

CITY OF BURNABY

FINANCE AND CIVIC DEVELOPMENT COMMITTEE

*HIS WORSHIP, THE MAYOR
AND COUNCILLORS*

RE: BURNABY FRASER FORESHORE PARK URBAN TRAIL

RECOMMENDATIONS:

1. **THAT** Council approve the expenditure of Gaming Funds not to exceed \$200,000 to prepare an engineering design, environmental protection plan, and cost estimate for the extension of the Burnaby Fraser Foreshore Park Urban Trail from Byrne Creek to Wiggins Street, as outlined in this report.
2. **THAT** Council authorize staff to pursue further discussions with GVRD Parks to develop and define terms to secure an anticipated GVRD Parks financial contribution towards the development of the subject Burnaby Fraser Foreshore Parks Urban Trail.
3. **THAT** Council forward a copy of this report to the Environment Committee, the Parks, Recreation and Culture Commission for information purposes.

R E P O R T

The Finance and Civic Development Committee, at its Open meeting held on 2005 February 21, received and adopted the *attached* report to seek Council authorization for preparation of an engineering design, environmental protection plan, and cost estimate for the extension of the Burnaby Fraser Foreshore Park Urban Trail from Byrne Creek to Wiggins Street.

Respectfully submitted,

Mayor Derek R. Corrigan, Chair
Chair

Councillor Dan Johnston
Vice Chair

Councillor Nick Volkow
Member

COPY: CITY MANAGER DIR. FINANCE DIR. PARKS, REC. & CULT. SERVICES DIR. PLNG. & BLDG. DIR. ENGINEERING CITY CLERK

TO: CHAIR AND MEMBERS 2005 January 26
FINANCE AND CIVIC DEVELOPMENT COMMITTEE

FROM: DIRECTOR PLANNING AND BUILDING OUR FILE:68000-20

SUBJECT: BURNABY FRASER FORESHORE PARK URBAN TRAIL

PURPOSE: To seek Committee and Council expenditure authorization for preparation of an engineering design, environmental protection plan, and cost estimate for the extension of the Burnaby Fraser Foreshore Park Urban Trail from Byrne Creek to Wiggins Street, as outlined in this report.

RECOMMENDATIONS:

1. **THAT** the Finance and Civic Development Committee request Council approval for the expenditure of Gaming Funds not to exceed \$200,000 to prepare an engineering design, environmental protection plan, and cost estimate for the extension of the Burnaby Fraser Foreshore Park Urban Trail from Byrne Creek to Wiggins Street, as outlined in this report.
2. **THAT** staff be authorized to pursue further discussions with GVRD Parks to develop and define terms to secure an anticipated GVRD Parks financial contribution towards the development of the subject Burnaby Fraser Foreshore Park Urban Trail.
3. **THAT** the Finance and Civic Development Committee request that Council forward a copy of this report to the Environment Committee, and the Parks, Recreation and Culture Commission for information purposes.

REPORT

1.0 INTRODUCTION

The protection of lands along the Fraser River foreshore in public ownership with provision for public access, enjoyment and interpretation of the natural amenities and environmental features along the river has been a long standing City objective. This City objective has been implemented consistent with Council's adopted Big Bend Development Plan. With the recent 2004 March 26 acquisition of an additional 43 acres of park land adjacent to the Fraser River from the Canada Lands Company Ltd., the City has now secured in public ownership all of the lands designated for the Burnaby Fraser Foreshore Park. The City has about 450 acres of park land in the Big Bend area with about 175 acres of park land being located on the Fraser River foreshore. This represents about 70% (5 km) of the Burnaby foreshore along the North Arm of the Fraser River. *Figure 1, attached*, shows existing City park land and designated open space within the Big Bend area. Within the adopted Plan, the eastern

portion of the Big Bend foreshore, east of Wheaton Street, is designated to be developed for dual public and industrial access to the waterfront with the lands to remain in private ownership. To date, the City has secured public rights-of-way along this section of the Fraser River foreshore from 5 of the existing 10 industrial properties east of Wheaton Street.

The planned Urban Trail network for the Big Bend area is an important recreational and transportation amenity for the growing employment base in the area. It is also an important recreation resource for all Burnaby residents providing direct access to the Burnaby Fraser Foreshore Park and the Fraser River waterfront in an area that is relatively flat and easily negotiated by pedestrians, cyclists and other users of all ages and abilities. The proposed Urban Trail network within the adopted Big Bend Development Plan area, as approved by Council and the Parks, Recreation and Culture Commission based on the 1990 conceptual alignment and subsequent area plan approvals, is shown on **Figure 2, attached**. This Urban Trail network is intended to inter-connect designated employment centres to City park lands, the Byrne Road and Marine Way Commercial Precinct, and upland destinations within Burnaby. Portions of the Urban Trail network also form part of the regional GVRD Greenway network providing future connections to Vancouver and New Westminster .

With the recent completion of the planned park land acquisitions for the Burnaby Fraser Foreshore Park, the City now has the land area needed to pursue implementation of the planned Urban Trail within the Burnaby Fraser Foreshore Park. The subject section of Urban Trail, shown on **Figure 3, attached**, extends through the Burnaby Fraser Foreshore Park lands from Byrne Creek through to Wiggins Street. This report seeks Council approval for expenditures to prepare an engineering design, environmental protection plan, and cost estimate for development of this subject section of the Burnaby Fraser Foreshore Park Urban Trail.

2.0 SUBJECT URBAN TRAIL SECTION

Portions of the planned Urban Trail network in the Big Bend have been constructed from Marine Way and Glenlyon Parkway through the Glenlyon Business Centre, and from the Edmonds Town Centre to Marine Drive. Other sections, secured through the development approval process, have been constructed, approved for construction, or are in the process of being designed for construction within the Glenwood Industrial Estate area and through the Byrne Road and Marine Way Commercial Precinct area. **Figure 2** also shows sections of the Big Bend Urban Trail network that have been completed or are in the process of being constructed or designed for construction.

