



City of Richmond

Report to Committee

To: Finance Committee **Date:** June 10, 2022
From: Ivy Wong **File:** 03-0900-01/2022-Vol
 Acting Director, Finance 01
Re: **2022 Major Development Cost Charges Program Update**

Staff Recommendation

That the preliminary DCC programs and DCC rates as outlined in the staff report dated June 10, 2022 titled "2022 Major Development Cost Charges Program Update" from the Acting Director, Finance, be endorsed as the basis for further public consultation in establishing the updated DCC Rates Bylaw.

Ivy Wong
 Acting Director, Finance
 (604-276-4046)

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Economic Development	<input checked="" type="checkbox"/>	 Acting GM, F&CS
Law	<input checked="" type="checkbox"/>	
Real Estate Services	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Building Approvals	<input checked="" type="checkbox"/>	
Development Applications	<input checked="" type="checkbox"/>	
Affordable Housing	<input checked="" type="checkbox"/>	
Policy Planning	<input checked="" type="checkbox"/>	
Transportation	<input checked="" type="checkbox"/>	
SENIOR STAFF REPORT REVIEW	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

The City of Richmond (the City) last completed a major DCC update in 2017. In following the Province's DCC Best Practice Guide of completing a major DCC update once every five years, a major review of the City's DCC rates is recommended for the current year.

The purpose of this report is to provide Council with an overview of the approach of the current year's DCC major update along with the draft DCC programs and DCC rates impact based on the review work completed to date. Once the DCC major update approach is endorsed by Council, staff will use this staff report as a basis for further public consultation over the summer months. Once the public's inputs are received and considered, staff will prepare the DCC Rates Amendment Bylaw for Council's consideration in fall of 2022.

This report supports Council's Strategic Plan 2018-2022 Strategy #5 Sound Financial Management:

Accountable, transparent, and responsible financial management that supports the needs of the community into the future.

5.1 Maintain a strong and robust financial position.

5.2 Clear accountability through transparent budgeting practices and effective public communication.

This report supports Council's Strategic Plan 2018-2022 Strategy #6 Strategic and Well-Planned Growth:

Leadership in effective and sustainable growth that supports Richmond's physical and social needs.

6.1 Ensure an effective OCP and ensure development aligns with it.

Findings of Facts

Since summer of 2021, staff from multi-disciplinary areas have been working together and with various external consultants in the areas of DCC legislation, DCC program review, land valuation, technical studies and growth estimates, in preparing the current major DCC review. The review and update take into consideration the City's Official Community Plan (OCP), as well as all relevant approved master plans, policies, studies and strategic documents. Staff reviewed and updated the underlying DCC assumptions, which include:

- Development and growth forecast
- Infrastructure requirements to support growth (Roads, Water, Sanitary, Drainage, Park Land Acquisition and Park Development)
- Benefit allocation and municipal assist factor
- Equivalency factors and drivers for various servicing types
- Average dwelling sizes
- Addition of new DCC projects
- Deletion of DCC projects that have been completed or are no longer required
- Updated timing of future DCC projects

Despite the fact that the timing of this major DCC update does not coincide with the OCP targeted update that is now underway, this DCC update is still recommended in accordance with the DCC Best Practice Guide using current data. Once the OCP targeted review is completed in 2024, a full DCC review will be undertaken to ensure that all major cost estimates, growth assumptions and underlying DCC methodologies are fully aligned with the broad policy consideration of the approved and updated OCP.

Analysis

DCC Overview

DCCs are monies that municipalities collect from developers to offset the portion of costs related to the services incurred as a direct result of new developments. The *Local Government Act* permits DCCs to be established for providing, constructing, altering or expanding facilities related only to roads, water, sanitary, drainage, parkland acquisition and park development.

DCC Bylaw Update Process

The last major DCC bylaw update was adopted by Council in May 2017. With the exception of year 2020, the City has been amending the DCC Rate Bylaw by inflationary adjustment each May, based on Vancouver’s Consumer Price Index (CPI) of the previous year. The annual adjustment was implemented in response to the feedback received from the development industry during the last major DCC update in 2017 and has been done in accordance with the *Development Cost Charges Amendment Bylaw Approval Exemption Regulation, B.C. Reg. 130/2010*. Table 1 summarizes the inflationary adjustments to the DCC rates since 2017:

Year	DCC Rate Adjustment	Adjustment Factor
2018	2.2%	Based on 2017 Vancouver CPI
2019	2.9%	Based on 2018 Vancouver CPI
2020	0.0%	None due to Covid relief. 2019 Vancouver CPI was 2.3%
2021	0.8%	Based on 2020 Vancouver CPI
Total	5.9%	Cumulative adjustments since the 2017 DCC update

Table 1. Inflationary Adjustments to DCC Rates (2017 to 2021)

The City has exercised the permitted Ministry approval exemption granted under the *Development Cost Charges Amendment Bylaw Approval Exemption Regulation, B.C. Reg. 130/2010* for up to four years from the date of adoption of the DCC bylaw approved by the Inspector in 2017. Therefore, the 2022 major DCC Rate Bylaw update, once approved by Council, will be subject to the Ministry’s approval as required under the DCC legislation.

Draft DCC Program

Based on the updated program costs required for each servicing area to support the City’s 2022-2047 capital infrastructure growth, the City’s updated DCC program is estimated to be \$1.96 billion. Table 2 and Chart 1 below provide a summary of the draft 2022 program values along with a comparison with the current DCC program values.

Program Area	2022 (Draft) DCC Recoverable Value	2017 (Current) DCC Recoverable Value	% Change	Refer to Attachment
Roads	\$ 718,085,195	\$ 504,321,687	42.4%	1 & 1.1
Drainage	\$ 583,324,854	\$ 167,383,669	248.5%	2 & 2.1
Park Acquisition	\$ 325,882,664	\$ 245,451,584	32.8%	3
Park Development	\$ 182,407,295	\$ 178,383,883	2.3%	4
Sanitary	\$ 102,234,339	\$ 88,650,258	15.3%	5 & 5.1
Water	\$ 44,055,639	\$ 38,308,976	15.0%	6 & 6.1
Total	\$1,955,989,986	\$1,222,500,057	60.0%	

Table 2. 2022 (draft) and 2017 DCC Program Values

Significant cost adjustments based on external market factors have been included in the draft DCC program. These increases are mainly the reflection of the substantial increases in land values and construction costs over the past years. The impact of the land value escalation is especially notable in the densified City Centre area, in many cases with land value immensely increased by more than two-folds. Both the Roads and the Park Acquisition DCC program values have been updated to reflect the current land acquisition costs for the roadways and park spaces required by growth.

In addition, as the City’s population and density increase, the significance of the City’s flood protection increases. As such, a new diking component has been added to the updated Drainage DCC program for the City to provide robust dike network and infrastructure with increased capacity to support growth.

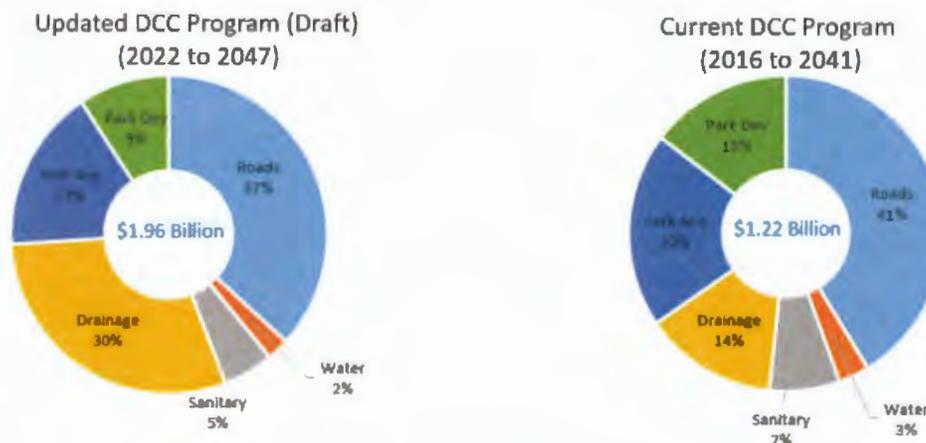


Chart 1: Comparison of the breakdown by servicing type of the current and updated DCC program (draft).

The municipal portion of the updated DCC program costs, which includes both the 1% municipal assist factor (minimum required by legislation) and the portion of the DCC programs that benefit existing population, is estimated to be \$1.1 billion for the 2022 to 2047 DCC program timeframe. The estimated municipal portion includes \$994 million in proposed drainage and dike program costs that are anticipated to be funded by utility revenues and utility reserves. The remaining municipal portion will be funded from capital reserves depending on the nature of the projects and will be included in the City’s future DCC capital plans and long-term financial plans.

Market Trends and Cost Drivers

The update of the DCC program value from the current program size of \$1.22 billion to \$1.96 billion is mainly driven by the following factors:

- Land value has escalated significantly since the last DCC update. Land and property values are highly driven by the real estate activities and demands. Using the Home Price Index (HPI) published by the Real Estate Board of Greater Vancouver as a reference for land and property cost escalation, Richmond's average residential HPI has increased well over 40% in the past five years.
- Building Construction Price Index for Metro Vancouver (as published by Statistics Canada) has increased by more than 45% over the past five years attributed to rising costs of labour, raw materials, commodities, along with labour shortage which all contributed to the heightened price pressure on construction costs and have been exacerbated by the pandemic and global supply chain issues. The increase has specifically affected the projected costs of the Engineering programs where raw materials and associated construction costs are significant cost drivers in providing the required capital infrastructures.
- An additional \$163 million in dike upgrade costs allocated to growth is included in the updated Drainage DCC Program. The City's perimeter dike network is paramount in providing flood protection against sea and river flooding. As the City's growth and population density increases, the significance of the dike network in protecting residents and infrastructure against flooding increases. Dike upgrades under the Drainage DCC Program are required to further enhance the City's flood resilience.

The increases in land value, construction costs, the fast and continuous pace of growth, as well as the large-scale developments in the City Centre area, are all contributing factors in determining the appropriate level of DCC to fund the required new infrastructures to support the population growth that new development brings to the City.

Growth Pays for Growth

The principle of DCC is the notion that local governments are not able to directly absorb all growth-related service costs, and that growth itself should assist in funding servicing needs. DCC is one of the main financing tools to ensure that growth fairly pays for growth.

Due to the complexity and the process involved in deriving the long-term DCC assumptions and program costs, it is a known issue that local governments are constantly "catching up" with their DCC programs and DCC rates – especially during the time where growth and costs are rapidly changing.

Each major DCC update (which happens on average once every five years) provides municipalities with the opportunity to update their DCC programs and the associated DCC rates based on known market conditions. However, such "catch up" is typically only temporary before the DCC program costs start to trail behind from the actual costs of delivering the DCC projects. This phenomenon is especially prevalent in the recent years where cost escalation faced by

municipalities in providing the required DCC infrastructure was increasing far more rapidly than general inflation.

Despite the annual ability for local governments to amend their DCC rates by general inflation, such adjustments still result in a significant gap because the cost drivers for DCC (as explained in the previous section) are significantly different than those included in a general CPI for consumers. Any shortfall in DCC funding for costs incurred by the City to support growth will become the City's responsibility through general tax revenue and/or capital reserves.

The increase in both the Roads and Parks Acquisition DCC programs will allow developers to receive fair compensation in form of DCC credits when either component is dedicated during the rezoning process. This also supports the underlying principle of DCC in ensuring that developers are fairly compensated in providing infrastructure that supports growth.

Updated DCC Rates (Draft)

Taking into consideration the updated DCC assumptions, the draft DCC rates for each development type are summarized in Table 3.

