Image 40: Illustrative View DA-Central: Current Zoning Maximum Building Height = 10 Metres; Proposed Maximum Building Height = 23 Metres; Does Not Affect Dockside Development View Corridors

Image 41: Illustrative View DA-North: Current Zoning Maximum Building Height = 10 Metres; Proposed Maximum Building Height = 23 Metres; Does Not Affect Dockside Development View Corridors
3.2 Buildable Areas

The identified buildable areas (BAs) form the basis for the development of two architectural building layout options for each of the development areas.

The preferred BA determined for each of the three development areas of the Harbour Road Industrial Waterfront site, takes into consideration the spatial needs for marine industrial operations of current and future on-site stakeholders, public (including vehicle) access, open spaces, key views needing to be protected, and surrounding uses.

These options provide design solutions that balance the protection of view corridors and the variation in building heights and forms, with public access to the waterfront and the needs of increased industrial operations.

Development shall occur within the BAs, and is subject to zoning, and the form and massing requirements of these guidelines. Internal circulation and parking requirements shall be considered within these BAs, and may also be located outside the BAs.

3.2.1 Development Option 1

3.2.1.1 DA-South

In the DA-South, one BA has been defined by a three metre setback along the south and west property lines, and a six metre setback from the eastern and most northern dock edges (high water mark), following existing zoning regulations (See Map 9 and Image 42, page 31).

This produces a BA of 13,098 square metres. While this area represents the buildable area within which buildings can be located, there are a number of functions that must be accommodated such as:

- The main entrance into the site, and a public or private access road;
- On-site parking requirements and vehicular circulation;
- Emergency and industrial circulation between DA-South and DA-Central;
- Circulation and clearances between buildings to facilitate movement of materials, vehicles and equipment; and
- Level pedestrian access through the site from the south-east corner to Harbour Road.

While the allowable setback from any dock edge is six metres, according to the zoning, these guidelines recommend a setback of eight to twelve metres to better align with the shoreline edge, and with the Johnson Street Bridge abutment. This is more consistent with the current edge of the building face in this zone, and allows a better dock connection with the future pedestrian link under the Johnson Street Bridge.
3.2.1.2 DA-Central

In the DA-Central, one buildable area (BA) has been identified with a total area of 4,681 square metres (See Map 9 and Image 42).

This area is defined by two view corridors from Harbour Road, and by the need for industrial vehicular circulation around the buildings, especially along the eastern side at the water’s edge.

Adequate space must be maintained between the water’s edge and the BA to allow emergency vehicles to access the eastern edge and circulate back around to the main entrance at Harbour Road.

While the zoning requires a six metre setback from the dock edge (high water mark), the City of Victoria’s requirements for emergency vehicular access must govern this particular setback to ensure adequate clearance between buildings and edge of heavy-duty road access, including required turning radius.
Development in this area is centred on the existing turntable spur lines into the site, with the condition of maintaining view corridors from the existing view platform.

3.2.1.3 DA-North

The current zoning permits building to the property line with no setback requirement for any lot boundary. These guidelines require a 10 metre right-of-way be accommodated along the north water’s edge to allow for pedestrian access and a viewing platform at the northeast corner (See Map 9 and Image 42, page 31). Furthermore, these guidelines recommend a minimum setback of six metres from the seaward edge of the dock, to match the zoning setback requirement for DA-South and DA-Central. This may potentially be increased to a minimum setback of 10 metres to accommodate light industrial vehicular circulation.

In Option 1 for the DA-North, two buildable areas (BA’s) have been identified:

- BA 1 = total area of 2,050 square metres
- BA 2 = total area of 7,070 square metres
- Total BA for DA-North in Option 1 is 9,120 square metres.

Within each BA, there is a maximum allowable building length of 50 metres along Harbour Road, with a minimum building separation of 18 metres to provide for open space views to the harbour. A 28-metre right-of-way, to allow for an additional viewing platform/view corridor or replacement space, also physically separates the two BAs (See Map 9, page 31).

3.2.2 Development Option 2

3.2.2.1 DA-South

The buildable area for Option 2 of the DA-South is 11,748 square metres, and has the same defining parameters as Option 1 (See Map 10 and Image 43, page 33).

Option 2 restricts building development along the northern edge of DA-South, where the main entrance to the site is proposed. In this option the area has been designated building-free to allow for the construction of a road from the main entrance across the Harbour Road lands to the waters edge.