The subject section of Urban Trail, shown on **Figure 3**, would connect the major portions of the Burnaby Fraser Foreshore Park from the Glenlyon Business Centre through to the developing Urban Trail system within Glenwood Industrial Estates east of Wiggins Street. Over the longer term, future City and development related Urban Trail projects would be required to fully complete and inter-connect the planned network in the Big Bend.

The subject Urban Trail would typically be constructed to a paved 4.0 metre wide standard to accommodate use of the trail for both cyclists and pedestrians. The paved surface would also serve to accommodate younger cyclists, persons with disabilities, roller-bladers and other users on a smooth and level surface. In some sections, the trail width may be reduced to 3.0 metres in width in response to site constraints, environmental conditions, cost implications or other considerations. The following describes the key features of identified segments of the subject Urban trail, labeled as **Segment 1 through 4** on **Figures 4, 5, 6, and 7, attached:**

Segments 1 and 2 – Byrne Creek to Emily Street Road End

This segment is proposed to follow an alignment within the Burnaby Fraser Foreshore Park and on the south side of Fraser Park Drive extending from Byrne Creek through to the existing service\trail access to the Burnaby Fraser Foreshore Park at the Emily Street road end.

The western section of this segment, **Segment 1 on Figure 4**, between Byrne Road and Byrne Creek, is currently developed to a 3.0 metre wide gravel standard for pedestrian use. The existing pedestrian trail parallels the foreshore through a grove of Cottonwood trees within an informal lawn and picnic area of the Park. This section is proposed to be widened to a 3.5 to 4.0 metre width to safely accommodate both cyclists and pedestrians. The existing smooth gravel surface of this section of the Urban Trail through the picnic area in this location would be maintained in response to the adjacent Cottonwood tree roots.

The portion of this trail east of Byrne Road, **Segment 2 on Figure 5**, is not currently constructed. There is a small pedestrian path across the waterfront portion of the park extending to Tillicum Street. This existing path on this portion of **Segment 2** would be replaced by a 3 to 4 metre wide paved path through to the service/trail access to Burnaby Fraser Foreshore Park at the Emily Street road end, as show on **Figure 5**. The eastern portion of this trail alignment would be built over the GVS&DD right-of-way located adjacent to the southern edge of Fraser Park Drive.

Segment 3 – Emily Street Road End to Wheaton Street

This segment, shown on **Figure 6**, is currently developed to a gravel standard over the GVS&DD service access road, at approximately 30 metres from the edge of the Fraser River through to the constructed channel located approximately midway along the river frontage of the major City park land holdings in this area. The unconstructed portion of this segment extends east from the channel through to the unconstructed Wheaton Street road right-of-way.

Future works related to the existing gravel section of Urban Trail would include installation of the standard paved surface on the current gravel service access road. The lands associated

with the eastern portion of **Segment 3** of the subject Urban Trail have been identified as having productive and diverse habitat features that support fish and wildlife functions. These lands are within the natural Fraser River flood plain and are subject to periodic flood inundation. The lands are also characterized by a variety of wetlands of various subtypes that add to the existing mix of river riparian area, dry grassland, mixed forest, shrub borders, ponds and rearing channels associated with the adjacent park parcel. Given the significant environmental values and native low land peat soils associated with this segment of the subject Urban Trail network, more extensive geo-technical, structural, and engineering design work, along with a comprehensive environmental protection plan, will be required to avoid impacts on existing habitat features and functions in the area.

Arising design considerations for this segment of Urban Trail, to avoid impacts on existing habitat features and functions in the area, include a bridged crossing of the constructed habitat channel with the balance of the eastern section of the Urban Trail to consist of a constructed elevated boardwalk connecting through to the existing service road located in the Wheaton Street right-of-way. The trail would be located approximately 30 metres from the edge of the Fraser River within a 'best fit' route that would seek to retain existing larger trees and minimize any environmental impacts. Design considerations would also include an analysis of the advantages and disadvantages of using a narrower boardwalk width of 3.0 metres with locations for rest / pull-out areas to reduce construction costs and environmental impacts. During boardwalk construction, disturbance of existing vegetation would be minimized by only allowing for the operation of construction machinery along the boardwalk alignment on "swamp pads" to avoid direct contact of machinery with the ground. The boardwalk would be constructed to the 200 year flood elevation level of about 3.15 metres geodetic and provide for guard rails to confine pedestrians and cyclists to the boardwalk route. Wet ground conditions and extensive wetland / hard-hack vegetation adjacent to the boardwalk will provide sufficient discouragement for users to wander from the boardwalk route into sensitive habitat areas.

Segment 4 – Wheaton Street to Wiggins Street

This segment, shown on **Figure 7**, would extend from the end of the existing unconstructed Wheaton Street road right-of-way through to the intersection of Riverbend Drive and Wiggins Street. The portion of the Urban Trail within the Wheaton Street road right-of-way would be developed on the existing gravel service road access. The service road access would remain closed and gated to general traffic and would only accommodate maintenance vehicles as needed. Works on this section would include installation of the standard paved surface on the current gravel service access road and buffer landscaping of the adjacent heavy industrial properties to the east. The Riverbend Drive portion would follow an alignment adjacent to the constructed road through to Wiggins Street. At this point, the Urban Trail would connect with the developing Urban Trail sections within Glenwood Industrial Estates through to Marine Way and North Fraser Way.

3.0 SCOPE OF WORK

This report seeks Council authorization for an expenditure not to exceed \$200,000 to prepare an engineering design, environmental protection plan, and cost estimate for the extension of the Burnaby Fraser Foreshore Park Urban Trail from Byrne Creek to Wiggins Street, as outlined above.