Development Type	Unit	Draft DCC Rates (2022)	Current DCC Rates (2021)	% Change
Single Family	per lot	\$64,427.85	\$41,865.77	54%
Townhouse	per ft ²	\$ 32.69	\$ 22.77	44%
Apartment	per ft ²	\$ 33.97	\$ 23.97	42%
Commercial/ Institutional	per ft ²	\$ 23.84	\$ 15.39	55%
Light Industrial	per ft ²	\$ 19.54	\$ 12.02	63%
Major Industrial	per acre	\$220,136.86	\$103,584.37	113%

Table 3. Comparison of Updated DCC Rates (Draft) and Current DCC Rates

The estimated average increase of 50% in the DCC rates are reflective of the known cost pressure faced by the City in delivering its infrastructure requirements to support growth. The updated rate increase will ensure that growth continues to fairly and equitably pay for the portion of the cost resulting from growth.

Impact to Development

Tables 4a and 4b below show the residential DCC rates as a percentage of average sale price under the current DCC rates and the draft DCC rates. For illustration purposes, the average home sale prices for the month of May for 2017 and 2022 (as published by the Real Estate Board of Greater Vancouver) have been selected for the purpose of this comparison.

May 2017	Single Family	Townhouse	Apartment
Average Home Sale Price	\$1,814,300	\$784,200	\$519,900
Applicable DCC (2017)	\$39,494	\$28,998	\$14,697
DCC as % of price	2.18%	3.70%	2.83%

Table 4a. 2017 DCC as a percentage of average home sale price

May 2022	Single Family	Townhouse	Apartment
Average Home Sale Price	\$2,178,300	\$1,127,800	\$739,000
Applicable DCC (draft)	\$64,428	\$44,132	\$22,080
DCC (draft) as % of price	2.96%	3.91%	2.99%

Table 4b. 2022 DCC (draft) as a percentage of average home sale price

The estimated increase in DCC rates is intended to allow for fair and equitable distribution of the costs of growth to new developments and is not intended to affect housing affordability. The updated DCC rates will allow the City to meet the objective of redistributing growth related costs back to growth to ensure such costs are not fully borne by general taxpayers.

DCC Waiver/Reduction

Local government may, through adoption of a DCC Waiver/Reduction Bylaw, waive or reduce charges for certain eligible affordable housing developments. Further studies are currently underway in reviewing the feasibility and financial impact of DCC waiver or reduction for qualifying affordable housing developments. Staff will report findings and recommendations back to Council upon completion of the review work in a separate report, which is expected by the end of year 2022.

In-Stream Protection

The *Local Government Act* provides in-stream protection to building permit applications, subdivision applications and precursor applications (e.g. rezoning application and development permit application) for a period of one year from the date the updated DCC bylaw is effective, which is usually the date of adoption.

To qualify for in-stream protection (i.e. in order for the development to be grandfathered to the current DCC rates instead of the new DCC rates in the amended DCC Bylaw):

- (a) Prior to date the updated DCC bylaw is adopted, a subdivision application must be “in-stream” such that it has been submitted in satisfactory form to and accepted by the City and that all application fees have been paid, and then the subdivision must be approved within 12 months of the date the DCC bylaw is effective for those DCC’s collected at subdivision; or
- (b) Prior to date the updated DCC bylaw is adopted, a rezoning application, a development permit application, or a building permit application must be “in-stream” such that it has been submitted in satisfactory form to and accepted by the City, but not yet determined, rejected or withdrawn, and that all application fees have been paid, and then the building permit for the development must be issued within 12 months of the date the bylaw is effective for those DCCs collected at building permit.

Under the legislation, if an application does not fall within one of the two groups above, or the subdivision is not approved or building permit not issued, as applicable, within 12 months of the effective date of the DCC bylaw, it will be subject to the new DCC rates (i.e. not eligible for in-stream protection).

Under the recommended approach, the effective date of the updated DCC bylaw will be on the adoption date of the bylaw, thus no further grace period is granted in addition to the in-stream application protection required by the *Local Government Act*.

Next Steps

If Council endorses the major DCC update, staff will use this staff report as a basis to proceed with further public consultation in establishing the City's updated DCC rates. The next steps include:

- Staff will seek stakeholder input by means of public consultation, where comments from relevant stakeholders such as the Urban Development Institute, NAIOP, Homebuilders Association and individual developers and builders etc. will be received for consideration;
- Staff will review stakeholder feedbacks and will prepare a proposed DCC Rate Bylaw to Council for first, second and third readings;
- Once the DCC Rate Bylaw is approved by Council, all supporting documentations will be sent to the Ministry for review and statutory approval;
- Staff will work with Ministry staff and address any questions or concerns from the Ministry, if any; and
- Once the Bylaw is approved by the Ministry, staff will present the Bylaw to Council for final adoption.

The amount of time required to complete the above steps internally and for the steps to be completed by the Ministry will take approximately 6 months.

Financial Impact

None.

Conclusion

To ensure that the required infrastructure will be available to support the anticipated growth and to ensure that capital costs directly attributed to growth are fairly and equitably allocated, the major DCC program update and DCC rates review are recommended.



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- Attachment 1: Updated Roads DCC Program (Draft)
- Attachment 2: Updated Drainage DCC Program (Draft)
- Attachment 3: Updated Park Acquisition DCC Program (Draft)
- Attachment 4: Updated Park Development DCC Program (Draft)
- Attachment 5: Updated Sanitary DCC Program (Draft)
- Attachment 6: Updated Water DCC Program (Draft)

UPDATED ROADS DCC PROGRAM (DRAFT)

Purpose of Program

The Roads DCC program provides a dedicated source of capital funding for upgrading existing, and providing new transportation infrastructure including arterial roads, traffic signals, sidewalks and pathways, crosswalks, cycling and rolling improvements (active transportation), transit-related road infrastructure, and traffic safety projects.

Overview of Program Changes (Draft)

	Roads DCC Program Recoverable Value	Number of Projects
2017 Approved DCC Program	\$ 504,321,687	126
Less: Completed Projects	(\$ 44,822,681)	(12)
Add: Inflationary Adjustment	\$ 257,579,854	-
Add: New / Enhanced Existing Projects	\$ 1,006,335	1
2022 Draft DCC Program (Attachment 1.1)	\$ 718,085,195	115

Overview of Updated Program

In correspondence with the goals and objectives of the Official Community Plan, these projects focus on accommodating and encouraging sustainable transportation.

Project Type	Description of Project Type	% of Total
Complete Streets	New /upgrade existing roads to accommodate all travel modes	65%
Road Safety	Arterial road crosswalks, major intersection improvements, neighbourhood traffic safety improvements, and traffic signals	17%
Sustainable Transportation	Active transportation, pedestrian and transit infrastructure	16%
Others	Project partnership funding, transportation modelling	2%

Highlights of Draft DCC Program

Completed Roads DCC Projects

Approximately \$45 million in Roads DCC projects have been completed since 2017, including:

- River Parkway (Hollybridge Way to Gilbert Road): major street with median in corridor;
- River Parkway (Gilbert Road to Cambie Road): extension of major street at interim standard;
- No. 2 Road Widening (Steveston Highway to Dyke Road): upgrade of roadway with selected intersections widening, signalization of No. 2 Road-Moncton Street and multi-use pathway;
- Jacombs Road (Cambie Road to Bathgate Road): sidewalk installation;
- Alderbridge Way (No. 4 Road to Fisher Drive): multi-use pathway installation; and
- Left-Turn Bay Installation (3 locations): eastbound Alderbridge Way at McClelland Road, eastbound Alderbridge Way at May Drive, southbound Garden City Road at Odlin Road.

New Roads DCC Project

- Moncton Street (frontage of new Steveston Community Centre and Library): upgrade with new boulevard, sidewalk and cycling facilities.

Project No.	Project Description	Location	Draft Roads DCC Recoverable Amount
CC-1	Roadworks, Urban Greenway incl S/W and Blvd	Alderbridge Way	\$ 6,138,644
CC-2	Roadworks, Sidewalk Improvements	Alderbridge Way	\$ 567,122
CC-3	Roadworks, Widen to 4 lanes	Beckwith St	\$ 9,175,832
CC-4	Roadworks, Widen to 4 lanes	Beckwith St	\$ 2,862,882
CC-5	Roadworks, Extension of Major Street, with Cycling	Brown Rd	\$ 17,836,896
CC-6	Roadworks, Extension of Major Street, with Cycling	Brown Rd	\$ 12,923,728
CC-7	Roadworks, Widen, Add cycling Lanes, new S/W	Brown Rd	\$ 15,924,548
CC-8	Roadworks, Widen, Add cycling Lanes, new S/W	Browngate Rd	\$ 5,886,119
CC-9	Roadworks, New Major Street Segment with Cycling	Browngate Rd	\$ 26,902,689
CC-10	Roadworks, Urban Greenway incl S/W and Blvd	Cambie Rd	\$ 963,072
CC-11	Roadworks, Major street w/median in new corridor	Cambie Rd	\$ 10,218,219
CC-12	Roadworks, Widen, Add cycling Lanes, new S/W	Capstan Way	\$ 30,037,527
CC-13	Roadworks, Cycling Lanes	Cook Rd	\$ 3,870,158
CC-14	Roadworks, Extension of Major Street, with Cycling	Cooney Rd	\$ 54,742,743
CC-15	Roadworks, Cycling Lanes	Cooney Rd	\$ 3,200,522
CC-16	Roadworks, Ped/cyc crossing enhancements, on Garden City, between Alderbridge and Westminster	Garden City Rd	\$ 299,079
CC-17	Roadworks, Ped/cyc crossing enhancements, on Garden City, between Westminster and Granville	Garden City Rd	\$ 299,079
CC-18	Roadworks, Ped/cyc crossing enhancements, on Garden City, between Sea Island and Cambie	Garden City Rd	\$ 299,079
CC-19	Roadworks, Upgrade Cycling, Add Urban Greenway	Gilbert Rd	\$ 99,693
CC-20	Roadworks, Urban Greenway incl S/W and Blvd	Gilbert Rd	\$ 741,114
CC-21	Roadworks, Urban Greenway incl S/W and Blvd	Gilbert Rd	\$ 1,881,000
CC-22	Roadworks, Ped/cyc crossing enhancements, on Gilbert Road at Lansdowne	Gilbert Rd	\$ 299,079
CC-23	Roadworks, Widen to 4 lanes, Upgr. Cycling, Urban Greenway	Gilbert Rd	\$ 10,868,418
CC-24	Roadworks, Urban Greenway incl S/W and Blvd	Granville Avenue	\$ 3,401,789
CC-25	Roadworks, Urban Greenway	Great Canadian Way	\$ 90,288
CC-26	Roadworks, Extend Minor Street - Commercial	Hazelbridge Way	\$ 1,352,439
CC-27	Roadworks, Cycling, Urban Greenway	Lansdowne Rd	\$ 14,405,639
CC-28	Roadworks, Extend Major Street, Include Cycling, Urban Greenway	Lansdowne Rd	\$ 25,971,281
CC-29	Roadworks, Cycling, Urban Greenway	Lansdowne Rd	\$ 9,855,186
CC-30	Roadworks, Extend Major Street, Include Cycling, Urban Greenway	Lansdowne Rd	\$ 10,661,822
CC-31	Roadworks, Widen, new S/W, Bicycle Friendly Street (Shared Lane)	Leslie Rd	\$ 4,237,490
CC-32	Roadworks, Realign and upgrade, Bicycle Friendly Street (Shared lane)	Leslie Rd	\$ 2,342,047
CC-33	Roadworks, Sidewalk Improvements, Bicycle Friendly Street	Leslie Rd	\$ 678,101
CC-34	Roadworks, Widen, new S/W, Bicycle Friendly Street (Shared Lane)	Leslie Rd	\$ 10,193,766
CC-37	Roadworks, Extend Major Street, Include Cycling, Urban Greenway	Minoru Blvd	\$ 28,267,982
CC-38	Roadworks, Sidewalk Improvements	Minoru Blvd	\$ 814,473

