



To: General Purposes Committee
From: Jim Bruce, General Manager, Finance and Corporate Services
Date: January 29, 2002
File: 0970-02-01

Joe Erceg
Chair, Land and Capital Team

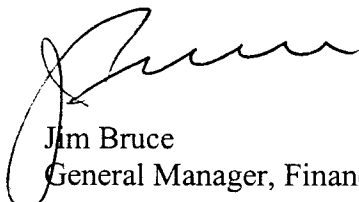
Re: Five Year Capital Plan - 2002 to 2006

Staff Recommendation

It is recommended that:

1. The attached 2002 – 2006 Capital Plan be adopted for inclusion in the 2002 Five Year Financial Plan (2002 – 2006) Bylaw; and
2. That staff be authorized to commence construction of the 2002 projects.


Joe Erceg
Chair, Land and Capital Team


Jim Bruce
General Manager, Finance and Corporate Services

JE:blg
Att.5

Staff Report

Origin

The Local Government Act requires the City to adopt a Five Year Financial Plan Bylaw (which includes operating, utility and capital expenditures) before May 15th of each year. The bylaw is required to identify all expenditures for the current year and provide estimates for the remainder of the five year program. The 2002 Five Year Financial Plan Bylaw provides the City with the authority to proceed with spending to the limits outlined in the bylaw. The purpose of this report is to present the proposed 2002 to 2006 Capital Plan and to obtain Council's approval to commence construction of the projects in year 2002 of the Capital Plan.

Analysis

Background and Process

The 2002 - 2006 Capital Plan was prepared by the Land and Capital Strategic Team, which contains members from all divisions within the City. The Team utilized a ranking system (in conjunction with comments and recommendations from all stakeholders) that is contained within the Long Range Capital Planning Model, which has been used since 1998. The ranking criteria include:

- The level of need for a project.
- Consistency with Council approved plans or direction.
- Financial costs and benefits.
- Financial risk associated with a project.
- Social/environmental/liveability benefits.
- Funding sources and availability.

The Long Range Capital Planning Model allowed the Team to recommend a Capital Plan that is in alignment with the City's Vision and can be funded from the available finances in a sustainable manner. Forecasts were prepared for anticipated Development Cost Charge (DCC), Utility and Reserve revenues and the Capital Plan was prepared accordingly. The 2002 Capital Plan is intended as a detailed plan for construction, while years 2003 to 2006 are intended to be a planning tool that will be reviewed and refined annually based on financial and other trends.

The 2002 – 2006 Capital Plan is attached as follows:

- Year 2002 – Appendix A
- Year 2003 – Appendix B
- Year 2004 – Appendix C
- Year 2005 – Appendix D
- Year 2006 – Appendix E

Each Appendix contains the following material:

- A summary of Capital Budget Funding Sources by program.
- Capital projects Recommended by the Team.
- Capital projects Not Recommended by the Team.

2002 Capital Plan Trends and Highlights

- The 2002 Capital Plan has a total value of approximately \$32 M; a reduction of approximately 15% over 2001.
- General Revenue funding has been reduced from \$1.7 M in 2001 to \$1.0 M in 2002 to reduce pressure on the Operating Budget.
- Roads Development Cost Charge (DCC) spending has been contained at \$3.4 M (\$4.3 M is available in 2002 based on the 50% rule) to help average out the amount available in subsequent years.
- An artificial turf field at Minoru Park is recommended, utilizing funding that has been accumulated in the Sport Statutory Reserve Fund, in previous years.
- A Waterfront Improvement Reserve fund has been established for waterfront improvements and planning.
- A major renovation of the Brighthouse Library (\$3.5 M) is not recommended and the stakeholder was requested to prepare a Master Plan for library facilities.

2003 – 2006 Capital Plan Trends and Highlights

- The approximate total value of each year of the Capital Plan is:
 - 2003 - \$ 27.5M
 - 2004 - \$ 26 M
 - 2005 - \$ 28 M
 - 2006 - \$ 67 M
- Projects contained within the Community Safety Master Plan have been incorporated into the Five Year Plan; funding for these projects is noted from “other” sources pending resolution. The large increase in the size of the 2006 Plan (above) is due, in large part, to inclusion of the Fire Hall No. 3 and RCMP Public Safety Building replacement in that year.
- Development Cost Charge (DCC) revenues are forecast to recover significantly in 2005. In the interim, the Roads program is significantly reduced. Major projects such as the North Loop Road, Steveston Highway widening, Blundell interchange and Steveston interchange are not recommended due to limited funding.

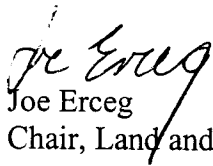
- Several new buildings and major retrofits have been moved beyond the Five Year Plan horizon pending preparation of Master Plans by stakeholders.
- The Waterfront Improvement Reserve fund has been incorporated into years 2003 to 2006.

Financial Impact

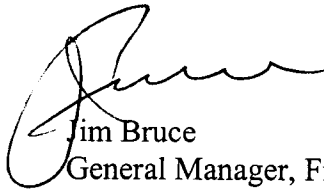
The Land and Capital Team worked closely with Finance and Corporate Services to develop a budget within specific financial parameters. It is noted that funding from the Operating Budget for 2002 has been reduced to \$1.0 M.

Conclusion

The 2002 – 2006 Capital Plan was strategically developed to best represent the interests of all stakeholders while meeting our corporate vision. The Plan utilizes our existing funding in an effective manner while ensuring that our strong financial position is not impacted.



Joe Erceg
Chair, Land and Capital Team



Jim Bruce
General Manager, Finance and Corporate Services

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APPENDIX A

PROPOSED 2002 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

CITY OF RICHMOND
2002 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM

	2001 PROGRAM	2002 PROGRAM	OPERATING BUDGET 5411/31/5/17	OPERATING SURPLUS 2430	CAP RSV REVOLVE 7110	CAP RSV LAND ACQ	D.C.C. RESERVE 7301 - 7959	PW EQUIP RESERVE 7205	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER RESERVE/ UTILITY 7919/7959	WATER RESERVE/ UTILITY 7819	OTHER FUNDING (VARIOUS)
INFRASTRUCTURE PROGRAM													
ROADS	\$7,407,000	\$6,718,500			\$1,837,575		\$3,418,425						\$1,462,500
DRAINAGE/STORM SEWER	\$3,692,500	\$4,008,251	\$50,000		\$197,913		\$3,760,338						
WATER	\$2,590,000	\$3,166,500					\$0					\$3,166,500	
SANITARY SEWER	\$4,191,000	\$2,652,000					\$140,000				\$2,512,000		\$400,000
MINOR PUBLIC WORKS	\$654,500	\$500,000	\$100,000										\$750,000
LOCAL IMPROVEMENTS	\$750,000	\$750,000											\$0
NIC	\$240,000	\$0											
SUB-TOTAL	\$19,525,000	\$17,795,251											
BUILDING PROGRAM													
MINOR BUILDINGS	\$1,175,000	\$1,089,000	\$325,000		\$500,000								\$264,000
MAJOR BUILDINGS	\$1,322,700	\$1,258,000			\$1,258,000								
PROVINCIAL COURT FACILITY	\$4,750,000	\$0			\$0								
SUB-TOTAL	\$7,247,700	\$2,347,000											
LAND PROGRAM													
LAND ACQUISITION	\$1,134,000	\$2,634,000				\$2,634,000							\$2,000,000
AFFORDABLE HOUSING PROJECT	\$1,000,000	\$2,000,000											
SUB-TOTAL	\$2,134,000	\$4,634,000											
PARKS PROGRAM													
PARKLAND ACQUISITION	\$2,449,000	\$1,224,490				\$24,490	\$1,200,000						\$800,000
MAJOR PARKS	\$1,850,000	\$1,948,000	\$275,000		\$451,600		\$421,400						
MINOR PARKS	\$350,000	\$250,000	\$250,000										
CHILD CARE PROGRAM	\$0	\$50,000											\$50,000
SUB-TOTAL	\$4,649,000	\$3,472,490											
EQUIPMENT PROGRAM													
ANNUAL FLEET REPLACEMENT	\$2,632,000	\$2,229,579			\$229,579			\$2,000,000	\$900,000				
FIRE DEPT. VEHICLES	\$683,700	\$900,000											
COMPUTER CAPITAL/SOFTWARE	\$335,000	\$0			\$375,000								
TECHNOLOGICAL INNOVATIONS	\$675,000	\$375,000			\$130,000								
COMMUNICATION EQUIPMENT	\$75,000	\$130,000											
SUB-TOTAL	\$4,400,700	\$3,634,579											
TOTAL REQUIRED	\$37,956,400	\$31,883,320	\$1,000,000	\$0	\$4,979,667	\$2,658,490	\$8,940,163	\$2,000,000	\$900,000	\$0	\$2,512,000	\$3,166,500	\$5,726,500

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	<p>This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).</p> <p>Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc.</p>	\$200,000
Bicycle Lane Program	<p>This work is proposed to be implemented upon completion of the storm sewer improvement work along Westminster Highway from No. 6 Road to No. 8 Road. In 2001, a wider shoulder would be provided for use by cyclists travelling eastbound upon infilling of the existing ditch on the south side of the Westminster Highway between No. 6 Road and No. 7 Road. Similar ditch infilling work is proposed to be carried out between No. 7 Road and No. 8 Road in 2002.</p> <p>The cost related to providing a wider shoulder for cyclists will be submitted to the BC/TFA Cycling Network Program for 50/50% cost sharing. This project will not proceed without the ditch infilling capital project from Engineering and funding commitment from BC/TFA/TransLink. The total cost of this project (\$450,000) is expected to be funded by the City (\$250,000) and external agency (\$200,000).</p>	\$450,000
Bicycle Lane Program	<p>The infill of the ditch on the north side of Williams Road west of No. 1 Road in August 2001 provides an opportunity to extend westward the existing Williams Road bicycle lanes, which currently end at No. 1 Road. The cost related to providing wider paved shoulders with marked bicycle lanes would be submitted to the BC/TFA Cycling Network Program for 50/50% cost-sharing and to the TransLink Bicycle Infrastructure Program for additional funding. This project will not proceed without funding commitments from BC/TFA and/or TransLink. The total estimated cost of \$263,000 is expected to be funded by the City (\$132,000) and external agencies (\$132,000).</p>	\$263,000
Garden City Road Extension - Continuation of Phase 1	<p>Construction of a new five-lane arterial road connection. This is the first phase of a three-phase project, which will extend the existing Garden City Road from Sea Island Way to Bridgeport Road. Road work including the construction of curb/gutter, sidewalks and boulevard on both sides, the relocation of an existing gas main and other utilities, etc.</p>	\$250,000
Intersection Improvements - Garden City Road/Cambie Road	<p>This project involves modification of the existing centre median on Garden City Road at Cambie Road, extension of the existing northbound left-turn bay, street light relocation and signal modification (installation of turning arrows). No land acquisition will be required for this project.</p>	\$41,000
Intersection Improvements - Kwantlen Street/Alderbridge Way	<p>This project is eligible for potential ICBC funding as part of their Traffic Safety Improvement Program.</p> <p>This project will proceed only if the land required for this work can be obtained through the City's Strategic Land Acquisition Program. Therefore, no land acquisition cost is included in this project.</p>	\$200,000
Minoru Boulevard Traffic Safety Improvements	<p>This project is eligible for TransLink funding contribution. If TransLink funding for Capital Project is not available in 2002, this project could potentially be deferred to a later year.</p> <p>This project involves road widening of the north leg of the intersection on Kwantlen Street to five-lane crossing (similar standards with the south leg), storm sewer upgrade as well as the related traffic signal enhancements.</p> <p>This project involves the installation of advance warning flashers to indicate the presence of loading vehicles in the northbound curb lane in front of Horizon Towers. Flashers will be triggered by loop detectors embedded in the pavement where loading is expected to occur.</p> <p>Hardware for the project includes poles, bases, junction boxes, underground/communication conduits, controller, related wiring, pavement markings, etc.</p>	\$20,000

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Neighbourhood Traffic Safety Enhancement Program	<p>Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc.</p> <p>The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).</p>	\$200,000
No. 2 Road Bridge	Debt financing	\$2,030,000
No. 3 Road Undergrounding - Hydro, Telus & Shaw	Approximately 1/3 funding from BC Hydro. Undergrounding and removing poles and obtaining right-of-ways for Hydro kiosks. This project includes the removal of all BC Hydro, Telus and Shaw overhead wiring/cables/poles and installing the underground duct/cable systems to accommodate the existing and future Private Utility services.	\$1,296,000
River Road / Hollybridge Way Pedestrian Signal	This project involves the installation of a new pedestrian signal complete with advance warning flashers (westbound only), overhead illuminated signs and pedestrian-actuated push buttons on River Road at Hollybridge Way. This project is eligible for potential ICBC funding as part of their Traffic Safety Improvement Program.	\$40,000
Sidewalk Program	Hardware for the project includes poles, bases, junction boxes, underground/communication conduits, controller, related wiring, pavement markings, push buttons, etc.	\$45,000
Traffic Signal Installation Program	This project involves the construction of a 1.50 m wide asphalt sidewalk on Alderbridge Way from Hazelbridge Way to Garden City Road where a sidewalk currently does not exist. This project is consistent with the strategies contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$250,000
Transit Plan Infrastructure Improvements	<p>The scope of this project involves the installation of new traffic signal hardware including poles, bases, junction boxes, underground conduits, controller, detector loops, related wiring and pavement markings, and communications conduit and cable at candidate intersections. Minor corner property acquisitions may be required.</p> <p>The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.</p> <p>The scope of this project includes infrastructure improvements that are required to support the introduction of various transit service improvements identified in the Richmond Five-Year Area Transit Plan as well as on-going enhancements to existing transit infrastructure. The general scope of improvements is expected to include the installation of new bus stop pads, minor road geometric improvements (e.g. intersection corner improvements), minor sidewalk construction, wheelchair ramps, and other supplementary pedestrian amenity improvements required to facilitate pedestrian traffic generated by transit passengers. This project also involves upgrading of existing bus stops to accessible standards.</p>	\$50,000
Undergrounding - Hydro & Telus	Undergrounding - ten year program. This project is the continuation of the removal of poles, overhead cables/ wires and the placement of kiosks in rights-of way. This year would include Granville Ave. from Minoru Blvd. to Gilbert Rd. and Westminster Hwy. from 100m west of No. 3 Rd. to Minoru Blvd.	\$1,350,000
	1/3 funding is from BC Hydro.	