For each segment of the subject Urban Trail, the engineering design would establish the precise trail location, construction standard, elevation, statutory right-of-way requirements and cost estimate for budgeting purposes. For *Segments 1 and 2*, the engineering design work is expected to be relatively routine with some requirements to coordinate the design with City park plans and uses, Fraser River dyke requirements, and GVS&DD approvals for alignments that encroach within the existing GVS&DD statutory right-of-way in the area and the Terasen right-of-way at the foot of Byrne Road. CN Rail approval will also be needed for public access under the existing rail bridge near the western section of *Segment 3*.

As noted, the significant environmental values and native low land peat soils associated with the eastern section of *Segment 3* of the subject Urban Trail system will require the completion of more extensive geo-technical, structural, and engineering design work along with a comprehensive environmental protection plan to avoid impacts on existing habitat features and functions in the area. As part of this work, staff would also explore the potential for the removal of the Wheaton flood box at the Fraser River in conjunction with completion of the Fraser River Dyke works within the Riverbend Drive right-of-way west of the GVRD Incinerator.

In the preparation of this report, staff undertook to submit a pre-application description of the project to the Fraser River Estuary Management Program (FREMP) Environmental Review Committee (ERC) for review and comment. Comments received from the FREMP ERC have been incorporated into the description of design requirements for this Urban Trail proposal. The FREMP ERC noted that a formal application(s) would be required in order to construct the proposed boardwalk section (*eastern portion of Segment 3*) of the Urban Trail. The section of Urban Trail east of Tillicum Street to the Emily Street road end, in *Segment 2*, will also require FREMP ERC approval based on the prepared design. The FREMP ERC response also noted that it did not anticipate any significant adverse impacts to habitat features to arise from the proposed Urban Trail sections located within or adjacent to Fraser Park Drive, Wheaton Street, or Riverbend Drive road rights-of-way. The engineering design assignment for the subject Urban Trail would include receipt of any required environmental approvals to allow for the construction of each segment of the Urban Trail.

At this stage, the engineering design and environmental protection plan would be primarily focused on the scope of design work and necessary environmental approvals needed to allow

for the advancement of construction of the proposed Urban Trail. The scope of work for the elevated section of the boardwalk within *Section 3* would consist of a preliminary engineering and structural design. Further detailed design work would be required to be completed prior to construction of this elevated segment. It is anticipated *Segments 1, 2, and 4* could be constructed while detailed engineering design work was being completed for the eastern portion of *Section 3*.

There are a range of other features that are anticipated to be incorporated within the Burnaby Fraser Foreshore Park along this Urban Trail route as part of future projects to be coordinated through the Park Master Plan implementation process. Future projects could include the creation of additional Look-offs to the Fraser River near the Emily Street road end and within the Wheaton Street road end. There may also be an opportunity for future park improvements to enhance fisheries and wildlife habitats, and provide for observation points to allow for structured opportunities for nature interpretation and public awareness of the habitat resources present in the park.

4.0 FINANCING AND POTENTIAL PARTNERSHIP OPPORTUNITIES

As part of its continuing efforts to recognize the legacy arising from the cooperation between the City and Canada Lands Company Ltd. (CLC) in implementing the development vision for the Glenlyon Business Park, CLC has indicated that it is prepared to direct funds towards the design and construction of the subject Urban Trail. For fiscal period ending in 2005 March, CLC has committed to contribute \$50,000 towards the design component. On completion of City design work, staff would invoice CLC for the \$50,000 contribution. CLC has also indicated that it is prepared to commit a further \$200,000 towards the development of specific features along the Urban Trail, including the development of public interpretation features and completion of a planned "look-off" in the area of the Emily Street road end.

In addition, GVRD Parks have indicated that there is a strong policy basis for development of a GVRD cost share contribution towards the subject trail section as it forms part of the North Fraser Greenway, as outlined within the adopted GVRD Parks Regional Recreational Greenway Plan. The North Fraser Greenway conceptual plan is to connect Vancouver along the North Arm of the Fraser River through Burnaby's Big Bend area to New Westminster's boardwalk promenade.

With Committee and Council adoption of the recommendations of this report, staff would pursue further discussions with GVRD Parks to develop and define terms for these potential financial contributions towards the trail construction. Completion of the proposed engineering design work and cost estimate will provide a sound basis for the GVRD, to determine its cost share contribution in light of its overall budget for the Greenway Program and to define requirements for recognition and registration of the GVRD's interest in exchange for a capital contribution to the project.

This project is included under the Urban Trail component of the City's 2005 to 2009 Provisional Capital Program. Of the total 5 year allocation of \$1,800,000 for this specific program, \$200,000 has been allocated for expenditures in 2005. Given the environmental benefits of accommodating pedestrian and cycle movements on the City's Urban Trail system, this report seeks the approval of the Committee and Council for the 2005 portion of this project to be funded through the Gaming Reserve Fund.

5.0 NEXT STEPS

On completion of the engineering design work, receipt of required environmental approvals, and preparation of a cost estimate for each segment of the proposed Urban Trail, staff would prepare a subsequent report to seek Committee and Council approval for approval for the phased construction of the subject Urban Trail, and completion of detail engineering and structural design work for the elevated section of the trail within the eastern portion of **Segment 3**. This report would also include the results of discussions with GVRD Parks on terms for a capital contribution towards the trail construction program consistent with the GVRD Greenway Program.

As part of other ongoing work in relation to the recent acquisition of lands for the Burnaby Fraser Foreshore Park, staff will prepare a report for future park dedication and zoning to the Park and Public Use (P3) District following completion of a road closure and park land consolidation proposal being advanced through Council.