Project No.	Project Description	Location	Draft Roads DCC Recoverable Amount
CC-39	Roadworks, Cycling, Urban Greenway	Minoru Blvd	\$ 1,560,290
CC-40	Roadworks, Realign and upgrade - Urban Greenway incl S/W and Blvd west side. (include future widening for raised bike lane on west side)	No. 3 Road	\$ 1,125,779
CC-41	Roadworks, Urban Greenway incl S/W and Blvd, west side	No. 3 Road	\$ 271,805
CC-42	Roadworks, Realign and upgrade - Urban Greenway incl S/W and Blvd west side. (include future widening for raised bike lane on west side)	No. 3 Road	\$ 7,287,621
CC-43	Roadworks, Realign and upgrade (Future widening / realignment)	No. 3 Road	\$ 4,540,421
CC-44	Roadworks, Urban Greenway incl S/W and Blvd, west side	No. 3 Road	\$ 1,936,490
CC-45	Roadworks, Realign and upgrade to major street with cycling	Odlin Rd	\$ 17,801,918
CC-46	Roadworks, Realign and upgrade to major street with cycling	Odlin Rd	\$ 4,429,553
CC-48	Roadworks, Major street w/median in new corridor	River Parkway	\$ 22,756,965
CC-49	Roadworks, Road extension to interim standards	River Parkway	\$ 4,115,628
CC-50	Roadworks, Major street w/median in new corridor	River Parkway	\$ 6,260,909
CC-53	Roadworks, Widen to 4 lanes + cycling + median	River Parkway	\$ 4,394,016
CC-54	Roadworks, Widen to 4 lanes, Shared Cycling	Sexsmith Rd	\$ 1,245,222
CC-55	Roadworks, Extension of Major Street, with Cycling	Sexsmith Rd	\$ 1,311,057
CC-56	Roadworks, Widen, Add cycling Lanes, new S/W	Sexsmith Rd	\$ 14,463,324
CC-57	Roadworks, Extend Minor Street - Residential	Sorenson Cr	\$ 607,563
CC-60	Roadworks, Urban Greenway incl S/W and Blvd	Westminster Hwy	\$ 2,699,235
CC-61	Roadworks, Ped/cyc crossing enhancements, on Westminster, between No. 3 and Garden City	Westminster Hwy	\$ 299,079
CC-62	Roadworks, Urban Greenway incl S/W and Blvd	Westminster Hwy	\$ 2,202,651
NSC-5	Neighbourhood Centre Active Transportation Improvements	Various locations	\$ 2,399,216
NSC-7	Neighbourhood Centre Active Transportation Improvements	Various locations	\$ 4,452,327
CCS- 2	Traffic Signal- Upgrade	City Centre Traffic Signal Enhancement Program	\$ 6,748,088
CCS- 1	Traffic Signal- New	City Centre Traffic Signal Installation Program	\$ 15,306,638
CCS- 3	Traffic Signal- add 4th leg	City Centre Traffic Signal Upgrade Program	\$ 1,892,756
Gen-01	Traffic Signal Installation Program	Various locations	\$ 24,924,191
Gen-02	Cycling Infrastructure Improvement Program	Various locations	\$ 7,476,975
Gen-03	Sidewalk, annual program	Various locations	\$ 4,984,650
Gen-04	Transit Plan Infrastructure Improvements	Various locations	\$ 4,984,650
Gen-05	Neighbourhood Traffic Calming Program	Various locations	\$ 3,987,720
Gen-06	Arterial Road Crosswalk Improvement Program	Various locations	\$ 7,476,975
Gen-07	Minor Traffic Safety Improvements	Various locations	\$ 996,930
Gen-08	Project Partnership Funding	Various locations	\$ 9,969,300
Gen-09	Major Intersection Improvements	Various locations	\$ 24,924,191
Gen-10	Transportation Modelling	Various locations	\$ 1,993,860

Project No.	Project Description	Location	Draft Roads DCC Recoverable Amount
CW- 03	Roadworks - Collector, Commercial Cross-section	Blundell Rd	\$ 10,837,513
CW- 04	Roadworks - Collector, Commercial Cross-section	Blundell Rd	\$ 7,377,282
CW- 05	Roadworks - Arterial, Undivided, Widening	Bridgeport Rd	\$ 2,292,939
CW- 06	Roadworks - Local, Residential Cross-section	Browngate Rd	\$ 210,672
CW- 07	Roadworks - Sidewalk Installation	Cedarbridge Way - Sidewalk	\$ 584,991
CW- 08	Roadworks - Local, Residential Cross-section Construction	Corvette Way	\$ 1,074,051
CW- 09	Roadworks - Overpass Structure	Dover Crossing Pedestrian Overpass: No 2 Road	\$ 299,079
CW- 10	Roadworks - Collector, Residential, Cross-section Construction	Ferndale Road	\$ 723,245
CW- 11	Roadworks - Arterial, Undivided, Widening	Francis Road	\$ 2,090,732
CW- 12	Roadworks - Local, Commercial/Industrial, Construction	Fraserwood Way	\$ 8,983,656
CW- 13	Roadworks - Sidewalk Installation	Garden City	\$ 175,874
CW- 14	Roadworks - Arterial, Divided, Widening	Garden City Rd	\$ 3,360,407
CW- 15	Roadworks - Arterial, Undivided (widening)	Granville Ave	\$ 3,093,305
CW- 18	Roadworks - Collector, Commercial	Hazelbridge Way	\$ 126,027
CW- 19	Roadworks - Bike Lane	Jacombs Rd	\$ 80,883
CW- 21	Roadworks - New Local, Commercial/Industrial, Construction	Knox Rd	\$ 11,311,394
CW- 22	Roadworks - Local, Commercial, Widening	Kwantlen St	\$ 8,473,487
CW- 23	Roadworks - New Local, Full construction	Lynas Lane Extension	\$ 1,524,618
CW- 24	Roadworks - New Local, Commercial/Industrial, Construction	Mitchell Rd	\$ 4,052,615
CW- 25	Roadworks - Arterial, Undivided, Widening	Nelson Rd	\$ 3,456,904
CW- 27	Roadworks - Minor Arterial, Commercial, Widening	No 5 Rd	\$ 2,225,223
CW- 28	Roadworks - Arterial, Undivided, Widening	No 6 Rd	\$ 4,915,994
CW- 29	Roadworks - Arterial, Undivided, Widening	No 6 Rd	\$ 1,495,395
CW- 30	Roadworks - Arterial, Undivided, Widening	No 6 Rd	\$ 2,852,537
CW- 31	Roadworks - Local, Residential Cross-section Construction	Princess St, Princess Lane, London Rd	\$ 508,811
CW- 32	Land Acq (CP Road)	River Parkway	\$ 2,511,135
CW- 33	Roadworks - Sidewalk Installation	River Dr Sidewalk	\$ 1,646,417
CW- 34	Roadworks - Local, Commercial/Industrial, Construction	Savage Rd	\$ 1,571,576
CW- 35	Roadworks - Arterial, Undivided, Widening	Shell Rd	\$ 12,857,576
CW- 36	Roadworks - Arterial, Undivided, Widening	Shell Rd	\$ 5,396,589
CW- 37	Roadworks - Arterial, Undivided, Widening	Shell Rd	\$ 181,517
CW- 38	Roadworks - Arterial, Undivided, Widening	Shell Rd (west)	\$ 6,546,821
CW- 39	Roadworks - Local, Residential Cross-section Construction	South McLennan	\$ 10,587,333
CW- 40	Roadworks - Arterial, Rural Undivided, Widening	Steveston Hwy widening	\$ 8,357,283
CW- 41	Roadworks - Local, Commercial/Industrial, Construction to new Cross-section	Triangle Rd	\$ 4,502,174
CW- 42	Roadworks - Collector, Commercial, Construction to Cross-section	Viking Way	\$ 1,578,159

Project No.	Project Description	Location	Draft Roads DCC Recoverable Amount
CW- 43	Roadworks - New Collector, Commercial Cross-section	Vulcan Way	\$ 6,241,158
CW- 44	Roadworks - New Collector, Commercial Cross-section	Vulcan Way	\$ 5,911,043
CW- 45	Roadworks - Arterial, Divided, Widening	Westminster Hwy	\$ 2,533,707
CW- 46	Roadworks - Arterial, Undivided, Widening	Westminster Hwy	\$ 10,219,473
CW- 47	Roadworks - Arterial, Undivided, Widening	Westminster Hwy	\$ 2,016,432
CW- 48	Roadworks - New Local, to Residential Cross-section Construction	Willet Ave	\$ 1,738,985
CW- 52	Roadworks - Left turn bay	Garden City Rd	\$ 322,278
CW- 55	Roadworks - Off Street bike way	Alderbridge Way	\$ 94,050
CW-57	Roadworks - Frontage Work	Moncton St	\$ 1,006,335
Total DCC Recoverable for Roads DCC Program (draft)			\$ 718,085,195

UPDATED DRAINAGE DCC PROGRAM (DRAFT)

Purpose of Program

The Drainage DCC Program provides a dedicated source of funding for upgrading existing infrastructure as well as installing new infrastructure to support growth. The drainage and diking systems manage storm water runoff and provide protection against flooding. As the City's population and population density increase, the significance of the City's flood protection increases. In addition, the increased impervious land area associated with densification through redevelopment increases the amount of surface runoff into the drainage system. As such, more robust flood protection infrastructure with increased capacity is required.

Overview of Program Changes (Draft)

	Drainage DCC Program Recoverable Value	Number of Projects
2017 Approved DCC Program	\$ 167,383,669	353
Less: Completed Projects	(\$ 4,609,823)	(7)
Less: Deleted/Deferred Projects	(\$ 24,311,804)	(17)
Add: Inflationary Adjustment	\$ 278,474,221	-
Add: New / Enhanced Existing Projects	\$ 166,388,591	56
2022 Draft DCC Program (Attachment 2.1)	\$ 583,324,854	385

Overview of Updated Program

The Drainage DCC Program aligns with the following objectives from the 2041 Official Community Plan, Section 12.2 Drainage and Irrigation and Section 12.6 Flood Protection:

- Maintain and improve urban drainage system to meet the public's needs and regional requirements; and
- Maintain and improve flood protection measures throughout Richmond.

The program consists of installation or upgrade of drainage pipes, pump stations and dikes.

Project Types	Description of Project Type	% of Total
Drainage Pipes	Installation or upgrade of drainage pipes	70%
Dikes	Installation or upgrade of dikes	28%
Pump Stations	Installation or upgrade of pump stations	2%

Highlights of Draft DCC Program

- New projects include approximately 42 kilometers of dike upgrades and upgrades to the Gilbert Road South and Cambie Road West Drainage Pump Stations.
- Projects completed since the previous DCC program update include the Horseshoe Slough and Shell Road North Drainage Pump Stations.
- Dike upgrades have been added to the program to further enhance the City's level of flood protection.