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Westminster Highway Crosswalk Installation	This project involves the installation of a new enhanced pedestrian crosswalk complete with overhead illuminated signs with flashers and pedestrian-actuated push buttons on Westminster Highway between No. 3 Road and Minoru Boulevard. The project will also include the closure of the existing median gap by removing the existing mid-block left-turn bay for eastbound traffic on Westminster Highway and restore the area with minor landscaping. Hardware for the project includes poles, bases, junction boxes, underground / communication conduits, controller, related wiring, pavement markings, push buttons, etc.	\$62,000
Drainage		
Broadmoor Blvd Lane Drainage	This project is eligible for ICBC funding (up to \$50,000) as part of their Traffic Safety Improvement Program. Add drainage to the lane behind Broadmoor Blvd from 7760-7900 Herbert to Deagle.	\$50,000
Drainage Assessment Program	This is the proposed Phase 1 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers. The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan. Replace the drainage pump station at Number 1 Road South. The pump station is under-sized, and needs upgrading and reconstruction.	\$162,250
Drainage Pump Station Rehabilitation.	Replace the drainage pump station at Number 1 Road South. The pump station is under-sized, and needs upgrading and reconstruction.	\$500,000
Drainage System - Blundell Road	Fill in the section of ditch on the 11,000 block of Blundell Road. (south side of Blundell Road, Shell Road to No. 5 Rd)	\$480,000
Drainage System - F.A. Thompson School	Ditch infill Fill in 140 meters of ditch on the north side of Odlin Road adjacent to F.A. Thompson School.	\$125,000
Drainage System - Granville Avenue	Ditch infill for road safety Fill in the ditch on the north side of Granville Ave from Garden City Ave to Bridge Street.	\$375,000
Drainage System - Sexsmith Road	Ditch infill for road safety Fill in ditch on west side of Sexsmith Way, immediately south of Sea Island Way.	\$180,000
Drainage System - Steveston Highway	Fill in ditch on north side of Steveston Hwy from No 1 Road to 7th Ave.	\$300,000
Drainage System - Westminster Hwy	Ditch infill, south side of Westminster Highway, from #7 Road to #8 Road, in conjunction with watermain replacement, and construction of bike lane	\$1,200,000
Emergency Response Equipment	Purchase of Generators for drainage pump stations	\$500,000
Water Main Replacement		
Asbestos Cement Watermain Replacement	Replace undersized 100 mm and 150 mm Asbestos Cement Watermain complete with service connections, with C-900 Plastic. First year of a three year phased project. Bakerview Dr. - Saunders Rd 760 m Ash St. - Bakerview Dr to Saunders Road 150 m	\$251,000
Total	910m @ \$275 m = \$251,000	

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Minor Capital Waterworks Program	2002g Water Model Calibration \$62,000 - REDMS 494868 2002a Asbestos Cement Watermai Testing - \$83,000 - REDMS 498289 2002b Intersection Renewal \$130,000 - REDMS 494846 2002c Number 8 Road Watermain Extentions \$50,000 - REDMS 494848 2002d Mobile Computing Pilot ART \$50,000 - REDMS 494859 2002e PRV Chamber Nelson Road \$100,000 - REDMS 494862 2002f Development Driven Watermain Replace \$25,000 - REDMS 494866 2002h Watermain West Road \$74,000 - REDMS 503012	\$574,000
Monds Subdivision	Watermain renewal - replace approx. 1,560m of existing 150mm diameter AC watermain and replace with 150mm diameter C-900 PVC watermain. This is the 3rd year of a 4 year replacement program. The scope of work is as follows: Kirkmond Cr. - Lamond Ave to Lamond Ave 300m Elkmond Rd - Williams Rd. to Lamond 90m Lamond Rd. - Gormond to Diamond. 260m Gormond Rd. - Lamond Ave to Raymond Ave 450m Wellmond - Oakmond to Oakmond 460m Total 1560m @ \$275/m = \$429,000	\$429,000
More Subdivision	Watermain renewal - replace approx. 1,895m of existing 150mm diameter Ac watermain and replace with 150mm diameter C-900 PVC watermain. This is the 2nd year of a 5 year replacement program. The scope of work is as follows: Kelmore Rd - Tinmore Pl to Francis Rd. 405m Vinmore Ave - Elsmore to Kelmore 300m Ullsmore Ave Elsmore to Kelmore 300m Elsmore Rd - Vinmore to Pacemore 500m Wardmore Francis to Seafair 390m Total 1895 @ 275 per/m = \$521,000	\$521,000

Seismic Upgrades of Waterwork Network

Pressure reducing valve (PRV) stations - install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. \$50,000

Install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. This budget accommodates 2 stations per year for an overall 6 year program costing \$300,000.00.

The proposed locations are Blundell Road & Shell Road and Williams Road & Shell Road.

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Southdale Sub-Division	<p>Project Scope (Detailed Description of Project)</p> <p>Replace 1030 m of 150mm Asbestos cement watermain with C-900. Inclusive of Intersection renewals .., Replacement of all Water Services, Rebuilding of the road shoulders and elimination of non-complying paved boulevards.</p> <p>Southgate North PL at the rear of 9891 Berry Road to Steveston Hwy 210 M Southgate Pl. 70 M Berry Road Southridge Road to Mortfield Road 350 M South Ridge Steveston to Mortfield 400 M TOTAL 1030M</p>	\$281,000
Westminster Highway	<p>Replacement approx. 600m of existing 300mm diameter AC watermain with 300mm diameter C-900 PVC watermain to serve Richmond General and WCB.</p> <p>Replace approximately 600 meters of existing 300mm diameter AC watermain with 300mm diameter C-900 PVC watermain complete with services, tie ins and restraint joints.</p>	\$400,000
Westminster Hwy	<p>Replace approximately 600 meters of 300mm diameter steel lead jointed watermain with 300mm diameter C-900 PVC watermain complete with joint restrainers.</p> <p>This project is located in the 16,000 and 17,000 blocks of Westminster Highway from approximately 24 meters east of No. 7 Road to and including the intersection of No. 8 Road.</p>	\$520,000
<p>4 Sanitary Sewer</p>		
Aspen, More, Monds, Broadmoor and Shellmont Sanitary Sewers	<p>Gravity Sewer replacement, reconstruction, and rehabilitation in the Aspen, Mores, Broadmoor and Shellmont areas.</p>	\$500,000
Sanitary Pump Station Rehabilitation	<p>Replace pumps, discharge bends, pipe work, valves and controls in Montieih and Steveston pump stations.</p>	\$500,000
Sanitary Pump Stations	<p>Funding for three local sanitary pump stations and forcemains required for new developments in the Fraser Port area.</p>	\$750,000
Sanitary Sewer Control Upgrades	<p>Upgrade 142 sanitary sewer pump stations by installing ultra-sonic (sonar fluid level indicators.</p>	\$426,000
Sanitary sewer Extension	<p>Sanitary sewer extension to service properties from 7580/7620 No. 3 Rd. and 8051 Jones Rd.</p>	\$110,000
Sanitary sewer extension	<p>Sanitary sewer extension to service properties from Woodhead Road to properties at corner of No. 5 Rd. and Cambie Rd.</p>	\$90,000
Sanitary sewer Extension	<p>Sanitary Sewer Extension to service properties at 7551, 7531, 7511 Garden City Road and 8760 General Currie Road</p>	\$30,000
Sanitary sewer extension	<p>Abandon existing pump station and extend sewer from Shell Rd along Freeway Exit and Odlin Rd to Hall Ave.</p>	\$170,000
<p>Minor Public Works</p>		

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment												
Public Works Minor Capital	<p>The scope of this program includes the following works:</p> <p>A. Road Improvement program: Walkway improvements.</p> <p>B. Storm Drainage Improvements: Storm Sewer Remedial works in older areas of Richmond that have ongoing flooding problems due to undersized systems; Laneways that have no drainage systems and are flooding as a result of new developments built to higher elevations and; Existing drainage structures that require protective shelters for the control systems.</p>	\$500,000												
LIP/NIC														
LIP	<p>Ditch infills, curb, gutter and sidewalk projects requested under the LIP program This funding is for ditch infills, curb gutter and sidewalk projects requested under the LIP program.</p>	\$750,000												
Infrastructure Advanced Design & Land														
Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$324,000												
B. Building Program Minor Building														
Building Improvements Minor Capital Program	<p>The Building Improvement Minor Capital program is designed to renovate, retrofit or add small additions to existing facilities that are under \$100,000.00 Eligible projects are submitted by the client/user and are evaluated and ranked by priority.</p>	\$500,000												
Physical Plant Sustaining Capital	<p>The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical, Electrical, Conveying and life Safety Systems. Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 8% of \$1,000,000 = \$80,000 Unplanned repairs/ Contingency = \$100,000 Project Manager (F/T temp) = \$70,000 Recommended Projects = \$750,000</p>	\$589,000												
Major Building														
Britannia Heritage Site: Seine Net Loft & Cannery Office	<p>Britannia Heritage Shipyard - cannery office stabilization and seine net loft. The cannery office needs structural stabilization, foundations replaced and the roof fixed. The seine net loft must be brought up to building code for industrial use, the building fabric repaired, powder post beetle damage repaired and controlled and storage and displays built.</p> <p>Cost split as follows for the two buildings: seine net loft \$150,000, cannery office \$23,000.</p> <table style="margin-left: 20px; border: none;"> <tr> <td>RENOS of the Loft:</td> <td>Seine Loft</td> <td>Cannery Office</td> </tr> <tr> <td></td> <td>\$110,000</td> <td>\$17,000</td> </tr> <tr> <td></td> <td>\$40,000</td> <td>\$6,000</td> </tr> <tr> <td></td> <td>Totals:</td> <td>\$23,000</td> </tr> </table>	RENOS of the Loft:	Seine Loft	Cannery Office		\$110,000	\$17,000		\$40,000	\$6,000		Totals:	\$23,000	\$173,000
RENOS of the Loft:	Seine Loft	Cannery Office												
	\$110,000	\$17,000												
	\$40,000	\$6,000												
	Totals:	\$23,000												
Civic Building Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$140,000												

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
<p>Minoru Arena</p>	<p>Building Upgrades / Retrofit Programs -Sound System -Hallway and dressing room flooring, replacement of asbestos laden ashall tiles -interior aesthetic treatment update colour scheme, murals etc. -update concession area -35 year old counters, shelves, etc. -security system (does not currently exist)</p>	<p>\$180,000</p>
<p>Minoru Park Fieldhouse & Caretaker Suite Replacement</p>	<p>Replace existing caretaker house and parks washroom facilities based on the London/Palmer models.</p>	<p>\$565,000</p>
<p>Satellite Works Yard</p>	<p>The site will include the following long term functions: * Parking for staff and fleet vehicles and equipment * Storage for materials * Continue to function as a soils reclamation / Composting * Fire rescue training area * Security fencing * Dump Station Facility and Truck washdown * Septic Field</p>	<p>\$200,000</p>
<p>The 1999 budget allocation of \$100,000 precluded the above site objectives being met in a single phase project, The additional funds proposed will enable a reduced scope project to be developed and priorities established in order to utilise this location as a operational facility.</p>		
<p>The objective for Phase 1 to be now accomplished in 2002 is to :</p>		
<ul style="list-style-type: none"> * Relocate the existing trailer (40' x 20') to main entrance, reconnect Power, telephone and washrooms, install sanitary tank and/or septic field * Provide Asphalt paved surface for staff parking for 10 vehicles * Locate parking and storage areas for City owned equipment (30m x 9m) with paved surface * Install 2.5m high chain link fence with gates to secure perimeter of site. * Install 150mm water service connection plus hydrant * Construct gravel surface (4000sq.m) and access road for Fire rescue training 		
<p>Reference REDMS Doc # 285164, #257491, #279733</p>		
<p>C. Land And Parks Program Land Acquisition</p>	<p>Affordable Housing Project</p>	<p>\$2,000,000</p>
<p>Request to Spend: City has an Affordable Housing Statutory Reserve Fund with a balance of \$4,418,842 as of December 31, 2001. In 2001, no projects were approved. 1. This request is to use the dollars for buying land and for other housing capital items: - to implement the findings of the seniors housing study, and /or - for another affordable housing project. 2. In 2002, two \$1Million dollar housing projects are contemplated, for example, one for seniors and the other for affordable housing projects..</p>		
<p>To purchase lands required for a variety of DCC funded projects, as identified on the City's DCC project list, in advance of the project commencement. "In advance" is defined as prior to the project being planned, designed, implemented and approved and could occur up to ten years before the specific funding, planning and design is in place. "In advance" in this instance does not refer to a planned and approved project that will occur within a one year or two year time-frame and is already included in the Capital Projects Budget. This is year 2 of 4.</p>		
<p>Infrastructure Program - Land Acquisition</p>		<p>\$634,000</p>

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Land Acquisition (Strategic)	<p>Funds are required for land acquisitions that are not within the scope of an approved parks or public works (ie: DCC funded) project. Such purchases are strategic in nature, in that they are opportunistic dependant upon availability, price and future utility.</p> <p>Funds for this purpose are available in the Industrial Land Reserve (totalling \$4 million) and inclusion of \$2 million within the 2002 capital budget program provides the opportunity to access the monies if the need arises, and subject to Council approval, without submission of a special by-law.</p>	\$2,000,000
Parkland acquisition	Acquisition of park land	\$1,224,490
Minor Parks		
Child Care Program	In 2002, it is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment.	\$50,000
	This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	
General Development	Ongoing improvements, repairs and replacements of benches, pathways, lighting, picnic tables, etc. Fund for misc. items initiated by Council/public. This program covers the ongoing improvements, repairs, and replacements of benches, pathways, lighting, picnic tables, fencing and backstop etc. These funds are also used for miscellaneous items which are brought to staffs' attention through Council and/or public correspondence and/or unforseen dialogue.	\$150,000
Playground Upgrade Program	Inspect City playgrounds and rectify potential safety hazards. This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.	\$100,000
	The City owns 54 playgrounds that are all impacted to varying degrees by the new standards.	
Major Parks/Streetscapes		
Artificial Turf Sports Field	Minoru Park -Field Artificial Turf Field Construction	\$800,000
	A Sport Statutory Reserve Fund was approved by Council in March, 2000 for the purposes of funding Richmond's first artificial turf field. The Sports Council and staff are recommending the upgrade of an existing field in Minoru Park. There are enormous savings realized by using the existing sand base, and the fact that there are support facilities such as washroom/changerooms, sportlights, security, and parking in place.	
	Total cost of \$800,000 is comprised of:	
	\$150,000 from 2002 Capital Plan	
	\$400,000 from 2001 Capital Plan	
	\$250,000 from 2000 Capital Plan	
Britannia Shipyard Dredging and Front Dock Increased Upgrade	Dredging of the moorage area for Britannia Heritage Shipyards, geotechnical studies, and increased pile length of shipyard dock upgrade.	\$243,000

