

November 27, 1997

SUBJECT: UPGRADING THE SEASIDE BIKE ROUTE ALONG ENGLISH BAY

RECOMMENDATION

THAT the Board approve recommendations A and B(i) in the attached Council/Board Report

BACKGROUND

This provides further information regarding the source of funds in recommendation B(i).

DISCUSSION

The total estimated cost of the improvements is \$855,000. The Canada/British Columbia Infrastructure Works Program provides \$206,666; the Engineering Department's Streets Sidewalk Reconstruction Account contributes \$50,000; the remainder is split equally between the Engineering Department and the Park Board for a share of \$299,167 each.

Within the existing Capital Budget there is \$239,167 available, and the additional \$60,000 is to be advanced from the 1998 Capital Budget.

Staff plan to undertake a fund-raising program to recover up to \$50,000 of the advance by seeking public contributions to the pedestrian enhancement of English Bay, including the proposed Bath House-style lighting, decorative pavement, special benches and flowering trees. Donors will be recognized by way of a plaque on the new benches to be installed.

Prepared by:
Pieter Rutgers
Planning and Development Division
Vancouver Board of Parks and Recreation
City of Vancouver
/ad
Attachment

ADMINISTRATIVE REPORT

Date: November 24, 1997

Author/Local: Doug Louie/7915

CC File No.

TO:	Standing Committee on Transportation and Traffic Vancouver Board of Parks and Recreation
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FROM:	General Manager of Engineering Services General Manager of Parks and Recreation
SUBJECT:	Upgrading the Seaside Bike Route along English Bay Beach

RECOMMENDATIONS

A. THAT the Seaside Bike Route along English Bay Beach be improved by constructing a new bike path from Stanley Park to Sunset Beach, as detailed in this report, at a total estimated cost of \$855,000;

B. THAT the cost of the project be funded as follows:

i) \$239,167 from the Park Board 1997 Capital Budget and \$60,000 as an advance approval of the Park Board 1998 Capital Budget

ii) \$282,167 in advance of the 1998 Streets Basic Capital (\$17,000 has already been approved and allocated for preliminary work)

iii) \$206,666 approved from the Canada/British Columbia Infrastructure Works Program

iv) \$50,000 from the Streets Sidewalk Reconstruction Account #12/31/6902/999.

C. THAT the Mayor writes to the Canada/BC Infrastructure Works Program thanking them for their 1997/98 program contribution towards the English Bay Bike Route.

GENERAL MANAGER'S COMMENTS

The General Manager of Engineering Services RECOMMENDS approval of recommendations A, B(ii), B(iii), B(iv), and C by City Council.

The General Manager of Parks and Recreation RECOMMENDS approval of recommendations A and B(i) by the Park Board.

COUNCIL POLICY

In May 1997, Council approved the Transportation Plan which emphasized the need to provide more comfortable cycling and walking environments.

In 1995, Council approved the development of a Vancouver Greenways Plan that included the Seaside Greenway Route.

In 1992, Council approved the development of a City-wide bicycle route network that included both commuter and

recreational bike routes.

The Vancouver Comprehensive Bicycle Plan (1988) and the Clouds of Change Report (1990) established the City's policy of promoting and encouraging cycling as a transportation alternative.

PURPOSE

The purpose of this report is to recommend improvements to the Seaside Bike Route along English Bay Beach to address congestion and safety concerns among pedestrians, cyclists, in-line skaters, and motorists.

SUMMARY

The Seaside Bike Route along English Bay Beach is highly congested during peak summer months and conflicts between cyclists, in-line skaters, pedestrians and motorists often occur. With the increasing resident and tourist populations in the downtown peninsula and in Vancouver in general, the congestion is expected to worsen. Currently, many parts of the existing bike and pedestrian facilities are substandard, and do not adequately accommodate in-line skaters who now recreate in the area.