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Box Culvert	Francis Road	\$ 7,010,210
Pump Station	No 1 Rd North Drainage Pump Station	\$ 1,367,240
Box Culvert	No. 1 Road	\$ 11,447,673
Box Culvert	McCallan Road	\$ 7,150,291
Box Culvert	Francis Road	\$ 5,713,321
Box Culvert	Francis Road	\$ 389,170
Drainage Main	Lynas Lane	\$ 202,755
Drainage Main	Granville	\$ 254,120
Box Culvert	Steveston Highway	\$ 8,904,307
Box Culvert	Railway Ave. and Moncton St.	\$ 36,293,400
Box Culvert	Gilbert Road (incl. connections to parallel system at Gilhurst Gate and Gainsborough Dr.)	\$ 64,136,028
Box Culvert	Williams Road	\$ 3,682,605
Box Culvert	No. 2 Road	\$ 6,232,375
Box Culvert	No. 2 Road	\$ 1,864,783
Box Culvert	No. 2 Road	\$ 2,768,391
Box Culvert	Railway Ave.	\$ 80,948
Drainage Main	Garry St.	\$ 163,619
Drainage Main	Garry St.	\$ 132,043
Box Culvert	Steveston Hwy	\$ 4,015,131
Box Culvert	S. of Williams Road	\$ 5,207,670
Box Culvert	No. 4 Rd.	\$ 18,958,208
Box Culvert	Garden City	\$ 1,182,322
Box Culvert	Steveston Hwy Culvert	\$ 5,573,920
Drainage Main	Shell Road Canal	\$ 346,470
Drainage Main	Williams Road - south side	\$ 34,342
Drainage Main	Railway Ave.	\$ 1,202,850
Drainage Main	Blundell	\$ 59,400
Drainage Main	Housman Street	\$ 40,219
Pump Station	No 2 Rd South Drainage Pump Station	\$ 1,089,000
Drainage Main	Constable Gate	\$ 41,828
Pump Station	Gilbert Rd South Drainage Pump Station	\$ 1,361,250
Drainage Main	Ransford Gate	\$ 3,824
Drainage Main	4th Ave	\$ 4,054
Drainage Main	Fortune Ave	\$ 8,303
Drainage Main	Fortune Ave	\$ 12,772
Drainage Main	Bonavista Dr	\$ 15,168
Drainage Main	Fortune Ave	\$ 16,935
Drainage Main	Fortune Ave	\$ 14,509
Drainage Main	Bonavista Dr	\$ 17,907
Drainage Main	Bonavista Dr	\$ 24,217
Drainage Main	Azure Road	\$ 21,807
Drainage Main	Azure Road	\$ 22,411
Drainage Main	Minoru Blvd	\$ 23,038
Drainage Main	Azure Road	\$ 24,250
Drainage Main	Azure Road	\$ 27,067

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Drainage Main	River Road	\$ 41,544
Drainage Main	River Road	\$ 42,911
Drainage Main	River Road	\$ 45,697
Drainage Main	Blundell Road	\$ 47,042
Drainage Main	Blundell Road	\$ 50,727
Drainage Main	Blundell Road	\$ 47,646
Drainage Main	Azure Road	\$ 49,300
Drainage Main	Azure Road	\$ 49,494
Drainage Main	Azure Road	\$ 49,497
Drainage Main	Azure Road	\$ 61,790
Drainage Main	Minoru Blvd	\$ 77,696
Drainage Main	Blundell Road	\$ 75,472
Drainage Main	Azure Road	\$ 87,467
Drainage Main	Azure Road	\$ 97,717
Drainage Main	Garden City Rd	\$ 1,083
Drainage Main	Amethyst Ave	\$ 1,258
Drainage Main	No. 4 Rd	\$ 1,289
Drainage Main	Tweedsmuir Ave	\$ 2,174
Drainage Main	Dixon Ave	\$ 3,021
Drainage Main	Bakerview Dr	\$ 3,331
Drainage Main	Steveston Hwy	\$ 3,481
Drainage Main	Greenless Rd	\$ 3,569
Drainage Main	Steveston Hwy	\$ 3,630
Drainage Main	Ash St	\$ 3,718
Drainage Main	Francis Road	\$ 4,139
Drainage Main	Bakerview Dr	\$ 5,036
Drainage Main	Bakerview Dr	\$ 5,036
Drainage Main	Francis Road	\$ 5,495
Drainage Main	Dolphin Ave	\$ 5,586
Drainage Main	Saunders Rd	\$ 5,717
Drainage Main	No. 4 Rd	\$ 5,732
Drainage Main	Williams Rd	\$ 5,748
Drainage Main	Francis Road	\$ 7,703
Drainage Main	Amethyst Ave	\$ 7,817
Drainage Main	Rosehill Dr	\$ 7,828
Drainage Main	Francis Rd	\$ 10,201
Drainage Main	Bakerview Dr	\$ 10,076
Drainage Main	Saunders Rd	\$ 10,992
Drainage Main	Saunders Rd	\$ 10,944
Drainage Main	Greenfield Dr	\$ 11,858
Drainage Main	Wagner Dr	\$ 12,313
Drainage Main	Francis Rd	\$ 12,365
Drainage Main	Goldstream Dr	\$ 12,405
Drainage Main	Tweedsmuir Ave	\$ 11,791
Drainage Main	Dixon Ave	\$ 13,899
Drainage Main	Tweedsmuir Ave	\$ 13,047

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Drainage Main	Greenless Rd	\$ 13,125
Drainage Main	Rosehill Dr	\$ 13,268
Drainage Main	Williams Rd	\$ 15,622
Drainage Main	Goldstream Dr	\$ 15,940
Drainage Main	Francis Rd	\$ 16,019
Drainage Main	Amethyst Ave	\$ 16,159
Drainage Main	Williams Rd	\$ 16,882
Drainage Main	Ash St	\$ 16,671
Drainage Main	Steveston Hwy	\$ 16,930
Drainage Main	Francis Rd	\$ 16,965
Drainage Main	Steveston Hwy	\$ 17,191
Drainage Main	Francis Rd	\$ 18,805
Drainage Main	Steveston Hwy	\$ 17,469
Drainage Main	Steveston Hwy	\$ 17,757
Drainage Main	Steveston Hwy	\$ 18,159
Drainage Main	Ryan Rd	\$ 19,699
Drainage Main	Ash St	\$ 18,194
Drainage Main	Steveston Hwy	\$ 18,621
Drainage Main	St Albans Rd	\$ 20,610
Drainage Main	Dolphin Ave	\$ 20,979
Drainage Main	Francis Rd	\$ 21,899
Drainage Main	St Albans Rd	\$ 22,285
Drainage Main	Heather St	\$ 22,337
Drainage Main	Glenallan Gate	\$ 22,417
Drainage Main	Williams Rd	\$ 22,534
Drainage Main	St Albans Rd	\$ 23,123
Drainage Main	Bakerview Dr	\$ 23,922
Drainage Main	Rosewell Ave	\$ 26,059
Drainage Main	St Albans Rd	\$ 22,285
Drainage Main	Dolphin Ave	\$ 27,061
Drainage Main	Francis Rd	\$ 27,204
Drainage Main	Williams Rd	\$ 28,063
Drainage Main	Dolphin Ave	\$ 28,255
Drainage Main	Ryan Rd	\$ 28,965
Drainage Main	Francis Rd	\$ 29,861
Drainage Main	Williams Rd	\$ 2,129
Drainage Main	No. 5 Rd	\$ 2,635
Drainage Main	Steveston Hwy	\$ 4,000
Drainage Main	Williams Rd	\$ 4,006
Drainage Main	No. 5 Rd	\$ 4,396
Drainage Main	Williams Rd	\$ 5,218
Drainage Main	Shell Rd	\$ 5,770
Drainage Main	Coppersmith Way	\$ 6,688
Drainage Main	Steveston Hwy	\$ 8,172
Drainage Main	No. 5 Rd	\$ 5,921
Drainage Main	Shell Rd	\$ 9,796

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Drainage Main	Steveston Hwy	\$ 9,822
Drainage Main	Williams Rd	\$ 9,189
Drainage Main	Williams Rd	\$ 9,239
Drainage Main	Horseshoe Way	\$ 12,272
Drainage Main	Steveston Hwy	\$ 13,757
Drainage Main	Williams Rd	\$ 15,489
Drainage Main	Shell Rd	\$ 15,890
Drainage Main	Steveston Hwy	\$ 15,913
Drainage Main	No. 5 Rd	\$ 17,627
Drainage Main	Williams Rd	\$ 17,901
Drainage Main	Steveston Hwy	\$ 18,055
Drainage Main	Williams Rd	\$ 20,810
Drainage Main	Seacote Rd	\$ 19,440
Drainage Main	Horseshoe Way	\$ 23,573
Drainage Main	Williams Rd	\$ 20,543
Drainage Main	No. 5 Rd	\$ 21,593
Drainage Main	No. 5 Rd	\$ 22,312
Drainage Main	Horseshoe Way	\$ 26,633
Drainage Main	Horseshoe Way	\$ 26,634
Drainage Main	Horseshoe Pl	\$ 29,932
Drainage Main	No. 5 Rd	\$ 26,226
Drainage Main	Horseshoe Way	\$ 32,235
Drainage Main	Horseshoe Way	\$ 25,788
Drainage Main	Horseshoe Way	\$ 32,564
Drainage Main	No. 5 Rd	\$ 28,507
Drainage Main	Seacote Rd	\$ 26,314
Drainage Main	No. 5 Rd	\$ 5,046
Drainage Main	Williams Rd	\$ 28,351
Drainage Main	King Rd	\$ 39,258
Drainage Main	Williams Rd	\$ 26,952
Drainage Main	Williams Rd	\$ 26,954
Drainage Main	King Rd	\$ 29,258
Drainage Main	Albion Rd	\$ 31,145
Drainage Main	Albion Rd	\$ 28,749
Drainage Main	Coppersmith Way	\$ 31,190
Drainage Main	Horseshoe Way	\$ 31,430
Drainage Main	Coppersmith Way	\$ 29,508
Drainage Main	Dixon Ave	\$ 30,442
Drainage Main	Dolphin Ave	\$ 31,482
Drainage Main	Dixon Ave	\$ 42,915
Drainage Main	Glendower Gate	\$ 86,004
Drainage Main	Dolphin Ave	\$ 105,232
Drainage Main	Dixon Ave	\$ 156,049
Drainage Main	Williams Rd	\$ 11,008
Drainage Main	King Rd	\$ 14,314
Drainage Main	Shell Rd	\$ 18,713