Building arrangement within this BA also need to accommodate:

- On-site parking requirements and vehicular circulation;
- Circulation and clearances between buildings – as stated in Option 1;
- Accommodation of a view corridor from within the site, out to the eastern dock edge, and over to the east shore of the Upper (Working) Harbour; and
- Level pedestrian access through the site from the southeast corner out to Harbour Road, described in Option 1.

3.2.2.2 DA-Central

The buildable area for Option 2 of the DA-Central is 8,349 square metres and is more flexible than Option 1. Building to the three metre setback line along Harbour Road is permitted, provided that the existing viewing platform is relocated into DA-South and DA-North. The 6m zoning setback requirement around the eastern edge of the property applies to both options and needs to accommodate emergency and industrial circulation (See Map 10 and Image 43, page 33).
3.2.2.3 DA-North

In Option 2 for DA-North, one buildable area (BA) has been identified (BA 1 = total area of 8,831 square metres).

Within the BA, there is a maximum allowable length of building along Harbour Road of 50 metres, with a minimum separation of 18 metres to provide for open space views to the harbour.

Within this BA it is preferred that there is space allocated between buildings to accommodate an additional viewing platform (No. 3) and view corridor aimed at the boat launch and across to the east side of the harbour focusing on the Capital Iron building (See Map 10 and Image 43).

There is flexibility as to the exact location of the viewing platform; a suggested location is shown on Map 7 (page 27) for Option 2.
3.3 Maximum Building Heights, Form and Massing

In general, new buildings should be a contemporary interpretation of traditional marine industrial architecture, with an emphasis on well designed proportional massing that is complementary to each adjacent building, and is well considered within the entire site.

These guidelines encourage a variety of building sizes and massing, with a caution to avoid long building elevations along Harbour Road and/or the waterfront. Buildings that are oriented “gable end on” to the waterfront are preferable. Where required buildings approach the maximum allowable building height allowed by zoning, they should be stepped down with auxiliary structures, where possible, to reduce the height impact. Refer to the specific zones section in this chapter for additional comments.

Openings into buildings, or glazing that provides visibility to industrial activities within buildings, is encouraged. Noise levels must be considered when placing openings and considering sound proofing levels for the openings.

While there are many opportunities to develop the northern end of the site, the two options convey some of the desired possibilities of achieving density, as well as visual relief, along Harbour Road and the dock edge.

Building heights in excess of current zoning allowance, while recommended in these guidelines, will require Council’s approval of variances.

3.3.1 Development Option 1

3.3.1.1 DA-South

The maximum allowable building height, according to the zoning regulations, is 10 metres. Current marine industrial businesses operating on the site indicate a need for taller buildings, namely a machine shop, approximately 18 metres.

These guidelines recommend that two areas within the DA-South have maximum building heights of 19 metres (geodedic) and 15 metres (geodedic) respectively, stepping down toward the water (See Map 11 and Image 44, page 36).

Also, a specific designated area has been identified to allow a taller building with a maximum height of 21 metres (geodetic), in order to accommodate future marine industrial needs.

- The buildable area for this taller building is restricted to 30 metres wide by 73 metres long, with the long dimension parallel to Harbour Road and set back by 19 metres. An additional 25-metre length is reserved to the south of this buildable area to allow for future expansion. However, these guidelines recommend keeping this building as short as possible, due to its orientation.

- Secondary buildings should be placed in an organized manner around the perimeter of the site, with sufficient space between buildings for industrial vehicular circulation and parking requirements.
• Within each maximum building height area, the buildings should step down and alternate in building height, using various roof forms.

• Buildings should be oriented gable end to the water along the dock edge, to allow glimpses of the water between buildings. At least one road access right-of-way to the eastern dock edge is required for views and access.

3.3.1.2 DA-Central
The maximum allowable building height, according to the zoning regulations, is 10 metres. Current marine industrial businesses operating on the site indicate an expressed need for taller buildings, namely a 27-metre tall paint and sandblasting facility (See Map 11 and Image 44, page 36).

These guidelines recommend a maximum building height for DA-Central of 19 metres (geodedic), with a designated area to accommodate a tall and narrow industrial building:

• The buildable area for this one tall building has a maximum of 26 metres wide by 60 metres long, oriented with the long axis perpendicular to Harbour Road, and aligned with the centre of the existing turntable. The maximum building height in this buildable area has a maximum of 30 metres (geodedic).

