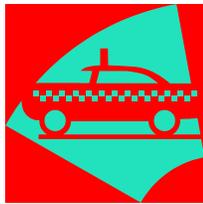


Capital Works Program 2005 Business Plan



Details



CAPITAL WORKS PROGRAM BUSINESS PLAN 2005

<i>Divisions:</i>	<i>Administration</i>	<i>Jim Rule (Chief Administrative Officer)</i>
	<i>Corporate and Financial Services</i>	<i>Paul Gill (General Manager)</i>
	<i>Community Development, Parks and Recreational Services</i>	<i>Mike Murray (General Manager)</i>
	<i>Public Works and Development Services</i>	<i>Frank Quinn (General Manager)</i>

District of Maple Ridge

Capital Works Program

Business Plan 2005

1. Executive Summary

Sustainable communities require a backbone of sound physical infrastructure. The District has the primary responsibility for providing a wide range of public infrastructure. The quality of life of our citizens and the health and welfare of our community is intrinsically tied to the District's capacity and ability to deliver these services.

The Capital Works Program (CWP) is the corporate guide toward the provision of infrastructure and public facilities. Programming capital infrastructure and facilities over time promotes better use of the District's limited financial resources and assists in the coordination of public and private development.

The Capital Works Program is both a planning tool and blueprint of future infrastructure needs. The program is reviewed annually and revised based on current circumstances and opportunities. Priorities may be changed due to funding considerations, management decisions and/or changes in legislation. As a basic tool for scheduling anticipated capital projects and capital financing, the program is a key element in planning and controlling future debt service requirements.

The programming process is a valuable means of coordinating capital project requests and taking advantage of joint planning, information sharing, and corporate wide strategic and tactical planning to achieve corporate goals and objectives. By looking beyond year to year budgeting and projecting what, where, when and how capital investments should be made, capital programming enables the District to optimize the use of resources for the benefit of both the present and future citizens. The result of this programming process is the Capital Works Program that is the long-range (15-20 year) roadmap for acquisition, expansion, and rehabilitation of the District's infrastructure, facilities and business systems.

The program represents a servicing "blueprint" for the future of the community based on the policies and objectives adopted in the District's Official Community Plan and directed by the elected officials in the Corporate Strategic Plan. A critical element of a balanced capital program is the provision of funds to preserve and enhance existing facilities and provide new assets to respond to changing service needs and community growth.

The program serves to identify needed capital projects and to coordinate the financing and timing of improvements in a way that optimizes the return to the public in the context of the District's capacity to pay. It provides a strategically planned and programmed approach to utilizing the District's financial resources in a responsive and effective manner.

Increasingly, local governments are finding that they are at the forefront of the challenges in addressing a growing deficit in infrastructure investment. This challenge must be addressed to ensure that the District's infrastructure and facilities continue to perform adequately and meet the needs of a growing and evolving community both now and in the future.

2. Corporate Overview

Infrastructure is the “highway” along which a municipality delivers essential services such as drinking water, sewage collection, transportation and traffic facilities, storm drainage, park facilities and protective and emergency services. The Capital Works Program is largely directed by the District’s **Corporate Strategic Plan (CSP)** and the following *principles* guiding the District’s infrastructure decisions.

Quality of Life

(Safe and Liveable Community)

Decisions on municipal infrastructure and facilities must address financial feasibility, impacts on public health and the environment and contribute to an enhanced quality of life for a community’s citizens.

Shared Responsibility

(Governance, Inter-Government Relations/Partnerships)

All levels of government, as well as the industrial, commercial, institutional sectors that benefit from public infrastructure, have a responsibility for ensuring sustainable funding and use of infrastructure.

Municipal Government Leadership

(Governance, Community Relations)

Municipal government is in the best position to determine the needs and priorities of their communities.

Adaptability

(Financial Management, Environment)

Capital project design and construction should consider the financial, social and environmental implications and impacts and build-in resilience and adaptability to address these considerations.

User Pay

(Financial Management, Transportation)

Full-cost accounting should be explored and users of public services and facilities should pay their fair share of the costs associated with operation, maintenance and replacement of infrastructure.

Maintenance and Rehabilitation

(Financial Management, Smart-Managed Growth)

To ensure efficient use and a maximum lifespan for municipal infrastructure, proper preventative maintenance is essential. The rehabilitation of existing infrastructure should be carefully considered before projects involving new construction.

Continuous Improvement

(Economic Development, Smart-Managed Growth)

The best available technologies and practices should be applied, and communities should strive to encourage the adoption of new and innovative technology based on appropriate performance objectives.

Partnerships

(Inter-Government Relations/Partnerships)

Policies and programs should encourage partnerships between governments and other stakeholders.

Municipal governments finance the operation, rehabilitation and replacement of their infrastructure assets through a combination of general taxes, user fees and debt financing. However, these sources of funding have proven to be insufficient to prevent an accelerating decay in the state of municipal infrastructure. Given the limited financial resources available, municipalities need to achieve system efficiencies, and to allocate capital works program funding through implementation of a financial sustainability plan.

A proactive strategy is required that will lay the groundwork for the continuance of high quality services and provide a legacy for future generations. It will position the Municipality to meet financial obligations and take advantage of opportunities that arise; it will also mean that residents can look forward to equitable and affordable taxation.

The following recent *policies* are structured to guide, support and respect the direction of the community.

Policy 1.0 - Growth in Tax Base

Real growth will be set based on the experience of the previous planning period and the projections for the ensuing period, using information provided by the BC Assessment Authority, the Planning Department and the Finance Department.

Policy 2.0 - Service Demands Created by a Growing Community

Business Plans should provide details of the demands for service created by growth and should include options as to how the demands can be met and existing standards maintained.

Policy 3.0 - Tax Increase

Tax increases of 4 percent per year to maintain existing service levels.

Policy 4.0 - Efficiencies, Demand Management & Service Level Reductions

Business Plans will identify demand management strategies and will include options for Service Level reductions.

Policy 5.0 - Alternative Revenues & External Funding

All departments will make every effort to access external funding opportunities from other levels of government & the private sector. All departments will endeavor to develop partnerships, strategic alliances and co-shared project funding to assist in the reduction of expenditures to the District. An expansion of the tax base, beyond existing ratios, can be used to reduce the general tax rate, increase service levels and/or provide new services.

Policy 6.0 - Infrastructure Maintenance & Replacement

The District will establish an inventory of its infrastructure and will keep it up to date. A maintenance/replacement program will be established using best practices. By 2015, this program must be fully funded and the current 5 year financial plan should start to address this on a phased basis. The required tax increase will be beyond that set out in Policy 2 and, annual operating and maintenance budgets will be adjusted to accommodate growth.

Policy 7.0 - New Services and Major Enhancements to Existing Services

New Services or enhancements to existing services will be funded by a combination of reduction in the cost of existing services (this may include reallocation of resources), increase in other revenues and/or a further increase in taxes.

Policy 8.0 - Debt Management

Projects that are to be funded by external debt should be submitted to Council with a business case, including recommendations on how the debt will be serviced.

Policy 9.0 - Fees and Charges

Fees and charges will be reviewed and adjusted annually. The public will be provided no less than 3 months notice of those changes.

Policy 10.0 - Accumulated Surplus

Accumulated surplus will be considered as a funding source for extraordinary one-time expenditures.

Policy 11.0 - Reserve Funds and Reserve Accounts

Each reserve account and reserve fund will be governed by policy that outlines its purpose, the types of expenditures permitted and the desired level of the reserve. Strategies for achieving the desired level of the reserve will be included in the Business Plans.

Policy 12.0 - Capital Projects

Each capital project submitted for consideration must clearly spell out the full initial cost as well as future costs, including operating & life cycle cost and demonstrate the source of sustainable funding for such costs.

Policy 13.0 – Carryover Projects

The Corporate Management Team will complete a detailed review of carryover projects in light of other priorities that may have emerged.

The Capital Works Program is structured to address the following *strategic focus areas*:

Governance

The capital works program is directed at providing of infrastructure, facilities and business systems to serve the needs of the community in a timely and cost-effective way based on the District's capacity and ability to deliver these services. Directed by the Corporate Management Team, all departments contribute to the program that is subsequently endorsed by Council through the business planning process.

Financial Management

Funding of the capital works program is an integral part of the Financial Plan Bylaw. Funding is allocated and approved from a variety of sources in keeping with legislative requirements of the *Community Charter*, other applicable statutes and the Financial Sustainability Plan. The Corporate Management Team and the Finance Department are responsible for formulating the District's financial investment strategy.

Inter-Government Relations/Partnership

The capital works program identifies projects for which share funding may be possible. The departments play a role in exploring opportunities to secure new and innovative resourcing tools and/or ways and means of generating new revenues in their respective business areas. The District's funding partnerships with TransLink and the District of Pitt Meadows are examples of the partnership approach.

Community Relations

The business planning process reflects the District's interest in informing the public about the District's Capital Works Program. Information regarding the program and financial plan are provided on the corporate web-site and the public is encouraged to attend business planning presentations. All departments work cooperatively with stakeholders in respect of departmental initiatives and projects.

Economic Development

The capital works program identifies key government services and infrastructure intended to promote economic growth and support local business prosperity. Recent improvements and upgrading of infrastructure in the Downtown such as the reconstruction of 227 Street (Lougheed – Dewdney) and North Avenue (223 – 224) are examples of the District's commitment to encourage both development and redevelopment opportunities.

Safe and Liveable Community

The capital works program provides for works associated with emergency preparedness and provision of protective services (fire protection and policing) to address protection of life and property. Capital

projects are scoped and prepared recognizing the need to incorporate crime prevention, safety and security features. The health and welfare of the community are key objectives of all business lines.

Transportation

The capital works program draws on the objectives of the Master Transportation Plan, the Safer Cities initiative and the Pavement Management Strategy. The program includes projects on the major road network that are eligible for TransLink cost-sharing consideration under a grant application/approval process. The program identifies projects to address transportation network and traffic safety needs, as well as, expansion projects in support of growth.

Smart Managed Growth

The capital works program is based on master infrastructure and parks plans commissioned by the departments. The departments prepare capital projects using the most current information available. A strategic planning approach is used to that employs smart planning, smart investment, smart maintenance and replacement strategies. The *Smart Growth On The Ground* initiative currently underway is an example of a smart initiative intended to direct future land use and infrastructure decisions.

Environment

Recognizing the high value that residents of the community place on the natural environment, the District is committed to environmental protection and to preserving the rural character and lifestyle of the community. The capital works program incorporates infrastructure and facilities that support responsible stormwater management principles and practices. The program promotes the implementation of best management practices and environmentally friendly design and construction of infrastructure to protect watercourses and habitat. The Streamside Setback Assessment completed in-house (Planning Department) and subsequently endorsed by the senior government agencies and Council demonstrates the District's resolve in this regard.

3. Divisional/Departmental Overview

Services Provided

- The compilation and preparation of the Capital Works Program Business Plan.
- The coordination of project information for the long-term capital works program (15-20 years) with priority attention being paid to the upcoming five-year timeframe (2005 – 2009).
- Deployment of information relating to the adopted Capital Works Program on the District's website.
- Staff support with respect to capital information inquiries and/or requests.
- Maintain the integrity of the data in the corporate business system for Long Term Capital Programming to create an archive of completed and planned projects.
- Development Cost Charge administration.

The District's business lines and examples of some capital projects being promoted by the departments and special committees for 2005 appear below:

Administration

Government Services Projects

- Council Chamber Sound System Phase 2
- Recycling Depot Expansion

Jim Rule (Chief Administrative Officer)

Jim Rule - Chief Administrative Officer
(*Governance*)
(*Community Relations*)

Corporate and Financial Services Division

Protective Services Projects
Fire Department Projects

- Fire Hall #4 Construction
- Fire Hall #4 - Equipment Purchase

Technology Projects

- Corporate Website Strategy Update
- Equipment Replacement Program
- Document Processing System

Community Development, Parks and Recreational Services Division

Park Acquisition Projects

- Whonnock Lake Acquisitions

Park Improvement Projects

- Cottonwood East Development
- Cottonwood North Development
- Maple Ridge Spray Pool Upgrade

Recreational Services Projects

- Lifecycle Program Assessment Leisure Centre

Public Works and Development Services Division

Waterworks Projects

- 236 St Pump Station Upgrade
- 256 St Pump Station Replacement

Sewer Projects

- River Road (232 – McKay) Stage 1
- Royal Cres (225 – Loughheed)
- 225 St (Bypass – 116)

Drainage Projects

Paul Gill (General Manager)

Peter Grootendorst - Chief Director

(Safe and Liveable Community)
(Safe and Liveable Community)

John Bastaja - Chief Information Officer

(Community Relations)
(Financial Management)
(Governance)

Mike Murray (General Manager)

David Boag - Director Parks/Facilities
(Community Relations)

David Boag - Director Parks/Facilities
(Community Relations)
(Community Relations)
(Community Relations)

David Boag - Director Parks/Facilities
(Financial Management)

Frank Quinn (General Manager)

Andrew Wood – Municipal Engineer
Ed Mitchell Waterworks Superintendent
(Smart-Managed Growth)
(Smart-Managed Growth)

Andrew Wood – Municipal Engineer
Ralph Kivi - Sewer Superintendent
(Smart-Managed Growth)
(Smart-Managed Growth)
(Smart-Managed Growth)

Andrew Wood – Municipal Engineer
Ralph Kivi - Sewer Superintendent

- 240 St (Lougheed - 102)
- 123 Ave (Fletcher – Fulton)
- Stormwater Management Update - Albion

(Smart-Managed Growth)
(Smart-Managed Growth)
(Environmental)

Highways Projects

- 240 St @ 104 Ave Traffic Signal
- Lougheed (116 – 232) Median
- 232 St @ Abernethy Intersection Upgrade

Andrew Wood - Municipal Engineering
 Wayne Hardy - Road Superintendent
(Transportation)
(Transportation)
(Transportation)

Planning Projects

- Environmental Sensitive Area Review

Jane Pickering – Director of Planning
(Environmental)

Customers

- Citizens of Maple Ridge
- Municipal Council
- Development, Business and Real Estate Communities
- Senior Governments
- Corporate Support
 - Corporate Management Team
 - Administration
 - Emergency Services
 - Protective Services
 - Fire Department
 - Police Department
 - Communication Services
 - Economic Development Services
- Corporate and Financial Services
 - Corporate Support Department
 - Information Services Section
 - Municipal Clerks Department
 - Property and Risk Management Section
 - Finance Department
- Community Development, Parks and Recreation Services
 - Parks and Facilities Department
 - Leisure Services Department
- Public Works and Development Services Division
 - Operations Department
 - Engineering Department
 - Planning Department
 - Inspection Services, Licenses, Permits and Bylaws Department

Resources

- Corporate Management Team (policy, guidelines, direction and approval).
- Directors of Departments (capital project contributors).
- Departments and Special Committees (business planning updates and capital works projects).
- Director of Development Engineering (capital works program co-ordinator).

Organization Chart

- See Departmental and Special Committee Business Plan Organization Charts.

Successes/Accomplishments in the Year 2004

- Municipal Office Tower Acquisition in support of the Town Centre (Administration/Finance)
- Boundary Park Phase 1 Acquisition (Parks)
- 227 Street (Lougheed Highway – Dewdney Trunk Road) Highway reconstruction (Engineering)
- North Avenue (223 – 224) reconstruction (Engineering)
- 240 Street @ 102 Avenue traffic signal (Engineering)
- Municipal Hall Renovations Phase 5 (Administration)
- Artificial Playfield Partnership with School District #42 – Samuel Robertson (Parks)
- Radio Communication System Replacement (Operations)

Projects in Progress

- 232 Street South Alouette Bridge (replacement/upgrade) (Engineering)
- Silver Valley Reservoir (support for growth) (Engineering)
- 207 Street @ River Road traffic signal (safety improvement) (Engineering)
- Webster's Corner Park Acquisition (Parks)

Statistics

Capital Works Program Information

- Implementation Horizon of 15 -20 years
- Infrastructure Identified to program build-out is estimated at approximately \$231,000,000
- Financial Emphasis for five-year timeframe
- Capital Projects Focus for two-year timeframe
- Capital Works Program information is posted on the corporate web-site

District's Infrastructure and Facilities (September 2004 numbers)

- 344 km of water distribution system having a replacement value of \$93M
- 227 km of sewage collection system with 23 pump stations having a replacement value of \$102M
- 253 km of drainage collection system having a replacement value of \$118M
- 425 km of highways, 14 bridge structures having a replacement value of \$218M
- 46 Parks having an assessed value of \$30M
- 3 Firehalls having an assessed value of \$1.6M

4. Performance Measures/Indicators

Service Area Goal 4.1:

- To advance the cause of capital works programming on a corporate-wide basis.

Objective:

- The objective of this initiative is to work with departments to ensure greater consistency of capital project information provided for program consideration.

Measures:

- Departments provide project information by means of capital project template format.
- Departments provide greater detail regarding capital projects.

Action, Responsibility and Timeline:

Actions	Responsibility	Timeline
Review, update and circulate capital project template	Dir. Development Engineering	1 st Quarter
Reiterate process at CWP & IT annual working session	Dir. Development Engineering	2 nd Quarter
Have Departments prepare and submit detailed estimates for projects for coming year's projects	Directors and Special Committee Chairpersons	3 rd Quarter
Accept capital project for CWP 2005 Review only if presented in template format	Dir. Development Engineering	3 rd Quarter

Service Area Goal 4.2:

- To advance the cause of capital programming in the context of the Financial Sustainability Plan..

Objective:

- To ensure that the departments prepare their capital requests in keeping with policies adopted for the Financial Sustainability Plan.

Measures:

- Policies are identified in the 9th Edition of the Business Planning Guidelines.

Action, Responsibility and Timeline:

Actions	Responsibility	Timeline
Incorporate the policies in the Business Planning Guidelines for clarity purposes	GM: Corporate & Financial Services	1 st Quarter
Obtain Business Planning Committee approval.	Director of Development Engineering	1 st Quarter

Service Area Goal 4.3:

- To advance the cause of capital programming in the context of the Financial Sustainability Plan

Objective:

- To works with Corporate Management Team to review and incorporate revision of carryover capital projects in keeping with Policy 13 of the Financial Sustainability Plan.

Measures:

- Reduction in the backlog of carryover capital projects in the Capital Works Program

Action, Responsibility and Timeline:

Actions	Responsibility	Timeline
CMT Review of carryover projects	Corporate Management Team	1 st Quarter
Re-allocate carryover capital funding priority basis	Corporate Management Team	2 nd Quarter
Implement recommendations of the review in 2005/2006 Capital Works Program	Director Development Engineering	3 rd Quarter

Service Area Goal 4.4:

- To advance the cause of capital works programming on a corporate-wide basis.

Objective:

- The goal of this initiative is to investigate updated business solution(s) to migrate the Long Term Capital legacy system to another system.

Measures:

- Complete a detailed assessment of products and costs associated with implementation of a replacement business solution.

Action, Responsibility and Timeline:

Actions	Responsibility	Timeline
Investigate system software functionality	Dir. Development Engineering Geomatics Supervisor	1 st Quarter
Create a CWP pilot to test system functionality	Geomatics Supervisor	2 nd Quarter
Report findings CMT on possible migration of CWP	Dir. Development Engineering	3 rd Quarter

5. Operating Budget

- Resources for coordination and preparation of Capital Works Program Business Plan are provided for in the operating budget of the Engineering Department Business Plan.
- Operating costs associated with new capital projects are provided for in the departmental business plans in keeping with the business planning guidelines.

6. Capital Budget (Corporate)

Capital Works Program (2004-2008)

Approved Capital Funding					
Financial Plan Bylaw No. 6020 -2003	2004	2005	2006	2007	2008
Drainage	\$663,936	\$568,242	\$643,818	\$625,860	\$1,061,377
Government Services	\$962,545	\$605,904	\$200,045	\$489,545	\$325,045
Highways	\$5,646,475	\$3,779,042	\$4,833,688	\$2,642,714	\$5,927,331
Park Acquisition	\$1,128,310	\$1,109,612	\$1,943,149	\$2,718,685	\$1,412,816
Park Improvements	\$1,955,500	\$969,228	\$303,712	\$633,332	\$889,761
Protective Services	\$1,729,550	\$976,510	\$3,500,000	\$250,000	\$1,750,000
Recreation Services	\$315,250	\$38,000	\$21,000	\$102,500	\$14,000
Sewage	\$1,894,307	\$2,016,390	\$1,105,182	\$1,077,418	\$1,270,611
Technology	\$610,394	\$1,740,629	\$835,414	\$557,974	\$2,023,000
Water	\$2,114,778	\$2,927,051	\$2,014,845	\$2,090,846	\$1,794,962
Total Capital Projects	\$17,021,045	\$14,730,608	\$15,400,853	\$11,188,874	\$16,468,903

Capital Works Program (2005-2009) – Proposed

Financial Plan Bylaw No. ???					
(Proposed)	2005	2006	2007	2008	2009
Drainage	\$1,187,546	\$651,289	\$435,530	\$2,651,236	\$479,508
Government Services	\$627,404	\$244,245	\$1,980,045	\$725,045	\$255,045
Highways	\$2,759,358	\$4,236,853	\$3,174,548	\$4,510,629	\$5,258,868
Park Acquisition	\$654,545	\$1,620,798	\$3,101,815	\$1,595,207	\$1,145,214
Park Improvements	\$738,052	\$245,152	\$311,094	\$619,398	\$567,727
Protective Services	\$2,813,665	\$1,578,960	\$2,550,000	\$1,750,000	\$1,500,000
Recreation Services	\$105,000	\$0	\$25,000	\$27,500	\$0
Sewage	\$2,271,183	\$1,459,913	\$1,646,715	\$1,667,366	\$1,349,113
Technology	\$1,725,129	\$733,164	\$327,614	\$1,823,000	\$580,700
Water	\$2,486,072	\$2,404,121	\$2,699,152	\$1,723,505	\$1,937,559
Total Capital Projects	\$15,367,404	\$13,174,495	\$16,221,513	\$17,092,886	\$13,073,734

7. Information Technology Requirements

- Technology related capital projects are presented in the Information Technology Business Plan and may also appear for discussion purposes in the departmental business plans.