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Drainage Main	Steveston Hwy	\$ 56,324
Drainage Main	Shell Rd	\$ 111,747
Drainage Main	Sealord Rd	\$ 105,211
Drainage Main	King Rd	\$ 231,994
Drainage Main	ROW b/w 7400 Minoru Blvd and 7500 Minoru Blvd (going east)	\$ 106,164
Drainage Main	Ackroyd Rd - south side	\$ 241,701
Drainage Main	Ackroyd Rd - north side	\$ 186,000
Drainage Main	Ackroyd Rd - south side	\$ 71,354
Drainage Main	Ackroyd Rd - south side	\$ 166,398
Drainage Main	Ackroyd Rd - north side	\$ 256,296
Drainage Main	Blundell Rd - north side	\$ 672,962
Drainage Main	Blundell Rd - north side	\$ 312,667
Drainage Main	Blundell Rd	\$ 187,621
Drainage Main	Bridge St - west side	\$ 114,646
Drainage Main	Cooney Rd	\$ 144,541
Drainage Main	Cooney Rd (east side) & Westminster Hwy (south side) (twin ex. box culvert)	\$ 503,866
Drainage Main	Gilbert Rd - ROW approx. 185m north of Blundell Rd	\$ 39,075
Drainage Main	Garden City Rd - east side	\$ 13,258
Drainage Main	General Currie - south side	\$ 10,494
Drainage Main	Elmbridge Way	\$ 76,854
Drainage Main	Elmbridge Way	\$ 159,641
Drainage Main	Gilbert Rd North PS outfall	\$ 29,613
Drainage Main	Granville Ave - south side	\$ 152,295
Drainage Main	Granville Ave - additional new pipe	\$ 127,901
Drainage Main	Granville Ave - south side	\$ 370,430
Drainage Main	Granville Ave - south side	\$ 1,491,399
Drainage Main	Heather St	\$ 132,077
Drainage Main	Heather St	\$ 50,276
Drainage Main	Lansdowne Rd & ROW - additional new pipe	\$ 1,164,225
Drainage Main	Minoru Blvd	\$ 499,513
Drainage Main	Minoru Blvd - replace and new segment	\$ 108,582
Drainage Main	Minoru Blvd at Acheson Rd	\$ 4,282
Drainage Main	Minoru Blvd	\$ 27,319
Drainage Main	Minoru Blvd	\$ 66,796
Drainage Main	Minoru Blvd	\$ 42,266
Drainage Main	No 3 Rd - west side	\$ 162,168
Drainage Main	No 3 Rd - additional new pipe	\$ 1,725,467
Drainage Main	Westminster Hwy - north side	\$ 188,667
Drainage Main	Park Rd - north side	\$ 111,637
Drainage Main	Pimliko Way/Citation Dr	\$ 173,362
Drainage Main	Railway ROW near Browngate Rd ROW and No 3 Rd	\$ 62,482
Drainage Main	River Rd - south side	\$ 51,177
Drainage Main	River Rd	\$ 2,903
Drainage Main	River Rd	\$ 19,372
Drainage Main	River Rd	\$ 204,860

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Drainage Main	River Rd	\$ 342,045
Drainage Main	River Rd	\$ 46,324
Drainage Main	Sexsmith Rd near Sea Island Way - connect East to West drainage system, additional new pipe	\$ 10,647
Drainage Main	Westminster Hwy - additional new pipe	\$ 272,689
Drainage Main	Garden City Rd - west side	\$ 15,781
Drainage Main	Garden City Rd - west side	\$ 63,029
Drainage Main	Garden City Rd - west side	\$ 182,857
Drainage Main	St. Albans Rd - west side	\$ 79,352
Drainage Main	Acheson Rd - south side	\$ 408,623
Drainage Main	Acheson Rd - north side	\$ 34,155
Drainage Main	Acheson Rd - north side (existing culverts only)	\$ 98,456
Drainage Main	Acheson Rd - north side	\$ 67,419
Drainage Main	Alderbridge Way	\$ 23,166
Drainage Main	Anderson Rd	\$ 58,955
Drainage Main	Ash St	\$ 129,566
Drainage Main	Ash St	\$ 249,728
Drainage Main	Ash St	\$ 133,774
Drainage Main	Ash St	\$ 359,816
Drainage Main	Ash St - west side	\$ 42,917
Drainage Main	Heather St - west side	\$ 23,909
Drainage Main	Bridge St - west side	\$ 519,750
Drainage Main	Sills Ave	\$ 145,085
Drainage Main	Bridge St - east side	\$ 630,630
Drainage Main	General Currie Rd - north side	\$ 8,044
Drainage Main	Buswell St	\$ 181,170
Drainage Main	Cambie Rd PS outfall	\$ 72,765
Drainage Main	Cooney Rd	\$ 278,883
Drainage Main	Gilbert Rd - ROW at rear	\$ 62,073
Drainage Main	Keefer Ave	\$ 103,356
Drainage Main	Garden City Rd	\$ 827,962
Drainage Main	Garden City Rd	\$ 474,755
Drainage Main	Garden City Rd	\$ 8,168
Drainage Main	Garden City Rd	\$ 183,732
Drainage Main	General Currie Rd	\$ 319,980
Drainage Main	General Currie Rd	\$ 249,233
Drainage Main	General Currie Rd	\$ 322,394
Drainage Main	Granville Ave	\$ 100,683
Drainage Main	Granville Ave	\$ 5,495
Drainage Main	Granville Ave	\$ 8,910
Drainage Main	Abercrombie Dr	\$ 86,749
Drainage Main	Minoru Blvd	\$ 157,818
Drainage Main	Granville Ave - north side	\$ 489,184
Drainage Main	Granville Ave - north side	\$ 153,698
Drainage Main	Bennett Rd - north side	\$ 1,156,370
Drainage Main	Bennett Rd - north side	\$ 198,916

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Drainage Main	General Currie Rd - north side	\$ 167,508
Drainage Main	General Currie Rd - north side	\$ 289,575
Drainage Main	General Currie Rd - north side	\$ 180,576
Drainage Main	General Currie Rd - north side	\$ 74,003
Drainage Main	Westminster Hwy - north side	\$ 12,771
Drainage Main	Westminster Hwy - north side	\$ 9,974
Drainage Main	Granville Ave - south side	\$ 303,237
Drainage Main	Granville Ave - south side	\$ 282,150
Drainage Main	Bennett Rd - south side	\$ 1,135,134
Drainage Main	Bennett Rd - south side	\$ 131,497
Drainage Main	Bennett Rd - south side	\$ 275,468
Drainage Main	General Currie Rd - south side	\$ 227,502
Drainage Main	General Currie Rd - south side	\$ 567,567
Drainage Main	Jones Rd - south side	\$ 115,211
Drainage Main	Jones Rd - south side	\$ 338,580
Drainage Main	Blundell Rd	\$ 487,385
Modelling		\$ 742,500
Pump Station	Cambie Rd West Drainage Pump Station	\$ 1,361,250
Drainage Main	Cambie Rd West of Garden City Rd - south side	\$ 51,233
Drainage Main	Dallyn Rd	\$ 8,829
Drainage Main	Dallyn Rd	\$ 328,879
Drainage Main	Danforth Dr	\$ 38,847
Drainage Main	River Rd	\$ 196,298
Drainage Main	St Edwards Dr	\$ 105,948
Drainage Main	Bridgeport Rd North Side	\$ 185,041
Drainage Main	No 5 Rd	\$ 503,252
Drainage Main	Bathgate Way	\$ 253,024
Drainage Main	River Rd	\$ 155,096
Drainage Main	Bath Slough	\$ 174,627
Drainage Main	Vulcan Way	\$ 533,785
Drainage Main	Bridgeport	\$ 227,788
Drainage Main	Viking Way (with new connection)	\$ 127,284
Pump Station	No. 6 Rd. North Drainage Pump Station	\$ 1,361,250
Drainage Main	Burrows Rd	\$ 297,095
Drainage Main	Bargen Dr	\$ 196,268
Drainage Main	No 5 Rd (New Connection)	\$ 24,131
Box Culvert	Blundell Rd	\$ 16,750,562
Box Culvert	McCallan Road	\$ 7,150,291
Box Culvert	Francis Road	\$ 5,713,321
Box Culvert	Francis Road	\$ 389,170
Box Culvert	Mccallan Rd	\$ 12,395,416
Box Culvert	No 3 Rd	\$ 27,139,965
Box Culvert	Cambie Road	\$ 22,654,438
Box Culvert	Gilbert Rd	\$ 11,358,243
Box Culvert	Granville Ave - north side	\$ 6,780,075
Box Culvert	Cambie Rd - south side	\$ 2,339,495

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Box Culvert	Cambie Rd - south side	\$ 4,081,554
Box Culvert	Cambie Rd	\$ 8,001,627
Box Culvert	Shell Rd	\$ 707,469
Box Culvert	Shell Rd	\$ 2,713,897
Box Culvert	Cambie St	\$ 9,547,821
Box Culvert	Bird Rd	\$ 12,445,668
Box Culvert	Bath Slough	\$ 1,333,753
Box Culvert	Bath Slough	\$ 854,375
Box Culvert	Bath Slough	\$ 850,509
Box Culvert	Bath Slough	\$ 1,248,702
Box Culvert	No 6 Rd North	\$ 21,831,566
Box Culvert	Bridgeport Rd - south side and cross over to north at Viking Way	\$ 9,017,386
Pump Station	No 3 Rd South Drainage Pump Station	\$ 2,722,500
Dike	South Dike - No 4 Rd to No 5 Rd	\$ 1,881,000
Dike	North Dike - Lynas Ln to No 2 Rd	\$ 1,138,500
Dike	South Dike - Fraserwood Way to Queens Rd	\$ 3,192,750
Dike	South Dike - Graybar Rd to Fraserwood Way	\$ 2,871,000
Dike	South Dike - Port of Vancouver to Nelson Rd	\$ 1,460,250
Dike	South Dike - No 7 Rd to Port of Vancouver	\$ 2,376,000
Dike	South Dike - VAFFC to No 7 Rd	\$ 2,277,000
Dike	South Dike - Riverport Way Park	\$ 965,250
Dike	South Dike - No 2 Rd to Gilbert Rd	\$ 4,232,250
Dike	Terra Nova West	\$ 1,867,635
Dike	Terra Nova North	\$ 2,477,475
Dike	North Dike - No 1 Rd to McCallan Rd Pump Station	\$ 3,087,315
Dike	North Dike - McCallan Rd Pump Station to Lynas Lane	\$ 1,524,600
Dike	North Dike - Queens Rd to Tree Island Steel	\$ 4,306,500
Dike	Farrel Estates Development (Dike Road to Graybar Road)	\$ 2,896,740
Dike	Cyber City Development to Yuanheng Development	\$ 1,181,565
Dike	South Dike - Rice Mill Rd (Canadian Fishing Company)	\$ 1,287,000
Dike	BC Ferries Development	\$ 4,611,915
Dike	South Dike - 13911 Garden City Road (Crown Packaging)	\$ 891,000
Dike	Cyber City Development	\$ 762,300
Dike	Duck Island Development	\$ 3,811,500
Dike	3500 Cessna Dr Development (Pacific Gateway Hotel)	\$ 952,875
Dike	8211 River Rd (between Moray Channel Bridge and Sea Island Connector)	\$ 323,978
Dike	South Dike - Queens Rd to Boundary Rd	\$ 5,915,250
Dike	South Dike - Finn Slough	\$ 4,677,750
Dike	Steveston Island Phase 1	\$ 4,192,650
Dike	North Dike - Shell Rd to Bath Slough Drainage Pump Station	\$ 3,659,040
Dike	North Dike - Bath Slough Drainage Pump Station to Knight St	\$ 3,582,810
Dike	North Dike - Knight St to No 6 Rd	\$ 2,286,900
Dike	West Dike - Garry Point Park to Steveston Hwy	\$ 4,040,190
Dike	West Dike - Steveston Hwy to Williams Rd	\$ 3,087,315
Dike	West Dike - Williams Rd to Francis Rd	\$ 3,087,315
Dike	West Dike - Francis Rd to Blundell Rd	\$ 3,163,545

Project Type	Project Location	Draft Drainage DCC Recoverable Amount
Dike	West Dike - Blundell Rd to Granville Ave	\$ 3,163,545
Dike	West Dike - Granville Ave to Westminster Hwy	\$ 3,087,315
Dike	North Dike - River Rd to No 1 Rd	\$ 2,782,395
Dike	Sea Island	\$ 1,608,750
Dike	North Dike - Dinsmore Bridge to Cambie Rd Drainage Pump Station	\$ 3,887,730
Dike	Yuanheng Development to Morray Channel Bridge	\$ 571,725
Dike	Oak St Bridge	\$ 1,257,795
Dike	North Dike - No 6 Rd to No 7 Rd	\$ 8,489,250
Dike	North Dike - No 7 Rd to No 8 Rd	\$ 8,860,500
Dike	North Dike - No 8 Rd to 19500 River Rd	\$ 8,019,000
Dike	North Dike - 19500 River Rd to CN Rail Trestle Bridge	\$ 8,316,000
Dike	North Dike - CN Rail Trestle Bridge to 22040 River Rd	\$ 4,034,250
Dike	North Dike - 22040 River Rd to Queens Rd	\$ 4,158,000
Dike	South Dike - Nelson Rd to Dyke Rd (Lafarge)	\$ 3,697,155
Dike	South Dike - No 5 Rd to BC Ferries Development (Mainland Sand & Gravel)	\$ 2,553,705
Dike	North Dike - Oak St Bridge to Canada Line SkyTrain (Foody World)	\$ 1,067,220
Dike	8811 River Rd (River Rock Casino Resort)	\$ 1,905,750
Dike	South Dike - Rice Mill Rd to Port of Vancouver (MoTI)	\$ 668,250
Dike	South Dike - Port of Vancouver to Steveston Hwy	\$ 2,846,250
Dike	South Dike - 16200 Portside Rd to 16280 Portside Rd	\$ 4,345,110
Total DCC Recoverable for Drainage DCC Program (draft)		\$ 583,324,854

UPDATED PARK ACQUISITION DCC PROGRAM (DRAFT)

Purpose of Program

The Parks Acquisition DCC program enables the City to expand parks services and provides a dedicated source of funding to increase the size of the parks and open space system in response to population growth.