• Attempts should be made to reduce the impact of tall buildings on the site and adjacent properties by stepping down tall buildings with lower adjacent structures and/or auxiliary buildings. The base of the tall building (below two metres) should also have a distinctive architectural treatment from the upper portion of the building through the use of form, materials and/or textures, in order to articulate a distinct building base. The roof of the tall building should be pitched (minimum 1:4), and may have multiple levels; a flat roof area is not envisioned on taller buildings.

• All other development within the DA-Central is limited to a maximum building height of 19 metres (geodedic), according to current zoning. Any development with building height in excess of current zoning allowance will require Council’s approval as a variance.

3.3.1.3 DA-North
The maximum allowable building height, according to the zoning regulations, is 15 metres. As previously mentioned, the tallest buildings should be oriented with the long dimension perpendicular to Harbour Road, with lower infill buildings located between taller buildings. The maximum length of continuous building mass along Harbour Road is 50 metres, with a minimum gap of approximately 18 metres to allow views to the water’s edge from the road (See Map 11 and Images 44, page 36).

When developing DA-North:
• Avoid blank walls and building shapes that are long and monotonous.

• Maintain an irregular streetfront with building faces, setbacks, varied building forms and heights.

• Provide secondary view corridors from Harbour Road to the water’s edge.

• Create key viewing platforms and position buildings in a manner that preserves the required view corridors.
• Step down building heights along the water’s edge and between taller buildings where possible.

• Opportunities should be maintained for viewing the marine industrial work by views into the industrial lands and buildings and, where possible, out to the water to enhance visual interest along Harbour Road.

While there are many opportunities to develop this end of the site, we provide two options to convey some of the desired possibilities of achieving density, as well as visual relief, along Harbour Road and the dock edge.

• These guidelines recommend a maximum building height of 19 metres (geodedic).

• Option 1 shows courtyard buildings, with taller buildings positioned narrow end perpendicular to Harbour Road and lower infill buildings in between. These are located with the minimum 18-metre clear separation (shown in light grey on map 11). It is further suggested that taller buildings step down towards the water.
3.3.2 Development Option 2

3.3.2.1 DA-South
The maximum allowable building height, according to the zoning regulations, is 10 metres. These guidelines recommend two areas within the DA-South have maximum building heights of 19 metres (geodedic) and 15 metres (geodedic) respectively, stepping down toward the water (See Map 12 and Image 45, page 38).

- Buildings should be oriented narrow end perpendicular to the dock edge for the east side of the site, and perpendicular to the development boundary on the west side of the site.
- Parking and circulation should be accommodated between buildings within the interior of the site.
- Orient buildings gable end to the water along the dock edge to allow glimpses of the water between buildings. At least one road access right-of-way to the eastern dock edge is required for views and access.

3.3.2.2 DA-Central
The maximum allowable building height, according to the zoning regulations, is 10 metres. While Option 1 was prepared to accommodate current marine industrial expansion, Option 2 is put forth as a solution for alternative future uses that are consistent with the zoning for this area (See Map 12 and Image 45, page 38).

- These guidelines recommend a maximum building height of 19 metres (geodedic), with no provision for a tall building, as stated in Option 1.
- Attempts should be made to step down taller buildings with lower adjacent structures and/or auxiliary buildings. The bases of the taller buildings (below two metres) should also have a distinctive architectural treatment from the upper portion of the building, through the use of form, materials and/or textures, in order to articulate a distinct building base.
- The roofs of taller buildings should be pitched (minimum 1:4), and may have multiple levels; flat roofs are not acceptable on the taller buildings.
- Buildings should step down towards the water.

3.3.2.3 DA-North
The maximum allowable building height, according to the zoning regulations, is 15 metres. As previously mentioned, the tallest buildings should be oriented with the long dimension perpendicular to Harbour Road, with lower infill buildings located between taller buildings. The maximum length of continuous building mass along Harbour Road is 50 metres, with a minimum gap of approximately 18 metres to allow views to the water’s edge from the road (See Map 12 and Image 45, page 38).