8. Incremental Packages

- Additional operating costs associated with new capital project requests are addressed as incremental package requests in the departmental business plans in keeping with the business planning guidelines.

9. Capital Works Program 2005 (Corporate)

Project Number	Project Name	Component	Funds Short Name	Estimate
1829	WATER IMPROVEMENT DEBT PAYMENT - 2005	Water	DCC ASSIST	\$94
		Water	DCC	\$9,320
1840	256 AT @ 130 AVE PUMP STATION REPLACE	Water	IN TRUST	\$137,500
		Water	WAT UTL	\$162,500
1850	117 AVE (207 - 210)	Water	WAT UTL	\$155,000
1852	DEWDNEY TRUNK RD (207 - LAITY) ADDITION	Water	WAT UTL	\$200,000
1853	DEWDNEY TRUNK ROAD @ LAITY PRV	Water	WAT UTL	\$110,000
1854	WATER SYSTEM SECURITY/SAFETY UPGRADES	Water	WAT UTL	\$15,000
1855	PRESSURE REDUCING VALVE UPGRADES	Water	WAT UTL	\$108,000
1856	EMERGENCY GENERATORS	Water	WAT UTL	\$145,000
1950	LANE N CALLIGAN AVE (223 - 224)	Water	WAT UTL	\$35,334
3037	DCC PAYMENT TO JOINT SUPPLY SYSTEM, 2005	Water	DCC	\$100,222
		Water	DCC ASSIST	\$1,012
3076	WATER NETWORK MODELLING - 2005	Water	WAT UTL	\$9,000
6071	236 ST PUMP STATION UPGRADE	Water	DCC	\$497,062
		Water	DCC ASSIST	\$5,020
		Water	WAT UTL	\$165,687
7625	GVWD RESERVOIR DEBT PAYMENT 2005	Water	DCC	\$46,657
		Water	DCC ASSIST	\$471
7976	117 AVE (210 - FRASERVIEW)	Water	WAT UTL	\$95,000
7977	117 AVE (FRASERVIEW - LAITY)	Water	WAT UTL	\$90,000
8006	WATER CONNECTIONS/TIE-INS 2005	Water	CONN REV W	\$148,193
8014	LOCAL IMPROVEMENT PROJECTS - WATER(2005)	Water	LIP	\$250,000
279	MASTER SEWER - DEBT RETIREMENT (2005)	Sewage	DCC	\$68,290

		Sewage	DCC ASSIST	\$689
1824	SANITARY IMPROVEMENT DEBT PAYMENT - 2005	Sewage	DCC	\$32,512
		Sewage	DCC ASSIST	\$328
1862	SANITARY UPGRADES CATCHMENTS B AND J	Sewage	SEW UTL	\$120,000
1863	EQUIPMENT PURCHASE - SHORING PLATES	Sewage	SEW UTL	\$20,000
1864	COOK AVE (210 - 212)	Sewage	SEW UTL	\$65,155
1865	KANAKA CREEK RD (232 - 240)	Sewage	SEW UTL	\$40,000
1891	225 ST (BYPASS - 116)	Sewage	SEW UTL	\$209,050
1892	ROYAL CRES (225 - 226)	Sewage	SEW UTL	\$281,120
3133	SEWAGE PS STANDBY GENERATORS	Sewage	SEW UTL	\$105,000
6181	RIVER ROAD (232 - MCKAY) STAGE 1	Sewage	DCC	\$637,585
		Sewage	DCC ASSIST	\$6,439
		Sewage	SEW UTL	\$112,515
8007	SANITARY SEWER CONNECTIONS 2005	Sewage	CONN REV S	\$72,500
8015	LOCAL IMPROVEMENT PROJECTS - SEWER(2005)	Sewage	LIP	\$500,000
675	240 ST (LOUGHEED - 102)	Drainage	DCC ASSIST	\$8,835
		Drainage	DCC	\$874,824
1751	123 AVE (FLETCHER - FULTON)	Drainage	GEN REV	\$44,693
1754	217 ST ROW (SOUTH OF 126) STAGE 1	Drainage	GEN REV	\$42,454
1819	DRAINAGE IMPROVEMENT DEBT PAYMENT - 2005	Drainage	DCC	\$27,861
		Drainage	DCC ASSIST	\$281
1866	232 ST (60M S DOGWOOD - DOGWOOD)	Drainage	IN TRUST	\$15,000
		Drainage	GEN REV	\$15,000
1867	218 ST (122 - RIDGEWAY)	Drainage	GEN REV	\$34,673
1868	WEST ST @ HAMMOND ROAD	Drainage	GEN REV	\$21,561
1869	COTTONWOOD DRIVE EAST OF 232 ST	Drainage	GEN REV	\$30,239
1870	272 ST @ BELL AVE	Drainage	GEN REV	\$13,057
2921	STORMWATER MANAGEMENT ALBION	Drainage	GEN REV	\$25,000
8009	DITCH ENCLOSURES 2005	Drainage	CONN REV G	\$16,440
8035	STORM SEWER CONNECTIONS - 2005	Drainage	CONN REV G	\$17,628
310	GARIBALDI ST (SAYERS CRES - 128)	Highways	GEN REV	\$46,337
631	118 AVE (238B - 240)	Highways	DCC	\$176,085
		Highways	GEN REV	\$19,565
		Highways	DCC ASSIST	\$1,778
696	ROTHSAY ST (DTR - 122)	Highways	GEN REV	\$33,500
1299	122 AVE (222 - 223)	Highways	GEN REV	\$41,000
1345	STONEHOUSE AVE (NORFOLK - 212)	Highways	GEN REV	\$15,950
1378	122 AVE (ACADIA - 220)	Highways	GEN REV	\$45,000
1468	WESTFIELD ST (MAPLE CRES - 207)	Highways	GEN REV	\$110,280
1533	LOUGHEED HWY (116 - 232)	Highways	TRANSLK C	\$200,000
		Highways	GEN REV	\$200,000
1771	102 AVE (248 - 256)	Highways	GEN REV	\$120,000
1773	DARTFORD ST (MAPLE CRESCENT - LORNE)	Highways	GEN REV	\$40,000

1871	ILLUMINATED STREET SIGNS PROGRAM PHASE 4	Highways	GEN REV	\$10,000
1876	230 ST (DTR - 122)	Highways	GEN REV	\$30,000
1877	SAFER SCHOOL TRAVEL PROGRAM	Highways	GEN REV	\$30,000
1883	128 AVE (GARIBALDI - WILLOW)	Highways	GEN REV	\$56,000
1884	LIGHTING IMPROVEMENTS	Highways	GEN REV	\$38,250
1885	BRIDGE REHABILITATION PROGRAM	Highways	GEN REV	\$190,000
1886	BIKELANE PROGRAM	Highways	GEN REV	\$39,000
		Highways	TRANSLK M	\$39,000
2061	232 ST @ ABERNETHY INTERSECTION UPGRADE	Highways	DCC ASSIST	\$959
		Highways	TRANSLK C	\$95,000
		Highways	DCC	\$95,000
2903	240 ST @ 104 AVE - TRAFFIC SIGNAL	Highways	DCC ASSIST	\$1,535
		Highways	DCC	\$152,000
		Highways	GEN REV	\$38,000
2976	118 AVE (231 ST - 50m E STEPHENS ST)	Highways	DCC ASSIST	\$636
		Highways	DCC	\$63,021
		Highways	GEN REV	\$42,014
3111	EQUIPMENT REPLACEMENT PROGRAM - 2005	Highways	MACH	\$496,789
8008	ACCESS CULVERTS 2005	Highways	CONN REV G	\$22,816
8016	LOCAL IMPROVEMENT PROJECTS - ROAD(2005)	Highways	LIP	\$250,000
8036	PRIVATE DRIVEWAY CROSSING - 2005	Highways	CONN REV G	\$19,843
1948	WHONNOCK LAKE ACQUISITION	Park Acq	DCC	\$450,000
		Park Acq	DCC ASSIST	\$4,545
6193	GREENBELT ACQUISITION	Park Acq	PARK RES	\$200,000
1710	MAPLE RIDGE SPRAY POOL	Park Imp't	GEN REV	\$144,600
1716	COTTONWOOD NORTH PARK DEVELOPMENT PH 3	Park Imp't	DCC	\$225,000
		Park Imp't	GEN REV	\$25,000
		Park Imp't	DCC ASSIST	\$2,272
6018	COTTONWOOD EAST PARK DEVELOPMENT	Park Imp't	DCC ASSIST	\$2,741
		Park Imp't	GEN REV	\$37,012
		Park Imp't	DCC	\$271,427
8024	TRAIL IMPROVEMENT PROGRAM	Park Imp't	GEN REV	\$30,000
1887	ENVIRONMENTALLY SENSITIVE AREA REVIEW	Gov't Services	GEN REV	\$75,000
1945	EQUIPMENT PURCHASE - LIBRARY	Gov't Services	GEN REV	\$6,500
1949	RAIN BARREL PROGRAM	Gov't Services	GEN REV	\$2,000
3095	RECYCLING DEPOT (PROCESS EQUIPMENT.2004)	Gov't Services	RECYCL	\$60,000
6202	RECYCLING DEPOT (BUILD. EXPANSION, 2005)	Gov't Services	RECYCL	\$50,000
6216	RECYCLING DEPOT (COLLECTION EQUIPMENT)	Gov't Services	RECYCL	\$83,859

7091	RECYCLING DEPOT (COLLECTION EQUIPMENT)	Gov't Services	RECYCL	\$25,000
7924	RECYCLING DEPOT EXPANSION	Gov't Services	RECYCL	\$200,000
7925	RECYCLING DEPOT EXPANSION	Gov't Services	RECYCL	\$50,000
7926	ORTHOPHOTO UPDATING	Gov't Services	GEN REV	\$30,000
8041	OPERATING CAPITAL MISCELLANEOUS 2005	Gov't Services	OP CAP	\$45,045
1451	EQUIPMENT PURCHASE MOBILE DISPATCH UNITS	Prot Service	FIRE C/A R	\$77,550
1928	EQUIPMENT REPLACEMENT - 4 INCH HOSE	Prot Service	FIRE	\$75,000
1929	EQUIPMENT REPLACEMENT - TRUCK BAY DOOR	Prot Service	FIRE	\$35,000
1930	EQUIPMENT REPLACEMENT - FIRE NOZZLES	Prot Service	FIRE	\$45,000
1931	EQUIPMENT UPGRADE - TELEPHONE SYSTEM	Prot Service	FIRE C/A R	\$27,500
1932	EQUIPMENT PURCHASE - FURNITURE	Prot Service	FIRE C/A R	\$27,000
1933	EQUIPMENT PURCHASE - SCBA UPGRADES	Prot Service	FIRE C/A R	\$96,615
1934	EQUIPMENT PURCHASE - FIRE HALL SIGN	Prot Service	FIRE C/A R	\$60,000
1938	EQUIPMENT RESTORATION - 1946 FIRE TRUCK	Prot Service	FIRE	\$50,000
4053	EQUIPMENT PURCHASE - FIRE HALL #4	Prot Service	FIRE C/A R	\$70,000
7054	FIREHALL #4 CONSTRUCTION	Prot Service	FIRE C/A R	\$787,500
		Prot Service	CAPWORKS	\$1,462,500
1780	LIFECYCLE PROGRAM ASSESSMENT LEISURE CEN	Rec Services	GEN REV	\$38,000
1781	EQUIPMENT PURCHASE - TRANSPORT TRAILOR	Rec Services	GEN REV	\$12,000
1939	CEMETERY MASTER PLAN	Rec Services	CEMETARY R	\$30,000
1946	EQUIPMENT PURCHASE - VEHICLE REC WEST	Rec Services	GEN REV	\$25,000
1556	FIBRE OPTIC NETWORK PHASE 1	Technology	GEN REV	\$50,000
1623	CORPORATE IN-HOUSE WEB SITE UPGRADE	Technology	GEN REV	\$50,000
1847	IS DEPT PRINTER	Technology	GEN REV	\$7,000
1848	ARCVIEW SOFTWARE LICENSES	Technology	GEN REV	\$14,000
1937	IT INFRASTRUCTURE IMPROVEMENTS	Technology	GEN REV	\$135,000
3633	DOCUMENT PROCESSING SYSTEM	Technology	GEN REV	\$50,000
8013	EQUIPMENT REPLACEMENT - INFO. SER.(2005)	Technology	IS EQP REP	\$1,419,129

Appendix

- The support documentation to the Capital Works Program (2005-2009) Business Plan includes information by service area regarding business purpose, legislative considerations, background information, policies, guiding principles, affiliations and partnerships, sustainability considerations and key funding sources as identified below. To be completed following the Corporate Management Team's endorsement of all business plans.

- Capital Works Program Support Document
 - Corporate Strategic Plan
 - Vision
 - Business Purpose
 - Value Statements
 - Focus Areas

 - Service Area Information for all business areas
 - Waterworks Engineering
 - Waste Service Engineering
 - Drainage and Terrain Engineering
 - Transportation and Traffic Engineering
 - Park Acquisition
 - Park Improvements
 - Recreational Services
 - Government Services
 - Technology
 - Protective Services – Fire
 - Protective Services – Police (RCMP)

 - Reports
 - Project Funding Summary (2005-2009)
 - Service Area Component Summary (2005-2009)
 - Projects and Funding List (2005-2009)

 - Maps and Charts
 - Areas and Sub-Areas Map
 - Project Mapping (2005)

Capital Works Program 2005 Business Plan



Corporate Framework
and Service Area Information

CAPITAL WORKS PROGRAM (2005 -2009)

**CORPORATE FRAMEWORK AND SERVICE AREA
INFORMATION**

Corporate Strategic Plan

Vision

Promoting a safe and livable community for our present and future citizens.

Business Purpose

The District of Maple Ridge is committed to the effective and efficient delivery of services for our customers and citizens.

Values

- Leadership: To encourage innovation, creativity, and initiative.
- Service: To be fair, friendly, and helpful.
- Reputation: To stress excellence, integrity, accountability, and honesty.
- Human Resources: To recognize that our people are our most valuable resource.
- Community: To respect and promote our community.

Strategic Focus Areas

Transportation

- Maintain and enhance an inter-modal transportation system within Maple Ridge to provide citizens with safe, efficient alternatives for the movement of individuals and goods.
- In cooperation with other regional stakeholders, identify improvements to the inter-municipal transportation system within Greater Vancouver.

Smart Managed Growth

- Develop a land use management process that is timely, open, inclusive, and consultative.
- Using the Official Community Plan, ensure growth is managed and establishes a balance of use types that is efficient and enhances the unique quality of life in Maple Ridge.
- Develop land use regulations, bylaws, procedures, and practices to implement the Official Community Plan.

CAPITAL WORKS PROGRAM

- Protect and manage existing municipal infrastructure through the development of appropriate plans to ensure development, maintenance and renewal of roads, sidewalks, water and sewer systems.

Environment

- Promote individual and community responsibility for the stewardship of natural resources.
- Identify environmental features (such as watercourses) and areas that require special recognition and management.
- In partnership with other levels of government, adjacent municipalities, and community groups, develop programs and projects to preserve and enhance the natural assets of Maple Ridge.
- Promote alternative modes (pedestrian, bike and public transit) of travel to reduce reliance on the automobile.

Inter-Government Relations/Partnerships

- Develop and maintain strong, positive working relationships with the provincial government; the Greater Vancouver Regional District; adjacent municipalities; and, the Katzie First Nations.
- Identify and promote the use of partnerships with public agencies; business; not-for-profit; community groups; and, volunteers to provide local government services in a cost-efficient manner.

Financial Management

- Identify methods to expand the tax base and generate non-tax revenue.
- Continue to use a user-pay philosophy.
- Provide high quality municipal services to our citizens and customers in a cost effective and efficient manner.
- Use a formal, business planning framework as a means to structure decision-making and guide resource allocation.
- Develop specific performance measures to ensure best value in delivery of local government services.

Community Relations

- Encourage citizen participation in local government and local government decision-making.
- Develop methods to communicate on a timely basis with citizens and community groups.
- Recognize and support the important contribution of volunteers in the community.

CAPITAL WORKS PROGRAM

Economic Development

- Use a formal economic development strategy as a means to structure a positive business and investment climate within Maple Ridge.
- Build a sustainable community that includes a balance of land use types.
- Identify, in consultation with community stakeholders, specific new employment opportunities.
- Develop a pro-business, customer-service oriented approach in the delivery of municipal services.
- Develop and maintain high quality community documentation and promotional material to attract investment and employment.

Safe and Livable Community

- Establish an emergency response and recovery plan in consultation with other public sector agencies, community groups, and other relevant stakeholders.
- Establish neighbourhood and community education programs to provide citizens with information and materials on emergency planning and procedures.
- Ensure development standards incorporate crime prevention, safety and security concepts.
- Develop mechanisms to encourage self-sufficiency with respect to emergency planning.
- Develop preventive as opposed to remediation initiatives in the delivery of fire and police services.
- Ensure that quality emergency services are delivered in a timely, effective and efficient manner through the development of multi-year business plans.
- In partnership with community groups, assist in the provision of leisure and cultural services to ensure access by all citizens.

Waterworks Engineering

Business Purpose

- To provide a safe supply of potable water for domestic and commercial uses and high quality infrastructure for domestic delivery and fire protection.

Legislative Considerations

- Health Act – Provincial
- Role of medical health officer
- Water Act - Provincial
- To regulate and manage the licensing and permitting of water use within the province
- Drinking Water Protection Regulation
- Private water supply – Medical Health Officer

CAPITAL WORKS PROGRAM

- Community Charter – Provincial – Part 2 (Municipal Purposes and Powers) Division 2 – Purposes and Fundamental Powers, Section 7 and 8
- Municipal purposes
- Fundamental powers

Background Information

- Water supply purchased from GVRD (Coquitlam Lake) and trunk distribution provided or upgraded under a Joint Supply Agreement.
- Water distribution system concept for the municipality was identified in 1978 GVWD Water Study (Dayton & Knight Ltd.) that is used to this day.
- Maintain 344 km of watermains, 1634 fire hydrants, 16,108 connections, 4806 valves, 1480 meters, 10 pump stations, 3 chlorine stations, 14 pressure reduction valves, and 8 reservoirs
- Maintain a SCADA monitoring system (moving to wireless technology)
- Provide water for domestic supply and fire protection purposes.
- Routine annual system maintenance including flushing and fire hydrant maintenance flushing of part of the distribution system each year.
- Water supply sampling stations throughout the distribution system is conducted on a monthly basis with samples tested by GVWD laboratories.
- Maintain Whonnock community well supplying water to rural area users
- Annual preparation of Water Quality Report and deployment of water quality information to web-site.
- A significant portion of the water distribution system is in good condition (ductile iron mains installed in past 15 years).
- Capital Works Program provides for the gradually replacement of asbestos cement watermains.
- Engineering Department is maintaining a water model to test, manage and schedule distribution system improvements
- Engineering and Operations Departments manage and respond to public inquires and request for service.

CAPITAL WORKS PROGRAM

Policies

- Maple Ridge Water Service Amending Bylaw No. 6123-2003
- Respecting the adjustment and updating of fees
- Maple Ridge Water Service Bylaw No. 6002-2001 (3-1)
- Respecting the waterworks system including the fixing of rates, charges, and conditions for the supply of water by the municipality
- Maple Ridge Official Community Plan Bylaw No. 5434-1996
- Policy #18 - Promote water conservation and participate in like programs
- Development Permit Area XXVI
- To address protection of natural environment in Schedule “H-2” and “H-3”
- To encourage siting and construction of utility services that will not negatively impact on the natural environment
- Schedule D – Major Public Utilities

CAPITAL WORKS PROGRAM

Guiding Principles

- Canadian Drinking Water Standards (Federal)
- Fire Underwriters of Survey (Water Supply for Fire Protection – A Guide to Recommended Practice)
- American Water Works Association Standards (AWWA)
- Maple Ridge Water Distribution Master Plan – October 2002 (Kerr, Wood, Leidal)
- Water distribution system Master Plan
- Joint Supply Scheme Agreement with the Greater Vancouver Water District
- National Water and Wastewater Benchmarking Initiative Report of June 2002 (Earth Tech Inc.)
- Public Works and Development Services Strategic Plan
- To promote the continued safety and livability of the community through effective planning and development, and the responsible design, construction and maintenance of roads and municipal services.
- Engineering and Operations Department Business Plans
- Capital Works Program Business Plan
- District of Maple Ridge Construction Specifications
- Workers Compensation Board Regulations
- Sustainability
- To provide services to meet the needs of the community today without compromising the ability of future generations to benefit from similar services.