Overview of Program Changes (Draft)

	Park Acquisition DCC Program Recoverable Value	Number of Projects
2017 Approved DCC Program	\$245,451,584	54
Less: Completed Projects	(\$ 27,198,690)	(4)
Add: Inflationary Adjustment	\$107,629,770	-
2022 Draft DCC Program	\$325,882,664	50

Overview of Updated Program

The Park Acquisition DCC program aligns with the objectives from the 2041 OCP. There are no major additions to this program update. There are several planning areas where no land acquisition has been identified. While there are modest levels of growth anticipated in these areas, the proposed approach focuses investment in park improvements in existing parks to increase the capacity of these parks to accommodate a growing population.

Planning Area	Acres by Park Type*				Park Acq. DCC Recoverable Value
	N	C	CW	NA	
Broadmoor	0.9				\$ 1,791,653
City Centre	4.72	1.531	157.17		\$ 231,224,032
East Cambie		0.258		5.8	\$ 2,776,356
East Richmond				79.06	\$ 16,518,190
Gilmore				19.78	\$ 23,180,245
Hamilton	4.19			2.4	\$ 19,248,447
Thompson		0.182	1.025		\$ 4,903,791
General				46.25	\$ 26,239,950
Total (draft)					\$325,882,664

*Park Type: N=Neighbourhood, C=Community, CW=City-Wide, NA=Natural Area

Highlights of Draft DCC Program

In order to meet the growth projected by the Official Community Plan (OCP) by 2041, the updated DCC program will enable the City to meet the city-wide park quantity standard of the OCP at 3.1 hectares/1,000 population (7.66 acres/1,000 population) and 1.3 hectares/1,000 population (3.25 acres/1,000 population) at City Centre. The following are highlights of the projects in the updated Parkland Acquisition program:

- Land acquisition of various properties in the City Centre area (Garden City Community Park, Paulik Neighbourhood Park, etc.) have been completed.
- The increasing cost of land acquisition has been evidently significant over recent years.
- Staff continues to look for opportunities to add to parkland inventory through park dedications via the rezoning development process.

UPDATED PARK DEVELOPMENT DCC PROGRAM (DRAFT)

Purpose of Program

The Parks Development DCC program enables the City to increase and to improve parks services in response to growth. The Parks Development DCC program provides a dedicated source of funding to fund the construction of new parks and add new facilities to existing parks required due to growth.

Overview of Program Changes (Draft)

	Park Development DCC Program Recoverable Value	Number of Projects
2017 Approved DCC Program	\$178,383,883	144
Less: Completed Projects	(\$15,955,583)	(3)
Add: Inflationary Adjustment	\$19,978,995	-
2022 Draft DCC Program	\$182,407,295	141

Overview of Updated Program

The parks and open space system in Richmond currently consists of over 871 ha. (2,153 acres) of park land and over 136 kilometers of trails. The number of proposed park development projects includes construction of new parks as well as improvements to existing parks to address the projected population growth.

Planning Area	Size (acres)	DCC Recoverable Cost by Park Type*					Park Dev. DCC Recoverable Value
		N	C	CW	NA	T/GW	
Blundell	106.3	\$846,079					\$846,079
Bridgeport	10.35	\$1,727,512					\$1,727,512
Broadmoor	134.53	\$1,438,719	\$3,217,789				\$4,656,508
City Centre	155.03	\$7,674,781	\$1,913,757	\$84,168,919			\$93,757,457
East Cambie	260.69	\$75,719	\$2,438,973		\$4,451,078		\$6,965,770
East Richmond	91.26			\$3,221,175			\$3,221,175
Fraser Lands	17.41				\$273,120	\$128,847	\$401,967
Gilmore	94.42				\$3,107,597		\$3,107,597
Hamilton	79.93	\$3,163,654	\$980,471		\$2,499,966	\$414,151	\$7,058,243
Sea Island	26.14				\$1,093,610		\$1,093,610
Seafair	91.93	\$956,731	\$1,656,604			\$82,621	\$2,695,956
Shellmont	48.08	\$864,697			\$281,957	\$2,379,277	\$3,525,931
Steveston	193.43	\$1,585,353	\$1,656,785	\$10,966,862			\$14,209,000
Thompson	251.07	\$631,894	\$1,718,225	\$5,668,431	\$1,330,303		\$9,348,854
West Cambie	30.62	\$2,142,033			\$196,408		\$2,338,441
City-Wide Trails						\$6,536,475	\$6,536,475
General				\$20,916,720			\$20,916,720
Total (draft)							\$182,407,295

*Park Type: N=Neighbourhood, C=Community, CW=City-Wide, NA=Natural Area, T/GW=Trail/Greenway

Highlights of Draft DCC Program

- The value of park development has increased due to increases in construction costs since the last update in 2016 and the inclusion of major works in some of the City's most significant parks. The costs assigned to each park development project are based on current park construction costs in the City.
- Various development projects have been completed or partially completed since the last program update. DCC recoverable costs for these projects have been deleted or reduced accordingly. These include Garden City Lands, London Steveston Neighbourhood Park, Minoru Park, Alexandra Park, and various park improvement projects in Steveston.
- Development and improvements to some of the major parks have begun, and will continue for the next few years. These include Minoru Park, Garden City Lands, The Gardens Agricultural Park, various community and neighbourhood parks, Community Gardens at various locations throughout the City.
- New park development will continue to be a focus for the rapidly densifying City Centre. Upcoming park development projects in the City Centre will include Lulu Island Park along the Middle Arm waterfront, and Lansdowne Major Park near the Canada Line Lansdowne station. Substantial DCC funded investments in park development are anticipated to continue at these locations.

UPDATED SANITARY DCC PROGRAM (DRAFT)

Purpose of Program

The Sanitary DCC Program provides a dedicated source of funding for upgrading existing infrastructure and installing new infrastructure to support growth. The sanitary sewer system collects sewage from properties and conveys it to wastewater treatment plants. As population density increases with redevelopment, sewage flows also increase, thereby requiring infrastructure with increased capacity.

Overview of Program Changes (Draft)

	Sanitary DCC Program Recoverable Value	Number of Projects
2017 Approved DCC Program	\$ 88,650,258	293
Less: Completed Projects	(\$ 6,174,754)	(9)
Less: Deleted/Deferred Projects	(\$ 8,844,502)	(30)
Add: Inflationary Adjustment	\$ 23,899,034	-
Add: New / Enhanced Existing Projects	\$ 4,704,303	17
2022 Draft DCC Program (Attachment 5.1)	\$ 102,234,339	271

Overview of Updated Program

The Sanitary DCC Program aligns with the following objective from the 2041 Official Community Plan, Section 12.1 Sanitary Sewers:

- Objective 2: Proactive planning of infrastructure upgrades and replacements due to age and growth.

The program consists of installation or upgrade of gravity mains, pump stations, and forcemains.

Project Type	Description of Project Type	% of Total
Gravity Mains	Installation or upgrade of gravity mains	50%
Pump Stations and Forcemains	Installation or upgrade of pump stations or forcemains	50%

Highlights of Draft DCC Program

- New projects include upgrades a pump station and approximately 930 meters of gravity mains.
- Projects completed since the previous DCC program update include the Willett, Eckersley B, and Leslie pump stations and associated works.
- A number of existing projects have been removed or reduced in scope due to the decrease in per capita sanitary flows as a result of water conservation efforts.

Project ID	Location	Draft Sanitary DCC Recoverable Amount
GRAVITY SEWER		
2006-BP-1066	Leslie	\$ 133,316
2006-BP-1074	Vanhorne	\$ 47,288
2006-BP-1083	Walford	\$ 193,590
2006-BP-1084	Walford	\$ 105,595
2006-BP-1085	Walford	\$ 90,636
2006-BP-1087	McLennan	\$ 123,194
2006-BP-1088	Odlin	\$ 293,905
2006-BP-1089	Odlin	\$ 350,222
2006-BP-1090	Odlin	\$ 332,623
2006-BP-1091	Odlin	\$ 72,903
2006-BP-1092	Odlin	\$ 197,110
2006-BP-1093	Viscount	\$ 336,143
2006-BP-1094	Viscount	\$ 78,814
2006-BP-1095	Dominion	\$ 414,761
2006-BP-1096	Dominion	\$ 239,122
2006-BP-1097	Dominion	\$ 23,277
2006-BP-1098	Dominion	\$ 159,598
2006-BP-1099	Dominion	\$ 124,132
2006-BP-1102	Gilley West	\$ 357,262
2006-BP-1103	Gilley West	\$ 650,215
2006-BP-1104	Crestwood	\$ 202,946
2006-BP-1105	Burrows	\$ 172,471
2006-BP-1106	Burrows	\$ 212,949
2006-BP-1107	Gilley East	\$ 885,235
2006-BP-1108	Gilley East	\$ 120,191
2006-BP-1109	Gilley East	\$ 411,803
2006-BP-1110	Gilley East	\$ 396,040
2006-BP-1111	Gilley East	\$ 211,189
2006-BP-1112	Gravity Main -No 6 Rd along 13700 International Pl	\$ 124,954
2008-CCAP-1303	Minoru Park behind 6611 Minoru Blvd	\$ 739,162
2008-CCAP-1304	Minoru Park, 85m N of Granville Ave	\$ 81,056
2008-CCAP-1309	Minoru Blvd	\$ 20,378
2008-CCAP-1310	ROW between 7400 Gilbert Rd & 7437 Moffatt Rd	\$ 155,628
2008-CCAP-1312	ROW between 7437 & 7297 Moffatt Rd	\$ 186,665
2008-CCAP-1313	ROW at 7571 Moffatt Rd	\$ 147,522
2008-CCAP-1314	ROW between Moffatt Rd & Gilbert Rd	\$ 114,073
2008-CCAP-1315	ROW between Moffatt Rd & Gilbert Rd	\$ 223,997
2008-CCAP-1316	7680 Minoru Blvd - SW corner	\$ 34,044
2008-CCAP-1319	Brown Rd	\$ 141,038
2008-CCAP-1320	Cambie Rd & Hazelbridge Way	\$ 367,995
2008-CCAP-1321	Capstan Way	\$ 519,008
2008-CCAP-1322	Capstan Way	\$ 477,799