J.S. Belhouse, Director
PLANNING AND BUILDING

LP/jc/sa
Attachments (7)

cc: City Manager
Director Finance
Director Parks, Recreation and Cultural Services
Director Engineering
City Clerk

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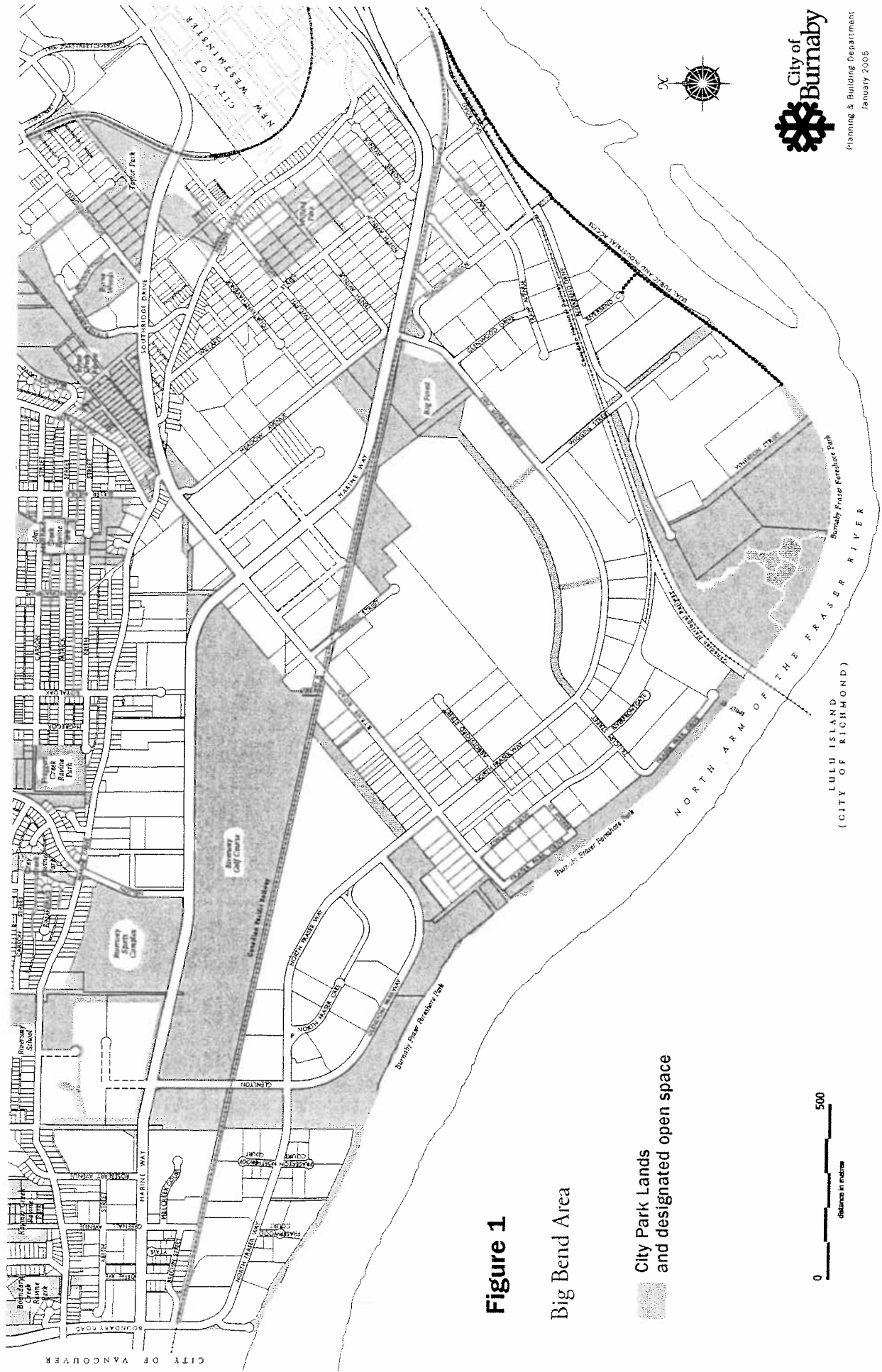