Municipal Affiliations and Partnerships

- Greater Vancouver Water District (GVWD)
- Ministry of Health – Fraser Health Authority - Medical Health Officer

CAPITAL WORKS PROGRAM

Sustainability (Life-Cycle) Considerations

- Watermains made of ductile iron – having a service life of 70 years
- Watermains made of cast iron – having a service life of 50 years
- Watermains made of asbestos-cement – having a service life of 30 years
- Valves, bends, fittings, appurtenances – having a service life of 50 years
- Pumping Stations – having a service life of 50 years
- Reservoirs – having a service life of 50 years
- Service connections – having a service life of 50 years
- Replacement value of the waterworks infrastructure is approximately \$93 million.

Service Impact Area

- Urban Area
- Sub-Areas
- West Maple Ridge, Laityview, North Central Maple Ridge, Southeast Central Maple Ridge, Cottonwood, Albion, Albion (Industrial), Silver Valley, Smith Avenue.
- Rural Area (portions)
- Neighbourhoods
- Yennadon East, Websters Corner, Whonnock (portions)
- Dewdney Trunk Road Corridor bounded by 240 Street, 268 Street, 116 Avenue, 125 Avenue.
- Whispering Falls (260 Street, 264 Street, 124 Avenue, 128 Avenue)
- Blue Mountain (256 Street from 130 Avenue to 141 Avenue)
- Rothsay Heights (269 Street, 272 Street, DTR, 123 Avenue)

CAPITAL WORKS PROGRAM

- Garibaldi Heights (McNutt Road, Sayers Crescent, 124 Avenue, 128 Avenue)

Key Funding Sources

- Development Cost Charges
- New and upgraded trunk distribution pipes, and major facilities and structures in support of development
- Provision of watermain over-sizing in support of development
- Provision of watermain assistance for construction fronting OCP designated Park, Greenbelt and School
- Water Utility
- Replacement and rehabilitation of the existing water distribution system and appurtenances
- Operations Department Operating Budget
- Administration of the department
- Maintenance and repair of infrastructure
- Local Improvement
- Annual short-term borrowing in support of resident initiated watermain extensions

BUSINESS PLAN - 2005

SERVICE AREA

Waterworks Engineering

<u>PROJECTS:</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
WATER IMPROVEMENT DEBT PAYMENT - 2005	1829	MUNICIPAL HALL	PAYMENT
256 AT @ 130 AVE PUMP STATION REPLACE	1840	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
117 AVE (207 - 210)	1850	LAITYVIEW	REPLACE-REHABILITATE
DEWDNEY TRUNK RD (207 - LAITY) ADDITION	1852	LAITYVIEW	REPLACE-REHABILITATE
DEWDNEY TRUNK ROAD @ LAITY PRV	1853	LAITYVIEW	REPLACE-REHABILITATE
WATER SYSTEM SECURITY/SAFETY UPGRADES	1854	MAPLE RIDGE (URBAN)	REPLACE-REHABILITATE
PRESSURE REDUCING VALVE UPGRADES	1855	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
EMERGENCY GENERATORS	1856	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
LANE N CALLIGAN AVE (223 - 224)	1950	CORE	REPLACE-REHABILITATE
DCC PAYMENT TO JOINT SUPPLY SYSTEM, 2005	3037	MUNICIPAL HALL	PAYMENT
WATER NETWORK MODELLING - 2005	3076	MUNICIPAL HALL	STUDY - ANALYSIS
236 ST PUMP STATION UPGRADE	6071	SILVER VALLEY	REPLACE-REHABILITATE
GVWD RESERVOIR DEBT PAYMENT 2005	7625	MUNICIPAL HALL	PAYMENT
117 AVE (210 - FRASERVIEW)	7976	LAITYVIEW	REPLACE-REHABILITATE
117 AVE (FRASERVIEW - LAITY)	7977	LAITYVIEW	REPLACE-REHABILITATE
WATER CONNECTIONS/TIE-INS 2005	8006	MUNICIPAL HALL	NEW INFRASTRUCTURE
LOCAL IMPROVEMENT PROJECTS - WATER(2005)	8014	MUNICIPAL HALL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$1,290,521
Contract Work	\$1,039,352
Payments	\$156,199
Total	\$2,486,072

REVENUE SOURCE

Dev. Cost Charge	\$653,261
General Revenue	\$6,597
Water Utility	\$1,290,521
Other	\$535,693
Total	\$2,486,072

PROJECT FOCUS

Pump station & trunk distribution improvements

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waterworks Management	Quantity	Replacement Value	Sustainability Provision
Watermains	344 km @ \$200	\$60,200,000	\$1,204,000
Pump Stations	11 @ \$350,000	\$3,850,000	\$77,000
Reservoirs	8	\$6,000,000	\$120,000
Fire Hydrants	1625 @ \$3000	\$4,875,000	\$97,500
Valves	4806	\$1,922,400	\$38,448
Water Connections	16108 @ \$1500	\$16,108,000	\$322,160
		\$92,955,400	\$1,859,108

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Waterworks Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
LAITY ST (117 - LOUGHEED)	13	LAITYVIEW	REPLACE-REHABILITATE
136 AVE @ 24200 ROCKRIDGE RESERVOIR PH 2	82	SILVER VALLEY	NEW INFRASTRUCTURE
260 ST (118 - DTR)	1397	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
210 ST (116 AVE - 118 AVE)	1403	LAITYVIEW	REPLACE-REHABILITATE
116 AVE (STEEVE ST - 210 ST)	1404	LAITYVIEW	REPLACE-REHABILITATE
LOCAL IMPROVEMENT PROJECTS - WATER(2006)	1491	MUNICIPAL HALL	NEW INFRASTRUCTURE
WATER CONNECTIONS/TIE-INS - 2006	1496	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
WATER IMPROVEMENT DEBT PAYMENT- 2006	1830	MUNICIPAL HALL	REPLACE-REHABILITATE
118 AVE (STEEVES - 210)	1851	LAITYVIEW	REPLACE-REHABILITATE
GRAVES ST (STONEY - MCFARLANE)	1857	LAITYVIEW	REPLACE-REHABILITATE
209 ST (STONEY - MACFARLANE)	1858	LAITYVIEW	REPLACE-REHABILITATE
208 ST (90M S MCFARLANE - MCFARLANE)	1859	LAITYVIEW	REPLACE-REHABILITATE
STONEY AVE (GRAVES - 209)	1860	LAITYVIEW	REPLACE-REHABILITATE
THORNE AVE (GRAVES - 80 M EAST GRAVES)	1861	LAITYVIEW	REPLACE-REHABILITATE
MCFARLANE AVE (GRAVES - 209)	1893	LAITYVIEW	REPLACE-REHABILITATE
STEEVES ST (RIVER RD - CAMWOOD)	2768	LAITYVIEW	REPLACE-REHABILITATE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,307,416	Dev. Cost Charge	\$688,112
Contract Work	\$894,210	General Revenue	\$6,948
Payments	\$202,495	Water Utility	\$1,307,416
		Other	\$401,645
Total	\$2,404,121	Total	\$2,404,121

PROJECT FOCUS

Water distribution upgrading Laityview Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waterworks Management	Quantity	Replacement Value	Sustainability Provision
Watermains	344 km @ \$200	\$60,200,000	\$1,204,000
Pump Stations	11 @ \$350,000	\$3,850,000	\$77,000
Reservoirs	8	\$6,000,000	\$120,000
Fire Hydrants	1625 @ \$3000	\$4,875,000	\$97,500
Valves	4806	\$1,922,400	\$38,448
Water Connections	16108 @ \$1500	\$16,108,000	\$322,160
		\$92,955,400	\$1,859,108

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Waterworks Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
LAITY ST (LOUGHEED - DTR)	3025	LAITYVIEW	REPLACE-REHABILITATE
DCC PAYMENT TO JOINT SUPPLY SYSTEM, 2006	3038	MUNICIPAL HALL	PAYMENT
WATER NETWORK MODELLING - 2006	3077	MUNICIPAL HALL	STUDY-ANALYSIS
232 ST (116 - SLAGER)	6157	COTTONWOOD	REPLACE-REHABILITATE
GVWD RESERVOIR DEBT PAYMENT 2006	7626	MUNICIPAL HALL	PAYMENT

PROJECT DISTRIBUTION

In-House Work	\$1,307,416
Contract Work	\$894,210
Payments	\$202,495
Total	\$2,404,121

REVENUE SOURCE

Dev. Cost Charge	\$688,112
General Revenue	\$6,948
Water Utility	\$1,307,416
Other	\$401,645
Total	\$2,404,121

PROJECT FOCUS

Water distribution upgrading Laityview Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waterworks Management	Quantity	Replacement Value	Sustainability Provision
Watermains	344 km @ \$200	\$60,200,000	\$1,204,000
Pump Stations	11 @ \$350,000	\$3,850,000	\$77,000
Reservoirs	8	\$6,000,000	\$120,000
Fire Hydrants	1625 @ \$3000	\$4,875,000	\$97,500
Valves	4806	\$1,922,400	\$38,448
Water Connections	16108 @ \$1500	\$16,108,000	\$322,160
		\$92,955,400	\$1,859,108

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Waterworks Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
263 ST (440 RESERVOIR - STAGE II)	3	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
119 AVE (227-228)	27	DOWNTOWN CORE	REPLACE-REHABILITATE
222 ST (119 - DTR)	689	DOWNTOWN CORE	REPLACE-REHABILITATE
224 ST (116 - NORTH AVE)	699	CORE	REPLACE-REHABILITATE
233 ST (132 - 150M N 132)	974	SILVER VALLEY	REPLACE-REHABILITATE
MORRIS ST (110M S 117 - 117)	1350	LAITYVIEW	REPLACE-REHABILITATE
224 ST (NORTH AVE - 119)	1565	DOWNTOWN CORE	REPLACE-REHABILITATE
WATER PUMP STATION SYNC (Q3,Q4,Q5,Q6)	1600	MAPLE RIDGE (URBAN)	REPLACE-REHABILITATE
WATER CONNECTIONS/TIE-INS - 2007	1635	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
EQUIPMENT PURCHASE - ENCLOSED TRAILOR	1733	MUNICIPAL HALL	NEW EQUIPMENT
WATER IMPROVEMENT DEBT PAYMENT - 2007	1831	MUNICIPAL HALL	PAYMENT
LOCAL IMPROVEMENT PROJECTS - WATER(2007)	1906	MUNICIPAL HALL	PAYMENT
DUNBAR ST (DTR - 122)	2769	LAITYVIEW	LAITYVIEW
DCC PAYMENT TO JOINT SUPPLY SYSTEM, 2007	3039	MUNICIPAL HALL	PAYMENT
WATER NETWORK MODELLING - 2007	3078	MUNICIPAL HALL	STUDY - ANALYSIS
CLIFF AVE (CARSHILL ST - 222 ST)	3629	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
112 AVE (240 - 245)	7159	ALBION - AREA A	REPLACE-REHABILITATE
GVWD RESERVOIR DEBT PAYMENT 2007	7627	MUNICIPAL HALL	PAYMENT

PROJECT DISTRIBUTION

In-House Work	\$1,266,918
Contract Work	\$1,243,586
Payments	\$158,648
Total	\$2,669,152

REVENUE SOURCE

Dev. Cost Charge	\$987,648
General Revenue	\$9,973
Water Utility	\$1,266,918
Other	\$404,613
Total	\$2,669,152

PROJECT FOCUS

Water distribution system upgrading throughout
Urban Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

	Quantity	Replacement Value	Sustainability Provision
Waterworks Management			
Watermains	344 km @ \$200	\$60,200,000	\$1,204,000
Pump Stations	11 @ \$350,000	\$3,850,000	\$77,000
Reservoirs	8	\$6,000,000	\$120,000
Fire Hydrants	1625 @ \$3000	\$4,875,000	\$97,500
Valves	4806	\$1,922,400	\$38,448
Water Connections	16108 @ \$1500	\$16,108,000	\$322,160
		\$92,955,400	\$1,859,108

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Waterworks Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
BROWN AVE (FRASER-228)	88	DOWNTOWN CORE	NEW INFRASTRUCTURE
116 AVE (232 ST - COTTONWOOD DRIVE)	90	COTTONWOOD	REPLACE-REHABILITATE
117 AVE (DARBY - 216)	688	LAITYVIEW	REPLACE-REHABILITATE
223 ST (RIVER RD - NORTH AVE)	698	CORE	REPLACE-REHABILITATE
FERGUSON AVE (248 - 250)	977	MAPLE RIDGE (URBAN)	REPLACE-REHABILITATE
DEWDNEY TRUNK RD (232 - 240)	1076	COTTONWOOD	REPLACE-REHABILITATE
236 ST (FERN CRES - 132)	1596	SILVER VALLEY	REPLACE-REHABILITATE
WATER CONNECTIONS/TIE-INS - 2008	1784	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
WATER IMPROVEMENT DEBT PAYMENT - 2008	1832	MUNICIPAL HALL	PAYMENT
DCC PAYMENT TO JOINT SUPPLY SYSTEM, 2008	1833	MUNICIPAL HALL	PAYMENT
LOCAL IMPROVEMENT PROJECTS - WATER(2008)	1907	MUNICIPAL HALL	NEW INFRASTRUCTURE
231 ST (117 AVE - 118 AVE)	2970	SOUTH EAST CENTRAL	NEW INFRASTRUCTURE
WATER NETWORK MODELLING - 2008	3079	MUNICIPAL HALL	STUDY - ANALYSIS
COTTONWOOD DR (115 - 116)	7556	COTTONWOOD	REPLACE-REHABILITATE
ROTHSAY HEIGHTS RESERVOIR IMPROVEMENT	7996	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$1,201,628
Contract Work	\$408,429
Payments	\$113,448
Total	\$1,723,505

REVENUE SOURCE

Dev. Cost Charge	\$113,448
General Revenue	\$1,145
Water Utility	\$1,201,628
Other	\$407,284
Total	\$1,723,505

PROJECT FOCUS

Water distribution system upgrading throughout Urban Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waterworks Management	Quantity	Replacement Value	Sustainability Provision
Watermains	344 km @ \$200	\$60,200,000	\$1,204,000
Pump Stations	11 @ \$350,000	\$3,850,000	\$77,000
Reservoirs	8	\$6,000,000	\$120,000
Fire Hydrants	1625 @ \$3000	\$4,875,000	\$97,500
Valves	4806	\$1,922,400	\$38,448
Water Connections	16108 @ \$1500	\$16,108,000	\$322,160
		\$92,955,400	\$1,859,108

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2009

SERVICE AREA:

Waterworks Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
216 ST (124 - 128)	16	LAITYVIEW	REPLACE-REHABILITATE
203 ST (THORNE - LOUGHEED)	525	WEST MAPLE RIDGE	REPLACE-REHABILITATE
RIVER RD (RIVERBEND - 223)	684	CORE	REPLACE-REHABILITATE
EXETER AVE (SPRING CRES - E OF 216)	685	LAITYVIEW	REPLACE-REHABILITATE
203 ST (POWELL - 132)	1337	WEST MAPLE RIDGE	REPLACE-REHABILITATE
LORNE AVE (KINSTON - PRINCESS)	1387	WEST MAPLE RIDGE	REPLACE-REHABILITATE
DCC PAYMENT TOJOINT SUPPLY SYSTEM, 2009	1834	MUNICIPAL HALL	PAYMENT
WATER CONNECTIONS/TIE-INS - 2009	1897	MUNICIPAL HALL	REPLACE-REHABILITATE
LOCAL IMPROVEMENT PROJECTS - WATER(2009)	1908	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
141 AVE @ 232 ST PRV	2865	SILVER VALLEY	NEW EQUIPMENT
INDUSTRIAL AVE (102 - 600M N 104)	3011	ALBION - AREA A	REPLACE-REHABILITATE
123 AVE (203 - 206)	3013	WEST MAPLE RIDGE	REPLACE-REHABILITATE
123 AVE (206 - 208)	3023	WEST MAPLE RIDGE	REPLACE-REHABILITATE
WATER NETWORK MODELLING - 2009	3080	MUNICIPAL HALL	STUDY-ANALYSIS
110 AVE (240 - 243)	7158	ALBION - AREA A	REPLACE-REHABILITATE

PROJECT DISTRIBUTION

In-House Work	\$1,071,752
Contract Work	\$765,585
Payments	\$100,222
Total	\$1,937,559

REVENUE SOURCE

Dev. Cost Charge	\$396,307
General Revenue	\$59,500
Water Utility	\$1,071,752
Other	\$410,000
Total	\$1,937,559

PROJECT FOCUS

Water distribution system upgrading throughout Urban Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

	Quantity	Replacement Value	Sustainability Provision
Waterworks Management			
Watermains	344 km @ \$200	\$60,200,000	\$1,204,000
Pump Stations	11 @ \$350,000	\$3,850,000	\$77,000
Reservoirs	8	\$6,000,000	\$120,000
Fire Hydrants	1625 @ \$3000	\$4,875,000	\$97,500
Valves	4806	\$1,922,400	\$38,448
Water Connections	16108 @ \$1500	\$16,108,000	\$322,160
		\$92,955,400	\$1,859,108

CAPITAL WORKS PROGRAM

Wastewater (Sewer) Engineering

Business Purpose - Liquid Waste (Sewage Collection)

- To provide dependable waste management services including from a liquid waste perspective, a sanitary sewer collection system and facilities for transmission to Regional District facilities by means of safe and high quality infrastructure.
- To provide and maintain leachate and methane collection and disposal at the Cottonwood Drive site of the *Old Landfill*.

Business Purpose - Solid Waste (Garbage Collection and Green Waste Disposal and Recycling)

- To support the partnership with Greater Vancouver Regional District for solid waste and *Green Waste* disposal at the site of the GVRD Transfer Station located at 10092 – 236 Street
- To perform limited *Green Waste* curbside chipping in selective neighbourhoods of the District.

Legislative Considerations

- Local Government Act – Provincial – Division 6 (Sewers) – Section 540
- Special drainage and sewerage authority
- Local Government Act – Provincial – Division 7 (Waste and Recycling) – Section 550
- Authority in relation to waste disposal and recycling services
- Community Charter – Provincial – Division 11 (Other Powers) Section 69
- Specific authority in relation to sewage
- Health Act – Provincial
- Sewage Disposal Regulations
- Private sewage system – Medical Health Officer

CAPITAL WORKS PROGRAM

- Environmental Management Act - Provincial
- To regulate the introduction of a waste into the environment meaning the depositing of waste on or allowing or causing the waste to flow or seep on or into any land or water or allowing or causing the waste to be emitted into the air.

Background Information - Liquid Waste (Sewage Collection)

- Municipal collection system discharges to Greater Vancouver Sewerage and Drainage District (GVS&DD) pump station on-route to the regional Annacis Island sewerage Treatment Plant in Delta, BC
- Interceptors sewers and trunk sewers are constructed through the established portion of the Urban Area to the border of the emerging urban sub-areas of Albion and Silver Valley
- Development activity provides extensions from trunk sewers
- Maintain 11 km trunk collection system, 235 km sanitary sewer, 11 km of forcemain, 13,854 connections & 24 pump stations
- Maintain a SCADA monitoring system
- Annual video inspection and monitoring of a portion of collection system
- Engineering Department is developing a *Sansys* sewer model (software) to test, manage and schedule collection system improvements
- Maintain leachate pond, pump station, gas collection system and burner
- Engineering and Operations Departments manage and respond to public inquires and request for service

Background Information - Solid Waste (Garbage Collection, Green Waste Disposal and Recycling)

- In partnership with the Greater Vancouver Regional District, to support the use of their transfer station located at 10092 - 236 Street as the solid waste (domestic garbage) and green waste disposal site for the District.
- In partnership with the Ridge Meadows Recycling Society to provide recycling services, education on environmental issues, entry-level employment and training opportunities, as well as support for work and training for adults with development disabilities

CAPITAL WORKS PROGRAM

- To provide terrain management and site security at the decommissioned site of the *Old Landfill* on Cottonwood Drive

Policies - Liquid Waste (Sewage Collection)

- Liquid Waste Management Plan (GVRD)
- Guidelines and requirements governing member municipalities liquid waste disposal operations and payments to GVRD
- Maple Ridge Sanitary Sewer Regulation Bylaw No. 691-1964 (4-1)
- To regulate connections to the common sewers
- Maple Ridge Sewer Rate Amending Bylaw No. 6124-2003
- Respecting the adjustment and updating of sewer charges for all users.
- Maple Ridge Sewer Rate Bylaw No. 5960-2001 (4-2)
- To impose a charge for use of sewer system
- Maple Ridge Official Community Plan Bylaw No. 5434-1996
- Policy #20 - Promote acceptable alternative sewage and waste water treatment methods
- Development Permit Area XXVI
- To address protection of natural environment in Schedule "H-2" and "H-3"
- To encourage siting and construction of utility services that will not negatively impact on the natural environment

CAPITAL WORKS PROGRAM

- Schedule D – Major Public Utilities

Policies - Solid Waste (Garbage Collection, Green Waste Disposal and Recycling)

- Maple Ridge Garbage Disposal Regulation Bylaw No. 4222-1989 (6-1)
- To regulate the disposal of garbage and waste material

Guiding Principles

- Public Works and Development Services Strategic Plan
- To promote the continued safety and livability of the community through effective planning and development, and the responsible design, construction and maintenance of roads and municipal services.
- Engineering and Operations Department Business Plans
- Capital Works Program Business Plan
- Recycling Society Business Plan
- Maple Ridge Master Sanitary Plan – June 2002 (Earth Tech Inc.)
- National Water and Wastewater Benchmarking Initiative Report of June 2002 (Earth Tech Inc.)
- Liquid Waste Management Plan of February 2001 by Greater Vancouver Regional District
- To understand the goals and objectives of this initiative
- District of Maple Ridge Construction Specifications
- Terms and conditions of the sewerage disposal agreement with the Greater Vancouver Sewerage and Drainage District.
- Terms and conditions of the *Green Waste* disposal agreement with the Greater Vancouver Regional District.
- Participate in Solid Waste Management through a fee-for-service support of the Recycling Society's activities at GVRD Transfer Station

CAPITAL WORKS PROGRAM

- Workers Compensation Board Regulations
- Sustainability
- To provide services to meet the needs of the community today without compromising the ability of future generations to benefit from similar services.