Project ID	Location	Draft Sanitary DCC Recoverable Amount
2008-CCAP-1323	Crossing Capstan Way	\$ 43,436
2008-CCAP-1324	Capstan Way	\$ 157,628
2008-CCAP-1325	ROW between 8151 Capstan Way & 3331 No 3 Rd	\$ 100,238
2008-CCAP-1326	Charles St	\$ 115,830
2008-CCAP-1328	Garden City Rd	\$ 98,184
2008-CCAP-1329	Corvette Way	\$ 348,277
2008-CCAP-1331	Hazelbridge Way	\$ 581,697
2008-CCAP-1333	Leslie Rd	\$ 236,442
2008-CCAP-1336	No 3 Rd	\$ 311,226
2008-CCAP-1338	8671 Odlin Cres - ROW along SPL	\$ 333,952
2008-CCAP-1339	River Dr	\$ 187,106
2008-CCAP-1340	River Rd	\$ 426,356
2008-CCAP-1342	Sexsmith Rd - ROW along W side	\$ 146,350
2008-CCAP-1344	9800 Van Horne Way	\$ 462,513
2008-CCAP-1345	ROW between 9500 & 9800 Van Horne Way	\$ 301,529
2008-CCAP-1348	ROW between 7360 Elmbridge Way & 7371 Westminster Hwy	\$ 181,566
2008-CCAP-1350	90m North of Granville Ave	\$ 196,156
2008-CCAP-1351	Minoru Park	\$ 105,373
2008-CCAP-1353	Westminster Hwy - ROW at rear	\$ 515,518
2008-CCAP-1354	Minoru Park	\$ 220,452
2008-CCAP-1355	NE corner of 6551 No 3 Rd	\$ 13,365
2008-CCAP-1363	Westminster Hwy	\$ 301,529
2008-CCAP-1364	Westminster Hwy & Elmbridge Way	\$ 577,992
2008-CCAP-1365	Elmbridge Way	\$ 169,290
2008-CCAP-1366	Gilbert Rd - ROW along W side	\$ 192,664
2008-CCAP-1367	Azure Rd - ROW at rear	\$ 144,280
2008-CCAP-1368	Minoru Park behind 6611 Minoru Blvd	\$ 107,447
2008-CCAP-1369	Gilbert Rd - ROW along W side	\$ 192,664
2008-CCAP-1370	Brighthouse School	\$ 516,438
2008-CCAP-1371	Brighthouse School	\$ 394,268
2008-CCAP-1372	Brighthouse Pump Station	\$ 361,969
2008-CCAP-1374	Minoru Park S of 7000 Westminster Hwy	\$ 38,981
2008-CCAP-1375	Heather St	\$ 157,466
2008-CCAP-1376	Heather St	\$ 18,525
2008-CCAP-1378	Lane N of Elmbridge Way	\$ 252,896
2008-CCAP-1379	Crossing Elmbridge Way	\$ 139,417
2008-CCAP-1383	Kwantlen Street	\$ 190,813
2008-CCAP-1386	Ackroyd Rd - ROW along S side	\$ 157,628
2008-CCAP-1387	Crossing Ackroyd Rd	\$ 31,111
2008-CCAP-1390	Alderbridge Way - ROW along N side	\$ 176,703
2008-CCAP-1391	Between 7771 & 7811 Alderbridge Way	\$ 652,658
2008-CCAP-1393	Lane S of Alderbridge Way	\$ 178,200
2008-CCAP-1394	ROW along NPL of 5891 No 3 Rd	\$ 152,386

Project ID	Location	Draft Sanitary DCC Recoverable Amount
2008-CCAP-1396	Lane West of No 3 Rd	\$ 599,400
2008-CCAP-1397	7080 River Rd - ROW at rear	\$ 442,567
2008-CCAP-1399	Ferndale Rd	\$ 20,378
2008-CCAP-1400	Katsura St	\$ 124,827
2008-CCAP-1403	8151 Bennett Rd - ROW along W side	\$ 87,069
2008-CCAP-1404	Bennett Rd	\$ 80,888
2008-CCAP-1405	8631 Bennett Rd - ROW along W side	\$ 155,613
2008-CCAP-1409	Cook Rd & Eckersley Rd - ROW at rear, Park Rd and ROW between Park Pl & Citation Dr	\$ 1,001,766
2008-CCAP-1410	Cook Rd & Eckersley Rd	\$ 56,739
2008-CCAP-1411	Cook Gate	\$ 151,406
2008-CCAP-1413	ROW between Cook Rd & Spires Rd	\$ 273,970
2008-CCAP-1414	ROW between Cooney Rd & Spires Rd	\$ 155,628
2008-CCAP-1419	Jones Rd	\$ 155,628
2008-CCAP-1420	Jones Rd	\$ 205,632
2008-CCAP-1421	8535 Jones Rd - ROW along W side	\$ 68,544
2008-CCAP-1422	Crossing Jones Rd	\$ 25,936
2008-CCAP-1412	ROW between Cook Rd & Spires Rd	\$ 109,300
2008-CCAP-1415	Cook & Spires	\$ 304,772
2008-TN-1501	Barnard Dr	\$ 133,383
2008-TN-1502	Dover Cr (Upstream of Works Yard Pump Station)	\$ 164,876
2008-TN-1505	Granville Ave	\$ 337,194
2008-TN-1506	Lynas Lane (Upstream Lynas Pump Station)	\$ 317,741
2008-TN-1507	Lynas Lane (South of Lynas Pump Station)	\$ 370,508
2008-TN-1508	Immediately Upstream of WorksYard Pump Station	\$ 46,313
2008-TN-1509	Dover Cr. (Upstream of Works Yard Pump Station)	\$ 160,491
2008-TN-1510	Tiffany Blvd (Upstream of Lynas Pump Station)	\$ 353,405
2008-TN-1511	Tiffany Blvd (Upstream of Lynas Pump Station)	\$ 351,982
2008-TN-1512	Colonial Dr & Blundell Rd	\$ 199,398
2008-TN-1513	Colonial Dr (Upstream of Claysmith Pump Station)	\$ 291,803
2008-TN-1514	Colonial Dr	\$ 470,545
2008-TN-1515	Francis Rd - N side	\$ 132,932
2008-TN-1516	Upstream of Youngmore Pump Station	\$ 210,746
2008-TN-1517	Quilchena School Park - ROW along E side and Anvil Cr - ROW at rear	\$ 656,556
2008-TN-1518	ROW between Quilchena School Park & Decourcy Cr	\$ 209,125
2008-TN-1519	Barnard & Richard Intersection	\$ 209,125
2008-TN-1520	Upstream of Barnard Pump Station	\$ 226,010
2008-TN-1521	Immediately Upstream of Barnard Pump Station	\$ 31,493
2008-TN-1522	2nd pipe Upstream of Terra Nova East Pump Station	\$ 89,162
2008-ST-1602	Elsmore Rd	\$ 823,398
2008-ST-1603	Elsmore Rd	\$ 347,490
2008-ST-1604	Kirkmond Rd	\$ 118,058
2008-ST-1610	3088 Francis - ROW along E side	\$ 251,274
2008-ST-1611	Wellmond Rd	\$ 75,954

Project ID	Location	Draft Sanitary DCC Recoverable Amount
2008-ST-1612	Wellmond Rd	\$ 161,171
2008-ST-1613	Barmond Ave	\$ 133,383
2008-ST-1614	Barmond Ave	\$ 237,125
2008-ST-1615	Barmond Ave	\$ 309,033
2008-ST-1616	Truro Dr - at rear	\$ 339,014
2008-ST-1617	10371 4th Ave - SW corner	\$ 98,889
2008-ST-1618	10760 Springmont Dr - ROW along the EPL	\$ 223,997
2008-ST-1619	7th Ave	\$ 255,650
2008-ST-1620	Lane between Richmond St & Broadway St	\$ 719,695
2008-ST-1621	Richmond St	\$ 278,438
2008-ST-1623	Immediate upstream of Richmond Park Pump Station	\$ 38,981
2008-ST-1625	10111 4th Ave - ROW along SPL	\$ 431,402
2008-ST-1627	Princeton Ave - ROW at rear	\$ 262,622
2008-ST-1628	9751 Parksville Dr - ROW along EPL	\$ 144,498
2008-ST-1629	ROW between Woodpecker Dr & Kingfisher Dr	\$ 434,462
2008-ST-1632	Lane W of 3rd Ave	\$ 196,156
2008-ST-1637	Springfield Dr - ROW at rear	\$ 63,224
2008-ST-1638	Springfield Dr & 4th Ave.	\$ 343,679
2008-ST-1640	Kirkmond Cr	\$ 121,584
2008-ST-1641	Gormond Rd.	\$ 637,273
2008-ST-1642	Ullsmore Ave	\$ 487,959
2008-ST-1644	Francis Rd	\$ 51,233
2008-ST-1645	9780 Pendleton Rd & Crossing Pendleton Rd	\$ 89,162
2008-ST-1647	Lane between Pleasant St & 4th Ave	\$ 100,037
2008-SH-1702	Lane between Sealily Pl & Seacote Rd	\$ 188,739
2008-SH-1704	No 5 Rd - ROW along W side	\$ 181,549
2008-SH-1705	No 5 Rd - ROW along W side	\$ 922,952
2008-SH-1706	Horseshoe Way (N) - ROW along N side	\$ 578,660
2008-SH-1707	Horseshoe Way	\$ 102,465
2008-SH-1708	Horseshoe Way - ROW along S side	\$ 458,778
2008-SH-1709	Horsehoe Pl - ROW along E side	\$ 170,433
2008-SH-1710	South of Horseshoe Pump Station	\$ 290,181
2008-SH-1711	Coppersmith Way - ROW along N & S side	\$ 319,362
2008-SH-1712	Crossing Horseshoe Way (50m N of Blacksmith Pl)	\$ 29,180
2008-SH-1713	Horseshoe Way	\$ 546,499
2008-SH-1714	Horseshoe Way	\$ 331,848
2008-SH-1715	Glenacres Dr - ROW at rear	\$ 301,529
2008-SH-1716	9540 Glenacres Dr - along WPL	\$ 437,625
2008-SH-1717	Ash St	\$ 284,145
2008-SH-1718	Ash St	\$ 204,930
2008-SH-1719	Ash St	\$ 209,385
2008-SH-1720	Ash St & Williams Rd	\$ 318,533
2008-SH-1725	ROW between Ryan Rd. & Mortfield Pl.	\$ 525,245