Figure 1

Big Bend Area

City Park Lands
and designated open space

0 500
Distance in metres

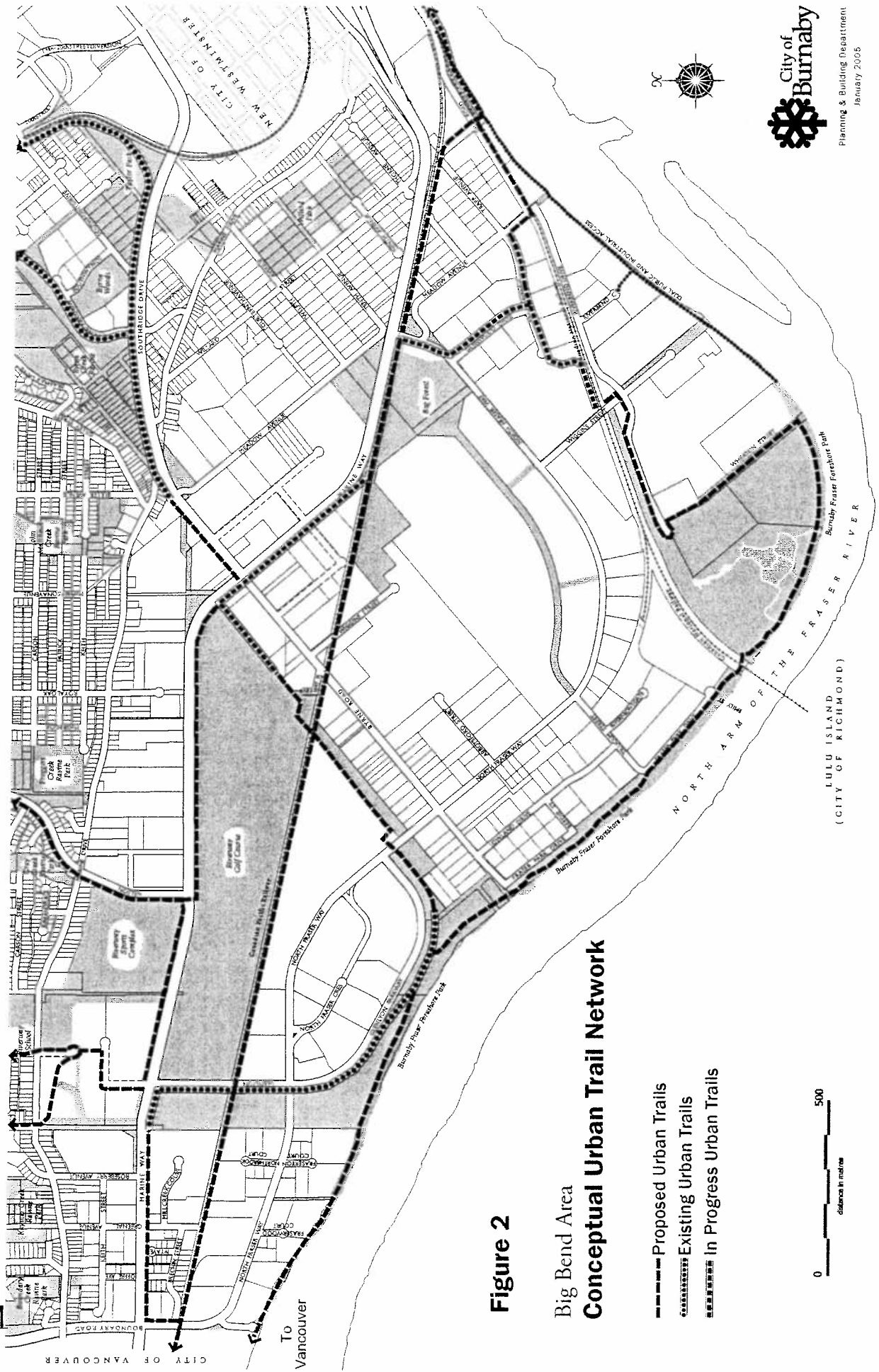


Figure 2
 Big Bend Area
Conceptual Urban Trail Network

- Proposed Urban Trails
- Existing Urban Trails
- In Progress Urban Trails