Municipal Affiliations and Partnerships

- Greater Vancouver Regional District (GVRD)
- Greater Vancouver Sewerage and Drainage District (GVS&DD)
- Ridge Meadows Recycling Society
- Ministry of Health –Fraser Health Authority

Sustainability (Life-Cycle) Liquid Waste Considerations

- Sanitary sewers made of asbestos-cement – having service life 30 years
- Sanitary sewers made of PVC – having a service life 50 years
- Manholes and other related appurtenances – having a service life of 50 years
- Pumping Stations – having a service life of 50 years
- Service connections – having a service life of 50 years
- Replacement value of the waste services infrastructure is approximately \$102 million.

Service Impact Area – Liquid Waste

- Properties within Sewer Area “A” (mapped in Engineering Dept.).
- Urban Area (as designated in Official Community Plan)
- Rural Area (portion only Yennadon East)
- Dewdney Trunk Road (240 Street – 243 Street)

CAPITAL WORKS PROGRAM

- 243 Street (Dewdney Trunk Road – 122 Avenue)

Key Funding Sources

- Development Cost Charges
- New and upgraded trunk collection system to the border of urban sub-areas and major facilities/structures in support of development
- Provision of sanitary sewer assistance for construction fronting OCP designated Park, Greenbelt and School
- Sewer Utility
- Replacement and rehabilitation of the existing sewage collection system and appurtenances
- Operations Department Operating Budget
- Administration of the department
- Maintenance and repair of infrastructure

- Local Improvement
- Annual short-term borrowing in support of funding local improvement projects
- Recycling Capital Acquisition Reserve
- Capital assets in support of the recycling operation

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Waste Services Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
MASTER SEWER - DEBT RETIREMENT (2005)	279	MUNICIPAL HALL	PAYMENT
SANITARY IMPROVEMENT DEBT PAYMENT - 2005	1824	MUNICIPAL HALL	PAYMENT
SANITARY UPGRADES CATCHMENTS B AND J	1862	MUNICIPAL HALL	STUDY-ANALYSIS
EQUIPMENT PURCHASE - SHORING PLATES	1863	MUNICIPAL HALL	NEW EQUIPMENT
COOK AVE (210 - 212)	1864	LAITYVIEW	REPLACE-REHABILITATE
KANAKA CREEK RD (232 - 240)	1865	COTTONWOOD	NEW INFRASTRUCTURE
225 ST (BYPASS - 116)	1891	SOUTH EAST CENTRAL	NEW INFRASTRUCTURE
ROYAL CRES (225 - 226)	1892	DOWNTOWN CORE	REPLACE-REHABILITATE
SEWAGE PS STANDBY GENERATORS	3133	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
RIVER ROAD (232 - MCKAY) STAGE 1	6181	ALBION INDUSTRIAL	NEW INFRASTRUCTURE
SANITARY SEWER CONNECTIONS 2005	8007	MUNICIPAL HALL	NEW INFRASTRUCTURE
LOCAL IMPROVEMENT PROJECTS - SEWER(2005)	8015	MUNICIPAL HALL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$952,840	Dev. Cost Charge	\$738,387
Contract Work	\$1,214,541	General Revenue	\$7,456
Payments	\$103,802	Sewer Utility	\$952,840
		Other	\$572,500
Total	\$2,271,183	Total	\$2,271,183

PROJECT FOCUS

Sewer capacity upgrade in Albion Industrial Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waste Services	Quantity	Replacement Value	Sustainability Provision
Sanitary sewer mains	235 km @ \$325	\$76,375,000	\$1,909,375
Pumping Stations	24 @ \$200,000	\$4,800,000	\$96,000
Sewer connections	13,800 @ \$1500	\$20,700,000	\$414,000
		\$101,875,000	\$2,419,375

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Waste Services Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
LANE N SELKIRK (226 - 227)	214	DOWNTOWN CORE	REPLACE-REHABILITATE
MASTER SEWER - DEBT RETIREMENT (2006)	280	MUNICIPAL HALL	PAYMENT
EQUIP PURCHASE - FLUSHER TR, OP & HELP	321	MUNICIPAL HALL	NEW EQUIPMENT
LOCAL IMPROVEMENT PROJECTS - SEWER(2006)	1492	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
SANITARY SEWER CONNECTIONS - 2006	1497	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
SOUTH SLOPE INTERCEPTOR I/I RE-EVALUATE	1586	MUNICIPAL HALL	STUDY-ANALYSIS
SANITARY NETWORK SUBCATCHMENT A STUDY	1588	MUNICIPAL HALL	STUDY-ANALYSIS
CLIFF AVE @ CLIFF PLACE PUMP STATION	1592	MAPLE RIDGE (RURAL)	NEW EQUIPMENT
WHARF ST @ HAZELLWOOD PUMP STATION	1593	MUNICIPAL HALL	WEST MAPLE RIDGE
SANITARY IMPROVEMENT DEBT PAYMENT - 2006	1825	MUNICIPAL HALL	PAYMENT
SANITARY SEWER MODELLING UPDATE - 2006	3064	MUNICIPAL HALL	STUDY-ANALYSIS
SEWAGE SYSTEM REHABILITATION	7906	MUNICIPAL HALL	REPLACE-REHABILITATE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$815,932	Dev. Cost Charge	\$68,841
Contract Work	-\$884,773	General Revenue	\$695
Payments	\$68,841	Sewer Utility	\$815,932
		Other	\$574,445
Total	\$1,459,913	Total	\$1,459,913

PROJECT FOCUS

Collection system investigation and assessment

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waste Services	Quantity	Replacement Value	Sustainability Provision
Sanitary sewer mains	235 km @ \$325	\$76,375,000	\$1,909,375
Pumping Stations	24 @ \$200,000	\$4,800,000	\$96,000
Sewer connections	13,800 @ \$1500	\$20,700,000	\$414,000
		\$101,875,000	\$2,419,375

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Waste Services Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
LIQUID WASTE MANAGEMENT PLAN C19 REPAIR	1579	MUNICIPAL HALL	STUDY-ANALYSIS
SANITARY NETWORK SUBCATCHMENT J STUDY	1589	MUNICIPAL HALL	STUDY-ANALYSIS
SANITARY SEWER CONNECTIONS - 2007	1636	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
MASTER SEWER - DEBT RETIREMENT (2007)	1801	MUNICIPAL HALL	PAYMENT
SANITARY IMPROVEMENT DEBT PAYMENT - 2007	1826	MUNICIPAL HALL	PAYMENT
LOCAL IMPROVEMENT PROJECTS - SEWER(2007)	1903	NEW INFRASTRUCTURE	NEW INFRASTRUCTURE
SANITARY SEWER MODELLING UPDATE - 2007	3065	MUNICIPAL HALL	STUDY-ANALYSIS
SEWAGE SYSTEM REHABILITATION 2007	7908	NEW INFRASTRUCTURE	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$996,500
Contract Work	\$576,853
Payments	\$73,362
Total	\$1,646,715

REVENUE SOURCE

Dev. Cost Charge	\$73,362
General Revenue	\$740
Sewer Utility	\$996,500
Other	\$576,113
Total	\$1,646,715

PROJECT FOCUS

Sewage collection system evaluation

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waste Services	Quantity	Replacement Value	Sustainability Provision
Sanitary sewer mains	235 km @ \$325	\$76,375,000	\$1,909,375
Pumping Stations	24 @ \$200,000	\$4,800,000	\$96,000
Sewer connections	13,800 @ \$1500	\$20,700,000	\$414,000
		\$101,875,000	\$2,419,375

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Waste Services Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
BROWN AVE (FRASER-227)	231	DOWNTOWN CORE	NEW INFRASTRUCTURE
SANITARY SEWER CONNECTIONS - 2008	1785	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
SANITARY IMPROVEMENT DEBT PAYMENT - 2008	1827	MUNICIPAL HALL	PAYMENT
LOCAL IMPROVEMENT PROJECTS - SEWER(2008)	1904	MUNICIPAL HALL	NEW INFRASTRUCTURE
225 ST PUMP STATION UPGRADE (PHASE 3)	2739	SOUTH EAST CENTRAL	NEW EQUIPMENT
SANITARY SEWER MODELLING UPDATE - 2008	3066	MUNICIPAL HALL	STUDY-ANALYSIS
SEWAGE SYSTEM REHABILITATION 2008	7909	MAPLE RIDGE (URBAN)	REPLACE-REHABILITATE
225 ST PUMP STATION PUMP UPGRADE	8001	SOUTH EAST CENTRAL	NEW EQUIPMENT

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,020,611	Dev. Cost Charge	\$329,783
Contract Work	\$250,000	General Revenue	
Payments	\$0	Sewer Utility	\$863,217
		Other	\$77,611
Total	\$1,270,611	Total	\$1,270,611

PROJECT FOCUS

Sewage collection system upgrading Downtown Core

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waste Services	Quantity	Replacement Value	Sustainability Provision
Sanitary sewer mains	235 km @ \$325	\$76,375,000	\$1,909,375
Pumping Stations	24 @ \$200,000	\$4,800,000	\$96,000
Sewer connections	13,800 @ \$1500	\$20,700,000	\$414,000
		\$101,875,000	\$2,419,375

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2009

SERVICE AREA

Waste Services Engineering

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
LANE S LOUGHEED (223 - 224)	209	DOWNTOWN CORE	REPLACE-REHABILITATE
LANE S SELKIRK (222 - 223)	212	DOWNTOWN CORE	REPLACE-REHABILITATE
LANE N SELKIRK (222 - 224)	215	DOWNTOWN CORE	REPLACE-REHABILITATE
LANE N 119 (222 - 224)	216	DOWNTOWN CORE	REPLACE-REHABILITATE
LANE N MCINTOSH (223 - 224)	219	DOWNTOWN CORE	REPLACE-REHABILITATE
223 ST (119 - DTR)	222	DOWNTOWN CORE	REPLACE-REHABILITATE
224 ST (LANE N NORTH-LOUGHEED)	223	DOWNTOWN CORE	REPLACE-REHABILITATE
224 ST (DTR - BROWN)	224	DOWNTOWN CORE	REPLACE-REHABILITATE
SOUTH SLOPE INTERCEPTOR MONITORING	1585	MUNICIPAL HALL	STUDY-ANALYSIS
SANITARY NETWORK SUBCATCHMENT K STUDY	1590	MUNICIPAL HALL	STUDY-ANALYSIS
COTTONWOOD LANDFILL CLOSURE	1628	COTTONWOOD	REPLACE-REHABILITATE
SANITARY SEWER CONNECTIONS - 2009	1898	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
LOCAL IMPROVEMENT PROJECTS - SEWER(2009)	1905	MUNICIPAL HALL	NEW INFRASTRUCTURE
SANITARY SEWER MODELLING UPDATE - 2009	3067	MUNICIPAL HALL	STUDY-ANALYSIS

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$770,003	Dev. Cost Charge	\$0
Contract Work	\$579,110	General Revenue	\$0
Payments	\$0	Sewer Utility	\$770,003
		Other	\$579,110
Total	\$1,349,113	Total	\$1,349,113

PROJECT FOCUS

Sewage collection system upgrading Downtown Core

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Waste Services	Quantity	Replacement Value	Sustainability Provision
Sanitary sewer mains	235 km @ \$325	\$76,375,000	\$1,909,375
Pumping Stations	24 @ \$200,000	\$4,800,000	\$96,000
Sewer connections	13,800 @ \$1500	\$20,700,000	\$414,000
		\$101,875,000	\$2,419,375

Drainage and Terrain Engineering

Business Purpose

- To provide effective drainage collection systems and facilities to protect and/or mitigate flooding of property other than property within the unprotected areas of the floodplain in an environmentally sensitive manner.

Legislative Considerations

- Fisheries Act - Federal
- To protect fish and fish habitat in “waters frequented by fish” including protection from any work in or near these waters.
- Water Act - Provincial
- To regulate changes in and about watercourses.
- Wildlife Act - Provincial
- To regulate access to or the management and protection of wildlife (including fish).
- Local Government Act – Provincial – Division 4.1 (Special Municipal Powers) Section 315.1 and 315.2
- Irrigation services
- District municipality drainage works
- Local Government Act – Provincial – Division 6 (Storm Drains and Drainage) – Section 540 - 548
- Special drainage and sewerage authority
- Watercourses in drainage system
- Requirements respecting drainage works
- Appropriation of stream channel or bed

CAPITAL WORKS PROGRAM

- Control of drainage
- Remedial authority in relation to drainage and dikes
- Interjurisdictional watercourses
- Community Charter – Provincial – Division 11 (Other Powers) Section 69 – 71
- Specific authority in relation to drainage and dikes
- Drainage control
- Orders and awards respecting drainage or reclamation works

Background Information

- Maintain 253 km of storm sewer, 10,924 service connections, 5100 catch basins, 225 km of ditching, 800 cross culverts, drainage pump stations and 7 detention ponds
- Stormwater Management Master Drainage Plans are developed for the urban area. Recent revisit and review of the Silver Valley Master Drainage Plan concept recommending additional *Best Management Practices*.
- Officials of MELP and DFO participated in the preparation of stormwater plans and work with staff to keep the concepts, requirements, guidelines and best practices current
- Environmental protection and fisheries issues are increasingly prevalent requiring the District's on-going attention
- "Green Team" initiative in place with staff of Environmental Affairs department working to address environmental issues/challenges and work cooperatively with MELP and DFO staff and local stewardship groups (ARMS and KEEPS)
- Engineering, Operations and Long Range Planning Departments manage and respond to public inquires and request for service.
- Environmental Review Committee established to investigate and address policy issues (senior staff and agency representatives meeting quarterly)
- Development Review Committee established to investigate and address issues of a project specific nature (line staff and agency representatives meeting monthly)

CAPITAL WORKS PROGRAM

Policies

- Maple Ridge Tree Protection Bylaw No. 5896-2000
- Respecting the regulation and prohibition of tree cutting and removal.
 - Maple Ridge Watercourse Regulation Bylaw No. 5807-1999 (5-2)
 - To prohibit the fouling, obstructing or impeding of watercourses
 - Maple Ridge Drainage Facilities Bylaw No. 2680-1979 (5-30)
 - To provide for charges for the construction of access culverts and ditch enclosures and storm sewer service connections
- Maple Ridge Official Community Plan Bylaw No. 5434-1996

in Environment and Natural Resources section (2.1)

- Development Permit Area XXVI
 - To address protection of natural environment in Schedule “H-2” and “H-3”
 - To encourage siting and construction of utility services that will not negatively impact on the natural environment
- Development Permit Area XXX
 - To preserve watercourses and wetlands
 - To conserve, restore and enhance habitat.

CAPITAL WORKS PROGRAM

- Schedule D – Major Public Utilities
- Pitt Meadows – Maple Ridge Flood Management Agreement

Guiding Principles

- Public Works and Development Services Strategic Plan
- To promote the continued safety and livability of the community through effective planning and development, and the responsible design, construction and maintenance of roads and municipal services.
- Engineering, Operations and Planning Department Business Plans
- Capital Works Program Business Plan
- District of Maple Ridge Construction Specifications
- Land Development Guidelines for the Protection of Fish Habitat (May 1992 by MELP & DFO)
- Urban Runoff Quality Control Guidelines for the Province of British Columbia (June 1992 MELP)
- Stream Stewardship – A Guide for Planners and Developers (1994 by MELP & DFO)
- Integrated Stormwater Management Planning – Terms of Reference Template (May 2002 by Kerr, Wood, Leidal Associates Ltd.)
- To provide a standardized process to facilitate development while protecting the environment
- Stormwater Management Master Drainage Plans for the *Urban Area*
- Drainage Assessments
- North and South Katzie Slough Basins in West Maple Ridge Area (1985 Study by Dayton & Knight Ltd.)
- McKenney Creek Basin in Laityview and the Rural Area (1985 Dayton & Knight Ltd.)
- South Alouette River Tributaries Basins, Coho Creek and Balabanian Creek Basins in North Central and the Rural Areas (1985 Dayton & Knight Ltd.)
- Fraser Area and Kanaka Creek Basins in Cottonwood (1985 Dayton & Knight Ltd.)

CAPITAL WORKS PROGRAM

- Salamander, Cottonwood, Horseshoe, and Rainbow Creek Basins in Cottonwood (1994 Kerr, Wood, Leidal Ltd.)
- Albion, Jackson Farm, Mainstream, Spencer, Maggy, Thornvale, Dunlop, and Seigel Creek Basins in the Albion Area (1995 UMA Ltd.)
- Anderson, Cattell, Blaney, Hennipen, North, Middle and Millionaire Basins in Silver Valley (1995 UMA Ltd.)
- Alouette Rivers Invertebrate Study (1996 ARMS)
- South Alouette River Flood Mapping for Silver Valley (MELP and BC Hydro)
- Silver Valley Master Drainage Plan Review (Jan. 2000 Reid Crowther & Partners) – Revisits 1995 UMA and identifies updates
- Sustainability
- To provide services to meet the needs of the community today without compromising the ability of future generations to benefit from similar services.

Municipal Affiliations and Partnerships

- Ministry of Environment, Lands and Parks (MELP)
- Department of Fisheries and Oceans Canada (DFO)
- District of Pitt Meadows (Dyking, Flood Protection)
- BC Hydro (Alouette Dam Management)
- Emergency Operations Centre (EOC) Emergency Preparedness
- Stewardship Groups (Various)
- Dyking District representatives (Operation and maintenance private systems)

Sustainability (Life-Cycle) Considerations

- Storm sewers made of asbestos-cement – having service life 30 years

CAPITAL WORKS PROGRAM

- Storm sewers made of concrete – having service life 50 years
- Storm sewers made PVC – having service life 50 years
- Manholes, catch basins, inlet/outlet structures and other related appurtenances – having a service life of 50 years
- Service connections – having a service life of 50 years
- Replacement value of the drainage infrastructure is approximately \$118 million.