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
City Centre Legacy Program	<p>As part of the Corporate Plan, the City Centre Legacy Program is a key initiative aimed at proactively influencing the development and character of key areas in the downtown and the waterfront in order to establish the desired standard for the City Centre for years to come.</p> <p>The deliverables of this program include:</p> <ul style="list-style-type: none"> - improved urban environment at significant landmark locations in the downtown which will set the standard and desired character for future developments in the City Centre as a whole. - a co-ordinated business approach, with an emphasis on partnerships, for developing the City Centre and its waterfront. - clear directions for the development of strategic locations in the City Centre. - implementation of key policies of the City Centre Plan. - long term provision of open space for future generations. 	\$75,000
McLennan North Community Park - Botanical Garden Phase II	<p>This will be continued design work on the Council approved concept plan for McLennan North Community Park. This amount of money together with the budget in 2001 will allow the City to continue with the design detailing of this important City Centre Park. As the intent is to build a unique pilot project with sustainability as a key concept, developing the appropriate design and construction detailing is critical especially when applying for Infrastructure Grants that focus on environmental and technical innovation.</p> <p>The scope of work for the total park is enormous: from 4 to 7 million dollars. This phase would allow for ongoing construction of the Botanical Garden that has been partnered through the Federal Millennium Partnership Program and ongoing construction detailing of some of the unique features proposed for the park. Other work may include temporary pathways into the park land to allow for limited public access.</p>	\$55,000
Special Sports Statutory Reserve Fund	<p>Transfer of funds from DCC Parks to the Special Sports Statutory Reserve Fund. Continuation of funding provided in years 2000 and 2001.</p>	\$150,000
Trails	<p>As part of the ongoing expansion and enhancement of Richmond's Trail and Greenway System, a number of design and construction projects are proposed.</p> <p>The original list of projects includes two substitutions. The proposed construction of a trail on the Shell Road r.o.w. to link to Dyke Road is being delayed as this r.o.w is being actively farmed and the issue of recreational corridors through agricultural land needs further discussion and resolution. The cost of building the Hamilton Trail adjacent to River Road is greater than the budget will allow for.</p> <p>The incredible popularity of the Richmond's trails system has increased the use and at times conflicts being experienced on the trails between the different users. The recent requests by residents and subsequent concerns from farmers of expanding the trails system adjacent to farmlands, the ongoing request for a trails program when applying for infrastructure grants has resulted in the urgent need to develop an updated Trails Strategy and Implementation Plan. The last Trails Plan was done in 1979.</p> <p>The projects proposed for 2002 include:</p> <ol style="list-style-type: none"> 1. South Dyke - East Trails - completion of the waterfront trail along Dyke Road between No. 5 Road and Horseshoe Slough. This is building upon work done in the area by the Public Works Department. 2. Trails Strategy and Implementation Plan. 3. No. 7 Road /South Dyke - completion of the first staging area in this area South Arm . 	\$225,000
D. Equipment Program Vehicle Equipment	<p>Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.</p>	\$400,000

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Vehicle Reserve Purchases (Fire)	<p>Apparatus and Equipment replacement</p> <p>1. Replace Unit #463 (pumper) \$750,000 including taxes and associated equipment Unit #463 is 20 years old, well past the life expectancy of fire apparatus in a full time fire department such as Richmond. In fact, the National Fire Protection Association recommends that pumpers should not exceed 15 years of service. Additionally because of its age, it is difficult to secure parts to properly maintain it, and as such, it's in a state of decay and disrepair. It is also technologically obsolete and does not meet the current (or future) needs of the department. Unit 463 is a single-function type of apparatus and not well suited to meet the daily demands of the department. It is intended to replace this unit with a "multi-functional rescue-pumper" type apparatus which is well-suited to respond to the wide variety of calls for service received by the department (fire, medical, automobile rescue, water rescue, etc.)</p> <p>2. Equipment for new apparatus scheduled to be delivered in 2002 \$150,000 including applicable taxes.</p> <p>In both 2000 and 2001, funds were approved from the vehicle reserve fund to replace two pumpers. However, the amount requested in each of these years was not sufficient to replace both the units and their associated equipment. The current cost to replace a pumper and its associated equipment is approximately \$750,000 (inclusive of applicable taxes) The \$150,000 requested is to provide for new equipment for the two units scheduled to arrive in 2002.</p>	\$900,000
Vehicle Reserve Purchases (PW)	<p>Vehicle replacement program.</p> <p>4 - Cars, 1 - Soil Shredder, 1 - Front end loader, 1 - 2 Step vans, 3 - Pickup trucks, 3 - Full size vans, 2 - Mini vans, 1 - Mower tractor, 1 - Rotary mower (impliment), 1 - Roto tiller (impliment), 1 - Large excavator, 2 - 21 passenger buses, 2 - Dump trucks, 1 - Backhoe loader, 1 - Crew cab dump truck, 1 - Ride-on roller.</p> <p>To buy out 4 vehicles currently being leased as part of Phase 2 to dissolve the Auxiliary/Phantom Fleet</p>	\$2,000,000
Vehicle Reserve Purchases - Phantom Fleet/Auxiliary		\$229,579
Technology		
Facility Lifecycle Planning Model	<p>Year 2 of Lifecycle Planning Program for City Buildings and Facilities refer to Project FPC 02 submitted for 2001</p> <p>Project is required to continue that "thorough" evaluation for all city bldgs and determine value and scope of deferred maintenance, life cycle renewal, code compliance and functional deficiencies. Funding is 100% allocated towards the process of on site inspections to determine deficiencies, enter that data into our data base. Project has already been tendered in 2000 and awarded to VFA. Target: 112 bldgs, 1.2 msf (900 contract 300 city) TO DATE: 38 bldgs, 621 ksf total cost \$200K. Also committed to \$30K/annum operating budget to maintain the database.</p>	\$125,000
Fibre optic cabling to City Buildings	<p>Put in place a fibre cable network from City Hall to remote sites</p> <p>The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per remote site per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from Cityhall to remote sites for 1 time capital cost and eliminate these lease costs.</p>	\$50,000
Property System Enhancements	<p>The Amanda system requires a list of enhancements: interface to the Geographic Information System; direct payment update; remote inspections; ability to handle inspections, permits, payments and property information via Interactive Voice Response and the Web (E-Commerce); completion of trust account module; ability to scan in images; attach correspondence online; purchase and integrate a third-party report-writing tool. Consulting costs will be incurred for each of the enhancements.</p>	\$200,000
Computer Capital		

City of Richmond: One Year Capital Program - Summary by Program 2002 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
GIS	<p>The scope of this work is to:</p> <ul style="list-style-type: none"> A: upgrade the existing internal GIS Intranet Inquiry application to ESRI's new ArcIMS technology. This will enable the city to: <ul style="list-style-type: none"> -enhance the navigation tools -add an aerial backdrop -hyperlink images to existing GIS features eg. Heritage Buildings to the existing GIS foot prints, and asbuilt drawings to water, storm, sanitary lines and street lighting B: Create a FEE DRIVEN internet application that will enable our customer to purchase digital GIS data in various formats and related static data 24 hours a day 7 days a week. C: Create a FREE internet application that will enable the public to search City, Tourism and Chamber of Commerce information 24 hours a day 7 days a week. D: Create an interface application that will enable mobile city staff to download GIS infrastructure data at their desktops and view and query this critical information in the field such as water, storm, sanitary lines and street lighting. <p>Summary for 'Project Year' = 2002 (73 detail records)</p>	\$130,000
Grand Total		\$31,883,319

City of Richmond: One Year Capital Program - Summary by Program 2002

(Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Minor Public Works		
Birchwood Estates Street Light Replacement	To replace existing Lamp Standard with new Z pole in this subdivision over a 3 year time frame. Each year we will replace approximately 1/5 of all lights in the subdivision.	\$30,000
Replacement of Service Panels on BC Hydro	To renew 25 pole mounted Service Panels. The present service entrances are rusted and dangerous. The replacement of service entrances will take approx. 3 years to complete.	\$25,000
B. Building Program		
Major Building		
Brighouse Library Renovation	<p>Since opening ten years ago the Brighouse Library Branch has seen exceptionally heavy public use (over one million people use Brighouse Library every year) and has deteriorated in appearance through wear and tear. In addition, library use is growing far faster than the growth in population. For example, the number of items checked out annually is increasing an average of 10% year over year. Renovations are essential in order to meet rapid growth in library use, return Brighouse's appearance to being an appealing and attractive facility, add new high demand public services, and further improve staff productivity.</p> <p>In order to keep costs down the renovations will take place within the existing walls and care has been taken to ensure a conceptual design that provides maximum flexibility in the spaces. A key strategy is to take full advantage of new technologies and automation in order to convert staff spaces into space for library customers. The project costs include a major upgrade to the lighting at a cost of some \$550,000 in order to achieve energy management cost savings over the long term. It does not include furniture and equipment costs at approximately \$500,000.</p> <p>These renovations will provide the customer service improvements requested by library users while providing much needed more space to meet the growth in library use. Included will be:</p> <ul style="list-style-type: none"> · 3,055 sq. ft. of additional public space · Enclosed Silent Study Room with seating for 36 (new service) · 2 Group Study Rooms especially important for teens (new service) · 50 additional study carrels · 2 reading lounges with 25 additional seats (expanded service) · Computer Centre for Teaching and Training (improved service) · Larger, more appealing area for Chinese language book collection · Improved display and merchandizing of books, videos and audios throughout the library · 2 additional Express Checkout machines to meet increased circulation · Improved book stack space to accommodate growing collections · The adoption of a "Front of House" approach to staffing on the second floor in order to create an improved customer service centre · Reduced and combined staff spaces to increase efficiency and productivity <p>Comprehensive documentation and analysis has been done to support this project. Architectural conceptual drawings have been created and sent out to a quantity surveyor in order to get accurate cost estimates and the project has been divided into discrete sections so that phasing options are available. A complete set of documentation is available for review.</p>	\$3,500,000
C. Land And Parks Program		
Minor Parks		
Sports Field Drainage Program	Construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields. This ongoing program entails construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields.	\$90,000
Tennis Court Resurfacing Program	This is a program to resurface the tennis courts in the City's major park sites. Minoru Park is considered the priority for this program.	\$100,000

City of Richmond: One Year Capital Program - Summary by Program 2002 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Tram Restoration	The Tram, car 1220, is being restored in Steveston. Remaining work requires that the engines and trucks be repaired and retooled at a professional shop and some interior work remains that requires professional workmen and cannot be done by volunteers.	\$260,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and restock the City Nursery.	\$100,000
Major Parks/Streetscapes		
Neighbourhood Beautification Initiative	The purpose of this project is to initiate capital improvements on City owned frontages and park lands in partnership with a variety of neighborhoods.	\$90,000
Summary for 'Project Year' = 2002 (8 detail records)		
Grand Total		\$4,195,000

APPENDIX B

PROPOSED 2003 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

CITY OF RICHMOND
2003 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM

	2002 PROGRAM	2003 PROGRAM	OPERATING BUDGET 5411/13/15/17	OPERATING SURPLUS 2430	CAP RSV REVOLVE 7110	CAP RSV LAND ACQ	D.C.C. RESERVE 7301 - 7959	PW EQUIP RESERVE 7205	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER RESERVE/ UTILITY 7919/7959	WATER RESERVE/ UTILITY 7819	OTHER FUNDING (VARIOUS)
INFRASTRUCTURE PROGRAM													
ROADS	\$6,718,500	\$4,506,577	\$0		\$50,575		\$2,990,925						\$1,465,077
DRAINAGE/STORM SEWER	\$4,008,251	\$1,698,251	\$50,000		\$82,413		\$1,565,838					\$2,808,000	
WATER	\$3,166,500	\$2,808,000			\$0		\$0				\$1,625,000		
SANITARY SEWER	\$2,652,000	\$1,625,000											
MINOR PUBLIC WORKS	\$500,000	\$700,000	\$700,000										\$750,000
LOCAL IMPROVEMENTS	\$750,000	\$750,000											\$0
NIC	\$0	\$0											
SUB-TOTAL	\$17,795,251	\$12,087,828											
BUILDING PROGRAM													
MINOR BUILDINGS	\$1,089,000	\$1,550,000	\$600,000		\$700,000								\$250,000
MAJOR BUILDINGS	\$1,258,000	\$4,575,000			\$1,575,000								\$3,000,000
SUB-TOTAL	\$2,347,000	\$6,125,000											
LAND PROGRAM													
LAND ACQUISITION	\$2,634,000	\$634,000				\$634,000							\$0
AFFORDABLE HOUSING PROJECT	\$2,000,000	\$1,000,000											\$1,000,000
SUB-TOTAL	\$4,634,000	\$1,634,000											
PARKS PROGRAM													
PARKLAND ACQUISITION	\$1,224,490	\$3,400,000			\$68,000		\$3,332,000						
MAJOR PARKS	\$1,948,000	\$1,566,000			\$668,320		\$897,680						
MINOR PARKS	\$250,000	\$300,000	\$300,000										
CHILD CARE PROGRAM	\$50,000	\$0											\$0
SUB-TOTAL	\$3,472,490	\$5,266,000	\$6,900,000										
EQUIPMENT PROGRAM													
ANNUAL FLEET REPLACEMENT	\$2,229,579	\$2,229,579			\$229,579								
FIRE DEPT. VEHICLES	\$900,000	\$84,200							\$84,200				
COMPUTER CAPITAL/SOFTWARE	\$0	\$0											
TECHNOLOGICAL INNOVATIONS	\$375,000	\$85,000			\$85,000								
COMMUNICATION EQUIPMENT	\$130,000	\$0											
EMERGENCY RESPONSE EQUIPMENT	\$0	\$0											
SUB-TOTAL	\$3,634,579	\$2,398,779											
TOTAL REQUIRED	\$31,883,320	\$27,511,607	\$8,550,000	\$0	\$3,458,887	\$634,000	\$8,786,443	\$2,000,000	\$84,200	\$0	\$1,625,000	\$2,808,000	\$6,465,077