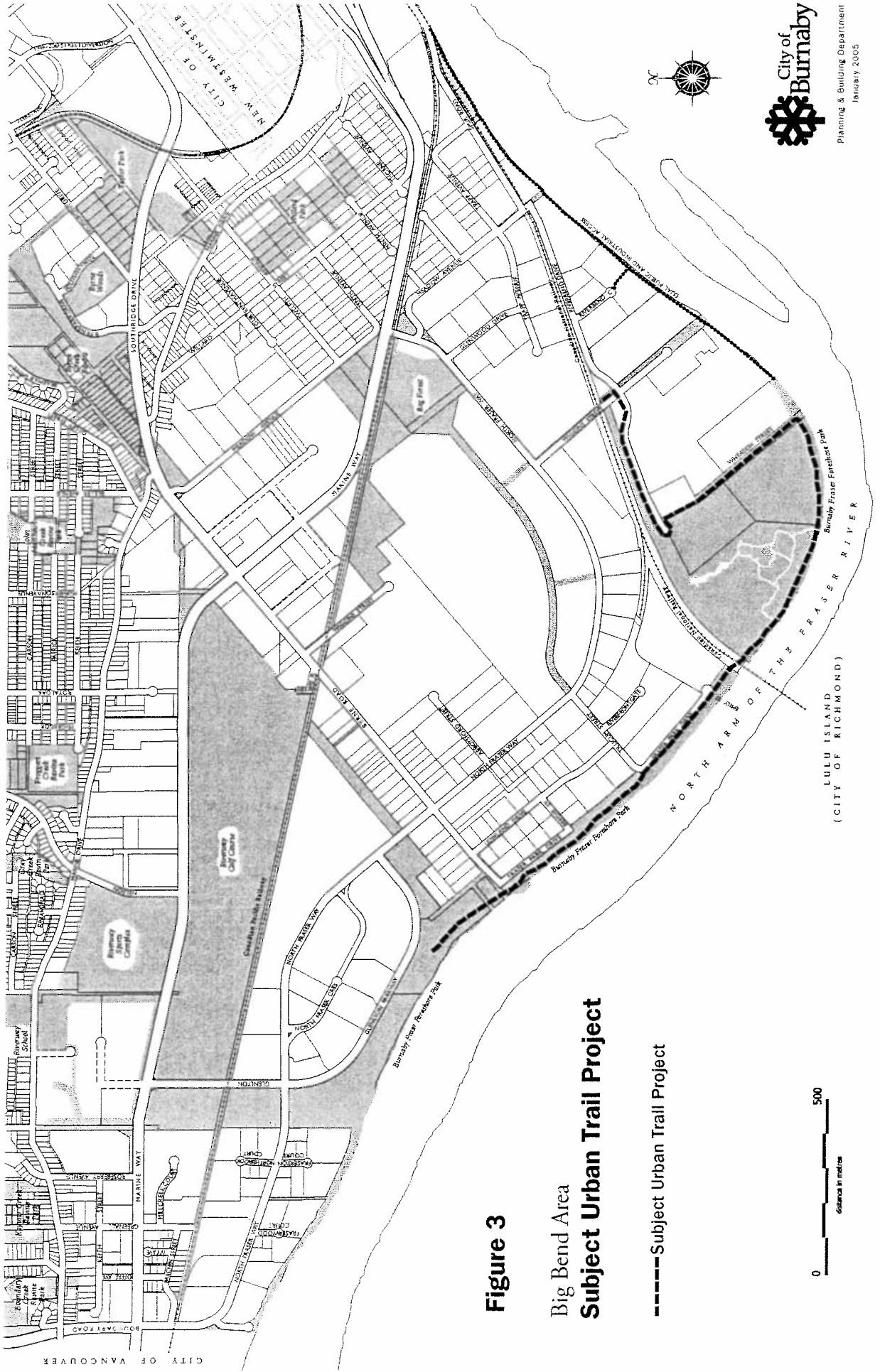


Figure 3
 Big Bend Area
Subject Urban Trail Project

----- Subject Urban Trail Project

0 500
 distance in metres

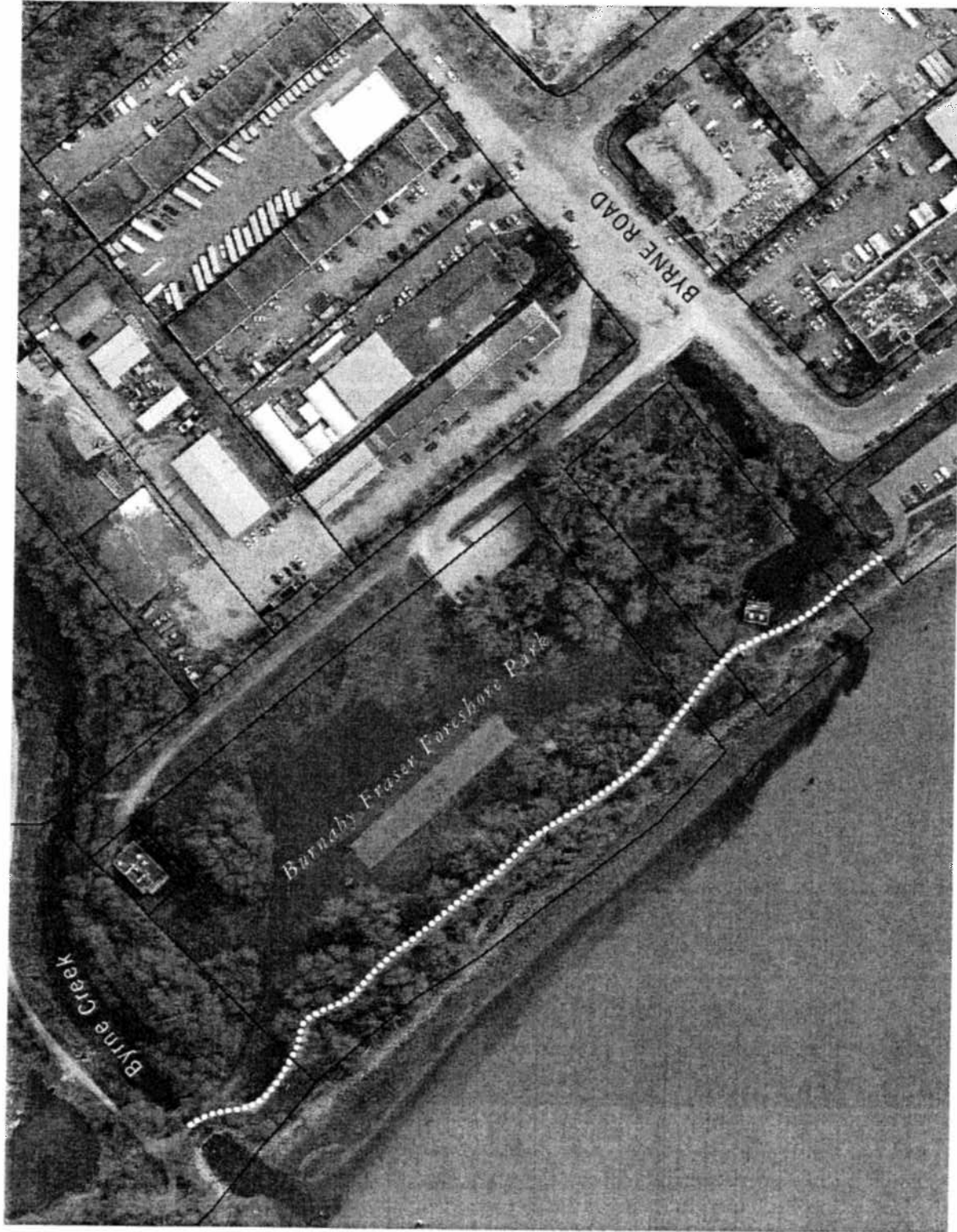


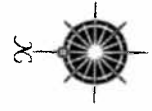
Figure 4