Service Impact Area

- Urban Area
- Serviced by a combination of underground storm sewers, drainage facilities/structures and other related appurtenances as well as roadside ditches and culverts discharging to watercourses
- Rural Area
- Serviced primarily by roadside ditches and culverts discharging to watercourses

Key Funding Sources

- Development Cost Charges
- New and upgraded trunk collection and major facilities/structures in support of development in the Urban Area
- Provision of storm sewer assistance for construction fronting OCP designated Park, Greenbelt and School
- General Revenue
- Funding from general taxation
- Replacement and rehabilitation of the existing drainage/storm sewer collection system and appurtenances
- Operations Department Operating Budget

CAPITAL WORKS PROGRAM

- Administration of the department
- Maintenance and repair of infrastructure
- Local Improvement
- Annual short-term borrowing in support of funding local improvement projects

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Drainage

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
240 ST (LOUGHEED - 102)	675	COTTONWOOD	NEW INFRASTRUCTURE
123 AVE (FLETCHER - FULTON)	1751	NORTH CENTRAL	REPLACE-REHABILITATE
217 ST ROW (SOUTH OF 126) STAGE 1	1754	LAITYVIEW	REPLACE-REHABILITATE
DRAINAGE IMPROVEMENT DEBT PAYMENT - 2005	1819	MUNICIPAL HALL	PAYMENT
232 ST (60M S DOGWOOD - DOGWOOD)	1866	LAITYVIEW	REPLACE-REHABILITATE
218 ST (122 - RIDGEWAY)	1867	NORTH CENTRAL	REPLACE-REHABILITATE
WEST ST @ HAMMOND ROAD	1868	MUNICIPAL HALL	NEW INFRASTRUCTURE
COTTONWOOD DRIVE EAST OF 232 ST	1869	LAITYVIEW	NEW INFRASTRUCTURE
272 ST @ BELL AVE	1870	LAITYVIEW	NEW INFRASTRUCTURE
STORMWATER MANAGEMENT ALBION	2921	MUNICIPAL HALL	STUDY - ANALYSIS
DITCH ENCLOSURES 2005	8009	MUNICIPAL HALL	NEW INFRASTRUCTURE
STORM SEWER CONNECTIONS - 2005	8035	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$303,887
Contract Work	\$883,659
Total	\$1,187,546

REVENUE SOURCE

Dev. Cost Charge	\$902,685
General Revenue	\$235,793
Other	\$49,068
Total	\$1,187,546

PROJECT FOCUS

Drainage improvements throughout Urban Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Drainage	Quantity	Replacement Value	Sustainability Provision
Storm sewer mains	253 km @ \$350	\$88,550,000	\$2,213,750
Pumping Stations	2 @ \$250,000	\$500,000	\$10,000
Drainage structures (Inlets, outfalls, etc.)	150 @ \$50,000	\$6,250,000	\$125,000
Catch Basins	5100	\$6,120,000	\$122,400
Sewer connections	10,925 @ \$1500	\$16,387,500	\$327,750
		\$117,807,500	\$2,798,900

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Drainage

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
223 ST (LANE SOUTH 117 AVE - NORTH AVE)	461	CORE	REPLACE-REHABILITATE
126 AVE (AT 100M E 217)	512	LAITYVIEW	REPLACE-REHABILITATE
DOVER ST (WICKLOW - DTR)	528	LAITYVIEW	NEW INFRASTRUCTURE
MCKINNEY CREEK IMPROVEMENTS	531	LAITYVIEW	NEW INFRASTRUCTURE
LOUGHEED HWY (AT MCKINNEY CREEK W)	536	LAITYVIEW	NEW INFRASTRUCTURE
MCKINNEY CREEK IMPROVEMENT	540	LAITYVIEW	NEW INFRASTRUCTURE
ROW 150 M S RIVER RD (RIVERWYND - 212)	646	LAITYVIEW	NEW INFRASTRUCTURE
ACADIA ST EAST OF DOVER	1287	LAITYVIEW	REPLACE-REHABILITATE
STORM SEWER CONNECTIONS - 2006	1502	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
DITCH ENCLOSURES 2006	1503	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
LIQUID WASTE MANAGEMENT PLAN SUPPORT	1799	MUNICIPAL HALL	STUDY - ANALYSIS
DRAINAGE IMPROVEMENT DEBT PAYMENT - 2006	1820	MUNICIPAL HALL	PAYMENT
ABERNETHY WAY (238 - 240)	1894	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
ACADIA ST (100M W DOVER - DOVER)	2771	LAITYVIEW	NEW INFRASTRUCTURE
LANE N SELKIRK (222 - 223)	2772	DOWNTOWN CORE	REPLACE-REHABILITATE
N.MILLIONAIRE CK STORMWATER FACILITIES	7201	SILVER VALLEY	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$400,303	Dev. Cost Charge	\$216,062
Contract Work	\$250,986	General Revenue	\$400,303
		Other	\$34,924
Total	\$651,289	Total	\$651,289

PROJECT FOCUS

Stormwater improvements in Laityview

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Drainage	Quantity	Replacement Value	Sustainability Provision
Storm sewer mains	253 km @ \$350	\$88,550,000	\$2,213,750
Pumping Stations	2 @ \$250,000	\$500,000	\$10,000
Drainage structures (Inlets, outfalls, etc.)	150 @ \$50,000	\$6,250,000	\$125,000
Catch Basins	5100	\$6,120,000	\$122,400
Sewer connections	10,925 @ \$1500	\$16,387,500	\$327,750
		\$117,807,500	\$2,798,900

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Drainage

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
DONOVAN AVE (216 - 80M E HALL)	530	LAITYVIEW	NEW INFRASTRUCTURE
MAPLE CRES (DARTFORD - 207)	561	WEST MAPLE RIDGE	REPLACE-REHABILITATE
LANE N SELKIRK (223 - 224)	613	DOWNTOWN CORE	REPLACE-REHABILITATE
DITCH ENCLOSURES - 2007	1637	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
STORM SEWER CONNECTIONS - 2007	1638	MUNICIPAL HALL	NEW INFRASTRUCTURE
217 ST ROW (SOUTH OF 126) STAGE 2	1755	LAITYVIEW	REPLACE-REHABILITATE
LIQUID WASTE MANAGEMENT PLAN SUPPORT	1798	MUNICIPAL HALL	STUDY - ANALYSIS
DRAINAGE IMPROVEMENT DEBT PAYMENT - 2007	1821	MUNICIPAL HALL	PAYMENT
LAITY ST (RIVER RD - 100m N RIVER RD)	7411	LAITYVIEW	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$435,530	Dev. Cost Charge	\$35,183
Contract Work	\$0	General Revenue	\$364,689
		Other	\$35,658
Total	\$435,530	Total	\$435,530

PROJECT FOCUS

Drainage improvements West Maple Ridge and Laityview

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Drainage	Quantity	Replacement Value	Sustainability Provision
Storm sewer mains	253 km @ \$350	\$88,550,000	\$2,213,750
Pumping Stations	2 @ \$250,000	\$500,000	\$10,000
Drainage structures (Inlets, outfalls, etc.)	150 @ \$50,000	\$6,250,000	\$125,000
Catch Basins	5100	\$6,120,000	\$122,400
Sewer connections	10,925 @ \$1500	\$16,387,500	\$327,750
		\$117,807,500	\$2,798,900

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Drainage

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
DONOVAN AVE (@ 21530)	336	LAITYVIEW	NEW INFRASTRUCTURE
BROWN AVE (227 - 228)	453	DOWNTOWN CORE	NEW INFRASTRUCTURE
223 ST (DTR-BROWN)	466	DOWNTOWN CORE	NEW INFRASTRUCTURE
114 AVE (205 - DARTFORD)	637	WEST MAPLE RIDGE	REPLACE-REHABILITATE
CARSHILL ST (RIVER RD - LOUGHEED)	655	LAITYVIEW	NEW INFRASTRUCTURE
STORM SEWER CONNECTIONS - 2008	1786	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
DITCH ENCLOSURES - 2008	1787	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
ISMP STOMWATER BASIN REVIEW	1794	MUNICIPAL HALL	STUDY-ANALYSIS
DRAINAGE IMPROVEMENT DEBT PAYMENT - 2008	1822	MUNICIPAL HALL	PAYMENT
ALBION FLATS DRAINAGE PUMP STATION	7848	COTTONWOOD	NEW EQUIPMENT

PROJECT DISTRIBUTION

In-House Work	\$845,419
Contract Work	\$1,805,817
Total	\$2,651,236

REVENUE SOURCE

Dev. Cost Charge	\$776,288
General Revenue	\$588,647
Other	\$1,286,301
Total	\$2,651,236

PROJECT FOCUS

Stormwater facilities in support of development in
Downtown Core and Albion Flats

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Drainage	Quantity	Replacement Value	Sustainability Provision
Storm sewer mains	253 km @ \$350	\$88,550,000	\$2,213,750
Pumping Stations	2 @ \$250,000	\$500,000	\$10,000
Drainage structures (Inlets, outfalls, etc.)	150 @ \$50,000	\$6,250,000	\$125,000
Catch Basins	5100	\$6,120,000	\$122,400
Sewer connections	10,925 @ \$1500	\$16,387,500	\$327,750
		\$117,807,500	\$2,798,900

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2009

SERVICE AREA

Drainage

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
MAPLE CRES (115 - WESTFIELD)	404	WEST MAPLE RIDGE	REPLACE-REHABILITATE
RIVER RD (@ RIVERBEND)	543	LAITYVIEW	NEW INFRASTRUCTURE
WHARF ST @ PRINCESS STORM PUMP	680	WEST MAPLE RIDGE	NEW EQUIPMENT
SELKIRK AVE (226 - 227) PHASE 2	1779	DOWNTOWN CORE	REPLACE-REHABILITATE
ISMP STOMWATER BASIN REVIEW	1796	MUNICIPAL HALL	STUDY - ANALYSIS
STORM SEWER CONNECTIONS - 2009	1899	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
DITCH ENCLOSURES - 2009	1900	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
M.MILLIONAIRE CK DETENTION POND(241/132)	7200	SILVER VALLEY	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$3,064,619
Contract Work	\$178,340
Total	\$3,242,959

REVENUE SOURCE

Dev. Cost Charge	\$132,750
General Revenue	\$3,071,841
Other	\$38,368
Total	\$3,242,959

PROJECT FOCUS

Stormwater detention facilities in Silver Valley

Drainage improvements throughout the District

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Drainage	Quantity	Replacement Value	Sustainability Provision
Storm sewer mains	253 km @ \$350	\$88,550,000	\$2,213,750
Pumping Stations	2 @ \$250,000	\$500,000	\$10,000
Drainage structures (Inlets, outfalls, etc.)	150 @ \$50,000	\$6,250,000	\$125,000
Catch Basins	5100	\$6,120,000	\$122,400
Sewer connections	10,925 @ \$1500	\$16,387,500	\$327,750
		\$117,807,500	\$2,798,900

Transportation and Traffic Engineering

Business Purpose

- To provide a safe and reliable highways network and traffic control facilities within the District.
- To provide cost-effective corporate fleet management and fuel dispensing for municipal, Fire Dept., RCMP, and School District #42 vehicles.

Legislative Considerations

- *Highways Act – Provincial*
- Traffic Regulations
- Obedience to traffic control devices
- Size and weight limitations
- Slow moving vehicles and prohibited traffic
- Transport of explosive, flammable, corrosive commodities
- Setback and sight clearance regulations
- Community Charter – Provincial - Division 5(Highways) - Sections 35 - 46)
- Ownership and possession of highways
- General authority and additional powers in relation to highways
- Permanent closure and removal of dedication
- Use of highways and public places

CAPITAL WORKS PROGRAM

Background Information

- Maintain 425 km of paved road, 16.6 km of TransLink major road network (MRN), 5.6 km of gravel road, 14 bridges, 8 rail crossing, 2350 ornamental street lights, 26 traffic signals, 3 pedestrian signals, 7200 traffic signs, and 96 waste bins
- Provide ice and snow removal
- Master Transportation Infrastructure project planning and traffic management administration and planning
- Utilize traffic modeling (EMME II) software to manage and test local highway network
- Implementing pavement management business system (PMS) to help target/schedule works
- To provide cost effective fleet management of approximately 126 pieces of licensed equipment (including vehicles), 64 pieces of unlicensed equipment, and the supply/deliver of fuel for municipal, Fire Dept., RCMP and School District #42 vehicles
- Municipal participation with TransLink regarding eligible major street program initiatives and development of a municipal project and funding strategy
- Highway network throughout the District comprised of 98 percent paved road and 2 percent gravel road.
- Engineering & Operations Departments manage and respond to public inquires and request for service

Policies

- Maple Ridge Official Community Plan Bylaw No. 5434-1996 in Transportation section (2.6)
- *{Support for improving transportation choice though}*
- Policies #59, 67, 72 - Encourage improved urban design to provide for alternate transportation modes
- Policy #72 - Implementation of bikeways plan
- Policies #49, 50, 51, 62, 63, 64, 66, 67, 71, 72, 75 -Promoting alternative transportation choices to automobile

CAPITAL WORKS PROGRAM

- Policies #45, 66, 70, 75 - Alter travel behaviour by encouraging home-based business, priority treatment for transit in inter-regional movements, special traffic lanes, and promote vehicle trip reduction
- *{Will contribute to transit-oriented and automobile-restrained transportation system for the region by}*
- Policies #63, 64, 66 – Discourage increases in peak-hour, peak-direction travel across the municipality’s eastern boundary beyond 3 traffic lanes. Encourage transit-oriented development through public policy and in-fill development
- *{Will work towards consistency between the OCP and LRSP over time and will}*
- Policy #70 - Seek regional and provincial support to secure commitments for the Fraser River bridge crossing construction with HOV treatment recognizing time frame of LRSP. Also provide a continuous HOV and bus lane network to the east and west along Lougheed Highway
- Development Permit Area XXVI
- To address protection of natural environment in Schedule “H-2” and “H-3”
- To encourage siting and construction of utility services that will not negatively impact on the natural environment

CAPITAL WORKS PROGRAM

- Schedule C – Transportation Network Plan
- Schedule F – Equestrian Trail Network
- Maple Ridge Highway and Traffic Bylaw No. 3136-1982 (2-6)
- For the regulation of traffic and the use of highways and other areas
- Maple Ridge Highway Allowance Construction Control Bylaw No. 2656-1979 (2-7)
- To regulate the construction of undeveloped highway allowance
- Maple Ridge Off-Street Parking and Loading Bylaw No. 4350-1990 (2-17)
- To require owners and occupiers of any land, building or structure to provide off-street parking and loading spaces

Guiding Principles

- Manual of Uniform Traffic Control Devices for Canada (Fourth Edition)
- Traffic Control Manual for Work on Roadways – Province of British Columbia (Ministry of Transportation and Highways (MOTH))
- Pedestrian Crossing Control Manual for British Columbia – Province of British Columbia (Ministry of Transportation and Highways (MOTH))
- Pavement Marking Manual – Province of British Columbia (Ministry of Transportation and Highways (MOTH))
- Manual of Standard Traffic Signs – Province of British Columbia (Ministry of Transportation and Highways (MOTH))
- Electrical and Traffic Engineering Manual – Province of British Columbia (Ministry of Transportation and Highways (MOTH))
- Guidelines for the Design of Lighting, Signal and Sign Installations
- Master Transportation Plan (2002 Urban Systems Ltd.)
- Updates transportation and traffic issues, considerations and project requirements for the District

CAPITAL WORKS PROGRAM

- Implementing (2002) the DTIMS pavement management business system (PMS) to help target/schedule capital projects for the capital works program
- Bridge Inspection Report (August 2001) Associated Engineering
- Updates bridge condition, replacement value and priorities
- Installation of Traffic Control Devices Policy Directive (2-5)
- Procedure for the installation of traffic control devices
- Public Works and Development Services Strategic Plan
- To promote the continued safety and livability of the community through effective planning and development, and the responsible design, construction and maintenance of roads and municipal services.
- To work cooperatively with other levels of government to maximize transportation improvements important to the District.
- Engineering and Operations Department Business Plans
- Capital Works Program Business Plan
- District of Maple Ridge Construction Specifications
- Workers Compensation Board Regulations
- Sustainability
- To provide services to meet the needs of the community today without compromising the ability of future generations to benefit from similar services.

Municipal Affiliations and Partnerships

- Ministry of Transportation and Highways (MOTH)
- TransLink
- School District #42 and Parent Action Committees (PAC's)

Sustainability (Life-Cycle) Considerations

CAPITAL WORKS PROGRAM

- ***Transportation and Traffic***

- Pavement structures – having a service life of 20 years
- Bridge structures – having a service life of 50 years
- Concrete or corrugated metal road crossing culvert structures – having a service life of 50 years
- Concrete curb, gutter, sidewalk structures – having a service life of 40 years
- Traffic Signals & ornamental street lights – having a service life of 30 years
- Regulatory and other traffic signs – having a service life of 20 years
- Street furniture, litter bins and other related appurtenances – having a service life of 25 years
- Street trees and landscaping – having unlimited service life
- Replacement value of the transportation infrastructure is approximately \$218 million.

- ***Fleet Management***

- Replacement approach based on the optimization to minimize major repair expenditures and maximize trade-in value.
- Replacement value of the fleet is approximately \$8,000,000.

Service Impact Area & Customers

- District of Maple Ridge (Urban and Rural Areas)
- Fuel delivery for Operations, RCMP, Fire Department and School District #42

Key Funding Sources

- Development Cost Charges
- Provision of major transportation infrastructure, structures and equipment/facilities in support of development

CAPITAL WORKS PROGRAM

- Provision of highway over-sizing in support of development
- Provision of highway assistance for construction fronting OCP designated Park, Greenbelt and School
- General Revenue
- Funding from general taxation
- Replacement and rehabilitation of the existing highway infrastructure and appurtenances
- TransLink Grant
- Provision of capital improvements and maintenance of eligible highways (portions of DTR, 232 Street, Fern Crescent, Loughheed, River Road, 240 Street)
- Equipment Replacement Reserve
- Replacement of vehicles and equipment in the fleet from funds generated by charge out rates established for equipment use
- Operations Department Operating Budget
- Administration of the department
- Maintenance and repair of infrastructure

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Transportation and Traffic

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
GARIBALDI ST (SAYERS CRES - 128)	310	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
118 AVE (238B - 240)	631	SOUTH EAST CENTRAL	NEW INFRASTRUCTURE
ROTHSAY ST (DTR - 122)	696	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
122 AVE (222 - 223)	1299	NORTH CENTRAL	NEW INFRASTRUCTURE
STONEHOUSE AVE (NORFOLK - 212)	1345	LAITYVIEW	NEW INFRASTRUCTURE
122 AVE (ACADIA - 220)	1378	LAITYVIEW	REPLACE-REHABILITATE
WESTFIELD ST (MAPLE CRES - 207)	1468	SILVER VALLEY	NEW INFRASTRUCTURE
LOUGHEED HWY (116 - 232)	1533	WEST MAPLE RIDGE	NEW INFRASTRUCTURE
102 AVE (248 - 256)	1771	ALBION - AREA A	REPLACE-REHABILITATE
DARTFORD ST (MAPLE CRESCENT - LORNE)	1773	WEST MAPLE RIDGE	NEW INFRASTRUCTURE
ILLUMINATED STREET SIGNS PROGRAM PHASE 4	1871	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
230 ST (DTR - 122)	1876	NORTH CENTRAL	NEW INFRASTRUCTURE
SAFER SCHOOL TRAVEL PROGRAM	1877	MAPLE RIDGE (URBAN)	REPLACE-REHABILITATE
128 AVE (GARIBALDI - WILLOW)	1883	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
LIGHTING IMPROVEMENTS	1884	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
BRIDGE REHABILITATION PROGRAM	1885	MAPLE RIDGE (URBAN)	REPLACE-REHABILITATE
BIKELANE PROGRAM	1886	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
232 ST @ ABERNETHY INTERSECTION UPGRADE	2061	NORTH CENTRAL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$2,304,259
Contract Work	\$455,099
Total	\$2,759,358

REVENUE SOURCE

Dev. Cost Charge	\$486,106
General Revenue	\$1,149,804
Other	\$1,123,448
Other (In-Trust)	\$0
Total	\$2,759,358

PROJECT FOCUS

Rehabilitation and safety improvements throughout District

SUSTAINABILITY LIFE CYCLE CONSIDERATION

Transportation and Traffic Management	Quantity	Replacement Value	Sustainability Provision
Highways (Locals, collectors, arterials)	425 km @ \$500	\$189,025,000	\$6,300,833
Traffic signals	27 @ \$175,000	\$4,725,000	\$157,500
Bridges	14 @ \$2,000,000	\$28,000,000	\$560,000
Lights	3775	\$9,436,250	\$377,450
Traffic signs	6500	\$812,500	\$40,625
Rail Crossings	8	\$680,000	\$34,000
Curb, gutter, sidewalk	300,000m @ \$50	\$15,000,000	\$600,000
		\$247,678,750	\$8,070,408

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Transportation and Traffic

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
240 ST @ 104 AVE - TRAFFIC SIGNAL	2903	ALBION - AREA A	NEW EQUIPMENT
118 AVE (231 ST - 50m E STEPHENS ST)	2976	SOUTH EAST CENTRAL	NEW INFRASTRUCTURE
EQUIPMENT REPLACEMENT PROGRAM - 2005	3111	MUNICIPAL HALL	NEW INFRASTRUCTURE
ACCESS CULVERTS 2005	8008	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
LOCAL IMPROVEMENT PROJECTS - ROAD(2005)	8016	MUNICIPAL HALL	NEW INFRASTRUCTURE
PRIVATE DRIVEWAY CROSSING - 2005	8036	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$2,304,259
Contract Work	\$455,099
Total	\$2,759,358

REVENUE SOURCE

Dev. Cost Charge	\$486,106
General Revenue	\$1,149,804
Other	\$1,123,448
Other (In-Trust)	\$0
Total	\$2,759,358

PROJECT FOCUS

Rehabilitation and safety improvements throughout District

SUSTAINABILITY LIFE CYCLE CONSIDERATION

Transportation and Traffic Management	Quantity	Replacement Value	Sustainability Provision
Highways (Locals, collectors, arterials)	425 km @ \$500	\$189,025,000	\$6,300,833
Traffic signals	27 @ \$175,000	\$4,725,000	\$157,500
Bridges	14 @ \$2,000,000	\$28,000,000	\$560,000
Lights	3775	\$9,436,250	\$377,450
Traffic signs	6500	\$812,500	\$40,625
Rail Crossings	8	\$680,000	\$34,000
Curb, gutter, sidewalk	300,000m @ \$50	\$15,000,000	\$600,000
		\$247,678,750	\$8,070,408

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Transportation and Traffic

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
COTTONWOOD DR (118 AVE - 728 M SOUTH)	304	COTTONWOOD	NEW INFRASTRUCTURE
232 ST @ N ALOUETTE RIVER (BRIDGE)	952	SILVER VALLEY	REPLACE-REHABILITATE
129 AVE (224 - 670M E 224)	1160	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
212 ST (117 - CUTLER)	1162	LAITYVIEW	REPLACE-REHABILITATE
FISHERMAN RD (MCKAY - 315M E MCKAY)	1180	ALBION - INDUSTRIAL	REPLACE-REHABILITATE
MCKAY ST (390M S RIVER RD - RIVER RD)	1187	ALBION - INDUSTRIAL	REPLACE-REHABILITATE
DOVER RD (218 - WICKLOW)	1298	LAITYVIEW	REPLACE-REHABILITATE
113 AVE (175M W 243 - 243)	1306	ALBION - AREA A	REPLACE-REHABILITATE
218 ST (LAURIE - DOVER)	1322	LAITYVIEW	REPLACE-REHABILITATE
CHURCH AVE (100M W 222 - 222)	1358	DOWNTOWN CORE	REPLACE-REHABILITATE
LAURIE AVE (218 - WICKLOW)	1372	LAITYVIEW	REPLACE-REHABILITATE
117 AVE (MORRIS - HOLLY)	1375	LAITYVIEW	NEW INFRASTRUCTURE
218 ST (117 - LOUGHEED)	1384	LAITYVIEW	NEW INFRASTRUCTURE
DEWDNEY TRUNK RD (248 ST - 256 ST)	1408	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
BRIDGE STUDY UPDATE	1465	MUNICIPAL HALL	STUDY - ANALYSIS
LOCAL IMPROVEMENT PROJECTS - ROAD(2006)	1493	MUNICIPAL HALL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$2,736,853
Contract Work	\$1,500,000
Total	\$4,236,853

REVENUE SOURCE

Dev. Cost Charge	\$1,359,875
General Revenue	\$1,011,550
Other	\$1,865,428
Other (In-Trust)	\$0
Total	\$4,236,853