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$200,000
Bicycle Lane Program	Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc. This project involves pavement widening to provide 2.5 m alphabet bike lanes for cyclists on both sides of Shell Road from Williams Road to Steveston Highway.	\$456,000
Blundell Road Rebuild of Road Base	This project (\$456,000) is expected to be funded jointly by the City (\$228,000) and BCTFA or TransLink (\$228,000). This project will not proceed without a funding commitment from either BCTFA or TransLink. Sideway West 200 Meters	\$332,077
Brownagate Road Extension (Road Construction)	Mulching existing asphalt, removal of overburden grade and repave existing Road 2.0 m Bike Lane @ 75mm dp asphalt to South Side Approx \$79,000 (not including Storm Works) Sideway to # 6 Rd Mulching existing asphalt, removal of overburden grade and repave existing Road 2.0 m Bike Lane @ 75mm dp asphalt to South Side Approx \$253,000 (not including Storm Works) The proposed Brownagate Road Extension is consistent with the recommendations contained in the City Centre Transportation Plan in addressing the need for better local circulation in the Aberdeen area. This road connection is required to support the proposed Aberdeen Centre Expansion with no cost to the City. The developer of Aberdeen Centre Expansion is responsible for the design and construction of the entire Brownagate Road Extension. An interim Brownagate Road (along the Aberdeen Centre frontage) will be constructed in conjunction with the construction of the proposed new Aberdeen Centre. As part of this development project, the developer is required to provide funding (as bond to the City) for extending of the interim Brownagate Road to No. 3 Road and converting the interim road width to the ultimate road wide of 13.6 m. The timing of constructing the ultimate Brownagate Road Extension to No. 3 Road will be depending on the success in securing the required right-of-way. The City is responsible for the cost of land acquisition, and has reserved \$250,000 for land purchase from the 2000 Capital Program.	\$645,000
Intersection Improvements (Westminster Highway and Jacombs Road)	This project involves road widening to enable the extension of an existing southbound right-turn bay on Jacombs Road at Westminster Highway and the associated traffic signal modifications. This project is eligible for TransLink funding contribution (Westminster Highway is part of the Major Road Network) and potential ICBC funding as part of their Traffic Safety Improvement Program.	\$200,000
Intersection Improvements - Westminster Highway / No. 6 Road	This project involves road widening to enable the construction of left-turn bays on both No. 6 Road approaches (northbound and southbound), dual left turn lanes on Westminster Highway (eastbound) and associated traffic signal modifications. This project is eligible for TransLink funding contribution (Westminster Highway is part of the Major Road Network) and potential ICBC funding as part of their Traffic Safety Improvement Program.	\$220,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Neighbourhood Traffic Safety Enhancement Program	Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc. The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	\$200,000
No. 2 Road Bridge	Debt financing costs	\$2,030,000
Traffic Signal Installation Program	The scope of this project involves the installation of new traffic signal hardware including poles, bases, junction boxes, underground conduits, controller, detector loops, related wiring and pavement markings, and communications conduit and cable at candidate intersections. Minor corner property acquisitions may be required. The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.	\$200,000
Transit Plan Infrastructure Improvements	The scope of this project includes infrastructure improvements that are required to support the introduction of various transit service improvements identified in the Richmond Five-Year Area Transit Plan as well as on-going enhancements to existing transit infrastructure. The general scope of improvements is expected to include the installation of new bus stop pads, minor road geometric improvements (e.g. intersection corner improvements), minor sidewalk construction, wheelchair ramps, and other supplementary pedestrian amenity improvements required to facilitate pedestrian traffic generated by transit passengers. This project also involves upgrading of existing bus stops to accessible standards.	\$100,000
Drainage		
Broadmoor Boulevard Lane Drainage	Install drainage in the lane behind the north side of Broadmoor Blvd, at 7331 Deagle Road.	\$50,000
Drainage Assessment Program	This is the proposed Phase 2 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers.	\$162,250
Drainage Pump Station Rehabilitation	The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan. Reconstruct drainage pump station. Replace pumps, electrical switch gear, floodbox and discharge pipes. Replace wooden shack with concrete block house. Public washroom and viewing platform (Parks) The drainage pump station at Williams Road and the dyke will be reconstructed.	\$500,000
Drainage System - Granville Avenue	Fill in the ditch on the south side of Granville Avenue from 4 Rd to Shell Road. Rehabilitate boulevard, and edge of road.	\$342,500
Drainage System - Granville Avenue	Fill in ditch on north side of Granville Ave from 4 Road to Shell.	\$342,500
Drainage System - Tait School	100 meters of ditch to be filled in, fronting on Tait School, on Gilmore Crescent.	\$50,000
Drainage System - Westminster Highway	Fill in ditch between 20351 and 20471 Westminster Hwy.	\$110,000
Water Main Replacement		

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Bakerview	<p>Project # 2003-02 Replace undersized 100 mm and 150 mm Asbestos Cement Watermain complete with service connections, with C-900 Plastic. First year of a three year phased project.</p> <p>Saunders Rd - Garden City to Ash St. 406 m Heather Pl. 75 m Pinewell Cres - Ash St to Saunders Road 510 m Ash St. - Williams Road to Saunders Rd 160m</p> <p>Total 1251 m @ \$275 m = \$345,000</p>	\$345,000
Blundell Road	<p>Replace 800m of 150mm steel watermain with 300mm C -900</p>	\$300,000
Gilbert Road	<p>Replace approx. 800m of existing 300mm diameter watermain with 300mm diameter C-900 PVC watermain to service Richmond General Hospital and WCB.</p> <p>Replace approximately 800 meters of existing 300mm diameter AC watermain with 300mm C-900 PVC watermain complete with services, tie ins and restraint joints.</p>	\$400,000
Monds Subdivision	<p>Watermain renewal - replace approx. 1,500m of existing 150mm diameter AC watermain with 150mm diameter C-900 PVC watermain. Replace approximately 1,500 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 4th year of a 4 year replacement program.</p> <p>The scope of work is as follows: Lamond - Gormond to Florimond 320 m Stillmond - Lamond to Williams 90 m Florimond Rd - Lamond Ave to Jesmond Ave 270 m Sedgemond 100 m Jesmond Florimond Rd, to Gormond Ave 320 m Piermond - Jesmond to Lamond 270 m Chapmond Cres 460 m Total 1830m @ \$275/m = \$504,000</p>	\$500,000
More Subdivision	<p>Watermain renewal - replace approx. 1,900m of existing 150mm diameter AC watermain with 150mm diameter C-900 PVC watermain. Replace approximately 1,900 meters of existing 150mm diameter AC watermain and services with 150mm diameter C-900 PVC watermain. This is the 3rd year of a 5 year replacement program.</p> <p>The scope of work is as follows: Seafair Dr. Blundell Rd. to Fairbrook Cres Newmore Ave - Seafair Dr. to Pacemore Ave Fairbrook Cres - Pacemore Ave to Fairdell Cres Fairbrook Pl Fairdell Cres Fairdell PL</p> <p>Total 1756 @ 275 per/m = \$483,000</p>	\$483,000
No. 4 Road	<p>Watermain AC replacement-Remove Replace Existing 250mm Steel watermain with 8m of 300 mm C-900 Plastic complete with service renewals LOCATION Number 4 Road Steveston Hwy to Montieith ROW</p>	\$260,000

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Westminster Highway	Replace 600mm diameter steel watermain with 300mm diameter C-900 PVC watermain c/w joint restraints. Replace approximately 1,600 meters of 300mm diameter steel lead jointed watermain with 300mm diameter C-900 PVC watermain complete with services and joint restraints. This project is located in the 10,000 & 11,000 block of Westminster Highway and include the intersections at No. 4 Road & No. 5 Road.	\$520,000
Sanitary Sewer		
Aspen, More, Monids, Broadmoor and Shellmont Sanitary Sewers	Gravity Sewer replacement, reconstruction and rehabilitation Gravity Sewer replacement, reconstruction, and rehabilitation in the Aspen, Mores, Broadmoor and Shellmont areas.	\$500,000
Sanitary Pump Station Rehabilitation	Replace pumps discharge bends, headers, pipe work, switchgear and controls in the Boyd pump stations.	\$250,000
Sanitary Pump Station Rehabilitation	Replace pumps discharge bends, headers, pipe work, switchgear and controls in the Ivy pump stations	\$250,000
Sanitary Sewer Pump Stations	New Sewer Pump Stations as required	\$500,000
Minor Public Works		
Public Works Minor Capital	Various improvements to roads, traffic, sanitary and sewer systems as required.	\$650,000
Wheel Chair Ramp upgrade program	Starting in South West Sector of Island (Steveston) modify each intersection in older subdivisions by installing wheel chair ramps.	\$50,000
LIP/NIC		
LIP	Ditch infill, sidewalk, curb and gutter where requested and required	\$750,000
Infrastructure Advanced Design & Land		
Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$189,500
B. Building Program		
Minor Building		
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$500,000
Parks Washrooms - Trails	Parks and trail washrooms	\$200,000
Physical Plant Sustaining Capital	The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical, Electrical, Conveying and life Safety Systems. Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 11% of \$700,000 = \$77,000 Unplanned repairs/ Contingency = \$68,000 Project Manager (F/T temp) = \$55,000 Recommended Projects = \$500,000	\$850,000
Major Building		

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Britannia Heritage Shipyard	Chinese Bunkhouse: bring the building up to current building code and interpret as the living quarters of Chinese labourers in the early part of the 1900's.	\$155,000
Civic Building Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$255,000
Community Safety Building Replacement	Replacement of Existing Fire hall No 5 located on Westminster Hwy. In Hamilton, East Richmond . The proposed new post disaster fire rescue facility is estimated to be approximately 7000 sf in size and would also accommodate a 1000sf Community Policing component. The new facility will be constructed to "Post Disaster " standards and include substantial "green " initiatives.	\$3,000,000
Ice Rinks	Ref REDMS # 336064, #128596 Prepare one rink for public skating and major upgrade of material finishes.	\$400,000
Parks Facility	Modified to reflect planning process, project delayed by one year from 2002 to 2003.vj New facility including caretaker suite	\$565,000
Satellite Works Yard	Refer to year 2002 for detailed scope . Phase 2 anticipates laying Blacktop roadway to rear of property for Fire truck access and providing Blacktop cover to the 4000 sq.m. training area.	\$200,000
C. Land And Parks Program		
Land Acquisition		
Affordable Housing Project	Request to Spend: City has an Affordable Housing Statutory Reserve Fund. This request is to use the dollars for buying land and for other housing capital items: - to implement the findings of the seniors housing study, and /or - for another affordable housing project.	\$1,000,000
Infrastructure Program - Land Acquisition	To purchase land required for DCC programs and per Council resolution Sept. 2000 this is year 3 of 4.	\$634,000
Parkland acquisition	Acquisition of park land	\$3,400,000
Minor Parks		
General Development	This program covers the ongoing improvements, repairs, and replacements of benches, pathways, lighting, picnic tables, fencing and backstop etc. These funds are also used for miscellaneous items which are brought to staffs' attention through Council and/or public correspondence and/or unforeseen situations. Inspect City playgrounds and rectify potential safety hazards. This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.	\$200,000
Playground Upgrade Program	The City owns 54 playgrounds that are all impacted to varying degrees by the new standards.	\$100,000
Major Parks/Streetscapes		

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
McLennan North Community Park	Capital construction work. Basic site preparation will be a major part of this first phase, including site work demolition, clearing, grading, preloading for hard surfaces and vegetation/landscape protection.	\$250,000
Park Design/Planning Fund	This fund is to provide a source for ongoing planning, project management, and construction detailing of both immediate and future projects either in park construction or strategic open space planning. This program allows the City to be prepared and efficient in managing the following capital construction years.	\$50,000
Parks Upgrade Program - Characterization	Implementation of design solutions intended to strengthen the overall function and character of existing park sites This project involves the implementation of design solutions intended to strengthen the overall function and character of existing sites within the City's park system. This site has been chosen for its size and community visibility due to its location to a major well travelled road, Francis Road.	\$100,000
Richmond Nature Park	Freestanding washroom building (not attached to existing buildings) with water and electricity. As part of this building a visitor and interpretation kiosk with a small room.	\$150,000
Special Sports Statutory Reserve Fund	A Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$166,000
Steveston Tram	Relocation of the Tram and all ancillary buildings from Steveston Park to a location to be determined by the transportation and feasibility study to be started in 2001.	\$100,000
Trails	The upgrade of existing trails and construction of new trails. The exact locations and priorities will be determined after the Trail Strategy and Implementation Plan, Needs Assessment, and the Environmental Management Strategy are conducted. Proposed trail projects for this year may include: A combination of design and construction projects: <ol style="list-style-type: none"> 1. Railway Avenue - trail construction and signage to connect Middle Arm to Steveston. 2. Boardwalk/lookouts at Terra Nova/West Dyke staging areas. 3. No.2 Road/ Dover Gateway 	\$250,000
Waterfront Improvement Reserve Fund	Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.	\$500,000
D. Equipment Program		
Vehicle Equipment		
Vehicle Reserve Purchases (Fire)	Apparatus and Equipment Replacement. A. Miscellaneous Equipment Replacement - \$ 84,2000.00.	\$84,200
Vehicle Reserve Purchases (PW)	The majority of this request is for replacement of extraction equipment that was purchased in 1992. Vehicle replacement program.	\$2,000,000
Vehicle Reserve Purchases - Phantom Flees/Auxiliary Technology	To buy out 4 vehicles currently being leased as part of Phase3 to dissolve the Auxiliary/Phantom Fleet	\$229,579

City of Richmond: One Year Capital Program - Summary by Program 2003 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
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\$85,000

Fibre optic cabling to City Buildings	Put in place a fibre cable network from City Hall to remote sites. The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per remote site per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from Cityhall to remote sites for 1 time capital cost and eliminate these lease costs.	
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Summary for 'Project Year' = 2003 (58 detail records)

Grand Total **\$27,511,606**

City of Richmond: One Year Capital Program - Summary by Program 2003 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Intersection Improvements - Blundell Road/Garden City Road	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$923,000
Intersection Improvements - Cambie Road/No. 5 Road	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$1,086,000
No. 6 Road widening	This project involves the widening of the existing single northbound lane of No. 6 Road to two lanes from north of the No. 7 Fire Hall to International Place.	\$329,000
Sidewalk Program	This project involves the construction of a 2.0m wide concrete sidewalk and tree boulevard along Firbridge Way between No. 3 Road and Minoru Blvd. (north side only) where concrete sidewalk does not exist. This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$68,000
Sidewalk Program	This project involves the construction of a 2.0 m wide concrete sidewalk and a 1.5 m wide tree boulevard along Minoru Boulevard between Elmbridge Way and Alderbridge Way where concrete sidewalk does not exist. This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$194,000
Water Main Replacement		
Minor Capital Waterworks Program	Water Model Development \$70,000	\$400,000
Minoru pool complex watermain	Install 120 m of 150mm watermain between the feed to the Minoru Pool and the watermain servicing the Senior Centre,	\$50,000
Seismic Upgrades of Waterwork Network	Pressure reducing valve (PRV) stations - install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. Install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. This Budget accommodates 2 stations per year for an overall 6 year program costing \$300,000.00.	\$50,000
Minor Public Works		
Birchwood Estates Street Light Replacement	The proposed locations are Steveston Hwy & Shell Rd and Shell Rd & Montieith Rd	
Replacement of Service Panels on BC Hydro	To replace existing Lamp Standard with new Z pole in this subdivision over a 3 year time frame. Each year we will replace approximately 1/5 of all lights in the subdivision. To renew 25 pole mounted Service Panels. The present service entrances are rusted and dangerous. The replacement of service entrances will take approximately 3 years to complete.	\$30,000
C. Land And Parks Program		
Land Acquisition		
North Loop Road - Phase I (Land Acquisition)	Land acquisition along the rear of No. 3 Road properties west side is required to secure the necessary road right-of-way for constructing a new two-lane interim road from Cambie Road to Leslie Road before the CPR right-of-way is acquired for an ultimate arterial road. This is the first phase of a two-phase project. The construction of this new road is the second phase of the project.	\$1,000,000
Minor Parks		
	North Loop Road is critical to the City Centre road network and should be implemented through alternative funding sources.	