Big Bend Subject Urban Trail Project

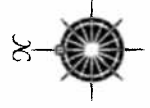
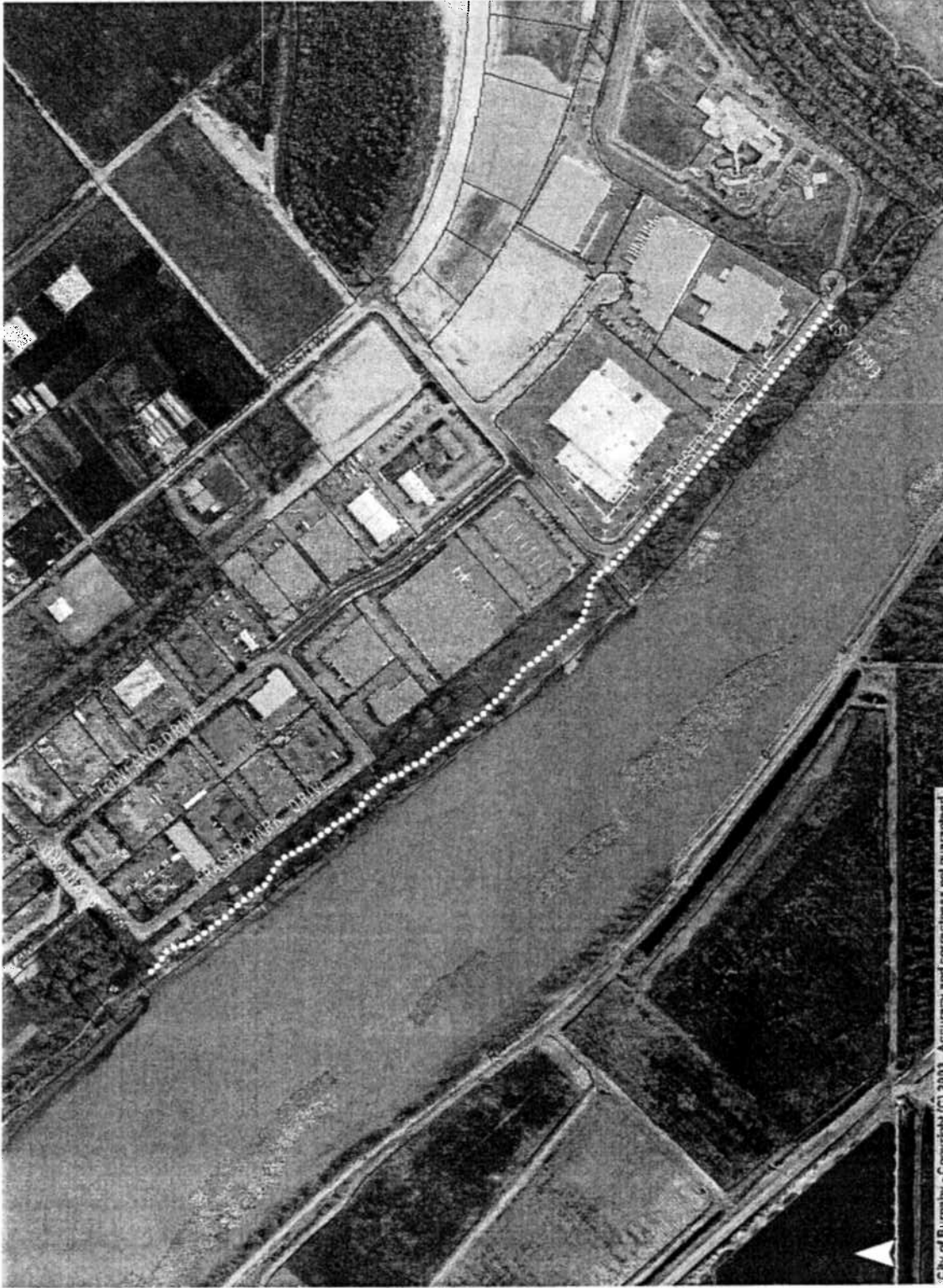
Segment 1: Byrne Creek to Byrne Road



Subject Urban Trail Route

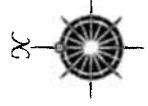
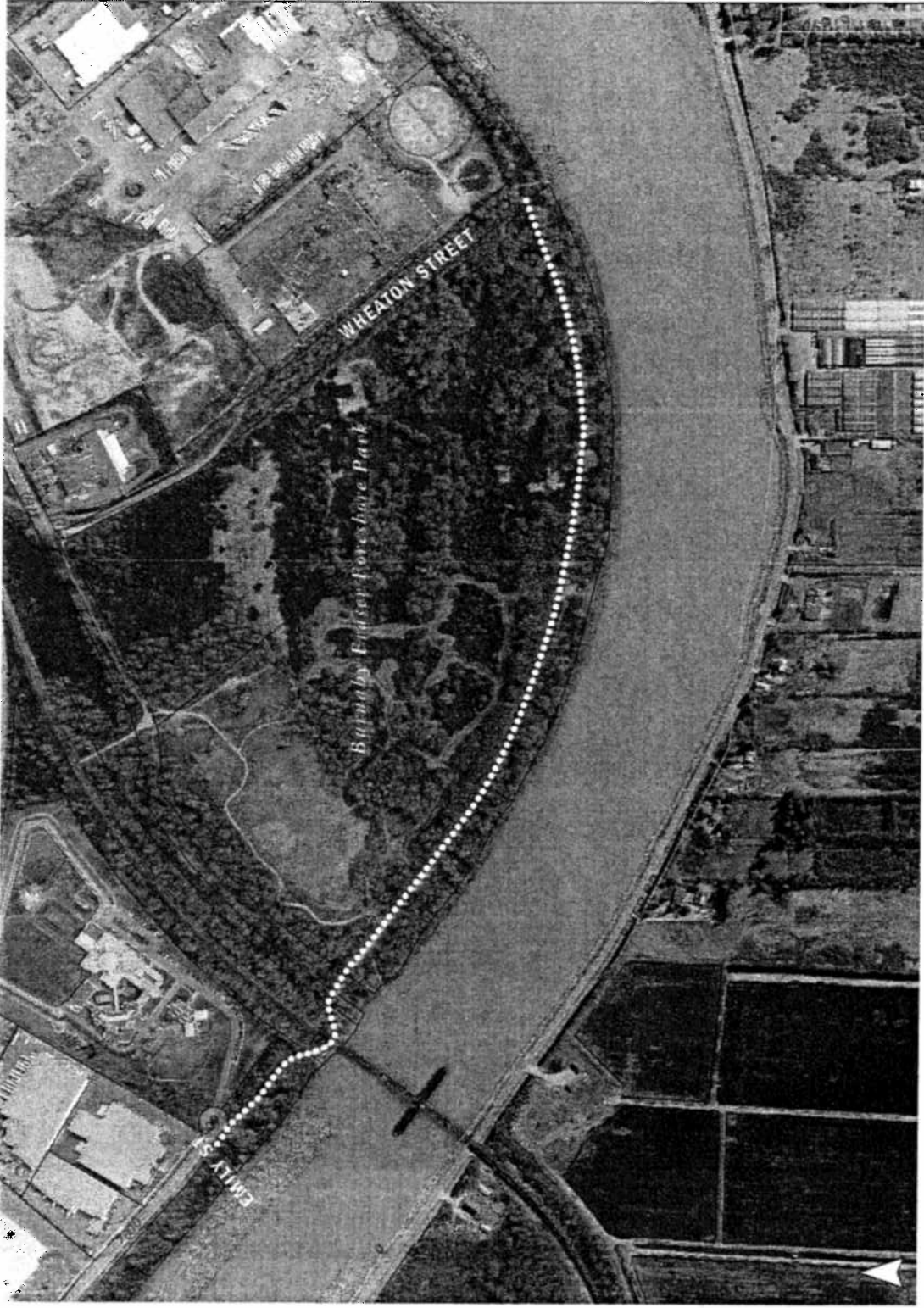