PROJECT FOCUS

Bridge replacement on 240 Street in Cottonwood/Albion Areas
Highway upgrading and rehabilitation throughout the municipality

SUSTAINABILITY LIFE CYCLE CONSIDERATION

Transportation and Traffic Management	Quantity	Replacement Value	Sustainability Provision
Highways (Locals, collectors, arterials)	425 km @ \$500	\$189,025,000	\$6,300,833
Traffic signals	27 @ \$175,000	\$4,725,000	\$157,500
Bridges	14 @ \$2,000,000	\$28,000,000	\$560,000
Lights	3775	\$9,436,250	\$377,450
Traffic signs	6500	\$812,500	\$40,625
Rail Crossings	8	\$680,000	\$34,000
Curb, gutter, sidewalk	300,000m @ \$50	\$15,000,000	\$600,000
		\$247,678,750	\$8,070,408

CAPITAL WORKS PROGRAM

BUSINESS PLAN - 2006

SERVICE AREA

Transportation and Traffic

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
ACCESS CULVERTS - 2006	1498	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
PRIVATE DRIVEWAY CROSSINGS - 2006	1499	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
WHEELCHAIR RAMP UPGRADES	1650	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
ILLUMINATED STREET SIGNS PROGRAM	1872	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
SAFER SCHOOL TRAVEL PROGRAM	1878	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
116 AVE (LOUGHEED - 232)	1882	SOUTH EAST CENTRAL	NEW INFRASTRUCTURE
HARRISON ST SOUTH LOUGHED	1890	SOUTH EAST CENTRAL	NEW INFRASTRUCTURE
BIKEWAY PROGRAM	1924	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
240 ST @ KANAKA CREEK (BRIDGE)	2052	ALBION - AREA A	NEW INFRASTRUCTURE
EQUIPMENT REPLACEMENT PROGRAM - 2006	3112	MUNICIPAL HALL	NEW EQUIPMENT
223 ST @ LOUGHEED HWY (TRAFFIC SIGNAL)	7273	DOWNTOWN CORE	NEW EQUIPMENT
DEWDNEY TRUNK RD AT 236 ST SIGNAL	7671	COTTONWOOD	NEW EQUIPMENT

PROJECT DISTRIBUTION

In-House Work	\$2,736,853
Contract Work	\$1,500,000
Total	\$4,236,853

REVENUE SOURCE

Dev. Cost Charge	\$1,359,875
General Revenue	\$1,011,550
Other	\$1,865,428
Other (In-Trust)	\$0
Total	\$4,236,853

PROJECT FOCUS

Bridge replacement on 240 Street in Cottonwood/Albion Areas
 Highway upgrading and rehabilitation throughout the municipality

SUSTAINABILITY LIFE CYCLE CONSIDERATION

Transportation and Traffic Management	Quantity	Replacement Value	Sustainability Provision
Highways (Locals, collectors, arterials)	425 km @ \$500	\$189,025,000	\$6,300,833
Traffic signals	27 @ \$175,000	\$4,725,000	\$157,500
Bridges	14 @ \$2,000,000	\$28,000,000	\$560,000
Lights	3775	\$9,436,250	\$377,450
Traffic signs	6500	\$812,500	\$40,625
Rail Crossings	8	\$680,000	\$34,000
Curb, gutter, sidewalk	300,000m @ \$50	\$15,000,000	\$600,000
		\$247,678,750	\$8,070,408

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Transportation and Traffic

PROJECTS:

LTC:

AREA:

117 AVE (RIVERWYND - LAITY)	1016	LAITYVIEW	REPLACE-REHABILITATE
117 AVE (209 ST - 210 ST)	1150	LAITYVIEW	REPLACE-REHABILITATE
224 ST (LOUGHEED - DEWDNEY TRUNK ROAD)	1189	DOWNTOWN CORE	REPLACE-REHABILITATE
141 AVE (232 - SILVER VALLEY RD)	1335	SILVER VALLEY	REPLACE-REHABILITATE
HOWISON AVE (160M W HALL - 90M E HALL)	1336	LAITYVIEW	REPLACE-REHABILITATE
117 AVE (190M W 218 - 218)	1373	LAITYVIEW	REPLACE-REHABILITATE
117 AVE (216 - 100M E 216)	1376	LAITYVIEW	REPLACE-REHABILITATE
ACCESS CULVERT 2007	1639	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
PRIVATE DRIVEWAY CROSSINGS 2007	1640	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
WHEELCHAIR RAMP UPGRADES	1652	DOWNTOWN CORE	NEW INFRASTRUCTURE
118 AVE (20400/20500 BLOCKS)	1725	WEST MAPLE RIDGE	NEW INFRASTRUCTURE
216 ST @ 121 INTERSECTION UPGRADE	1803	LAITYVIEW	NEW INFRASTRUCTURE
ILLUMINATED STREET SIGNS PROGRAM	1873	SOUTHEAST CENTRAL	NEW INFRASTRUCTURE
SAFER SCHOOL TRAVEL PROGRAM	1879	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
LOCAL IMPROVEMENT PROJECTS - ROAD(2007)	1909	LAITYVIEW	NEW INFRASTRUCTURE
EQUIPMENT REPLACEMENT PROGRAM - 2007	3113	SILVER VALLEY	NEW EQUIPMENT
MCFARLANE AVE (GRAVES - 209)	4192	MAPLE RIDGE (URBAN)	REPLACE-REHABILITATE
132 AVE (232 - 236)	6080	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
117 AVE (207 - STEEVES)	7113	LAITYVIEW	REPLACE-REHABILITATE
POWELL AVE (203 - 50M EAST 203)	7899	WEST MAPLE RIDGE	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,278,932	Dev. Cost Charge	\$943,046
Contract Work	\$1,895,616	General Revenue	\$969,593
		Other	\$1,261,909
Total	\$3,174,548	Total	\$3,174,548

PROJECT FOCUS

Highway upgrading and rehabilitation throughout the municipality

SUSTAINABILITY LIFE CYCLE CONSIDERATION

Transportation and Traffic Management	Quantity	Replacement Value	Sustainability Provision
Highways (Locals, collectors, arterials)	425 km @ \$500	\$189,025,000	\$6,300,833
Traffic signals	27 @ \$175,000	\$4,725,000	\$157,500
Bridges	14 @ \$2,000,000	\$28,000,000	\$560,000
Lights	3775	\$9,436,250	\$377,450
Traffic signs	6500	\$812,500	\$40,625
Rail Crossings	8	\$680,000	\$34,000
Curb, gutter, sidewalk	300,000m @ \$50	\$15,000,000	\$600,000
		\$247,678,750	\$8,070,408

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Transportation and Traffic

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
EQUIP PURCHASE - ASPHALT/CONCRETE SAW	319	MUNICIPAL HALL	NEW EQUIPMENT
DEWDNEY TRUNK RD @ KANAKA CR (BRIDGE)	956	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
224 ST @ BLANEY CREEK (BRIDGE)	959	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
GREENWELL ST (PURDY - 123)	1013	NORTH CENTRAL	REPLACE-REHABILITATE
FERN CRESCENT (236 - 240)	1340	SILVER VALLEY	REPLACE-REHABILITATE
FERN CRESCENT (BALSAM - 236)	1341	SILVER VALLEY	REPLACE-REHABILITATE
DONOVAN AVE (217 - WICKLOW)	1361	LAITYVIEW	REPLACE-REHABILITATE
117 AVE (251 - 252)	1374	LAITYVIEW	REPLACE-REHABILITATE
251 ST (116 - 117)	1390	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
ENGINEERING OPERATIONS CENTRE - PARKING ACCESS CULVERT 2008	1398	COTTONWOOD	NEW INFRASTRUCTURE
PRIVATE DRIVEWAY CROSSINGS 2008	1788	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
205 ST (LORNE - WESTFIELD)	1789	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
ILLUMINATED STREET SIGNS PROGRAM	1800	WEST MAPLE RIDGE	REPLACE-REHABILITATE
SAFER SCHOOL TRAVEL PROGRAM	1874	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
LOCAL IMPROVEMENT PROJECTS - ROAD(2008)	1880	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
BROWN AVE (FRASER-228)	1910	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
BROWN AVE (228-BURNETT)	2009	DOWNTOWN CORE	NEW INFRASTRUCTURE
EQUIPMENT REPLACEMENT PROGRAM - 2008	2010	DOWNTOWN CORE	NEW INFRASTRUCTURE
SIDEWALK PROGRAM PHASE 2	3114	DOWNTOWN CORE	NEW EQUIPMENT
LOUGHEED HWY (222 - 230)	7891	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
	7993	DOWNTOWN CORE	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$2,598,815
Contract Work	\$1,911,814
Total	\$4,510,629

REVENUE SOURCE

Dev. Cost Charge	\$1,423,082
General Revenue	\$923,760
Other	\$2,163,787
Other (In-Trust)	\$0
Total	\$4,510,629

PROJECT FOCUS

Replacement of bridges

SUSTAINABILITY LIFE CYCLE CONSIDERATION

Transportation and Traffic Management	Quantity	Replacement Value	Sustainability Provision
Highways (Locals, collectors, arterials)	425 km @ \$500	\$189,025,000	\$6,300,833
Traffic signals	27 @ \$175,000	\$4,725,000	\$157,500
Bridges	14 @ \$2,000,000	\$28,000,000	\$560,000
Lights	3775	\$9,436,250	\$377,450
Traffic signs	6500	\$812,500	\$40,625
Rail Crossings	8	\$680,000	\$34,000
Curb, gutter, sidewalk	300,000m @ \$50	\$15,000,000	\$600,000
		\$247,678,750	\$8,070,408

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2009

SERVICE AREA

Transportation and Traffic

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
MAPLE CRES (115 - WESTFIELD)	703	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
LORNE AVE (205 - 207)	707	MAPLE RIDGE (RURAL)	REPLACE-REHABILITATE
LORNE AVE (205 - 207)	707	MUNICIPAL HALL	NEW EQUIPMENT
ROYAL CRES (225 - LOUGHEED)	760	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
ROYAL CRES (225 - LOUGHEED)	760	SOUTHEAST CENTRAL	REPLACE-REHABILITATE
112 AVE (300M W 248 BRIDGE)	792	ALBION - AREA A	REPLACE-REHABILITATE
102 AVE (240 - INDUSTRIAL)	910	DOWNTOWN CORE	REPLACE-REHABILITATE
WHEELCHAIR RAMP UPGRADES	1651	MUNICIPAL HALL	NEW EQUIPMENT
116 AVE (LOUGHEED - 232)	1772	LAITYVIEW	REPLACE-REHABILITATE
ILLUMINATED STREET SIGNS PROGRAM	1875	LAITYVIEW	REPLACE-REHABILITATE
SAFER SCHOOL TRAVEL PROGRAM	1881	MUNICIPAL HALL	STUDY-ANALYSIS
ACCESS CULVERT 2009	1901	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
PRIVATE DRIVEWAY CROSSINGS 2009	1902	MAPLE RIDGE (URBAN)	STUDY-ANALYSIS
LOCAL IMPROVEMENT PROJECTS - ROAD(2009)	1911	DOWNTOWN CORE	NEW INFRASTRUCTURE
203 ST (D.T.R. - 123 AVE)	2789	DOWNTOWN CORE	NEW INFRASTRUCTURE
EQUIPMENT REPLACEMENT PROGRAM - 2009	3115	ALBION - AREA A	NEW INFRASTRUCTURE
HANEY BYPASS (223 - 227)	4185	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$2,258,868	Dev. Cost Charge	\$2,774,308
Contract Work	\$3,000,000	General Revenue	\$1,098,744
		Other	\$1,385,816
			\$0
Total	\$5,258,868	Total	\$5,258,868

PROJECT FOCUS

Road rehabilitation throughout the District
Bridge replacement Albion Area

SUSTAINABILITY LIFE CYCLE CONSIDERATION

Transportation and Traffic Management	Quantity	Replacement Value	Sustainability Provision
Highways (Locals, collectors, arterials)	425 km @ \$500	\$189,025,000	\$6,300,833
Traffic signals	27 @ \$175,000	\$4,725,000	\$157,500
Bridges	14 @ \$2,000,000	\$28,000,000	\$560,000
Lights	3775	\$9,436,250	\$377,450
Traffic signs	6500	\$812,500	\$40,625
Rail Crossings	8	\$680,000	\$34,000
Curb, gutter, sidewalk	300,000m @ \$50	\$15,000,000	\$600,000
		\$247,678,750	\$8,070,408

Park Acquisition

Business Purposes

- Leisure Services is committed to creating opportunities for community pride, personal enjoyment and healthy lifestyles, and to striving for continuous improvement in the processes and services which will achieve that end result.
- To provide a well-developed and well-used system of public parks and facilities for residents and visitors alike.

Legislative Considerations

- Local Government Act – Provincial (Chapter 323, Part 27, Division 2, Sections 954, 955)
- Community Heritage Register, Heritage Recognition
- Community Charter – Provincial – Division 3, Section 29
- Municipal ownership of subdivision park land

Background Information

- Strategy for acquisition of municipal, recreation, municipal athletic and neighbourhood parks based upon 1991 Parks, Recreation and Cultural Master Plan guidelines/recommendations.
- Confirmed in OCP and guide plans
- District has 46 parks (104 ha of developed park and 93 ha of undeveloped park)
- Strategy for acquisition of greenbelt is based upon watercourse preservation policy and various other assessments

Policies

- Maple Ridge Official Community Plan Bylaw No. 5434-1996
- *{Address Community Services, Parks, Heritage Conservation}*

CAPITAL WORKS PROGRAM

- Policy #86 - Will ensure that parks, leisure and cultural facilities and services are provided in accordance with Parks, Recreation and Cultural Master Plan taking into account the joint delivery of services in Maple Ridge and Pitt Meadows
- Policy #87 - Will locate community level and neighbourhood level parks adjacent to secondary schools and elementary schools, wherever possible
- Policy #88 - Encourage public access and controlled use of dykes, shorelines, ravines and watercourses where appropriate
- Policy #89 - Will work with other levels of government and authorities towards a coordinated system of parks and recreational opportunities in the community
- Policy #90 - Support the Regional Parks and Outdoor Recreation System concept and will amend the OCP accordingly once the proposals are finalized

Guiding Principles

- Arts and Cultural Plan – Policy Directive 4.13
- A policy to provide general sense of direction, commitment and vision for the arts and culture in our area
- Municipal Lands: Acquisition Policy Directive 5.28
- A policy reflecting a fair and equitable approach to property acquisition
- Parks, Recreation and Cultural Master Plan
- Community Development, Parks and Recreation Business Plan
- Capital Works Program Business Plan
- Ridge Meadows Joint Leisure Services Agreement
- Equestrian Trails Council Agreement

Municipal Affiliations and Partnerships

- District of Pitt Meadows (Ridge - Meadows Parks and Leisure Services)

CAPITAL WORKS PROGRAM

- Greater Vancouver Regional District Livable Region Strategy Plan (LRSP) and Parks and Cultural Committees
- BC Parks
- Ministry of Forests
- School District #42
- Elderly Citizens Recreational Association (ECRA)
- Fraser Valley Regional Library
- Equestrian Trail Council
- Maple Ridge Arts Council (Gallery)
- Community Groups and Agencies

Sustainability Considerations

- Driven by the recommendations of the Parks, Recreation and Cultural Master Plan in terms of keeping pace with growth projections
- Based on a review of British Columbia Assessment Authority data, the assessed value of Parks (not including greenbelt) in the District exceeds \$30,000,000.

Service Impact Area

- District of Maple Ridge (Urban and Rural Areas)

Key Funding Sources

- Development Cost Charges
- Provision of new municipal and community parks in support of development
- Parkland Acquisition Reserve
- Funding in support of parkland acquisitions

CAPITAL WORKS PROGRAM

- Operating Budget
- Administration of the department

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Park Acquisition

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
WHONNOCK LAKE ACQUISITION	1948	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
GREENBELT ACQUISITION	6193	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$454,545	Dev. Cost Charge	\$450,000
Contract Work	\$200,000	General Revenue	\$4,545
		Cap Work Res/Other	\$200,000
Total	\$654,545	Total	\$654,545

PROJECT FOCUS

Provision of park land acquisition in Rural Area

Provision of greenbelt acquisition through the municipality

SUSTAINABILITY CONSIDERATION

Park Acquisition	Quantity	Replacement Value	Sustainability Provision
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Consistency with Parks, Recreation and Cultural Master Plan

Methodology undefined at this time

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Park Acquisition

PROJECTS

LTC

AREA

TYPE

PARK (241/112)	622	SILVER VALLEY	NEW INFRASTRUCTURE
GREENBELT ACQUISITION	6194	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,420,798	Dev. Cost Charge	\$1,267,200
Contract Work	\$200,000	General Revenue	\$153,598
		Other (Park Reserve)	\$200,000
 Total	 \$1,620,798	 Total	 \$1,620,798

PROJECT FOCUS

Provision of park land acquisition in Albion

Provision of greenbelt acquisition through the municipality

SUSTAINABILITY CONSIDERATION

Park Acquisition	Quantity	Replacement Value	Sustainability Provision
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Consistency with Parks, Recreation and Cultural Master Plan

Methodology undefined at this time

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Park Acquisition

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
MERKLEY PARK EXPANSION PARK (231/137)	612	LAITYVIEW	NEW INFRASTRUCTURE
SILVER VALLEY NEIGHBOURHOOD PARK ACQ.	626	SILVER VALLEY	NEW INFRASTRUCTURE
GREENBELT ACQUISITION	627	SILVER VALLEY	NEW INFRASTRUCTURE
	6195	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$2,901,815
Contract Work	\$200,000
Total	\$3,101,815

REVENUE SOURCE

Dev. Cost Charge	\$2,160,000
General Revenue	\$389,815
Other (Park Reserve)	\$552,000
Total	\$3,101,815

PROJECT FOCUS

Provision of park land acquisition Silver Valley and North Central Areas

Provision of greenbelt acquisition through the municipality

SUSTAINABILITY CONSIDERATION

Park Acquisition	Quantity	Replacement Value	Sustainability Provision
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Consistency with Parks, Recreation and Cultural Master Plan

Methodology undefined at this time

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Park Acquisition

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
BOUNDARY PARK (201/123) PHASE 2	656	WEST MAPLE RIDGE	NEW INFRASTRUCTURE
WHISPERING FALLS PARK (264/126)	674	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
GREENBELT ACQUISITION	6196	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$1,395,207
Contract Work	\$200,000
Total	\$1,595,207

REVENUE SOURCE

Dev. Cost Charge	\$1,167,165
General Revenue	\$228,042
Other (Park Reserve)	\$200,000
Total	\$1,595,207

PROJECT FOCUS

Provision of park land acquisition in West Maple Ridge and Rural Area

Provision of greenbelt acquisition through the municipality

SUSTAINABILITY CONSIDERATION

Park Acquisition	Quantity	Replacement Value	Sustainability Provision
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Consistency with Parks, Recreation and Cultural Master Plan

Methodology undefined at this time

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2009

SERVICE AREA

Park Acquisition

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
SILVER VALLEY NEIGHBOURHOOD PARK ACQ.	1925	SILVER VALLEY	NEW INFRASTRUCTURE
CORE PARK (222/121) PORTION ONLY	6059	DOWNTOWN CORE	NEW INFRASTRUCTURE
GREENBELT ACQUISITION MISC. (2009)	6197	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
PORT HANEY WATERFRONT PARK - PARCEL 2	7175	CORE	NEW INFRASTRUCTURE
PORT HANEY WATERFRONT PARK - PARCEL 3	7176	CORE	NEW INFRASTRUCTURE
PORT HANEY WATERFRONT PARK - PARCEL 4	7177	CORE	NEW INFRASTRUCTURE
PORT HANEY WATERFRONT PARK - PARCEL 5	7178	CORE	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$1,145,214
Contract Work	\$0
Total	\$1,145,214

REVENUE SOURCE

Dev. Cost Charge	\$411,331
General Revenue	\$133,883
Other (Park Reserve)	\$600,000
Total	\$1,145,214

PROJECT FOCUS

Provision of park land acquisition in Silver Valley and Core

Provision of greenbelt acquisition through the municipality

SUSTAINABILITY CONSIDERATION

Park Acquisition	Quantity	Replacement Value	Sustainability Provision
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Consistency with Parks, Recreation and Cultural Master Plan

Methodology undefined at this time

CAPITAL WORKS PROGRAM

Park Improvement

Business Purposes

- Leisure Services is committed to creating opportunities for community pride, personal enjoyment and healthy lifestyles, and to striving for continuous improvement in the processes and services which will achieve that end result.
- The Parks and Facilities Department is responsible for managing the maintenance of open space and municipal owned and leased buildings.