After reviewing many options with the public, a final design plan is now recommended for implementation. Sections of the existing seawall in this area will become pedestrian only. The plan recommends that the sidewalk on the south side of Beach Avenue between Stanley Park and Denman Street be widened to accommodate a bike and a pedestrian path separated by either a curb and a planted strip, or a tactile strip of concrete pavers or granite setts. Narrowing the roadway results in the loss of about 40 parking spaces. Additional trees, decorative lighting, reconfigured planters and brick pavers would be included in this section. East of Denman to Bidwell, the existing sidewalk would be widened by narrowing the planters at the Bath House and extending over an existing gravel path adjacent to the sidewalk. This would provide a bike path and sidewalk separated by a tactile strip. East of Bidwell, a bike path would be constructed through the park from the sidewalk at Bidwell to the seawall at Sunset Beach. To minimize the impact on the park, the parking lot between Bidwell and Cardero would be reconfigured to accommodate cyclists and the bike path would be routed along the edge of the meadow. Where the bike path runs close to the seawall from the pump station to the Aquatic Centre, the seawall would be widened to provide a separated bike and pedestrian path.

In September 1997, an Open House was held at English Bay Beach to present the conceptual design plan. The majority of comments received were positive and many suggestions for improvements were made. Many of these are reflected in the final design described and recommended in this report.

The total estimated cost of the proposal is \$855,000 funded from the Canada/British Columbia Infrastructure Works Program (\$206,666), Engineering Streets Capital (\$349,167), and the Park Board (\$299,167). If the proposal is approved, detailed plans will be completed and construction will begin in March 1998. Substantial completion of the project prior to the summer peak season is anticipated.

BACKGROUND

The Seaside Bike Route is a continuous 15km bicycle route from Stanley Park to Spanish Banks. The route was established in 1990 using a combination of pathways, seawalls, and roadways, some of which are shared with pedestrians, in-line skaters and motorists. The English Bay Bike Route is the portion of the Seaside Route that extends from Stanley Park to Burrard Bridge.

Between Stanley Park and Bidwell, the existing bike route is on-street. Cyclists and motorists share moving lanes 3.0 metres (10 feet) wide, compared to the Council-approved optimum width of 4.3 metres (14 feet). According to recent counts, most cyclists and in-line skaters avoid using the road and use the existing south sidewalk of Beach Avenue instead.

East of Bidwell to Burrard Bridge, the existing bike route descends a steep hill and runs along the waterfront as part of the seawall, separated from the pedestrian path by a painted line. The bike path width is as low as 1.5 metres (5 feet) and is inadequate for two-way bike traffic. A desirable width is 3.7 to 4.0 metres (12 to 13 feet) which allows cyclists to comfortably pass each other without straying into the pedestrian section. New waterfront seawalls along Coal Harbour and False Creek are currently being designed and constructed with approximately 4.0 metre wide bike paths and 4.0 metre wide pedestrian walkways.

The Seaside Bike Route is frequented by both recreational and commuter cyclists and in-line skaters. Frequent congestion during peak periods and lack of separation between pedestrian and bike paths have led to conflicts between the modes. The Park Board conducted counts this summer at peak times on Beach Avenue. Up to 750 people per hour moved along Beach Avenue, not counting motorized vehicles. 32% were pedestrians, 40% cyclists and 28% in-line skaters. More than half the cyclists and almost all in-line skaters used the sidewalk. In addition, about 400 to 500 pedestrians per hour walked along the seawall. This congestion is expected to worsen as a result of increasing resident and tourist populations in the downtown peninsula, and the connection of the new bicycle and pedestrian systems in Coal Harbour and False Creek.

Since 1993, West End residents, the Bicycle Advisory Committee, and staff have been involved in studies to improve cycling conditions along English Bay. Many different options have been developed and publicly reviewed, including the installation of bike lanes on Beach and Pacific Avenues.

In 1996, staff invited public feedback on several options for a bike path separated from traffic. A workshop with City Council and Park Board to discuss the options was held in April 1997. At that time, the pursuit of a higher design standard was requested. Based on all comments received, Engineering Services and the Park Board refined the design criteria and hired landscape architects Kim Perry and Associates as consultants for the design of the new bike route.

The draft design plans were presented to the public in an "Open House" at English Bay on September 27, 1997, and were further exhibited at the Park Board office and the Aquatic Centre from September 29 to October 5, 1997. More than 150 people filled out comment sheets, a sample of which is attached as Appendix A. The draft design has since been refined to address the major public concerns and a final design is now ready and recommended for implementation.