When developing DA-North:
- Avoid blank walls and building shapes that are long and monotonous.
- Maintain irregular streetfront with building faces, setbacks, varied building forms and heights.
- Provide secondary view corridors from Harbour Road to the water’s edge.
• Create key viewing platforms and position buildings in a manner that preserves the required view corridors.
• Step down building heights along the water’s edge and between taller buildings where possible.
• Opportunities should be maintained for viewing the marine industrial work by views into the industrial lands and buildings and, where possible, out to the water to enhance visual interest along Harbour Road.
• These guidelines recommend a maximum building height of 19 metres (geodedic), with no provision for a tall building, as stated in Option 1.
• Option 2 shows a layout of taller buildings with different relationships to Harbour Road, creating courtyards from Harbour Road, as well as from the dock edge. Placing the building groups with 18-metre gaps in between also accommodates secondary view corridors (shown in light grey on map 12).
The City of Victoria initiated the development of design guidelines for the Harbour Road Industrial Waterfront in January 2007.

The planning process included two key consultation elements:

1. **Stakeholder Consultation** via face-to-face interviews, mail drops and presentations; and

2. **Public Consultation** via walking tours and open houses, advertised in the Times Colonist newspaper.

A City of Victoria website for the project provided background information, and also served as a community feedback mechanism.

**Stakeholder Consultation**

The stakeholders identified by City staff included businesses operating from the industrial site, the neighbouring Dockside Green development, Esquimalt and Songhees First Nations, community associations, the Environmental and Shoreline Advisory Committee, the Victoria Police Department, the Greater Victoria Harbour Authority, City staff, the City’s environmental consultant SNC Lavalin and other government agencies.

**Public Consultation**

**Walking Tours**

The focus of these two walking tours, held in August and September 2007, was to identify the main issues and opportunities to be considered in the design guidelines. A consultation package, which included some basic project background information, “site opportunities” and “site constraints” maps and a map of the walking route, was provided to participants.

Feedback from the walking tours was presented to City Council in November and posted on the project website.

**Open Houses**

The focus of the two public open houses, held in October 2007, was to provide an opportunity for stakeholders and the public to review and discuss the draft design guidelines for the Harbour Road Industrial Waterfront. An interactive computer model helped demonstrate the potential impacts of future industrial developments.
APPENDIX A2: Remembering the Past

Victoria has a long maritime history, and the west shore of the Upper Harbour was the site of some of the city’s earliest shipyards – the first shipyard began operation in 1873. In the 1840s, the Songhees Indian Reserve was established on the west side of the harbour and included the waterfront lands (See Image 48).

The transition to industrial use at the upper end of the harbour gathered speed in 1911 when the Provincial government purchased the area from the Songhees Band, and designated it for industrial purposes. By 1917, wooden, steam and cargo freighters up to 90 metres in length, were built on the Harbour Road Industrial Waterfront site. The shipbuilding industry’s need for accessibility of large vessels to the Upper Harbour was accommodated in the construction of a draw bridge in 1924, now known as Johnson Street Bridge. The opening of the bridge further contributed to the city’s industrial development by improving the connection of the city centre to the industrial area across the harbour.

After 1911, the area included a shipyard operation, a rail line and associated freight storage buildings, an iron and metal trading operation, a propane operation, an asphalt plant and a cedar shingle mill. By the 1970s, most of these uses had closed down or relocated, leaving the area in a barren, contaminated condition, with the exception of the Harbour Road Industrial Waterfront, where marine industrial activities continue today.

In comparison, the M.V. Coho, a vehicle and passenger ferry that currently connects Victoria with the Town of Port Angeles WA, is 104 metres long.
APPENDIX A3: Relevant Planning Regulations

These design guidelines form part of a series of regulatory documents that, when combined, guide future development on the Harbour Road Industrial Waterfront.

Readers should also refer to:

1. The Zoning Bylaw;
2. Green Building Policy (Under Development);
3. Victoria Official Community Plan, OCP (Amended 2006);
5. Design Guidelines for the Songhees Area of Victoria West (Amended 2005);
6. Buildings, Signs and Awning Advisory Design Guidelines (Amended 2005);
7. Crime Prevention Through Environmental Design (CPTED) (Amended 2004);
9. Victoria Harbour Plan – 2001; and

1. The Zoning Bylaw

Zoning for the Shipyard District envisions an area primarily characterized by, and zoning allows for, a range of marine-related industrial uses. The Dockside Districts’ zoning includes industrial uses, but also permits restaurants, clubs, neighbourhood pubs and cabarets, as well as public amenities like parks, museums and cultural facilities. The two Dockside Districts, therefore, anticipate a mixed-use area with public access. Building height maximums are 10 metres in two Dockside District Zones (SD-1 and SD-2) and 15 metres in the Shipyard District (S-PH).