Legislative Considerations

- Local Government Act – Provincial (Chapter 323, Part 27, Division 2, Sections 954, 955)
- Community Heritage Register, Heritage Recognition
- Community Charter – Provincial – Division 3, Section 29
- Municipal ownership of subdivision park land

Background Information

- Parks and Facilities Department has three sections
- Parks and Cemetery
- Acquire and develop new parkland and maintain existing developed parkland
- Manage two cemeteries
- Manage departmental capital works projects
- Facilities
- Maintenance and renovation of existing buildings for government services and historic sites
- Manage the infrastructure program

CAPITAL WORKS PROGRAM

- Manage the facilities reservation system and customer service centre
- Administration of public/private partnership agreements
- Emergency Preparedness
- Administration and operation of the joint Emergency Preparedness Program for Maple Ridge and Pitt Meadows

CAPITAL WORKS PROGRAM

Policies

- Maple Ridge Official Community Plan Bylaw No. 5434-1996
- *{Address Community Services, Parks, Heritage Conservation}*
- Policy #86 - Will ensure that parks, leisure and cultural facilities and services are provided in accordance with Parks, Recreation and Cultural Master Plan taking into account the joint delivery of services in Maple Ridge and Pitt Meadows
- Policy #87 - Will locate community level and neighbourhood level parks adjacent to secondary schools and elementary schools, wherever possible
- Policy #89 - Will work with other levels of government and authorities towards a coordinated system of parks and recreational opportunities in the community
- Policy #90 - Support the Regional Parks and Outdoor Recreation System concept and will amend the OCP accordingly once the proposals are finalized
- Schedule F – Equestrian Trail Network

Guiding Principles

- Parks, Recreation and Cultural Master Plan
- Community Development, Parks and Recreation Business Plan
- Capital Works Program Business Plan
- Equestrian Trails Council Agreement (2-16)
- Ridge Meadows Joint Leisure Services Agreement
- Workers Compensation Board Regulations

Municipal Affiliations and Partnerships

- District of Pitt Meadows (Ridge - Meadows Parks and Leisure Services)
- Greater Vancouver Regional District Livable Region Strategy Plan (LRSP)

CAPITAL WORKS PROGRAM

- Equestrian Trail Council
- Local User and Stewardship Groups

Sustainability (Life-Cycle) Considerations

- Driven by the Parks, Facilities and Government Properties Life-Cycle Reserve Assessment
- Reflected as 2.75 % of taxes plus 2.0 % inflation compounded annually
- Based on the information prepared by Universal Appraisal Co. Ltd. Reference Number 2351 (last updated Oct. 1998) the Total Construction and Equipment Replacement Insurable Value for Parks Facilities is approximately \$44,000,000.

Service Impact Area

- District of Maple Ridge (Urban and Rural Areas)

Key Funding Sources

- Development Cost Charges
- Funding for parks improvements in support of development
- Facilities Life-Cycle Reserve
- Funding in support of facilities (buildings) repairs and improvements
- General Revenue
- Funding from general taxation
- Parks and Facilities Operating Budgets
- Administration of the department
- Maintenance and repair of infrastructure

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Park Improvement

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
MAPLE RIDGE SPRAY POOL	1710	SILVER VALLEY	NEW INFRASTRUCTURE
COTTONWOOD NORTH PARK DEVELOPMENT PH 3	1716	COTTONWOOD	NEW INFRASTRUCTURE
COTTONWOOD EAST PARK DEVELOPMENT	6018	COTTONWOOD	NEW INFRASTRUCTURE
TRAIL IMPROVEMENT PROGRAM	8024	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

In-House Work	\$593,452
Contract Work	\$144,600
Total	\$738,052

REVENUE SOURCE

Dev. Cost Charge	\$496,427
General Revenue	\$241,625
Other	\$0
Total	\$738,052

PROJECT FOCUS

Provision of park development and facilities in Cottonwood and Silver Valley

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Park Improvement	Quantity	Replacement Value	Sustainability Provision
*Based upon Parks, Facilities & Government Properties Assessment			2.75% of taxes 2.0% annual inflation

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2006**

SERVICE AREA

Park Improvement

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
WHONNOCK LAKE PHASE 2 PARKING	1439	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
TRAIL IMPROVEMENT	1571	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$30,000	Dev. Cost Charge	
Contract Work	\$215,152	General Revenue	\$245,152
		Other	\$0
Total	\$245,152	Total	\$245,152

PROJECT FOCUS

Provision of park and trail development in Rural Area

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Park Improvement	Quantity	Replacement Value	Sustainability Provision
*Based upon Parks, Facilities & Government Properties Assessment			2.75% of taxes 2.0% annual inflation

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2007**

SERVICE AREA

Park Improvement

PROJECTS

LTC

AREA

TYPE

WHONNOCK LAKE PHASE 1	6045	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
MERKLEY PARK IMPROVEMENTS	7298	NORTH CENTRAL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$311,094	Dev. Cost Charge	\$87,375
Contract Work	\$0	General Revenue	\$223,719
		Other	
Total	\$311,094	Total	\$311,094

PROJECT FOCUS

Provision of park development and facilities in Rural Area and North Central

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Park Improvement	Quantity	Replacement Value	Sustainability Provision
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*Based upon Parks, Facilities & Government Properties Assessment

2.75% of taxes
2.0% annual inflation

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Park Improvement

PROJECTS

LTC

AREA

TYPE

TRAIL IMPROVEMENT	1417	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
BOULEVARD IMPROVEMENT	1572	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
COTTONWOOD WEST PARK FACILITIES	6017	COTTONWOOD	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$559,398	Dev. Cost Charge	\$416,395
Contract Work	\$60,000	General Revenue	\$203,003
		Other (Fac Reserve)	
		Other	\$0
Total	\$619,398	Total	\$619,398

PROJECT FOCUS

Provision of park development and facilities in Cottonwood

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Park Improvement	Quantity	Replacement Value	Sustainability Provision
*Based upon Parks, Facilities & Government Properties Assessment			2.75% of taxes 2.0% annual inflation

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2009**

SERVICE AREA

Park Improvement

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
TRAIL IMPROVEMENT	1569	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE
TELOSKY FIELD HOUSE	7238	SOUTH EAST CENTRAL	NEW INFRASTRUCTURE
CEMETERY CARETAKER HOUSE	7275	LAITYVIEW	NEW INFRASTRUCTURE
ALBION SPORT COMPLEX PARKING DRAINAGE	7299	COTTONWOOD	NEW INFRASTRUCTURE
ALCO PARK SERVICE ROAD	8025	MAPLE RIDGE (RURAL)	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$567,727	Dev. Cost Charge	\$270,000
Contract Work	\$0	General Revenue	\$297,727
		Other	\$0
Total	\$567,727	Total	\$567,727

PROJECT FOCUS

Provision of park development and facilities in Core and Silver Valley

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Park Improvement	Quantity	Replacement Value	Sustainability Provision
*Based upon Parks, Facilities & Government Properties Assessment			2.75% of taxes 2.0% annual inflation

Recreational Services

Business Purposes

- Leisure Services is committed to creating opportunities for community pride, personal enjoyment and healthy lifestyles, and to striving for continuous improvement in the processes and services which will achieve that end result.
- The Recreation Department is responsible for a wide variety of recreational opportunities for residents and visitors alike.
- Delivery of recreational programs in municipal, community and school facilities and through partnering encourage the development of community groups and volunteers to provide additional services such as, aquatics, fitness, youth, special services, special events, arts, health, wellness managed by the following three program teams;
- Program Development
- Community Development
- Leisure Centre/Outdoor Pools

Legislative Considerations

- Local Government Act – Provincial (Chapter 323, Part 27, Division 2, Sections 954, 955)
- Community Heritage Register, Heritage Recognition
- Community Charter – Provincial – Division 3, Section 29
- Municipal ownership of subdivision park land

Background Information

- Provide opportunities to for active living through programs and the operation of facilities
- Review and apply community development model through citizen participation
- Provide leadership development opportunities

CAPITAL WORKS PROGRAM

- Address community needs through partnerships
- Assist in development of community groups long-range vision and increased capacity for service
- Provide efficient, reliable reservation booking system.

Policies

- Maple Ridge Official Community Plan Bylaw No. 5434-1996
- *{Address Community Services, Parks, Heritage Conservation}*
- Policies #76 - Work in partnership with others to establish range of community facilities and services and encourage community and neighbourhood level involvement
- Policies #78 - Will promote concept of community use of grounds and facilities of School District, municipality, and other agencies and organizations
- Policy #86 - Will ensure that parks, leisure and cultural facilities and services are provided in accordance with Parks, Recreation and Cultural Master Plan taking into account the joint delivery of services in Maple Ridge and Pitt Meadows
- Policy #87 - Will locate community level and neighbourhood level parks adjacent to secondary schools and elementary schools, wherever possible
- Policy #89 - Will work with other levels of government and authorities towards a coordinated system of parks and recreational opportunities in the community
- Policy #90 - Support the Regional Parks and Outdoor Recreation System concept and will amend the OCP accordingly once the proposals are finalized
- Policy #95 - Support implementation of Ridge Meadows Arts and Culture Policy and Plan of 1996

Guiding Principles

- Parks, Recreation and Cultural Master Plan
- Community Development, Parks and Recreation Business Plan
- Capital Works Program Business Plan

CAPITAL WORKS PROGRAM

- Ridge Meadows Joint Leisure Services Agreement
- Approach community-based programming through a process of providing services based on identifying community needs and gaps in services.
- Decisions to offer programs in specified areas are based on an ongoing formula of balancing long-term benefits to the community with sound business practice considerations.

Municipal Affiliations and Partnerships

- Citizens of Maple Ridge and Pitt Meadows
- District of Pitt Meadows (Ridge - Meadows Parks and Leisure Services)
- Local Community and User Groups

Sustainability (Life-Cycle) Considerations

- Driven by the Parks, Facilities and Government Properties Life-Cycle Reserve Assessment
- Reflected as 2.75 % of taxes plus 2.0 % inflation compounded annually

Service Impact Area

- District of Maple Ridge (Urban and Rural Areas)
- District of Pitt Meadows

Key Funding Sources

- General Revenue
- Funding from general taxation
- Recreation Department Operating Budgets

CAPITAL WORKS PROGRAM

- Administration of the department
- Maintenance and repair of infrastructure

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Recreational Service

PROJECTS

LTC

AREA

ITEM

LIFECYCLE ASSESSMENT LEISURE CEN	1780	MUNICIPAL HALL	NEW INFRASTRUCTURE
EQUIPMENT PURCHASE - TRANSPORT TRAILOR	1781	MUNICIPAL HALL	NEW EQUIPMENT
CEMETERY MASTER PLAN	1939	MUNICIPAL HALL	STUDY - ANALYSIS
EQUIPMENT PURCHASE - VEHICLE REC WEST	1946	MUNICIPAL HALL	NEW EQUIPMENT

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$37,000	Dev. Cost Charge	\$0
Contract Work	\$68,000	General Revenue	\$75,000
		Other	\$30,000
Total	\$105,000	Total	\$105,000

PROJECT FOCUS

Planning and new equipment

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Recreational Services	Quantity	Replacement Value	Sustainability Provision
*Based upon Parks, Facilities & Government Properties Assessment			2.75% of taxes 2.0% annual inflation

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2006**

SERVICE AREA

Recreational Service

PROJECTS

LTC

AREA

ITEM

NOT IDENTIFIED

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$0	Dev. Cost Charge	\$0
Contract Work	\$0	General Revenue	\$0
		Other	
Total	\$0	Total	\$0

PROJECT FOCUS

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Recreational Services	Quantity	Replacement Value	Sustainability Provision
*Based upon Parks, Facilities & Government Properties Assessment			2.75% of taxes 2.0% annual inflation

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2007**

SERVICE AREA

Recreational Service

PROJECTS

LTC

AREA

ITEM

LIFECYCLE ASSESSMENT FIREHALLS	1944	MUNICIPAL HALL	STUDY - ANALYSIS
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PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$0	Dev. Cost Charge	\$0
Contract Work	\$25,000	General Revenue	\$25,000
		Other	\$0
 Total	 \$25,000	 Total	 \$25,000

PROJECT FOCUS

Lifecycle review of firehalls throughout the District

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Recreational Services	Quantity	Replacement Value	Sustainability Provision
 *Based upon Parks, Facilities & Government Properties Assessment			 2.75% of taxes 2.0% annual inflation

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2008**

SERVICE AREA

Recreational Service

PROJECTS

LTC

AREA

ITEM

LIFECYCLE ASSESSMENT ACT

1782

MUNICIPAL HALL

STUDY - ANALYSIS

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work

\$0

Dev. Cost Charge

\$0

Contract Work

\$27,500

General Revenue

\$27,500

Other

Total

\$27,500

Total

\$27,500

PROJECT FOCUS

Lifecycle assessment of the Act

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Recreational Services

Quantity

Replacement Value

Sustainability Provision

*Based upon Parks, Facilities & Government
Properties Assessment

2.75% of taxes
2.0% annual inflation

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2009**

SERVICE AREA

Recreational Service

PROJECTS

LTC

AREA

ITEM

NOT IDENTIFIED

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$0	Dev. Cost Charge	\$0
Contract Work	\$0	General Revenue	\$0
		Other	\$0
Total	\$0	Total	\$0

PROJECT FOCUS

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Recreational Services	Quantity	Replacement Value	Sustainability Provision
*Based upon Parks, Facilities & Government Properties Assessment			2.75% of taxes 2.0% annual inflation

CAPITAL WORKS PROGRAM

Government Services

Business Purpose

- To promote a "Continuous Quality Improvement" approach for the effective and efficient delivery of services to our customers and citizens in the areas of leadership, communication, information and analysis, human resources and customer focus/customer satisfaction
- To promote Maple Ridge as a good place for business and investment to ensure a sustainable community with balanced development.

Legislative Considerations

- Community Charter – Provincial Part 1 -9
- Part 1 – Principles, purposes and interpretations
- Part 2 – Municipal purpose and powers
- Part 3 - Additional powers and limits on powers
- Part 4 – Public participation and council accountability
- Part 5 – Municipal government and procedures
- Part 6 – Financial management
- Part 7 – Municipal revenue
- Part 8 – Bylaw enforcement and related matters
- Part 9 – Government relations

Background Information

- Capital Works Program projects and initiatives identified by;
- Administration (Office of the CAO)

CAPITAL WORKS PROGRAM

- Community and Business Relations
- Clerks Section
- Information Services Section
- Personnel Section
- Finance Department
- Corporate Planning and Protective Services
- Community Development, Parks and Recreation Services
- Public Works & Development Services
- Recycling Services
- Property Management administration is the responsibility of Property Management Committee (Chairperson: Paul Gill, Director of Corporate Planning and Protective Services). Committee meets bi-weekly.
- Environmental initiatives and liaison with senior government agencies and stewardship groups managed by Environmental Affairs staff
- Building Renovations and Office Equipment
- Surveys, Studies and Consultation
- Miscellaneous Projects of a government services type

Policies

- Maple Ridge Garbage Disposal Regulation Bylaw No. 4222-1989 (6-1)
- To regulate the disposal of garbage and waste material
- Maple Ridge Official Community Plan Bylaw No. 5434-1996
- Policy #19 - Encourage the reduction of solid waste generation by the promotion of source reduction, reuse and recycling and will participate in like programs
- Policy #83 - Assist the Fraser Valley Regional Library Board to ensure quality library service in the community

CAPITAL WORKS PROGRAM

Guiding Principles

- Local Government Act
- Corporate Strategic Plan
- Divisional, Departmental and Corporate Specific Business Plans
- Capital Works Program Business Plan
- Municipal Land Management Strategy (December 1998) prepared by Special Projects Coordinator
- To implement a Property Management Strategy for the acquisition of required lands and the disposition of surplus municipal property. Six key recommendations highlighted.
- Purchasing Preference Policy Directive 5.40
- To support local merchants by encouraging the use of local suppliers and by purchasing locally, where all things are equal, the goods and services required by the municipality
- Environmental Assessments
- Albion Environmental Assessment and Development Guidelines (June 1993 by Resource Systems Management Inc.)
- Cottonwood Environmental Assessment (April 1991 by Gartner Lee Ltd.)
- Silver Valley Environmental Assessment (1994 by Gartner Lee Ltd.)
- Emergency Preparedness Business Plan
- Recycling Society Business Plan
- Workers Compensation Board Regulations

Municipal Affiliations and Partnerships

- Union of British Columbia Municipalities – (Council and Administration Department)
- Greater Vancouver Water District (GVWD) – (Engineering Department)

CAPITAL WORKS PROGRAM

- Greater Vancouver Sewerage and Drainage District (GVS&DD) – (Engineering Department)
- Greater Vancouver Regional District Livable Region Strategy Plan (LRSP) – (Planning Department)
- TransLink (formerly GVTA) – (Engineering Department)
- Regional Engineers Action Committee (REAC) – (Engineering Department)
- Ridge Meadows Parks and Leisure Services– (Community Development Department)
- Ridge Meadows Recycling Society– (Engineering Department)
- Equestrian Trail Council– (Planning and Engineering Departments)
- Elderly Citizens Recreational Association (ECRA) – (Administration Department)
- Urban Development Institute (UDI) – (Planning, Engineering and Inspection Services Departments)

Sustainability (Life-Cycle) Considerations

- Buildings and structures – assume a service life of 50 years

Service Centers

- Municipal Hall, Operations Centre, RCMP Building , Fire Hall #1

Key Funding Sources

- General Revenue
- Funding from general taxation
- Capital works of a government services and support nature
- Capital Works Reserve
- Reserve fund in support of capital works projects

CAPITAL WORKS PROGRAM

- Land Sales
- Sale of municipal property for revenue generation
- Recycling Capital Acquisition Reserve

Capital assets in support of the recycling operation

- Grants (Federal and Provincial)
- Departmental Operating Budgets
- Administration of the departments
- Maintenance and repair of infrastructure

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Government Services

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
ENVIRONMENTALLY SENSITIVE AREA REVIEW	1887	MUNICIPAL HALL	STUDY - ANALYSIS
EQUIPMENT PURCHASE - LIBRARY	1945	MUNICIPAL HALL	NEW EQUIPMENT
RAIN BARREL PROGRAM	1949	MUNICIPAL HALL	NEW EQUIPMENT
RECYCLING DEPOT (PROCESS EQUIPMENT.2004)	3095	MUNICIPAL HALL	NEW EQUIPMENT
RECYCLING DEPOT (BUILD. EXPANSION, 2005)	6202	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT EXPANSION	7924	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT EXPANSION	7925	MUNICIPAL HALL	NEW INFRASTRUCTURE
ORTHO PHOTO UPDATING	7926	MUNICIPAL HALL	STUDY - ANALYSIS
OPERATING CAPITAL MISCELLANEOUS 2005	8041	MUNICIPAL HALL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$522,404	Dev. Cost Charge	\$0
Contract Work	\$105,000	General Revenue	\$113,500
		Other	\$513,904
Total	\$627,404	Total	\$627,404

PROJECT FOCUS

Provision of Recycling Depot expansion

Assessment of ESAs

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Government Services	Quantity	Replacement Value	Sustainability Provision
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*Methodology undefined at this time

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Government Services

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
RECYCLING DEPOT EXPANSION	1760	MUNICIPAL HALL	NEW INFRASTRUCTURE
COURTHOUSE RENOVATION REVIEW	1941	MUNICIPAL HALL	NEW INFRASTRUCTURE
EQUIPMENT PURCHASE - LIBRARY	1947	MUNICIPAL HALL	NEW EQUIPMENT
ECOLOGICAL ANALYSIS - LAND COVER PILOT	4131	MUNICIPAL HALL	STUDY - ANALYSIS
RECYCLING DEPOT (LEASEHOLD IMPROVE.2005)	6210	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT (COLLECTION EQUIPMENT)	6216	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT (COLLECTION EQUI. 2005)	7091	MUNICIPAL HALL	NEW EQUIPMENT
CENSUS GEOCODING - PLANNING	7930	MUNICIPAL HALL	STUDY - ANALYSIS
OPERATING CAPITAL MISCELLANEOUS 2006	8042	MUNICIPAL HALL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$122,745	Dev. Cost Charge	\$0
Contract Work	\$121,500	General Revenue	\$29,200
		Other	\$215,045
Total	\$244,245	Total	\$244,245

PROJECT FOCUS

Provision of support equipment for Recycling Depot and Courthouse

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Government Services	Quantity	Replacement Value	Sustainability Provision
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*Methodology undefined at this time

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Government Services

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
RECYCLING DEPOT (COLLECTION EQUIPMENT)	1762	MUNICIPAL HALL	NEW EQUIPMENT
COURTHOUSE RENOVATION	1940	MUNICIPAL HALL	NEW INFRASTRUCTURE
COURTHOUSE RENOVATION MUNICIPAL RECORDS	1942	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT (PROCESS EQUIPMENT,2005)	6209	MUNICIPAL HALL	NEW EQUIPMENT
OPERATING CAPITAL MISCELLANEOUS 2007	8043	MUNICIPAL HALL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$155,045	Dev. Cost Charge	\$0
Contract Work	\$1,825,000	General Revenue	\$75,000
		Other	\$1,905,045
Total	\$1,980,045	Total	\$1,980,045

PROJECT FOCUS

Provision of renovations of Courthouse

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Government Services	Quantity	Replacement Value	Sustainability Provision
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*Methodology undefined at this time

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2008**

SERVICE AREA

Government Services

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
RECYCLING DEPOT (PROCESS EQUIPMENT)	1761	MUNICIPAL HALL	NEW EQUIPMENT
RECYCLING DEPOT (COLLECTION EQUIPMENT)	1763	MUNICIPAL HALL	NEW EQUIPMENT
OPERATING CAPITAL MISCELLANEOUS 2008	1791	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT (PROCESS IMPROVEMENT)	3094	MUNICIPAL HALL	NEW EQUIPMENT
RECYCLING DEPOT (LEASEHOLD IMPROVE)	6208	MUNICIPAL HALL	NEW INFRASTRUCTURE
MUNICIPAL POUND FACILITY *	7007	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT (LEASEHOLD IMPROVE 2008)	6208	MUNICIPAL HALL	NEW INFRASTRUCTURE

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$725,045	Dev. Cost Charge	\$0
Contract Work	\$0	General Revenue	\$0
		Other	\$725,045
Total	\$725,045	Total	\$725,045

PROJECT FOCUS

Provision of support of Recycling Depot

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Government Services	Quantity	Replacement Value	Sustainability Provision
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*Methodology undefined at this time

**CAPITAL WORKS PROGRAM
BUSINESS PLAN - 2009**

SERVICE AREA

Government Services

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
OPERATING CAPITAL MISCELLANEOUS 2009	1912	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT (COLLECTIONS EQUIP.)	3093	MUNICIPAL HALL	NEW EQUIPMENT
RECYCLING DEPOT (BUILD. EXPANSION)	6205	MUNICIPAL HALL	NEW INFRASTRUCTURE
RECYCLING DEPOT (PROCESS EQUIPMENT)	6206	MUNICIPAL HALL	NEW EQUIPMENT

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$255,045	Dev. Cost Charge	\$0
Contract Work	\$0	General Revenue	\$255,045
		Other	\$0
Total	\$255,045	Total	\$255,045

PROJECT FOCUS

Provision of support of Recycling Depot

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Government Services	Quantity	Replacement Value	Sustainability Provision
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*Methodology undefined at this time

CAPITAL WORKS PROGRAM

Technology

Business Purpose

- To provide a corporate-based vision and direction in the identification, scheduling, funding and implementation of business system solutions and information technology improvements

Background Information

- Consistency with the Corporate Strategic Plan
- Consistency with 2003 Information Technology Committee and Information Services Department business plans
- Refer to the 1995 Sierra Systems Consultants Inc. Strategic Technology Plan, the recommendations of which were implemented in the period 1995 through 1998
- Information Technology administration is the responsibility of IT Steering Committee (Chairperson: John Bastaja, Chief Information Officer). Committee meets quarterly.
- Year 2003 corporate decision to proceed with
- Taxation and Utility Billing systems replacement with CSDC/Synertech Systems Inc. "Amanda" business system implementing modules for financial operations improvements.
- Help Desk, Security Management, Broadband Wireless, and InterNet Mapping Phase 2 projects.