City of Richmond: One Year Capital Program - Summary by Program 2003 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000
Sports Field Drainage Program	This program entails construction of perimeter drainage in older parks and school park sites and/or retrofitting drainage around individual sports fields.	\$90,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and provide stock for the City Nursery.	\$100,000
Major Parks/Streetscapes		
Steveston Tram - demonstration 1/2 kilometer	Construction of a half kilometer of tram line including track construction, provision of overhead power lines, a rectifier station and crossing and crossing protection. Temporary landing platforms also needed. The location of the route will be determined in a feasibility and engineering study being undertaken in 2001. The cost does not include any land acquisition needed in order to accommodate turning radii needed.	\$385,000
Tennis Court Resurfacing Program	This is a program to resurface the tennis courts in the City's major park sites. Further work is to be done at South Arm Park.	\$100,000
Terra Nova Park	Design, construction, and engineering detailing of the 60 acre site. The degree and amount of detailing will depend upon the final plan approved by Council. Some of this fund may go towards providing trails through the site.	\$250,000
Summary for 'Project Year' = 2003 (17 detail records)		
Grand Total		\$5,130,000

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APPENDIX C

PROPOSED 2004 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

**CITY OF RICHMOND
2004 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM**

	2003 PROGRAM	2004 PROGRAM	OPERATING BUDGET 54110101517	2430 OPERATING SURPLUS	7110 CAP RSV REVOLVE	7110 CAP RSV LAND ACQ	7301, 7359 D.C.C. RESERVE	7305 PW EQUIP RESERVE	7210 FIRE EQUIP RESERVE	7220 COMPUTER RESERVE	79197959 SEWER RESERVE/ UTILITY	7419 WATER RESERVE/ UTILITY	OTHER FUNDING (VARIABLES)
INFRASTRUCTURE PROGRAM													
ROADS	\$4,506,577	\$4,112,500			\$926,175		\$2,527,325						\$659,000
DRAINAGE/STORM SEWER	\$1,698,251	\$954,751	\$50,000		\$45,238		\$859,513				\$2,152,500	\$2,836,000	
WATER	\$2,808,000	\$2,836,000											
SANITARY SEWER	\$1,625,000	\$2,152,500											
MINOR PUBLIC WORKS	\$700,000	\$625,000	\$625,000										\$750,000
LOCAL IMPROVEMENTS	\$750,000	\$750,000											
NIC	\$0	\$0											
SUB-TOTAL	\$12,087,828	\$11,430,751											
BUILDING PROGRAM													
MINOR BUILDINGS	\$1,550,000	\$1,300,000	\$800,000		\$500,000								\$3,000,000
MAJOR BUILDINGS	\$4,575,000	\$3,460,250			\$460,250								
SUB-TOTAL	\$6,125,000	\$4,760,250											
LAND PROGRAM													
LAND ACQUISITION	\$634,000	\$634,000				\$634,000							\$1,000,000
AFFORDABLE HOUSING PROJECT	\$1,000,000	\$1,000,000											
SUB-TOTAL	\$1,634,000	\$1,634,000											
PARKS PROGRAM													
PARKLAND ACQUISITION	\$3,400,000	\$3,400,000			\$68,000		\$3,332,000						\$0
MAJOR PARKS	\$1,566,000	\$1,595,000	\$300,000		\$619,900		\$975,100						
MINOR PARKS	\$300,000	\$390,000	\$300,000		\$1,800		\$88,200						
CHILD CARE PROGRAM	\$0	\$0											
SUB-TOTAL	\$5,266,000	\$5,385,000											
EQUIPMENT PROGRAM													
ANNUAL FLEET REPLACEMENT	\$2,229,579	\$2,569,679			\$229,579				\$149,400				
FIRE DEPT. VEHICLES	\$84,200	\$149,400											
COMPUTER CAPITAL/SOFTWARE	\$0	\$0											
TECHNOLOGICAL INNOVATIONS	\$85,000	\$115,000			\$115,000								
COMMUNICATION EQUIPMENT	\$0	\$0											
EMERGENCY RESPONSE EQUIPMENT	\$0	\$0											
SUB-TOTAL	\$2,398,779	\$2,834,079						\$2,340,100	\$149,400				
TOTAL REQUIRED	\$27,511,607	\$26,044,080	\$1,775,000	\$0	\$2,965,942	\$634,000	\$7,782,138	\$2,340,100	\$149,400	\$0	\$2,152,500	\$2,836,000	\$5,409,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$100,000
Bicycle Lane Program	Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc. This project involves the construction of a 3.0 m wide asphalt paved bicycle pathway on a linear greenway north of Bridgeport Road between Shell Road and Garden City Road. This bicycle pathway will connect the Shell Road bike route. This project assumes no land acquisition cost.	\$418,000
Neighbourhood Traffic Safety Program	This project (\$418,000) is expected to be funded jointly by the City (\$209,000) and BCTFA/TransLink (\$209,000). This project will not proceed without a funding commitment from either BCTFA or TransLink. Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc. The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	\$100,000
No. 2 Road Bridge	Debt financing costs	\$2,030,000
Traffic Signal Installation Program	The scope of this project involves the installation of new traffic signal hardware including poles, bases, junction boxes, underground conduits, controller, detector loops, related wiring and pavement markings, and communications conduit and cable at candidate intersections. Minor corner property acquisitions may be required. The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.	\$100,000
Undergrounding - Hydro and Telus	Undergrounding - ten year program. This project is the continuation of the removal of poles, overhead cables/wires and the placement of kiosks in rights-of-way. This year would include an area in the core of the City Centre. As in previous years, 1/3 funding is from BC Hydro.	\$1,350,000
Drainage		
Broadmoor Boulevard - Lane Drainage	Install drainage in lane behind the north side of Broadmoor Blvd, 7791-7731 Deagle to Herbert.	\$50,000



City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Drainage Assessment Program	This is the proposed Phase 3 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers.	\$162,250
Drainage Pump Station Rehabilitation	The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan. Reconstruction of pump station, renewal of pumps, floodbox, electrical switch gear, controls and pipework. Rebuilding of pump station house. Possible Public washrooms and viewing platform (Parks). Reconstruction of the pump station, renewal of the pumps, floodbox, electrical switch gear, controls, and pipework. The building housing the pump station will also be rebuilt.	\$500,000
Drainage System - No. 6 Road	Ditch infill for road safety A short stretch of ditch on the east side of No 6 Road, to be filled in prior to road widening.	\$80,000
Drainage System - Walter Lee School	Ditch infill Fill in the ditch fronting on Walter Lee School for a length of 250 meters.	\$125,000
Water Main Replacement		
AC Watermain Replacement	Replace approximately 1875 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 1st year of a 3 year replacement program	\$516,000
	Afton Dr - Gilbert Rd. to Broadmoor Blvd. Herbert Rd. - Afton to Broadmoor Blvd Broadmoor Blvd. Gilbert to No 3 road Belair Rd - Gilbert to Deagle	
	Total 1875m @ 275 = \$516,000	
Bakerview/Saunders	Replace undersized 100 mm and 150 mm Asbestos Cement Watermain complete with service connections, with C-900 Plastic. First year of a three year phased project.	\$289,000
	Saunders Rd - Ash St to No 4 Rd. 420 m Pinewell Pl. 100 m Pinewell Cres - Ash St to Saunders Road east 530 m	
	Total 1050 m @ \$275 m = \$289,000	
Minor Capital Waterworks Program	Funding for emergency watermain replacements and infrastructure studies. The intent of the minor capital account is to fund unscheduled, high priority projects, large emergency watermain replacements and Engineering Planning costs to maintain infrastructure studies. Water modeling \$25,000	\$200,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
More Subdivision	<p>Watermain renewal - replace approx. 1,800m of existing 150mm diameter AC watermain with 150mm diameter C-900 PVC watermain. Replace approximately 1,800 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 4th year of a 5 year replacement program.</p> <p>The Scope of work is as follows: The scope of work is as follows: Seafair Dr. Fairbrook Cres to Fairway Rd 240m Fairlane Rd. - Seafair Dr. to Fairway Rd. 270 m Fairway Rd. - Seafair Drive to Ullismore Ave 315 m Ullismore Rd = Fairway Rd. to Elismore 250 m Fairhurst Rd - Ullismore to Fairbrook Cres 300 m Fairbrook Cres - Fairhurst Rd o Pacemore Ave 410</p>	\$491,000
	Total 1785 @ 275 per/m = \$491,000	
No. 7 Road	Replace approximately 800 meters of existing 100mm diameter steel watermain with 300mm diameter C-900 PVC watermain complete with service connections.	\$235,000
No. 7 Road	Replace approx. 800m of existing 100mm diameter steel watermain with 300mm diameter C-900 PVC watermain c/w water service connections.	\$240,000
No. 7 Road	Replace approx. 750m of existing 100mm diameter steel watermain with 300mm diameter C-900 PVC watermain c/w water service connections.	\$215,000
Pressure Reducing Valve Station Seismic Upgrade	Recommendation of consultant report	\$200,000
Seismic Upgrades of Waterwork Network	<p>Rebuild the Pressure Reducing Station for earthquake proofing including replacement of the watermain between the PRV chamber and GVRD watermain</p> <p>Install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. This budget accommodates 2 stations per year for an overall 6 year program costing \$300,000.00.</p>	\$50,000
Westminster Highway	<p>The proposed locations are Steveston Hwy & Shell Rd and Shell Rd & Montieth Rd</p> <p>Replace approximately 800 meters of 300mm diameter steel lead jointed watermain with 300mm diameter C-900 PVC complete with joint restrains and service connections.</p> <p>This project is located in the 9000 Block of Westminster Highway and includes the replacement of the watermain at both intersections.</p>	\$400,000
Sanitary Sewer		
Aspen, More, Monds, Broadmoor and Shellmont Sanitary Sewers	Gravity Sewer replacement, reconstruction, and rehabilitation in the Aspen, Mores, Broadmoor and Shellmont areas.	\$1,000,000
Fraserlands Industrial Area	New Pump Stations	\$500,000
Sanitary Pump Station Rehabilitation Minor Public Works	Reconstruct two sanitary pump stations, replace pumps, electrical switch gear, controls, valves and pipework at Quilchena and Crestwood.	\$500,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Public Works Minor Capital	Various improvements to roads, traffic, sanitary and sewer systems as required.	\$575,000
Wheel Chair Ramp upgrade program	Starting in South West Sector of Island (Steveston) modify each intersection in older subdivision installing wheel chair ramps.	\$50,000
LIP/NIC		
LIP	Ditch infill, sidewalk, curb and gutter where requested and required	\$750,000
Infrastructure Advanced Design & Land		
Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$204,500
B. Building Program		
Minor Building		
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$500,000
Physical Plant Sustaining Capital	The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical ,Electrical, Conveying and life Safety Systems. Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 8% of \$1,000,000 = \$80,000 Unplanned repairs/ Contingency 10 % = \$100,000 Project Manager (F/T temp) = \$70,000 Recommended Projects = \$750,000	\$800,000
Major Building		
Briannia Heritage Shipyard	relocate Murchison Houses to permanent locations, refurbish the interiors to depict living conditions in the early 1900's.	\$100,000
Civic Building Infrastructure Advanced Design	10% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$360,250
Community Safety Building Replacement	Replacement of Existing Fire hall No 4 located on Lancaster crescent , Burkeville, Sea Island . The proposed new post disaster fire rescue facility is estimated to be approximately 7000 sf in size The new facility will be constructed to "Post Disaster " standards and include substantial "green " initiatives. Ref REDMS # 336064, #128596	\$3,000,000
C. Land And Parks Program		
Land Acquisition		