DISCUSSION

Many options have been reviewed in detail to try to address the ongoing congestion and safety concerns along the existing Seaside Bike Route at English Bay. The final design balances the many needs of the general public including those of pedestrians, cyclists, in-line skaters, motorists, and park users in general. The plan also meets the need to preserve and retain as much green park space as possible and to create a high quality urban waterfront seawall that is now typical along Coal Harbour and many parts of False Creek. The details of the proposed design are described below and plans are attached in Appendix B.

Stanley Park to Gilford

The sidewalk on the south side of Beach Avenue is to be widened by 2.6 metres. This will create a total sidewalk width

of about 6.3 metres, of which 3.7 metres adjacent to the park will be an asphalt bike path, 2.0 metres adjacent to the roadway will be a concrete sidewalk, and 0.6 metres will be a planted strip separating the bike path and sidewalk. A concrete curb between the bike path and planted strip will also be installed to provide some grade separation. See Appendix B - Section A.

The widened sidewalk will narrow the roadway by 2.6 metres and will remove about 40 parking spaces on the south side of Beach Avenue. At present, these parking spaces are prohibited on Sundays and Holidays in order to allow Park traffic to clear more easily. Resident parking will be maintained on the north side and the two existing moving lanes will also be maintained at about 3.1 metres wide.

Street vending locations will be accommodated between the bike path and pedestrian sidewalk where the spacing of the existing trees allows the sidewalk to be widened into the park by about 1.0 metre.

Gilford to Denman

The widening of the south sidewalk and the narrowing of the roadway by 2.6 metres is continued along this section of Beach Avenue to Denman Street. The wide westbound moving lane is narrowed to about 3.0 metres wide and the two eastbound moving lanes are maintained at about 3.0 metres wide.

The existing planters at the foot of Davie Street will be relocated 1.5 metres south and narrowed slightly from 3.0 metres to 2.5 metres. The asphalt pathway just south of the planters will be narrowed by about 1.0 metre due to this relocation. The gaps between the planters will be reconfigured to align with the pedestrian crosswalks on Beach Avenue and contain six new lighting fixtures similar to the existing fixtures on top of the Bath House. The majority of the existing plant material within the planters will be retained after temporary storage during the construction phase. The relocation of the planters will also allow for an enhanced park bench program to be implemented by the Park Board that will help offset the cost of the bike path improvements.

The relocation of the planters and the narrowing of the roadway will create a 7.6 metre wide sidewalk. This will accommodate a 4.0 metre wide asphalt bike path adjacent to the planter, a 3.0 metre wide concrete sidewalk adjacent to the roadway, and a 0.6 metre wide tactile strip between the two. The tactile strip will include seven new flowering trees and will consist of concrete pavers or granite setts.

The area where pedestrians cross the bike path will be highlighted with the use of concrete pavers from the curb of the street to the edge of the park. All along the bike path and particularly in this area, cyclists will be required to yield to pedestrians.

One street vendor location will be accommodated between the bike path and pedestrian sidewalk just west of Davie Street. Several others will be accommodated on the north side of Beach Avenue, west of Davie Street.

At Denman Street, an existing Plane Tree will be preserved by jogging the bike path around it. An existing retaining wall will be removed and three small trees will be relocated. A new stone wall will be constructed to grade-separate the bike path from the pedestrian path immediately south and allow for the installation of additional park benches. In total, 21 new park benches are envisioned to increase pedestrian amenities by replacing the existing four long benches in this area.

Appendix B - Sections B, C, D, E, and F illustrate the above details or click [here](#) for a map of existing paths and some of the proposed ones.

Denman to the Bath House

The width of the street is unchanged from Denman eastward. The width of the planters on top of the Bath House will be reduced from 3.0 metres to 1.5 metres. This will create a 6.5 metre wide sidewalk which will accommodate a 3.7 metre wide asphalt bike path adjacent to the planters, a 2.5 metre wide concrete sidewalk adjacent the roadway and a 0.3 metre wide tactile strip separating the two. The separation function of the tactile strip will be enhanced by adding 12 new flowering trees and will consist of concrete pavers or granite setts.