2. Green Building Policy (Under Development)

Council has endorsed a Green Building Policy for its own Civic Facilities which may extend to private sector development. A report has been prepared by Stantec Consulting relating to private sector development that provides an overview of the merits of green buildings, the rationale for the choice of LEED (Leadership in Energy and Environmental Design) as a standard, and specific measures the City can endorse to encourage greener buildings (with the focus on water and energy efficiency).

3. Victoria Official Community Plan (OCP) Amended 2006

A section within the OCP (Toward a Harbour Community) contains a series of objectives and policies that focus on Victoria’s harbour and Upper (Working) Harbour areas, stressing the need for the retention of, “an active Working Harbour with mixed-use activities, provided all uses, including residential, recognize and
are compatible with harbour traffic activities. Emphasis is on the need for integrated waterfront planning and its relationship to surrounding neighbourhoods, while maintaining balance between public access and marine priorities.

Policies especially relevant to the Harbour Road lands include, “encouraging marine industries that require waterfront access” and “securing public access wherever feasible”.

4. **Design Guidelines for the Dockside Area, Policy Plan 2005**

   Building heights of the Dockside Green development along Harbour Road vary from 22.14 metres² facing the S-PH Zone Shipyard District, to 26.5 metres² facing SD-2 Zone Dockside District, and 30.5 metres² at the south western corner facing the SD-1 Zone Dockside District. A view corridor from the Johnson Street Bridge across to Tyee Road and the Harbour Road Industrial Waterfront has been identified. Preferred building materials include concrete, wood, stone, brick, metal and glass. Crime prevention through environmental design must be considered throughout the project.

5. **Design Guidelines for the Songhees Area of Victoria West (Amended 2005)**

   This plan and guidelines set out policies and a design character for the Songhees area. The established marine industrial character is enhanced by improved access and upgraded appearance. Land use policies support marine activities. Building heights vary from one to three storeys throughout the site, with the exception of three to five storeys at the north eastern corner of the Harbour Road/Esquimalt Road intersection. Buildings are to step up and away from the water’s edge. Pedestrian access under the Johnson Street Bridge to continue the waterfront walkway is desirable.


   These guidelines are meant to assist developers in achieving a design compatible with the characteristics of the neighbourhood. The guidelines are general in nature and intended to identify issues that should play a part in the design process. In evaluating a design, particular emphasis will be placed on the solution to these general aspects: comprehensive design approach, relevancy of expression, context, pedestrian access, massing, scale, roofline, detailing, street relationship, vistas, landscaping plan, colours and textures.

7. **Crime Prevention Through Environmental Design (CPTED) (Amended 2004)**

   Design strategies for CPTED might include specifications for access, security fencing, sightlines, elimination of blind spots and hidden areas, lighting, electronic surveillance and acoustic interference.

8. **Greenways Plan - 2003**

   This long-term plan provides a policy framework and strategies to establish a greenway system throughout the City of Victoria.

9. **Victoria Harbour Plan - 2001**

   The Harbour Road Industrial Waterfront site is part of the Dockside area of the Upper (Working) Harbour. Maintaining the Working Harbour is important to the overall economy of the city and the region, as it provides a marine focused industry base.

10. **Victoria West Neighbourhood Plan - 1986**

    The Victoria West Neighbourhood Plan sets out land use policies for the Dockside Lands and the Harbour Road Industrial Waterfront, with the main objective to conserve most of Dockside’s waterfront lands for port-related activities.

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2 geodetic height, metres at mean tide level
APPENDIX A4: Glossary of Terms

BUILDABLE AREA, BA - The confined land area within which future development shall occur, subject to zoning, form and massing requirements and these guidelines.

DEVELOPMENT AREA, DA - The Harbour Road Industrial Waterfront site is divided into three sub areas called Development Area North, Development Area Central and Development Area South.

DEVELOPMENT OPTIONS - Two architectural building layout options that are based on buildable areas.

GEODEDIC HEIGHT - Refers height measurement in metres at mean tide level.