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Affordable Housing Project	Request to Spend: City has an Affordable Housing Statutory Reserve Fund. This request is to use the dollars for buying land and for other housing capital items: - to implement the findings of the seniors housing study, and /or - for another affordable housing project.	\$1,000,000
Infrastructure Program - Land Acquisition	To purchase land required for DCC program and per Council resolution Sept. 2000 this is year 4 of 4.	\$634,000
Parkland acquisition	Acquisition of park land	\$3,400,000
Minor Parks		
General Development	This program covers the ongoing improvements, repairs, and replacements of benches, pathways, lighting, picnic tables, fencing and backstop etc. These funds are also used for miscellaneous items which are brought to staffs' attention through Council and/or public correspondence and/or unforeseen dialogue.	\$200,000
Playground Upgrade Program	Inspect City playgrounds and rectify potential safety hazards. This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.	\$100,000
Sports Field Drainage Program	The City owns 54 playgrounds that are all impacted to varying degrees by the new standards. Construction of perimeter drainage in parks/school park sites and retrofitting drainage around sports fields. This program entails construction of perimeter drainage in older parks and school park sites and/or retrofitting drainage around individual sports fields.	\$90,000
Major Parks/Streetscapes		
McLennan North Community Park Development	Capital construction work including basic site preparation, grading and drainage. Construction phasing will be determined after detailed design, construction and engineering plans are completed in 2001/2002.	\$250,000
Minoru Park Upgrade	Restore lake banks, repair/replace drain lines, modify irrigation, relandscape overgrown beds Lakes - restore banks with rip-rap and wood and turf. Repair or replace drain lines. Modify irrigation to meet the needs of the landscaping. Relandscape overgrown beds.	\$150,000
Natural Areas	Construction of pathways, shelters, observation areas and/or interpretation signage in a variety of natural areas. Priorities will be established depending upon the outcome of the Trails Strategy and the Environmental Management Plan. Areas could include the Northeast Bog Forest, waterfront natural areas, the east side of the Nature Park, Lee Slough or new properties that may be acquired through the acquisition plan.	\$150,000
Park Advance Design/Planning Fund	This fund is to provide a source for ongoing planning, project management, and construction detailing of both immediate and future projects either in park construction or strategic open space planning. This program allows the City to be prepared and efficient in managing the following capital construction years.	\$50,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Parks Upgrade Program- Characterization	Implementation of design solutions intended to strengthen the overall function and character of existing park sites This project involves the implementation of design solutions intended to strengthen the overall function and character of existing sites within the City's park system.	\$100,000
Special Sports Statutory Reserve Fund	A. Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$95,000
Trails	An ongoing program of upgrading existing trails and the construction of new trails. The exact locations and priorities will be determined after the Trail Strategy and Implementation Plan, and Environmental Management Strategy are conducted in the previous years. Some proposed projects may include: 1. North Arm trails - upgrade of dyke surfaces and construction of staging areas at No. 4 Road. 2. Trail Development between No. 5 Road and No. 7 Road Pier - North Arm	\$200,000
Waterfront Improvement Reserve Fund	Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.	\$600,000
D. Equipment Program Vehicle Equipment		
Vehicle Reserve Purchases (Fire)	Apparatus and Equipment Replacement. A. Replace units # 800, 801, 821 and 822 - \$ 84,000.00. These Ford Ranger pickups in 2004 will be ten years old. B. Replace Unit # 809 - \$ 40,000.00 This GMC Jimmy in 2004 will be ten years old. C. Miscellaneous Equipment Replacement - \$ 25,400.00. The majority of this request is to replace Honda generators that were purchased in 1988 and 1982.	\$149,400
Vehicle Reserve Purchases (PW)	Vehicle replacement program.	\$2,340,100
Vehicle Reserve Purchases - Phantom Fleet/Auxiliary	To buy out 4 vehicles currently being leased as part of Phase 4 to dissolve the Auxiliary/Phantom Fleet	\$229,579
Technology		
Fibre optic cabling to City Buildings	Put in place a fibre cable network from City Hall to remote sites The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per remote site per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from Cityhall to remote sites for 1 time capital cost and eliminate these lease costs.	\$115,000
Summary for 'Project Year' = 2004 (51 detail records)		
Grand Total		\$26,044,079

City of Richmond: One Year Capital Program - Summary by Program 2004

(Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Francis Road widening	This project involves the widening of the existing Francis Road to 4-lane paved urban arterial standards with concrete sidewalks and tree boulevard along Francis Road between St. Albans Road and Garden City Road where concrete sidewalk does not exist.	\$867,000
Intersection Improvements - Blundell Road/No. 3 Road	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$919,000
North Loop Road - Phase II (Construction)	This project involves the construction of two lane interim road/laneway along the rear of No. 3 Rd properties on the west side before the CPR right-of-way is acquired for the completion of an ultimate arterial road. The project scope includes the construction of a new 2-lane interim road along the rear of No. 3 Road properties on the west side between Cambie Road and Leslie Road. This is the second phase of a two-phase project.	\$1,460,000
Sidewalk Program	This project involves the construction of a 2.0 m wide concrete sidewalk and min. 1.5 m wide tree boulevard on the west side of No. 3 Road between Cambie Road and Sea Island Way where concrete sidewalk does not exist.	\$100,000
Minor Public Works		
Birchwood Estates Street Light Replacement	This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$30,000
Replacement of Service Panels on BC Hydro	To replace existing Lamp Standard with new Z pole in this subdivision over a 3 year time frame. Each year we will replace approximately 1/5 of all lights in the subdivision.	\$25,000
Street Light Replacement Program	To renew 25 pole mounted Service Panels. The present service entrances are rusted and dangerous. The replacement of all service entrances will take approximately 3 years to complete.	\$125,000
C. Land And Parks Program		
Minor Parks		
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and provide tree stock for the City Nursery.	\$100,000
Major Parks/Streetscapes		
Steveston Tram - second 1/2 kilometer	Construction of the second half kilometer of tram line including track construction, provision of overhead power lines, a rectifier station and crossing and crossing protection. The cost does not include any land acquisition needed in order to accommodate turning radii needed.	\$385,000
Tennis Court/Hard Surfaces Resurfacing Program	This is a program to resurface the tennis courts in the City's major and minor park sites. Work is to be done at Hugh Boyd Park and Steveston Park.	\$100,000
Terra Nova Park	This is the first phase of construction of this major legacy project in Terra Nova. The scope of work will only be determined after the planning and public and Council approval processes in Year 2001 and 2002.	\$500,000

City of Richmond: One Year Capital Program - Summary by Program 2004 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Summary for 'Project Year' = 2004 (12 detail records)		
Grand Total		\$4,661,000

APPENDIX D

PROPOSED 2005 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

CITY OF RICHMOND
2005 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM

	2004 PROGRAM	2005 PROGRAM	OPERATING BUDGET 5411/13/15/17 2430	OPERATING SURPLUS 7110	CAP RSV REVOLVE LAND ACQ 7201 - 7959	D.C.C. RESERVE 7205	PW EQUIP RESERVE 7210	FIRE EQUIP RESERVE 7220	SEWER RESERVE/ UTILITY 7819	WATER RESERVE/ UTILITY 7919/7959	OTHER FUNDING (VARIOUS)	
INFRASTRUCTURE PROGRAM												
ROADS	\$4,112,500	\$3,878,500	\$0	\$917,250	\$2,357,750						\$603,500	
DRAINAGE/STORM SEWER	\$954,751	\$610,500	\$0	\$30,525	\$579,975							
WATER	\$2,836,000	\$2,830,000	\$0	\$0	\$0				\$2,830,000			
SANITARY SEWER	\$2,152,500	\$1,902,500		\$0	\$0				\$1,902,500		\$0	
MINOR PUBLIC WORKS	\$625,000	\$1,125,000	\$625,000	\$500,000							\$750,000	
LOCAL IMPROVEMENTS	\$750,000	\$750,000									\$0	
NIC	\$0	\$0										
SUB-TOTAL	\$11,430,751	\$11,096,500										
BUILDING PROGRAM												
MINOR BUILDINGS	\$1,300,000	\$1,385,000	\$800,000	\$585,000							\$0	
MAJOR BUILDINGS	\$3,460,250	\$3,505,000		\$400,000							\$3,105,000	
SUB-TOTAL	\$4,760,250	\$4,890,000										
LAND PROGRAM												
LAND ACQUISITION	\$634,000	\$225,000			\$225,000						\$0	
AFFORDABLE HOUSING PROJECT	\$1,000,000	\$1,000,000				\$0					\$1,000,000	
SUB-TOTAL	\$1,634,000	\$1,225,000										
PARKS PROGRAM												
PARKLAND ACQUISITION	\$3,400,000	\$5,900,000	\$0	\$118,000	\$5,782,000						\$0	
MAJOR PARKS	\$1,595,000	\$2,190,000	\$300,000	\$729,800	\$1,460,200						\$0	
MINOR PARKS	\$390,000	\$500,000		\$4,000	\$196,000						\$0	
CHILD CARE PROGRAM	\$0	\$0										
SUB-TOTAL	\$5,385,000	\$8,590,000										
EQUIPMENT PROGRAM												
ANNUAL FLEET REPLACEMENT	\$2,569,679	\$1,776,300		\$0								
FIRE DEPT. VEHICLES	\$149,400	\$650,000										
COMPUTER CAPITAL/SOFTWARE	\$0	\$0	\$0	\$135,000								
TECHNOLOGICAL INNOVATIONS	\$115,000	\$135,000	\$0									
COMMUNICATION EQUIPMENT	\$0	\$0										
EMERGENCY RESPONSE EQUIPMENT	\$0	\$0										
SUB-TOTAL	\$2,834,079	\$2,561,300					\$1,776,300	\$650,000				
TOTAL REQUIRED	\$26,044,080	\$28,362,800	\$1,725,000	\$0	\$3,419,575	\$225,000	\$1,776,300	\$650,000	\$0	\$1,902,500	\$2,830,000	\$5,458,500

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads. The upgrade involves the installation of overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$100,000
Bicycle Lane Program	Hardware installation of these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc. This project involves the in-filling of ditch and widening of pavement to provide bike lanes for cyclists on Shell Road from Highway 99 to Cambie Road as part of ditch in-filling project, timing TBD. Project subject to RCCC and BCTFA support.	\$307,000
Neighbourhood Traffic Safety Program	This project (\$308,000) is expected to be funded jointly by the City (\$154,000) and BCTFA/TransLink (\$154,000). This project will not proceed without a funding commitment from either BCTFA or TransLink. Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc. The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	\$100,000
T1368/1369 - No. 2 Road Bridge	Debt financing costs	\$2,030,000
Traffic Signal Installation Program	The scope of this project involves the installation of new traffic signal hardware including poles, bases, junction boxes, underground conduits, controller, detector loops, related wiring and pavement markings, and communications conduit and cable at candidate intersections. Minor corner property acquisitions may be required. The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.	\$100,000
Undergrounding - Hydro/Tel	Undergrounding - Hydro/Tel (10year). This project is the continuation of the removal of poles, overhead cables/wires and the placement of kiosks in rights-of-way. This year would include Ferndale Rd. from Garden City to No. 4 Rd. 1/3 funding is from BC Hydro.	\$1,350,000
Drainage		
Drainage Assessment Program	This is the proposed Phase 4 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers. The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan.	\$162,250

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Drainage System - Granville Avenue	Fill in ditch on Granville Ave from # 2 Road east for 315 meters. This with complete the ditch infill on this important arterial road, and improve the safety for the driving public. It will also allow for the planting of trees and beautification of the boulevard.	\$150,000
Drainage System - Woodwards School	Ditch will be filled in for 250 meters on the east side of Seacote Road.	\$137,750
Water Main Replacement		
11000 Blk Granville	Replace 800 m of 150mm temporary watermain with C-900. Inclusive of Intersection renewals. Replacement of all Water Services	\$300,000
AC Watermain Replacement	GVRD will be installing a large watermain along Granville between 2005 - 2008 we will attempt to coordinate this project with theirs for a potential savings. Replace approximately 1809 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 2nd year of a 3 year replacement program	\$498,000
	Belair Rd - Broadmoor Blvd. To Deagle Rd 586m Herbert Rd. - Broadmoor Blvd. To Bates 478 m Bates Rd, - Deagle to Greenlees Rd 395 m Greenlees - Williams to Bates Rd 350 m Total 1809 m @ 275 = \$498,000	
	Replace 1690m of 150mm Asbestos cement watermain with C-900. Inclusive of Intersection renewals. Replacement of all Water Services, Rebuilding of the road shoulders and elimination of non-complying paved boulevards.	
Bowcock Sub-Division	Replace 1570 meters of existing 100mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 1st year of a 2 year replacement program	\$432,000
	Bowcock Road - No 3 Rd. - to St Albans St Albans Road - Bowcock to Francis Myhill Road - Bowcock to Robinson Moore Road - Bowcock to Robinson Gay Road Bowcock to Robinson Robinson Road Gay road to St albans Total 1570 m @ 275 = \$432,000	
Gilbert Road	Replace existing steel and Asbestos Cement watermain with 790m of 300mm C-900 PVC watermain, including tie ins at Montieith ROW and Steveston Highway. Replacement services and an intersection renewal may also be required.	\$250,000
Minor Capital Waterworks Program	Water Model Development \$70,000	\$400,000

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
More Subdivision	Replace approximately 1635 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 5th year of a 5-year replacement program.	\$450,000
	The scope of work is as follows: Seafair Dr. Fairway Rd to Francis 500m Fairfax Cres Seafair Dr. to Fairfax Pl. 435 m Francis Rd. - east of Millmore Rd to No 1 Road 700 m	
	Total 1635 @ 275 per/m = \$450,000	
Seismic Upgrading of Watermains	Replace 500 meters of 300 mm Ac watermain with restrained 300 mm of C-900 plastic.	\$400,000
Watermain replacement	Replace existing watermain with C-900 in conjunction with a ditch in-fill project. Full scope has not been determined at this time	\$100,000
Sanitary Sewer		
Hamilton Pump Station	New Pump Stations and extension of sanitary sewers. To extend sanitary sewers in Hamilton area (details not yet known)	\$1,000,000
Sanitary Pump Station Rehabilitation	Sanitary pump Station Rehabilitation	\$750,000
Minor Public Works		
Public Works Minor Capital	Various improvements to roads, traffic, sanitary and sewer systems as required.	\$575,000
Upgrade to City Centre Lighting	Change existing street light poles to ornamental theme poles	\$500,000
Wheel Chair Ramp upgrade program	Starting in South West Sector of Island (Steveston) modify each intersection in older subdivision installing wheel chair ramps.	\$50,000
LIP/NIC		
LIP	Ditch Infill and possible full road upgrade	\$750,000
Infrastructure Advanced Design & Land		
Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$204,500
B. Building Program		
Minor Building		
Britannia Heritage Site	Code and structural work, building fabric repair. Use is undetermined at this point; further research is required to determine accurate past use. This is phase 2. Phase 1, foundation work, is occurring in 2001.	\$85,000
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$500,000

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Physical Plant Sustaining Capital	<p>The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as</p> <p>Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical, Electrical, Conveying and Life Safety Systems</p> <p>Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital</p> <p>At this time the project budget is distributed as :</p> <p>City Overhead charge @ 11% of \$700,000 = \$77,000 Unplanned repairs/ Contingency = \$68,000 Project Manager (F/T temp) = \$55,000 Recommended Projects = \$500,000</p>	\$800,000
Major Building	10% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$310,000
Civic Building Infrastructure Advanced Design	Repositioning and replacement of Existing Fire hall No 1 on Gilbert @ Granville and by locating a smaller community Fire Hall	\$3,105,000
Community Safety Building Replacement	The proposed new post disaster fire rescue facility is estimated to be approximately 7000 sf in size and would also accommodate a 1000sf Community Policing component. The new facility will be constructed to "Post Disaster " standards and include substantial "green " initiatives.	
Public Washroom - Shell Rd Trail	Ref REDMS # 3336064, #128596 Deferred to 2005 from 2002 as per Parks Planning (from David Naysmith)	\$90,000
C. Land And Parks Program	Construct a "Trails" type public washroom facility, along the existing Shell Road Trail. Request for funding to construct a 'Trails' type public washroom facility along the existing Shell Road Trail, with a specific location to be determined. This would be a facility on the model of the washroom facilities constructed in 1998 - 1999. Estimate: 'global' budget allowance \$90,000	
Land Acquisition	Request to Spend: The City has an Affordable Housing Statutory Reserve Fund.	\$1,000,000
Affordable Housing Project	This request is to use the dollars for buying land and for other housing capital items: - to implement the findings of the seniors housing study, and /or - for another affordable housing project.	
Infrastructure Program - Land Acquisition	To purchase land required for DCC program	\$225,000
Parkland acquisition	Acquisition of park land	\$5,900,000
Minor Parks	Ongoing improvements, repairs and replacements of benches, pathways, lighting, picnic tables, fencing, and backstops. These funds are also used for miscellaneous items which are brought to staff's attention through Council and/or public correspondence and/or unforeseen dialogue.	\$200,000
General Development		