The larger plants in the existing planters will be accommodated in the narrowed planters wherever possible. It is expected that all the existing palms can remain in the planters during and after construction. A new 1.5 metre wide planting strip between the new bike path and the existing Bath House Concession Stand will also be created. The existing bus stop at the Bath House will remain. If necessary, a bus shelter may be constructed to further separate the bus stop and sidewalk from the bike path.

Where pedestrian connections exist from the sidewalk to the top of the Bath House or to the stairs leading down to the seawall, the bike path will be interrupted by a concrete sidewalk. This will help assign the right-of-way to pedestrians.

Appendix B - Sections G and H illustrate the above details.

East of the Bath House to Bidwell

The south sidewalk along Beach Avenue will be widened by about 2.5 metres south to take advantage of the informal pathway that currently exists. This will create a 5.7 metre wide sidewalk which will accommodate a 3.55 metre wide asphalt bike path and a 1.85 metre wide concrete sidewalk, separated by a 0.3 metre wide tactile strip of concrete pavers or granite setts. Greater widths in this section cannot be accommodated without threatening the existing trees or narrowing the roadway beyond minimum standards.

A low retaining wall with a granite cap is currently proposed for the edge of the bike path adjacent to the park. Other alternatives that may be more aesthetically pleasing and cost efficient will be explored in the development of the construction details.

As the bike path approaches Bidwell Street, it will divert south away from the sidewalk for a short distance to follow existing grades and reduce the need for a retaining wall. However, at Bidwell Street, the bike path will need to be adjacent to the sidewalk to reduce the impact to the existing trees commonly known as the Five Sisters.

Appendix B - Section I illustrates the above details.

Bidwell to Cardero

The current bike path just east of Bidwell continues down a very steep slope that joins with the existing seawall. The proposal eliminates the steep slope by routing a 3.7 metre wide asphalt bike path along the south side of the existing parking lot adjacent to Beach Avenue. To accommodate the bike path, the existing 31 angled parking spaces in the parking lot will be replaced with 18 parallel parking spaces. The bike path and parking lot will be separated by a 0.8 meter wide planted strip and concrete curb. The significant advantage in this scheme is the minimal loss of green space and the creation of a pedestrian-only seawall from Bidwell to Sunset Beach.

Appendix B - Section J illustrates the above details.

Cardero to Burrard Bridge

From the east end of the parking lot at Cardero, the 3.7 metre wide asphalt bike path will continue east along the meadow area. Its routing will create a gentle slope to better accommodate cyclists and in-line skaters, preserve all existing trees, and be along the edge of the flat meadow area to preserve it for other uses.

As the bike path approaches the pump station, but before joining up with the existing seawall, some grading of the existing embankment is required. This will allow the existing seawall and the new bike path to be grade separated. The grading work will require the relocation of three existing benches and the replacement of one tree.

As the bike path joins the existing seawall at the pump station, the seawall will be widened from 3.2 metres to 6.7 metres by expanding south into the beach area. This will accommodate a 3.7 metre wide asphalt bike path and a 3.0 metre wide asphalt pedestrian path separated by a tactile strip.

East of the pump station to the Aquatic Centre, the existing seawall will be widened northwards into the park. The widening varies from zero to 3.0 metres to accommodate a 3.7 metre wide asphalt bike path and at least a 3.0 metre wide asphalt pedestrian path. The majority of the bike and pedestrian path along this section will be grade separated as it currently exists.

Just west of Burrard Bridge, the bike path will be routed eastward under the Burrard Bridge to continue along the Seawall or northward just east of the Aquatic Centre to link up with Beach Avenue. From Beach Avenue, cyclists can use Thurlow or the lanes west of Burrard Bridge to link up with the Burrard Bridge. Further changes and improvements to access Burrard Bridge will be made once the status of the bicycling improvements on the bridge itself is finalized.

Appendix B - Sections K, L, and M illustrate the above details or click [here](#) for a map of existing paths and some of the proposed ones.

PUBLIC CONSULTATION

During the development of the upgrade of the Seaside Bike route, many stakeholder meetings were held. In 1996, options for improvements were discussed in a public meeting and were displayed at the Park Board and Aquatic Centre. The proposals were also reviewed in conjunction with the Stanley Park cycle route proposal in early 1997.