Planning & Building Department
January 2005




Big Bend Subject Urban Trail Project
Segment 2: Byrne Road to Emily Street road end


 Subject Urban Trail Route



Big Bend Subject Urban Trail Project
Segment 3: Emily Street road end to Wheaton St.


 Subject Urban Trail Route

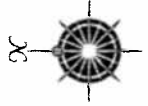
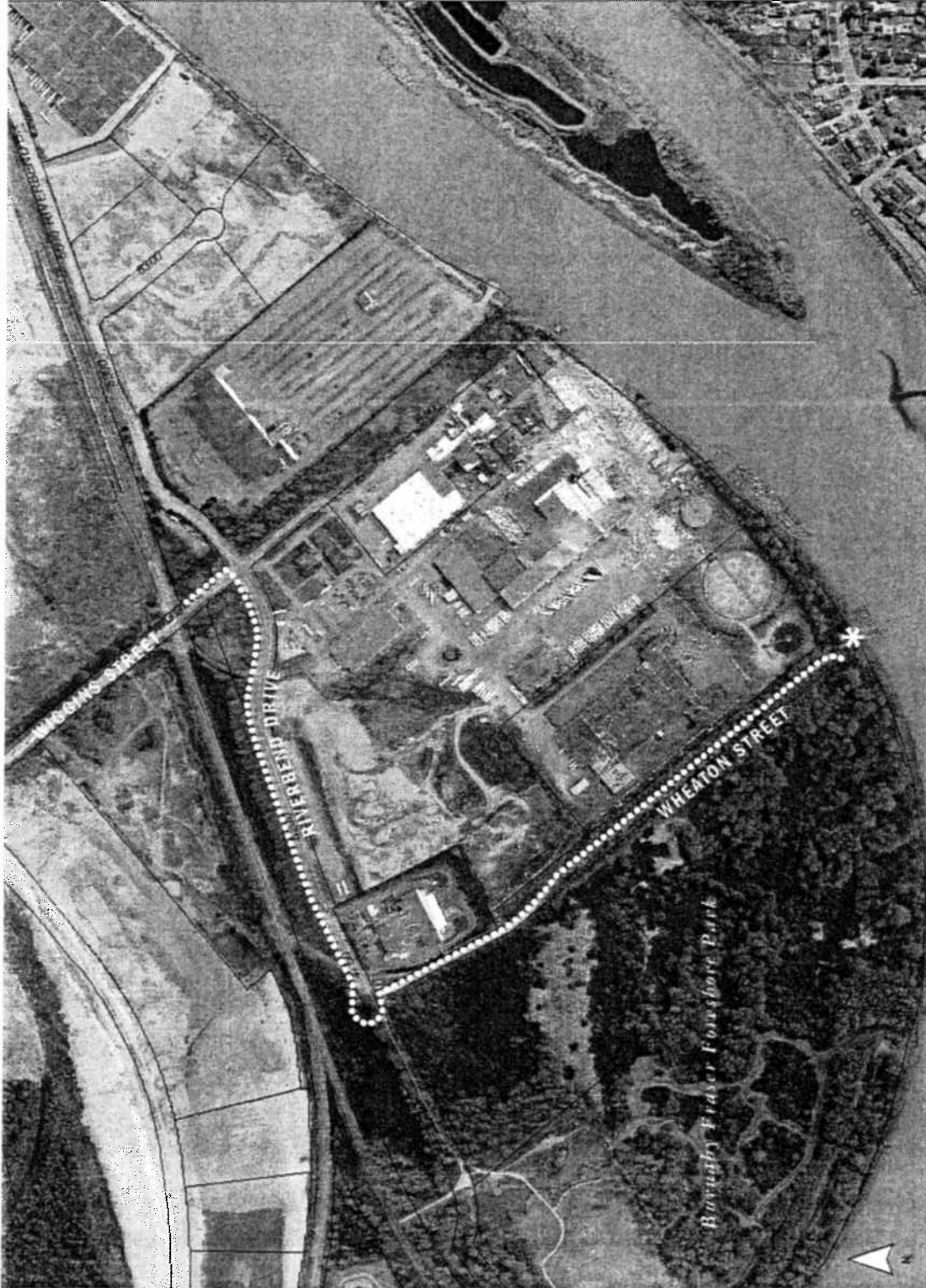



Figure 7 Big Bend Subject Urban Trail Project
Segment 4: Wheaton Street to Wiggins Street

 Subject Urban Trail Route

 Potential Look-off