City of Richmond: One Year Capital Program - Summary by Program 2005 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Park Drainage Retrofit Program	Construction of perimeter drainage in parks/school park sites and retrofitting drainage around sports fields. This program entails construction of perimeter drainage in older parks and school park sites and/or retrofitting drainage around individual sports fields.	\$200,000
Playground Upgrade Program	Inspect City playgrounds and rectify potential safety hazards as identified through the CSA inspection program. The City owns 54 playgrounds that are all impacted to varying degrees by the new standards introduced in 1999.	\$100,000
Major Parks/Streetscapes		
Characterization - Neighbourhood Parks	Implementation of design solutions to add character to existing park sites- pathways, trees and activity areas -with the intent of strengthening the overall function and character of existing sites within the City's park system.	\$200,000
City Centre Waterfront Open Space	This project would entail an upgrade/ beautification of the waterfront in the City Centre. The specific projects would be determined through the Beautification and City Centre Legacy teams. This amount of money could be used for a small pilot project or be used as seed money to elicit matching funds from infrastructure grants or the business community.	\$290,000
Hugh Boyd Park Development	Redevelopment of field no. 4 and landscaping of new fieldhouse This project comprises two major components: 1) the redevelopment of field no. 4, in the southwest corner of the park. Work will include regrading and reseeding the site, and renewing the storm drainage system. A new backstop will also be installed. 2) landscaping of the new fieldhouse to be located just east of the 'oval'.	\$200,000
McLennan North Community Park	Capital construction work including basic site preparation, grading and drainage. Construction phasing will be determined after detailed design, construction and engineering plans are completed in 2001-2002.	\$250,000
Natural Areas	Various sites. Program is used to protect and enhance natural areas, to construct limited public access observation decks, pathways, interpretation signage and/ or shelters.	\$50,000
Steveston Park Redevelopment - Phase III	Retrofit , development of park	\$500,000
Waterfront Improvement Reserve Fund	Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.	\$700,000
D. Equipment Program		
Vehicle Equipment		
Vehicle Reserve Purchases (Fire)	Fire Department - Apparatus and Equipment Replacement.	\$650,000
Vehicle Reserve Purchases (PW)	Vehicle replacement program	\$1,776,300
Technology		
Fibre optic cabling to City Buildings	Put in place a fibre cable network from City Hall to remote sites The City currently leases Fibre optic services from BC Tel at a cost of \$1,200 per remote site per month based on 1999 pricing. Over the next 5 years by utilizing City conduit infrastructure we can put in place our own fibre from Cityhall to remote sites for 1 time capital cost and eliminate these lease costs.	\$135,000
Summary for 'Project Year' = 2005 (46 detail records)		
Grand Total		\$28,362,800

City of Richmond: One Year Capital Program - Summary by Program 2005

(Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Blundell Road widening (Phase I)	This project involves in-filling of ditches and reconstructing the existing Blundell Road to 14m wide paved urban arterial standards. This is the first phase of a two-phase project includes the section of Blundell Road between No. 4 Road and Shell Road. Phase II of this project includes the section east of Shell Road to No. 5 Road.	\$2,734,000
Intersection Improvements - Cambie Road/No. 4 Road	Project scope includes: storm sewer, sanitary trunk sewer, sidewalk, curb and gutter, streetlights, tree boulevard on both sides; railway crossing and relocation of other utilities.	\$800,000
Sidewalk Program	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$519,000
Steveston Highway Widening	This project involves construction of concrete sidewalk and tree boulevard on both sides along Garden City Road between Sea Island Way and Cambie Road where concrete sidewalk does not exist. This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area.	\$1,800,000
Drainage		
Drainage Pump Station Rehabilitation # 3 Rd/Steveston Highway	This project involves the widening of Steveston Highway from Palmburg Road to the Steveston Highway Interchange to divided four-lane urban arterial road standard. Project scope includes: road widening to four lanes with curb and gutter, sidewalk, raised centre median, streetlights and tree boulevard. Project is contingent upon ditch infill and storm drainage already being completed.	\$500,000
P39308 - Queens Canal	This project will not proceed without funding commitment from BCTFA, TransLink, ICBC River Port area businesses and future developments. The total estimated cost of \$1,800,000 is expected to be funded 1/3 by the City (\$600,000) and 2/3 by external agencies (\$1,200,000). This cost estimates do not allow for drainage work including ditch infill and box culvert extensions.	\$500,000
Water Main Replacement		
Monterith Road	Drainage Pump Station Rehabilitation # 3 Rd/Steveston Highway pump station is in a dilapidated condition, the pumps and electrical switch gear are under-sized and nearing the end of their useful life. The pump station and floodbox structure will be completely reconstructed. Rebuild cross-section of canal	\$250,000
Seismic Upgrades of Waterwork Network	Install 820 m of 300mm C-900 watermain and replacement of services Flexible joints of PRV stations Install flexible earthquake resistant joints, change out copper control lines with stainless steel and install SCADA monitoring equipment. This budget accommodates 2 stations per year for an overall 6 year program costing \$300,000.00.	\$50,000
Sanitary Sewer		
Aspen, More, Monds. Broadmoor and Shellmont	Sanitary sewer infrastructure replacement. This program will rehabilitate aging sanitary sewers before they completely break down.	\$1,000,000
Minor Public Works		
Street Light Replacement Program	Repair and replace Older Street Light Poles with newer Poles	\$125,000
C. Land And Parks Program		
Land Acquisition		

City of Richmond: One Year Capital Program - Summary by Program 2005 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Steveston Tram - car barn/station/museum display	Construction of a permanent car barn, station and museum display.	\$450,000
Minor Parks		
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000
Tree Planting Program	This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites.	\$100,000
Major Parks/Streetscapes		
City Centre Streetscape Upgrades	Greenways, entrances to City, medians etc.	\$200,000
Park Advance Design / Planning Fund	This fund is to provide a source for ongoing planning, project management, and construction detailing of both immediate and future projects either in park construction or strategic open space planning. This program allows the City to be prepared and efficient in managing the following capital construction years.	\$50,000
Special Sports Statutory Reserve Fund	A Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$250,000
Trails	Upgrade of existing trails and construction of new trails. The locations will be determined after the Trail Study to be conducted in 2000/ 2001.	\$250,000
Summary for 'Project Year' = 2005 (17 detail records)		
Grand Total		\$9,628,000

APPENDIX E

PROPOSED 2006 CAPITAL PLAN

- **SUMMARY OF CAPITAL BUDGET FUNDING SOURCES BY PROGRAM**
- **CAPITAL PROJECTS RECOMMENDED BY THE TEAM**
- **CAPITAL PROJECTS NOT RECOMMENDED BY THE TEAM**

**CITY OF RICHMOND
2006 CAPITAL BUDGET WITH FUNDING SOURCES
BY PROGRAM**

	2005 PROGRAM	2006 PROGRAM	OPERATING BUDGET SURPLUS 5411031517 2430	OPERATING CAP RSV REVOLVE 7110	CAP RSV LAND ACQ	D.C.C. RESERVE 7301-7959	PW EQUIP RESERVE 7205	FIRE EQUIP RESERVE 7210	COMPUTER RESERVE 7220	SEWER RESERVE/ UTILITY 79197959	WATER RESERVE/ UTILITY 7819	OTHER FUNDING (VARIOUS)
INFRASTRUCTURE PROGRAM												
ROADS	\$3,878,500	\$4,044,500										
DRAINAGE/STORM SEWER	\$610,500	\$1,699,751		\$921,975		\$2,447,525						\$675,000
WATER	\$2,830,000	\$2,963,500		\$84,988		\$1,614,763				\$2,052,500	\$2,963,500	
SANITARY SEWER	\$1,902,500	\$2,052,500										
MINOR PUBLIC WORKS	\$1,125,000	\$725,000	\$725,000									
LOCAL IMPROVEMENTS	\$750,000	\$750,000										\$750,000
NIC	\$0	\$0										
SUB-TOTAL	\$11,096,500	\$12,235,251										
BUILDING PROGRAM												
MINOR BUILDINGS	\$1,385,000	\$1,900,000	\$900,000	\$1,000,000								
MAJOR BUILDINGS	\$3,505,000	\$1,695,000		\$875,000								\$820,000
PUBLIC SAFETY BUILDING	\$0	\$27,000,000										\$27,000,000
COMMUNITY SAFETY BUILD REPLAC	\$0	\$11,500,000										\$11,500,000
SUB-TOTAL	\$4,890,000	\$42,095,000										
LAND PROGRAM												
LAND ACQUISITION	\$225,000	\$0										
AFFORDABLE HOUSING PROJECT	\$1,000,000	\$1,000,000										\$1,000,000
SUB-TOTAL	\$1,225,000	\$1,000,000										
PARKS PROGRAM												
PARKLAND ACQUISITION	\$5,900,000	\$6,400,000		\$128,000		\$6,272,000						
MAJOR PARKS	\$2,190,000	\$2,500,000		\$834,000		\$1,666,000						
MINOR PARKS	\$500,000	\$350,000	\$200,000	\$3,000		\$147,000						\$0
CHILD CARE PROGRAM	\$0	\$0										
SUB-TOTAL	\$8,590,000	\$9,250,000										
EQUIPMENT PROGRAM												
ANNUAL FLEET REPLACEMENT	\$1,776,300	\$1,590,000										
FIRE DEPT. VEHICLES	\$650,000	\$650,000					\$1,590,000	\$650,000				
COMPUTER CAPITAL/SOFTWARE	\$0	\$0										
TECHNOLOGICAL INNOVATIONS	\$135,000	\$0										
COMMUNICATION EQUIPMENT	\$0	\$0										
EMERGENCY RESPONSE EQUIPMENT	\$0	\$0										
SUB-TOTAL	\$2,561,300	\$2,240,000										
TOTAL REQUIRED	\$28,362,800	\$66,820,251	\$1,825,000	\$3,846,963	\$0	\$12,147,288	\$1,590,000	\$650,000	\$0	\$2,052,500	\$2,963,500	\$41,745,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Arterial Road Crosswalk Improvement Program	This project involves the upgrading of existing crosswalks on four-lane arterial roads to overhead illuminated signs with flashers and pedestrian-controlled push buttons. The existing crosswalks are typically "marked" crosswalks with side-mounted signs and advance warning signs. About 30 existing crosswalk locations have been identified for inclusion in this program. It is proposed that these crosswalks be upgraded through a 5-Year Crosswalk Improvement Program (approximately six locations to be completed each year).	\$100,000
Bicycle Lane Program	Hardware for these upgrades include poles, bases, junction boxes, underground/ communication conduits, controller, related wiring, pavement markings, illuminated crosswalk signs, push buttons, etc. In-filling of ditch and widening of pavement to provide bike lanes for cyclists on Shell Road from Cambie Road to River Road as part of ditch in-filling project, timing TBD. Project subject to RCCC and BCTFA support. This project assumes no land acquisition cost. This project (\$450,000) is expected to be funded jointly by the City (\$250,000) and BCTFA/TransLink (\$200,000). This project will not proceed without a funding commitment from either BCTFA or TransLink. This project is critical to the bicycle network and should be implemented.	\$450,000
Neighbourhood Traffic Safety Program	Projects contained in this program are aimed at applying traffic calming techniques to address concerns related to speed violations, neighbourhood through traffic intrusions and other unacceptable driving and parking behaviours. Traffic calming related improvements include the construction of curb extensions, centre medians, installation of delineated walkways, extruded curbs, traffic circles, etc. The main objective of this program is to address traffic safety concerns and maintain neighbourhood livability by retrofitting existing streets with traffic calming measures. These concerns are typically raised by local residents. Upon receipt of public enquiry, a traffic safety review is conducted to determine the need and priority of implementation among candidate locations. A public consultation process is conducted and Council approval is sought if public response is supportive and adequate funding is in place. Examples of these projects are the Heather Street traffic calming (2001) and River Drive truck traffic calming (2000).	\$100,000
T1368/1369 - No. 2 Road Bridge	Debt financing costs	\$2,030,000
Undergrounding - Hydro/Tel	Undergrounding - Hydro/Tel (10 year program)	\$1,350,000
Drainage		
Drainage Assessment Program	This is the proposed Phase 5 of a 7 year program that will provide the conditional assessment of the City's drainage infrastructure that will enable staff to strategically develop a rehabilitation and/or replacement program for the ageing storm sewers. The program will include storm sewer video assessment, flow monitoring, and data collection, required for the development of the City's Drainage master plan.	\$162,250
No. 3 Road South Pump Station	The project involves moving existing control systems and constructing a new structure west of the current location. A detailed scope of this project will be available by the next budget cycle.	\$1,500,000
Water Main Replacement		