A sample of the comments received from the most recent open house at English Bay Beach and exhibition at the Park Board and Aquatic Centre in September and October of this year is attached as Appendix A. More than 150 people provided comments, with the majority (80%) supportive of the proposed improvements to the Seaside Bike Route and seawall. Those who did not support the project disliked the fact that green park space and planters were being reduced to provide a path for cyclists and in-line skaters, and suggested that cyclists should all be accommodated on the roadway.

Many constructive comments and suggestions were received and incorporated into the project where feasible. Of these, some of the major issues are presented below:

1. Location of Pedestrian Sidewalk and Cyclist Pathway - Comments have been received suggesting that the pedestrian sidewalk on the south side of Beach Avenue from Stanley Park to Bidwell be relocated away from the edge of the roadway to be adjacent to the park. This would create a walking environment away from moving vehicular traffic. Also, this would avoid placing pedestrians between cars and cyclists.

After careful review of all options, the relocation of the sidewalk is not recommended because it would create additional safety concerns along the bike path. These concerns are listed below:

- The need to accommodate a crossover of the bike path and the pedestrian sidewalk when the bike path is routed toward the seawall.
- Conflicts when pedestrians wait to cross Beach Avenue (northbound) at the edge of the curb on the bike path.
- Conflicts when pedestrians have finished crossing Beach Avenue (southbound) only to step up the curb into a bike path.
- Conflicts between cyclists and bus or car passengers loading or unloading.

However, to improve the comfort of pedestrians, particularly between Stanley Park and Gilford, the design has been revised by narrowing Beach Avenue by an additional 0.6 metres to create space for a planted strip and curb to separate the bike path and pedestrian sidewalk. This separation will provide additional comfort for pedestrians as it would be difficult for cyclists and in-line skaters to cross over the curb into the pedestrian sidewalk.

2. Narrowed Planters - Comments have been received objecting to the narrowing of the existing planters at the Davie Street end and at the Bath House. The ability of narrowed planters to buffer park users from Beach Avenue traffic is a concern given that some of the larger existing plant material within the planters cannot be retained if the planters are narrowed.

In response to these concerns, the planters at the Davie Street end will be shifted south by 1.5 metres and only narrowed by 0.5 metres instead of the previously proposed 1.5 metres. This will allow the majority of the plant material to be accommodated within the relocated planter and thereby maintain the existing buffer to park users. Unfortunately, the planters at the Bath House cannot be shifted south without affecting the structure of the Bath House. On the other hand, if the planters at the Bath House are not narrowed, the pedestrian sidewalk and bike path would become uncomfortably narrow at a width of 5.0 metres. Therefore, the proposed narrowing of the planters at the Bath House should proceed.

3. Sidewalk Widths - The congestion of the pedestrian sidewalk, particularly on the south side of Beach Avenue between Davie and Denman, was cited as a concern. During peak periods, significant congestion occurs due to the high pedestrian volumes in this area. The original proposal recommended widening the existing sidewalk from 3.9 metres to 7.0 metres to accommodate a pedestrian sidewalk and a bike path. In response, an additional 0.6 metres have been added by narrowing Beach Avenue by the same amount. Opportunities for widening the sidewalks at other locations along the route have also been reviewed. No additional sidewalk widening is possible given that they have already been maximized to the extent possible given the site constraints.

4. Cycling on Beach Avenue - Suggestions have been received about better accommodating cyclists along Beach Avenue. Faster cyclists should be encouraged to continue to use Beach Avenue instead of the new bike path, especially during peak periods. Although the proposed changes on Beach Avenue do not improve cycling on the roadway, they also don't make it more difficult. Many faster cyclists currently use the roadway, and given that Beach Avenue has a speed

limit of 30km/h, will continue to do so. Apart from the proposed improvement to the pavement surface on Beach Avenue in the eastbound direction, it is not possible to improve the existing street conditions for cycling without compromising the new bike path and sidewalk on the south side. Therefore, no further change to the street design is recommended.