Guiding Principles

- Information Services Business Plan
- Capital Works Program Business Plan
- Information Technology Committee Business Plan
- Consistency with the Strategic Information Technology Plan (November 1999) prepared by KnowledgeTech Consulting Ltd.)

CAPITAL WORKS PROGRAM

- Information Technology Vision
- “Smart City” Concept
- One-Stop Shopping & Virtual City Hall Approach
- Community Information Repository
- Customer Delivery
- Facilitate Diversified Tax Base
- Information Technology Strategy
- Implement Core business systems
- Invest in strategic application initiatives first
- Migrate to Internet enabled systems
- Let business solutions drive infrastructure investment
- Use Selection Principles
- Functionally rich business solutions
- Consistency of standards and architecture
- Packaged software solutions
- Stable and limited vendors
- Information Technology Program
- Addresses Projects, Costs, and Funding
- Project evaluation and priorities based upon
- Strategic Alignment
- Quantitative Benefit
- Qualitative Benefit
- Risk Assessment

CAPITAL WORKS PROGRAM

- Action Plan (annual review and update)

CAPITAL WORKS PROGRAM

Sustainability (Life-Cycle) Considerations

- Information technology infrastructure – desktop computers having a service life of 3 years and production system hardware of 5 years
- Business systems software – having a service life of 3 year for desktop systems and 7 years for specific business systems

Replacement value of the Information Technology infrastructure and business systems is approximately \$7,233,000.

Service Centers

- Municipal Hall, Leisure Centre, Operations Centre, RCMP Building , Fire Hall #1

Key Funding Sources

- General Revenue
- Funding from general taxation
- Information technology equipment purchases and business systems implementation
- Information Services Equipment Replacement
- Reserve fund for replacement of IS Department hardware
- Water Utility
- Business systems implementation relating to *Waterworks Management*
- Sewer Utility
- Business systems implementation relating to *Waste Services Management*
- Information Services Operational Budget
- Information technology equipment and business systems replacement Information technology equipment purchases and business systems implementation

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Technology

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
FIBRE OPTIC NETWORK PHASE 1	1556	MUNICIPAL HALL	NEW INFRASTRUCTURE
CORPORATE IN-HOUSE WEB SITE UPGRADE	1623	MUNICIPAL HALL	STUDY - ANALYSIS
IS DEPT PRINTER	1847	MUNICIPAL HALL	NEW EQUIPMENT
ARCVIEW SOFTWARE LICENSES	1848	MUNICIPAL HALL	NEW EQUIPMENT
IT INFRASTRUCTURE IMPROVEMENTS	1937	MUNICIPAL HALL	NEW EQUIPMENT
DOCUMENT PROCESSING SYSTEM	3633	MUNICIPAL HALL	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - INFO. SER.(2005)	8013	MUNICIPAL HALL	NEW EQUIPMENT

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,625,129	Equip. Replacement	\$1,419,129
Contract Work	\$100,000	General Revenue	\$306,000
		Other	\$0
Total	\$1,725,129	Total	\$1,725,129
Strategic Information Technology Plan Recommendation	\$600,000		

PROJECT FOCUS

Consistency with Strategic Information Technology Business Plan

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Technology	Quantity	Replacement Value	Sustainability Provision
IT Infrastructure (computers, monitors, printers, servers, and networks)		\$2,008,000	\$502,000
Business systems (desktop software)		\$125,000	\$41,667
Business systems (production software)		\$5,100,000	\$728,571
		\$7,233,000	\$1,272,238

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Technology

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
EQUIPMENT PURCHASE - COUNCIL MEDIA UPGR	1457	MUNICIPAL HALL	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - INFO. SER.(2006)	1487	MUNICIPAL HALL	NEW EQUIPMENT
IT DISASTER RECOVERY PLAN	1619	MUNICIPAL HALL	STUDY - ANALYSIS
AMANDA PHASE 4 DOGS & EXCESS CAPACITY	1703	MUNICIPAL HALL	NEW BUSINESS SYSTEM
WIDE AREA NETWORK PHASE 2	3639	MUNICIPAL HALL	NEW INFRASTRUCTURE
INFRASTRUCTURE MANAGEMENT PHASE 1	4134	MUNICIPAL HALL	NEW BUSINESS SYSTEM
DATA WAREHOUSE/OLAP SUPPORT	7131	MUNICIPAL HALL	NEW EQUIPMENT

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$658,164	Equip. Replacement	\$388,164
Contract Work	\$75,000	General Revenue	\$345,000
		Other	
	\$733,164	Total	\$733,164
Strategic Information Technology Plan Recommendation	\$600,000		

PROJECT FOCUS

Consistency with Strategic Information Technology Business Plan

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Technology	Quantity	Replacement Value	Sustainability Provision
IT Infrastructure (computers, monitors, printers, servers, and networks)		\$2,008,000	\$502,000
Business systems (desktop software)		\$125,000	\$41,667
Business systems (production software)		\$5,100,000	\$728,571
		\$7,233,000	\$1,272,238

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Technology

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
ORACLE PERFORMANCE MONITOR	1463	MUNICIPAL HALL	NEW BUSINESS SYSTEM
SYSTEMS MANAGEMENT SERVER PHASE 2	1555	MUNICIPAL HALL	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - INFO. SER.(2007)	1631	MUNICIPAL HALL	NEW EQUIPMENT
IS DEPT LARGE FORMAT PLOTTER	1846	MUNICIPAL HALL	NEW EQUIPMENT
MANAGEMENT REPORTING SOFTWARE	1849	MUNICIPAL HALL	NEW BUSINESS SYSTEM
REMOTE COMPUTING STRATEGY	4060	MUNICIPAL HALL	STUDY - ANALYSIS
WINDOWS VMS MITGRATION PHASE 1	7111	MUNICIPAL HALL	NEW EQUIPMENT

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$327,614	Equip. Replacement	\$147,274
Contract Work	\$0	General Revenue	\$180,340
		Other	\$0
Total	\$327,614	Total	\$327,614
Strategic Information Technology Plan Recommendation	\$600,000		

PROJECT FOCUS

Consistency with Strategic Information Technology Business Plan

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Technology	Quantity	Replacement Value	Sustainability Provision
IT Infrastructure (computers, monitors, printers, servers, and networks)		\$2,008,000	\$502,000
Business systems (desktop software)		\$125,000	\$41,667
Business systems (production software)		\$5,100,000	\$728,571
		\$7,233,000	\$1,272,238

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Technology

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
STRATEGIC IT ALLIANCE STUDY	1456	MUNICIPAL HALL	STUDY - ANALYSIS
PAYROLL SYSTEM REPLACEMENT	1473	MUNICIPAL HALL	NEW BUSINESS SYSTEM
DOCUMENT PROCESSING SYSTEM	1704	MUNICIPAL HALL	NEW BUSINESS SYSTEM
EQUIPMENT REPLACEMENT - INFO. SER.(2008)	1705	MUNICIPAL HALL	NEW EQUIPMENT

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,523,000	Equip. Replacement	\$1,500,000
Contract Work	\$300,000	General Revenue	\$323,000
		Other	\$0
Total	\$1,823,000	Total	\$1,823,000
Strategic Information Technology Plan Recommendation	\$600,000		

PROJECT FOCUS

Consistency with Strategic Information Technology Business Plan

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Technology	Quantity	Replacement Value	Sustainability Provision
IT Infrastructure (computers, monitors, printers, servers, and networks)		\$2,008,000	\$502,000
Business systems (desktop software)		\$125,000	\$41,667
Business systems (production software)		\$5,100,000	\$728,571
		\$7,233,000	\$1,272,238

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2009

SERVICE AREA

Technology

<u>PROJECTS</u>	<u>LTC</u>	<u>AREA</u>	<u>TYPE</u>
INTEGRATED CASH SYSTEM	1461	MUNICIPAL HALL	NEW BUSINESS SYSTEM
BROADBAND WIRELESS CONNECTION	1617	MUNICIPAL HALL	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - INFO. SER.(2009)	1913	MUNICIPAL HALL	NEW EQUIPMENT
WINDOWS VMS MITGRATION PHASE 2	6231	MUNICIPAL HALL	NEW BUSINESS SYSTEM

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$530,700	Equipment Replacement	\$420,000
Contract Work	\$50,000	General Revenue	\$160,700
		Other	\$0
Total	\$580,700	Total	\$580,700
Strategic Information Technology Plan Recommendation	\$600,000		

PROJECT FOCUS

Consistency with Strategic Information Technology Business Plan

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Technology	Quantity	Replacement Value	Sustainability Provision
IT Infrastructure (computers, monitors, printers, servers, and networks)		\$2,008,000	\$502,000
Business systems (desktop software)		\$125,000	\$41,667
Business systems (production software)		\$5,100,000	\$728,571
		\$7,233,000	\$1,272,238

Protective Services – Police (RCMP)

Business Purpose

- To provide quality police services to our community in cooperation with the Royal Canadian Mounted Police and associated agencies.

Legislative Considerations

- Justice Administration Act
- Police Act

Background Information

- The Royal Canadian Mounted Police is Canada's national police service. Proud of their traditions and confident in meeting future challenges, they commit to preserving the peace, upholding the law and providing quality service in participation with communities.
- 69 RCMP members (Maple Ridge) and 3 (Province), 34 vehicles, 5 additional donated vehicles, 2 motorcycles, 11 mountain bikes working from Main Detachment Building.
- Activities are supported by 33 municipal staff working from the Main Detachment Building at 11990 Haney Place

Policies

- Federal Statutes
- Maple Ridge Official Community Plan Bylaw No. 5434-1996 Community Services, Parks, and Heritage Conservation section (2.7)
- Policy #82 - Provide policing services to maintain a safe and secure community

Guiding Principles

CAPITAL WORKS PROGRAM

- District of Maple Ridge Corporate Strategic Plan
- Protective Services – Police (RCMP) Department Business Plan
- Capital Works Program Business Plan
- Workers Compensation Board Regulations

Sustainability (Life-Cycle) Considerations

- Buildings and structures – having a service life of 50 years
- Vehicles – having a service life of 5 years
- Based on the information prepared by Universal Appraisal Co. Ltd. Reference Number 2351 (last updated Oct. 1998) the Replacement Insurable Value of buildings and facilities (1998 dollars) is approximately \$2,600,000.

Service Impact Area

- District of Maple Ridge (Urban and Rural Areas)

Key Funding Sources

- General Revenue
- Funding from general taxation
- Capital works of a servicing support nature
- Protective Services Operating Budget
- Administration of the department
- Maintenance and repair of equipment

Protective Services – Fire

Business Purpose

- The Maple Ridge Volunteer Fire Department will provide to the residents of Maple Ridge a level of excellence in protection of life and property commensurate with its capability to respond, while maintaining a high level of safety and education for its members in order to provide them with protection of self, and the ability to carry out their duties in the most efficient manner.

Legislative Considerations

- Local Government Act (Chapter 323, Part 15, Divisions 3, Sections 522)
- Special fire protection powers
- Community Charter – Provincial – Division 11, Section 66
- Fire chief powers

Background Information

- Operate and maintain 3 fire halls and related equipment with 105 volunteer fire fighters
- Primary mission is protection and preservation of life, property and the environment
- Emergency Response - fire alarm, fire suppression, rescue, hazardous material spills, and medical aid.
- Provide fire education including TAPC Program for juveniles

Policies

- Maple Ridge Fire Prevention Bylaw No. 4111-1988 (1-43)
- For the prevention of fires and the spread of fire, and the preservation of life

CAPITAL WORKS PROGRAM

- Maple Ridge Official Community Plan Bylaw No. 5434-1996 Community Services, Parks, and Heritage Conservation section (2.7)
- Policy #82 - Provide fire protection services to maintain a safe and secure community

Guiding Principles

- Protective Services – Fire Department Business Plan
- Capital Works Program Business Plan

Sustainability (Life-Cycle) Considerations

- Buildings and structures – having a service life of 50 years
- Specialty vehicles, machinery and equipment – having a service life of 20 years
- Based on the information prepared by Universal Appraisal Co. Ltd. Reference Number 2351 (last updated Oct. 1998) the Replacement Insurable Value of Fire Halls #1, 2, 3 buildings and facilities (1998 dollars) is approximately \$1,600,000.

Service Impact Area

- District of Maple Ridge (Urban and Rural Areas)

Key Funding Sources

- Fire Dept. Capital Assets Acquisition Reserve
- Capital works resulting in additional fire department related assets
- Fire Equipment Replacement Reserve
- Funding in support of equipment replacement
- General Revenue
- Funding from general taxation

CAPITAL WORKS PROGRAM

- Capital works of a general or miscellaneous nature
- Protective Services Operating Budget
- Administration of the department
- Maintenance and repair of equipment

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2005

SERVICE AREA

Protective Service

PROJECTS

LTC

AREA

TYPE

Fire Services

EQUIPMENT PURCHASE MOBILE DISPATCH UNITS	1451	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - 4 INCH HOSE	1928	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - TRUCK BAY DOOR	1929	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - FIRE NOZZLES	1930	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT UPGRADE - TELEPHONE SYSTEM	1931	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT PURCHASE - FURNITURE	1932	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT PURCHASE - SCBA UPGRADES	1933	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT PURCHASE - FIRE HALL SIGN	1934	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT RESTORATION - 1946 FIRE TRUCK	1938	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT PURCHASE - FIRE HALL #4	4053	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
FIREHALL #4 CONSTRUCTION	7054	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE

Police Services

No projects identified

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$563,665	Dev. Cost Charge	\$0
Contract Work	\$2,250,000	General Revenue	\$0
		Other (Fire C/A) R	\$1,146,165
		Other	\$1,667,500
		Other (Pitt Meadows)	\$0
Total	\$2,813,665	Total	\$2,813,665

PROJECT FOCUS

Provision of fire protection facilities and equipment

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Protective Services	Quantity	Replacement Value	Sustainability Provision
Fire Halls #1, #2, #3	3	\$1,638,200	\$46,806
Fire Trucks - Rolling Equipment	appr 10	\$4,455,000	\$222,750
		\$6,093,200	\$269,556

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2006

SERVICE AREA

Protective Service

PROJECTS

LTC

AREA

TYPE

Fire Services

FIREHALL #4 COMPUTER TRAINING CENTRE3	1453	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT PURCHASE - FIREHALL #1 PUMPER	1476	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
EQUIPMENT REPLACEMENT - RESCUE ONE	1477	MAPLE RIDGE (URBAN)	NEW EQUIPMENT
FIREHALL #5 LAND ACQUISITION	7066	SILVER VALLEY	NEW INFRASTRUCTURE
FIREHALL #4 PROTECTIVE AND SAFETY EQUIP.	7105	COTTONWOOD	NEW EQUIPMENT
FIREHALL #4 TECHNICAL & FURNISHINGS	7633	COTTONWOOD	NEW EQUIPMENT

Police Services

No projects identified

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,578,960	Dev. Cost Charge	\$0
Contract Work	\$0	General Revenue	\$0
		Other (Fire C/A) R	\$1,178,960
		Other (Fire Equip Repl)	\$400,000
		Other	\$0
		Other Pitt Meadows)	\$0
Total	\$1,578,960	Total	\$1,578,960

PROJECT FOCUS

Provision of fire protection expansion and equipment

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Protective Services	Quantity	Replacement Value	Sustainability Provision
Firehalls #1, #2, #3	3	\$1,638,200	\$46,806
Fire Trucks - Rolling Equipment	appr 10	\$4,455,000	\$222,750
		\$6,093,200	\$269,556

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2007

SERVICE AREA

Protective Service

PROJECTS

LTC

AREA

TYPE

Fire Services

FIRE HALL #1 EXPANSION	1935	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
FIREHALL #5 CONSTRUCTION PHASE 1	7049	SILVER VALLEY	NEW INFRASTRUCTURE

Police Services

NO PROJECTS IDENTIFIED

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$2,300,000	Dev. Cost Charge	\$0
Contract Work	\$250,000	General Revenue	\$0
		Other Pitt Meadows)	\$0
		Other (Fire C/A) R	\$2,550,000
		Other	\$0
Total	\$2,550,000	Total	\$2,550,000

PROJECT FOCUS

Proovision of fire hall construction

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Protective Services	Quantity	Replacement Value	Sustainability Provision
Firehalls #1, #2, #3	3	\$1,638,200	\$46,806
Fire Trucks - Rolling Equipment	appr 10	\$4,455,000	\$222,750
		\$6,093,200	\$269,556

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2008

SERVICE AREA

Protective Service

PROJECTS

LTC

AREA

TYPE

Fire Services

FIREHALL #5 CONSTRUCTION PHASE 2	7067	MAPLE RIDGE (URBAN)	NEW INFRASTRUCTURE
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Police Services

No projects identified

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$0	Dev. Cost Charge	\$0
Contract Work	\$1,750,000	General Revenue	\$0
		Other Pitt Meadows)	\$0
		Other (Fire C/A) R	\$1,750,000
		Other (Fire Equip Repl)	\$0
		Other	\$0
Total	\$1,750,000	Total	\$1,750,000

PROJECT FOCUS

Firehall expansion and new construction

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Protective Services	Quantity	Replacement Value	Sustainability Provision
Firehalls #1, #2, #3	3	\$1,638,200	\$46,806
Fire Trucks - Rolling Equipment	appr 10	\$4,455,000	\$222,750
		\$6,093,200	\$269,556

CAPITAL WORKS PROGRAM BUSINESS PLAN - 2009

SERVICE AREA

Protective Service

PROJECTS

LTC

AREA

TYPE

Fire Services

FIREHALL #4 1250 PUMPER	3648	MUNICIPAL HALL	NEW EQUIPMENT
FIREHALL #4 CONSTRUCTION PHASE 3	3655	MUNICIPAL HALL	NEW INFRASTRUCTURE
EQUIPMENT PURCHASE - FIREHALL #4	7052	MAPLE RIDGE (URBAN)	NEW EQUIPMENT

Police Services

No projects identified

PROJECT DISTRIBUTION

REVENUE SOURCE

In-House Work	\$1,000,000	Dev. Cost Charge	\$0
Contract Work	\$500,000	General Revenue	\$0
		Other (Fire C/A) R	\$1,500,000
		Other (Fire Equip Repl)	\$0
		Other	\$0
Total	\$1,500,000	Total	\$1,500,000

PROJECT FOCUS

Provision of fire protection equipment
RCMP Equipment and renovations

SUSTAINABILITY (LIFE CYCLE CONSIDERATION)

Protective Services	Quantity	Replacement Value	Sustainability Provision
Firehalls #1, #2, #3	3	\$1,638,200	\$46,806
Fire Trucks - Rolling Equipment	appr 10	\$4,455,000	\$222,750
		\$6,093,200	\$269,556

CAPITAL WORKS PROGRAM

Capital Works Program Acknowledgements

Municipal Council

- ⌋ For identifying the District's mission and strategic focus areas

Chief Administrative Officer

- ⌋ For articulating the corporate vision, goals and objectives

Corporate Management Team

- ⌋ For administration of policies, practices and procedures

General Manager of Corporate and Financial Services

- ⌋ For developing the business planning guidelines

General Manager of Community Development, Parks and Recreational Services

- ⌋ For championing teamwork and stakeholder cooperation

General Manager of Public Works and Development Services

- ⌋ For encouraging innovation and supervising the capital management process

Directors

- ⌋ For determining the needs of the community and developing business plans and capital projects

CAPITAL WORKS PROGRAM

Staff

- \ For implementing the capital works program

Citizens/Taxpayers

- \ For providing the resources to support the capital works program