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
AC Replacement Program	<p>Replace approximately 2700 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 1st year of a 2 year replacement program</p> <p>Maddock – Aintree Cres to Swinton Cres 259 m Dennis Cres – complete look to new areas 1075 m Dennis Pl 156 m Wilkinson Rd. – No 4 Road to Swinton Crew 190 m Swinton Crew - complete look to new areas 780 m Aquila Rd.– Williams Rd. to Swinton Cres. 240m</p> <p style="text-align: right;">Total 2700 m @ 275 = \$743,000</p>	\$743,000
AC Replacement Program	<p>Replace 1729 m of undersized or passes life cycle Asbestos Cement Watermain.</p> <p>Comstock 553m Udy 467m Donald 297m Bassett Rd 366m Bassett OI 46m TOTAL 1729 @ \$265 = \$459,000</p>	\$459,000
AC Watermain Replacement	<p>Watermain Replacement</p> <p>Replace 1115 meters of existing 100mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 1st year of a 2 year replacement program</p> <p>Bowcock Road St Albans 425 m Scotchbrook Rd – Bowcock to Robinson Rd 220 m Wheeler Rd = Bowcock to Robinson Rd 220 m Robinson Road Gay road to St Albans 200 m Robinson Pl 50 m</p> <p style="text-align: right;">Total 1115 m @ 275 = \$307,000</p>	\$307,000
Broadmoor Sub-division Watermain Replacement Phase 3 of 3	<p>Replace approximately 950 meters of existing 150mm diameter AC watermain and services with 150 diameter C-900 PVC watermain. This is the 4nd year of a 4 year replacement program</p> <p>Bates Rd – Greenlees to end 453 m Gilhurst Gate – Gilbert to Gilhurst Cr 107 m Gilhurst Cr - Gilhurst Gate to Gilbert Rd 384m</p> <p style="text-align: right;">Total 950 m @ 275 = \$262,000</p>	\$262,000
Minor Capital Waterworks Program	Water Model Development 25,000	\$365,000
River Rd 18 inch steel	Replace 18 inch steel watermain from PRV Cchamber to 300 mm AC Pipe	\$280,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Seismic Upgrading of Watermains	Replace 800 meters of 300 mm Ac watermain with restrained 300 mm of C-900 plastic.	\$400,000
Sanitary Sewer		
Aspen, More, Monds, Broadmoor and Shellmont	Sanitary sewer infrastructure replacement	\$1,400,000
Sanitary Pump Station Rehabilitation	Sanitary pump Station Rehabilitation	\$500,000
Minor Public Works		
Public Works Minor Capital	Various improvements to roads, traffic, sanitary and sewer systems as required.	\$675,000
Wheel Chair Ramp upgrade program	Starting in South West Sector of Island (Steveston) modify each intersection in older subdivision installing wheel chair ramps.	\$50,000
LIP/NIC		
LIP	Ditch Infill and possible full road upgrade	\$750,000
Infrastructure Advanced Design & Land		
Infrastructure Advanced Design	5% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$352,000
B. Building Program		
Minor Building		
Building Improvements Minor Capital Program	Minor renovations at various locations. Project Budget established annually from Client Dept requests. Projects include renovations and new additions to existing facilities under \$100,000 in value.	\$1,000,000
Physical Plant Sustaining Capital	The purpose of this project is to provide a funding source for the Lifecycle or "Cyclic" maintenance of City Facilities. Unlike Building Improvements this Fund is specifically for the repair, refurbishment and replacement of building envelope and physical plant and includes such items as Roofs, Windows, Siding, flooring HVAC, Boilers, Mechanical ,Electrical, Conveying and Life Safety Systems. Only Projects with a gross value <\$100,000 are included with projects > than \$100k are submitted as Major Capital At this time the project budget is distributed as : City Overhead charge @ 11% of \$700,000 = \$77,000 Unplanned repairs/ Contingency = \$68,000 Project Manager (F/T temp) = \$55,000 Recommended Projects = \$500,000	\$900,000
Major Building		
Civic Building Infrastructure Advanced Design	10% of funds to be allocated towards the advanced planning and design of projects to be constructed in the following year.	\$310,000
Community Safety Building - Seismic Upgrade	The Work entails removal and replacement of the existing Floor slab and roof to install a structurally reinforced floor slab and roof diaphragm, and provide structural cross bracing to the building. In addition, fixtures and equipment will be strengthened and lifecycle maintenance deficiencies corrected ref REDMS # 336064, 446000	\$820,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Community Safety Building Replacement	<p>Repositioning and replacement of Existing Fire hall No 3 at Bridgeport to a new location on garden City @ Alderbridge and constructing a new Fire rescue headquarters facility</p> <p>The proposed new post disaster fire rescue facility is estimated to be approximately 15 -20,000 sf in size</p> <p>Initial Planning is also evaluating the opportunities to co -locate the RCMP in a joint service Public Safety building along with a new Emergency Operations Centre</p> <p>The new facility will be constructed to "Post Disaster " standards and include substantial "green " initiatives.</p>	\$11,500,000
Manoah Steves Park Fieldhouse & Caretaker Suite	<p>Ref REDMS # 336064, #128596</p> <p>Deferred to 2006 from 2002 as per Parks Planning (from David Naysmith)</p> <p>New washroom and caretaker facility</p>	\$565,000
RCMP - Public Safety Building	<p>Construction of a new "Post Disaster " and "Green" Public safety building to accommodate the RCMP by the year 2008</p> <p>The estimated size of the facility is 85,000 sf with an additional 5,000sf allocation for an Emergency Operations Centre.</p> <p>Current Communitys Safety Buildings Master Plan prepared by Fac. Mgmt proposes a number of site options including the City precinct and the potential to co -locate with the new Fire Rescue headquarters at garden City @ Alderbridge</p> <p>Reference REDMS # 33604, 446000</p>	\$27,000,000
C. Land And Parks Program		
Land Acquisition		
Affordable Housing Project	<p>Request to Spend: City has an Affordable Housing Statutory Reserve Fund.</p> <p>This request is to use the dollars for buying land and for other housing capital items:</p> <ul style="list-style-type: none"> - to implement the findings of the seniors housing study, and /or - for another affordable housing project. 	\$1,000,000
Parkland acquisition	Acquisition of park land	\$6,400,000
Minor Parks		
Hugh Boyd Park Sports Lights	Construction of Phase 2 sports lights on Field One as per the Council approved Hugh Boyd Park Master Plan.	\$150,000
Parks Minor Capital-General Development	This program covers the ongoing improvements to the park facilities such as benches, pathways, lighting, picnic tables, fencing and is used as a fund for miscellaneous items which are brought to staff's attention through Council and/or public correspondence and/or unforeseen dialogue.	\$200,000
Major Parks/Streetscapes		
McLennan North Park	Capital park construction work. Total cost of project is estimated at \$4million to \$7 million dollars. Detailed phasing of the construction will only be determined upon completion of the design/construction details in 2002.	\$250,000
Special Sports Statutory Reserve Fund	A Special Sport Statutory Reserve Fund was approved in March 2000 for the purposes of funding artificial turf fields in Richmond and to meet the unmet facility needs of the field sport user groups in the City. Utilizing the funds from this annual program and working in partnership with the Sports Council, priority field upgrades for lighting, and improved turf surfaces will be determined to improve the quality of Richmond's existing inventory of sport playing fields.	\$50,000
Terra Nova NWQ Park	Development of a potential 60 acre open space site.	\$500,000
	This is the third phase of construction of this major legacy project in Terra Nova. The exact scope of work will only be determined after the planning and public and Council approval processes in Year 2001 and 2002.	

City of Richmond: One Year Capital Program - Summary by Program 2006 (Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Trails	Upgrade of existing trails and construction of new trails. The exact locations and priorities will be determined after the Trail Strategy and Implementation Plan, Needs Assessment, and the Environmental Management Strategy are conducted in the previous years.	\$300,000
Waterfront Improvement Reserve Fund	Establishment of a waterfront improvement fund that will be funded annually from the Capital Revolving Fund to ongoing waterfront improvements and planning.	\$800,000
Waterfront Park Development	This project would entail an upgrade/beautification of the waterfront in the City Centre or along the South Dyke - Legacy Lands by Riverport. The priority and the specific projects would be determined as the opportunities arise. It may be a project within the City Centre determined through the Beautification and City Centre Legacy teams or a project along the South Dyke- Riverport area determined through the Trails Strategy and Needs Assessment.	\$350,000
Youth Park - BMX or equivalent	This amount of money could be used for a specific construction project or be used as seed money to elicit matching funds from infrastructure grants or the business community.	\$250,000
D. Equipment Program		
Vehicle Equipment	To construct a park or a section of an existing park programmed with a recreational activity specifically for youth/teens. It may be another skateboard park, frisbee golf, BMX or an equivalent sport of choice for teens.	\$650,000
Vehicle Reserve Purchases (Fire)	Fire Department - Apparatus and Equipment Replacement.	
Vehicle Reserve Purchases (PW)	Vehicle Replacement program.	\$1,590,000

Summary for 'Project Year' = 2006 (40 detail records)
Grand Total **\$66,820,250**

City of Richmond: One Year Capital Program - Summary by Program 2006 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
A. Infrastructure Program		
Roads		
Blundell Interchange (Phase I)	This is a 2-3 year project. This phase involves implementation of a partial Blundell interchange at Highway 99 and Blundell Road and will be implemented in partnership with the Province/Ministry of Transportation (MoT), TransLink and potentially with ICBC. The project scope includes: construction of a northbound off-ramp and southbound on-ramp to form a partial interchange at Highway 99 and Blundell Road. This project also involves widening of Blundell Road between No. 5 Road and No. 6 Road to 4 lanes. The detailed scope of work will be determined after the completion of the Richmond Sub-Area Transportation Study in early 2002. Land acquisition may be required.	\$7,200,000
Blundell Road widening (Phase II)	This project will not proceed without funding commitment from external agencies including the Province/MoT, TransLink (subject to inclusion of Blundell Road in the MRN) and ICBC. Staff also anticipate that this project will be funded by a three-party funding agreement (including the City as one of the parties). The total project cost is estimated at \$21,900,000, and the anticipated share from the City is \$7,300,000 (\$2,400,000 in 2006, \$2,400,000 in 2007 and \$2,500,000 in 2008). Potentially, ICBC may contribute to this project to enhance traffic safety along the Highway 99 system and Blundell Road corridor, as part of their Traffic Safety Improvement Program.	\$2,607,000
Intersection Improvements - Blundell Road at Gilbert Road	The project scope includes: storm sewer, sanitary trunk sewer, sidewalk, curb and gutter, streetlights, tree boulevard on both sides, railway crossing, and relocation of other utilities.	\$1,000,000
Lynas Lane Extension	This project includes road widening for the introduction of left-turn bays at all approaches and traffic signal modifications. Land acquisition will be required for this project.	\$900,000
Sidewalk Program	This project involves the construction of a two-lane road extending from the existing Lynas Lane at Granville Avenue south to Lynnwood Drive. Project scope includes: two-lane road construction (11.5 m width) with curb and gutter, sidewalks, streetlights and tree boulevard. This project is subject to successfully securing the required land at no cost to the City from neighbouring properties as part of the re-development of this neighbourhood.	\$394,000
Steveston Highway Interchange Upgrade (Ph I)	This project involves the construction of 2.0 m wide concrete sidewalks and 1.5 m wide tree boulevard on both sides of Alderbridge Way west of No. 3 Road where concrete sidewalk does not exist. This project is consistent with the recommendations contained in the City Centre Transportation Plan which calls for improvements to pedestrian facilities in the core area. Steveston Interchange upgrade has been identified as one of the top Council priority and is critical to the South Richmond area businesses and residents. Therefore, funding strategy should be in place to implement this project. This project involves upgrading the Steveston Interchange to freeway standards in partnership with BCTFA/MoTH and TransLink. The project scope includes: twinning existing overpass with new bridge structure, Steveston Highway widening at the interchange, ramp reconstruction, new signals, etc. Detailed scope of work will be determined after the completion of the Richmond Sub-Area Transportation Study in 2001. Land acquisition may be required. This project will not proceed without funding commitment from external agencies including BCTFA/MoTH, TransLink and ICBC. Staff anticipate that the design and construction of the recommended improvements will be implemented over a two-year period. The BCTFA/MoTH and TransLink could potentially provide additional funding toward this project. ICBC has already committed to cost share minor road improvements in the area, which are expected to enhance traffic safety along the Steveston Highway corridor, as part of their Traffic Safety Improvement Program.	\$4,500,000

City of Richmond: One Year Capital Program - Summary by Program 2006 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Traffic Signal Installation Program	<p>The scope of this project involves the installation of new traffic signal hardware including poles, bases, junction boxes, underground conduits, controller, detector loops, related wiring and pavement markings, and communications conduit and cable at candidate intersections. Minor corner property acquisitions may be required.</p> <p>The project also involves the installation of pedestrian crossing signal timer hardware including poles, controller, related wiring and pavement markings at candidate intersections. Minor curb cuts and boulevard modifications may also be required at the selected locations. The locations for new traffic signal installations are determined based on public requests, development patterns, traffic safety and capacity requirements.</p>	\$100,000
Minor Public Works		\$125,000
Street Light Replacement Program	Significant # of old subdivisions need street lights	
Upgrade to City Centre Lighting	Change existing street light poles with ornamental theme poles	\$500,000
B. Building Program		
Major Building		
Britannia Heritage Shipyard Cannery Office	Interior work on cannery office, completed to look as it was when it was the office. Work includes interior restoration including installation of displays for viewing from window. No public access. Further research is required about past historical configuration.	\$50,000
C. Land And Parks Program		
Land Acquisition		
Infrastructure Program - Land Acquisition	To purchase land required for DCC program	\$500,000
Minor Parks		
Child Care Program	It is proposed to spend \$50,000 to assist City owned and other day care centres with improving playground and related equipment. This money is to come from the Child Care Statutory Reserve Fund into which it is proposed to add \$50,000 from Casino Funding or General Revenues.	\$50,000
Field Drainage Upgrade Program	Construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields.	\$150,000
Playground Upgrade Program	<p>This ongoing program entails construction of perimeter drainage in older park sites and/or retrofitting drainage around individual sports fields. The cost of one sports field to be properly drained averages \$150,000.</p> <p>This will be the 6th year of a phased program to deal with the CSA requirements.</p> <p>This year the program will focus on safety issues that have been identified at the City's existing playgrounds through an inspection using the new Canadian Safety Association (CSA) standards for playground. Staff will work with the Health Department inspecting City playgrounds and rectifying potential hazards identified through these new standards. Work will focus on fixing or replacing individual components of play equipment, removing or replacing outdated equipment, and/or upgrading the surfaces under play equipment.</p> <p>The City owns 54 playgrounds that are all impacted to varying degrees by the new standards.</p> <p>This is an ongoing program to plant trees and provide tree stewardship throughout the City in parks and open spaces, natural areas, right-of-ways, along trails, and other public properties. This program will allow for planting of 175 trees in 8 to 10 sites and provide stock for the City Nursery.</p>	\$100,000
Tree Planting		
Major Parks/Streetscapes		

City of Richmond: One Year Capital Program - Summary by Program 2006 (Not Recommended by Capital Team)

Project Name	Scope of Work	Capital Investment
Automatic lighting and Irrigation Control	Installation of electronic/computer control of irrigation and lighting systems at parks	\$250,000
Minoru Park Pathway	To construct a lit pathway system in the park.	\$250,000
Steveston Tram - second kilometer	Construction of one kilometer of tram line including track construction, provision of overhead power lines, rectifier station, crossing and crossing protection. The cost does not include any land acquisition needed in order to accommodate turning radii needed.	\$770,000
Summary for 'Project Year' = 2006 (18 detail records)		
Grand Total		\$19,546,000