The Bicycle Advisory Committee, the Greenways Team, members of the West End Traffic and Parking Committee, and some street vendors have also been consulted and are supportive of the proposal. On October 15, 1997, the Bicycle Advisory Committee resolved,

"That Engineering Service's presentation on the extension of the Seaside Bike Route from the Aquatic Centre to Stanley Park be supported by the Committee;

Further That the Committee recommends provision be made for:

- adequate signage indicating cyclists may use the road or pathway
- bollards designed to not obstruct pedestrians and be visible at night
- approval of the sidewalk next to the roadway
- improving connections to the Burrard Bridge
- preparation of sub-grade to minimize future maintenance;

And Further That the Bicycle Advisory Committee recommends provision be made available for maintenance of this new facility."

FINANCIAL IMPLICATIONS

The total cost of the proposed project is estimated to be \$855,000. The estimated cost is higher than previously anticipated for several reasons. The selection of the option to narrow the roadway along Beach Avenue from Stanley Park to Denman Street versus an asphalt path through the park has increased costs, but this is necessary to preserve the existing trees and well-used park space. The preservation of the width of the planters at Denman Street, as identified by the public, also added to the cost. Finally, the development of the design to significantly improve the separation of cyclists and pedestrians and to improve the aesthetics of this high profile area, has increased cost.

In June 1997, the City received approval for \$206,666 from the Canada/BC Infrastructure Works Program for their share of the English Bay Bike Route Project.

A breakdown of the costs is shown below:

Design Preparation and Temporary Help.....	\$ 40,000
Construction - Stanley Park to Gilford	\$150,000
- Gilford to Denman	\$230,000
- Denman to Bath House	\$ 95,000
- Bath House to Bidwell	\$165,000

- Bidwell to Cardero	\$ 45,000
- <u>Cardero to Burrard</u>	<u>\$130,000</u>
Total Estimated Cost	\$855,000

Funding for the project is available from the following sources:

Existing Sources:

- * \$206,666 approved from the Canada/British Columbia Infrastructure Works Program.
- * \$17,000 previously approved by Council for preliminary work on October 17, 1997.

New Funding Sources:

- * \$50,000 from the Streets Sidewalk Reconstruction Account #12/31/6902/999.
- * \$282,167 in advance of the 1998 Streets Basic Capital.
- * \$239,167 from the Park Board 1997 Capital Budget.
- * \$60,000 as an advance approval of the Park Board 1998 Capital Budget.

IMPLEMENTATION

If approved, detailed design and construction drawings will be prepared in-house with assistance from the consultants. Final design is to be completed early in 1998 with construction scheduled for March of 1998. As part of the Infrastructure Works Program funding arrangements, construction must be completed by September 1998. It is hoped that construction will be completed well before then to avoid inconvenience to the general public, especially during the summer peak periods of activity at English Bay Beach.

The Public Art Committee will be approached to consider ways to incorporate public art into aspects of the project. This will likely occur after construction given the tight deadline for construction completion.

MAINTENANCE

After completion of the project, the new bike path will be maintained by Engineering Services and the Park Board. In general, Engineering Services will be responsible for the maintenance of the new bike path between Stanley Park and Bidwell Street, including the brick pavers that extend into the park at the planters at the foot of Davie Street. At least initially, this maintenance cost can be accommodated within existing budget. Over time however, the concrete pavers, tactile strip, etc. will have higher maintenance and replacement costs, and future budgets may be affected. The Park Board will generally be responsible for the maintenance of the new bike path east of Bidwell, as well as all landscaping along the entire route. An increase in the Park Board's operational maintenance budget for this will be requested upon completion of the project.

CONCLUSION

After extensive consultation and review of alternatives, the final design for upgrading the Seaside Bike Route along English Bay Beach as presented in this report is recommended for implementation. The plan balances the needs of all users including pedestrians, cyclists, in-line skaters, park users, and motorists. It will enhance the English Bay Beach area and will become an important part of the high quality pedestrian and bicycle system currently being developed at Coal Harbour and around False Creek.

* * * * *

General Mgr./Dept. Head:	
Date:	
This report has been prepared in consultation with the departments listed to the right, and they concur with its contents	
Report dated:	November 24, 1997
Author:	Doug Louie
Phone:	7915
Concurring Departments	
Park Board	
Finance	

FOR A COPY OF THE APPENDIX
PLEASE CONTACT
TILO DRIESSEN AT 257-8404