Project ID	Location	Draft Sanitary DCC Recoverable Amount
2008-SH-1726	ROW between 9111 Kingsbridge Dr & 11751 King Rd	\$ 94,025
2008-SH-1727	11751 King Rd - Row along WPL & King Rd - ROW at rear	\$ 755,835
2008-SH-1728	Seacote Rd	\$ 184,590
2008-SH-1729	Seaport Ave & Seacote Rd - ROW at rear	\$ 238,516
2008-SH-1730	Lane between Seaton Pl & Seacote Rd	\$ 147,015
2008-SH-1731	Lane between Seaton Pl & Seacote Rd and lane between Seaton Rd & Williams Rd	\$ 376,448
2008-SH-1734	Seaway Rd - ROW at rear	\$ 238,305
2008-SH-1735	Aquila Rd - ROW at rear	\$ 264,913
2008-SH-1736	Aquila Rd - ROW at rear	\$ 607,697
2008-SH-1738	Lane between Aquila Rd & Aragon Rd and lane between Dennis Cr & Aintree Cr	\$ 871,101
2008-SH-1739	Lane between Aquila Rd & Aragon Rd and lane between Dennis Cr & Aintree Cr	\$ 187,106
2008-SH-1740	Riverside Way - ROW along E side	\$ 296,666
2008-SH-1741	Crossing Riverside Way	\$ 42,608
2015-OCP-1002	8971 Beckwith Rd to 8960 Charles St	\$ 181,272
2015-OCP-1003	Gilbert and Elmbridge Way	\$ 130,014
2015-OCP-1004	7111 Elmbridge Way	\$ 210,422
2015-OCP-1005	6551 No. 3 Rd	\$ 249,716
2015-OCP-1006	8120 Cook Rd (east side lane)	\$ 147,832
2015-OCP-1007	8121 Cook Rd (east side lane)	\$ 18,155
2015-OCP-1008	6091 No 3 Rd (Lane to the south west)	\$ 72,434
2015-OCP-1009	6092 No 3 Rd (Lane to the south west)	\$ 104,483
2015-OCP-1010	6093 No 3 Rd (Lane to the south west)	\$ 13,709
2015-OCP-1011	6094 No 3 Rd (Lane to the south west)	\$ 61,504
2015-OCP-1012	6095 No 3 Rd (Lane to the south west)	\$ 29,085
2021-OCP-1006	River Rd NE of West Rd	\$ 217,454
2021-OCP-1007	River Rd NE of West Rd	\$ 217,843
2021-OCP-1008	No 3 Rd SE of River Rd	\$ 121,709
2021-OCP-1009	Beckwith Rd E of No 3 Rd	\$ 189,479
2021-OCP-1010	Beckwith Rd E of No 3 Rd	\$ 38,376
2021-OCP-1011	Beckwith Rd E of No 3 Rd	\$ 140,850
2021-OCP-1012	Beckwith Rd E of No 3 Rd	\$ 181,611
2021-OCP-1013	Laneway N of Beckwith Rd	\$ 200,454
2021-OCP-1014	Laneway N of Beckwith Rd	\$ 54,286
2021-OCP-1015	Charles St E of Laneway	\$ 119,371
2021-OCP-1016	Easement E of Northey Rd	\$ 107,764
2021-OCP-1017	Easement E of Northey Rd	\$ 128,099
2021-OCP-1018	Easement E of Northey Rd	\$ 129,458
2021-OCP-1023	Murdoch Ave at Minoru Blvd	\$ 46,047
2021-OCP-1024	Cook Gate S of Easement	\$ 9,700
2021-OCP-1025	Cook Gate S of Easement	\$ 80,339
PUMP STATIONS		
2006-BP-1014	Burkeville	\$ 734,766
2006-BP-1017	Woodhead East	\$ 734,766

Project ID	Location	Draft Sanitary DCC Recoverable Amount
2006-BP-1018	Kilby	\$ 734,766
2006-BP-1019	Gilley East	\$ 734,766
2006-BP-1010	Dominion	\$ 587,813
2006-BP-1013	Skyline	\$ 1,116,844
2006-BP-1023	Pinnacle	\$ 1,763,438
2006-BP-1024	Odlin Rd West	\$ 1,763,438
2006-ER-1214	East Richmond	\$ 2,204,297
2006-ER-1213	East Richmond	\$ 3,526,875
2006-CC-1037	Eckersley A	\$ 734,766
2006-CC-1038	Heather N	\$ 734,766
2006-CC-1040	Acheson	\$ 734,766
2006-CC-1041	Ackroyd	\$ 734,766
2006-CC-1042	Alberta	\$ 734,766
2006-CC-1044	Arcadia	\$ 734,766
2006-CC-1045	Brighthouse	\$ 734,766
2006-CC-1047	Ferndale	\$ 734,766
2006-CC-1048	Foster N	\$ 734,766
2006-CC-1049	Alderbridge West	\$ 734,766
2006-CC-1050	Jones	\$ 734,766
2006-CC-1053	Moffatt	\$ 734,766
2008-BM-1762	Montrose	\$ 618,750
2008-BM-1763	Oeser	\$ 618,750
2008-BM-1765	Woodwards	\$ 618,750
2008-CCAP-1441	Alderbridge (Includes new wet well)	\$ 1,856,250
2008-CCAP-1444	Elmbridge	\$ 618,750
2008-CCAP-1445	Minoru (Includes new wet well)	\$ 1,856,250
2008-TN-1525	Lynas	\$ 618,750
2008-TN-1527	Works Yard	\$ 618,750
2008-ST-1649	Ivy	\$ 618,750
2008-ST-1650	Pendlebury	\$ 618,750
2008-ST-1651	Ransford	\$ 618,750
2008-ST-1652	Regent	\$ 618,750
2008-ST-1654	Trites	\$ 618,750
2008-ST-1655	Boyd	\$ 618,750
2008-SH-1743	Horseshoe	\$ 618,750
2008-SH-1744	Riverside	\$ 618,750
2008-CCAP-1426	Capstan Way	\$ 356,400
2008-CCAP-1427	ROW between 7400 & 7600 River Rd	\$ 290,367
2008-CCAP-1428	ROW between 4411 & 4551 No 3 Rd	\$ 402,366
2008-CCAP-1429	4551 No 3 Rd	\$ 282,071
2008-CCAP-1430	Elmbridge Way	\$ 696,881
2008-CCAP-1431	Gilbert Rd	\$ 171,518
2008-CCAP-1432	Cedarbridge Way	\$ 236,115

Project ID	Location	Draft Sanitary DCC Recoverable Amount
2008-CCAP-1434	Lansdowne Rd	\$ 754,954
2008-CCAP-1448	9080 Van Horne Way	\$ 800,344
2008-TN-1523	Barnard	\$ 618,750
2008-TN-1524	Claysmith	\$ 618,750
2008-TN-1526	Terra Nova East	\$ 618,750
2008-ST-1653	Richmond Park	\$ 618,750
2008-SH-1742	Edgemere	\$ 618,750
2008-SH-1745	Riverside East	\$ 618,750
2008-SH-1746	Sherman	\$ 618,750
2008-BM-1761	Maple	\$ 618,750
2008-BM-1764	Saunders	\$ 618,750
2015-OCP-1001	Pump Station Near Williams and Triangle Rd Area, and 2000m Forcemain	\$ 3,734,775
2021-OCP-1001	17002 Blundell Road	\$ 2,721,463
Total DCC Recoverable for Sanitary DCC Program (draft)		\$ 102,234,339

UPDATED WATER DCC PROGRAM (DRAFT)

Purpose of Program

The Water DCC Program provides a dedicated source of funding for upgrading existing infrastructure and installing new infrastructure to support growth. The water system distributes potable water supplied by Metro Vancouver to individual properties across the City. As population density increases with redevelopment, water demand increases, thereby requiring infrastructure with increased capacity.

Overview of Program Changes (Draft)

	Water DCC Program Recoverable Value	Number of Projects
2017 Approved DCC Program	\$ 38,308,976	215
Less: Completed Projects	(\$ 4,313,040)	(25)
Less: Deleted/Deferred Projects	(\$ 3,944,143)	(17)
Add: Inflationary Adjustment	\$ 12,823,917	-
Add: New / Enhanced Existing Projects	\$ 1,179,929	5
2022 Draft DCC Program (Attachment 6.1)	\$ 44,055,639	178

Overview of Updated Program

The Water DCC Program aligns with the following objectives from the 2041 Official Community Plan, Section 12.3 Water Supply and Distribution:

- Objective 1: Provide sufficient quantities of high-quality drinking water at adequate pressure to meet present and future needs of the community; and
- Objective 2: Proactive planning and implementation of infrastructure upgrades and replacements due to age and growth.

The program consists of installation or upgrade of watermains.

Project Type	Description of Project Type	% of Total
Watermain Upgrades	Installation or upgrade of watermains	100%

Highlights of Draft DCC Program

- New projects include approximately 1,000 meters of watermain upgrades.
- Projects completed since the previous DCC program update include watermain installation or upgrades in the Spires, Blundell, and Bridgeport areas.
- A number of projects have been removed or reduced in scope due to the decrease in per capita demand from water conservation efforts.

Project ID	Project Location	Draft Water DCC Recoverable Amount
WATERMAINS		
2006-BL-16	Ledway Rd	\$ 116,289
2006-BL-17	Ludlow Rd	\$ 223,147
2006-BL-22	Livingstone Pl	\$ 113,970
2006-BL-26	Grandy Rd	\$ 106,012
2006-BL-28	Chelmsford St	\$ 128,143
2006-BL-29	Dorval Rd	\$ 149,565
2006-BL-30	Dorval Rd	\$ 15,283
2006-BL-31	Dorval Rd	\$ 97,829
2006-BL-32	Dorval Rd	\$ 145,700
2006-BL-35	Dorval Rd	\$ 74,518
2006-BL-36	Dunsany Pl	\$ 15,679
2006-BL-37	Dorval Rd	\$ 121,867
2006-BL-40	Woodwards Rd	\$ 248,203
2006-BL-41	Woodwards Rd	\$ 420,194
2006-BL-42	Woodwards Rd	\$ 255,983
2006-BL-43	Woodwards Rd	\$ 34,093
2006-BL-48	Lynnwood Rd	\$ 392,240
2006-BL-49	Ledway Rd	\$ 346,457
2006-BL-50	Ledway Rd	\$ 29,712
2006-BL-52	Blundell Rd	\$ 376,539
2006-BL-53	No. 2 Rd	\$ 269,222
2006-BL-371	Woodwards Rd	\$ 154,829
2006-BL-372	Woodwards Rd	\$ 121,642
2006-BL-373	Woodwards Rd	\$ 151,222
2006-BP-61	Beckwith Rd	\$ 339,168
2006-BP-375	Finlayson Rd	\$ 133,678
2006-BM-77	Lucas Rd	\$ 193,887
2006-BM-78	Lucas Rd	\$ 97,304
2006-BM-79	Lucas Rd	\$ 192,257
2006-BM-80	Sunnycroft Rd	\$ 133,467
2006-BM-81	Sunnycroft Rd	\$ 104,947
2006-BM-82	Sunnycroft Rd	\$ 112,968
2006-BM-116	Ash St	\$ 91,553
2006-BM-117	Ash St	\$ 157,906
2006-BM-118	Ash St	\$ 231,074
2006-CC-136	Bennett Rd	\$ 205,886
2006-CC-137	Park Rd	\$ 417,284
2006-CC-143	Cooney Rd	\$ 228,855
2006-CC-144	Cooney Rd to Granville Connector	\$ 125,811
2006-CC-147	Eckersley Rd	\$ 223,508
2006-CC-151	Pimlico Way	\$ 213,108
2006-CC-152	Odlin Rd (Odlin Cr west to Brown Rd)	\$ 418,125
2006-CC-132	Sexsmith Rd	\$ 623,732

Project ID	Project Location	Draft Water DCC Recoverable Amount
2006-CC-133	Lansdowne/Minoru Connector	\$ 23,597
2006-CC-148	Cook Gate	\$ 124,967
2006-CC-149	Spires Rd	\$ 98,907
2006-CC-150	Spires Rd	\$ 91,397
2006-CC-155	Cook Rd	\$ 150,203
2006-CC-156	Cook Rd	\$ 126,187
2006-CC-157	Cook Rd	\$ 139,655
2006-CC-158	Cook Rd	\$ 175,252
2006-CC-159	Cook Rd	\$ 195,204
2006-EC-161	Bird Rd	\$ 456,114
2006-EC-162	Bird Rd	\$ 445,914
2006-EC-163	Bird Rd	\$ 69,678
2006-EC-166	Daniels Rd	\$ 111,974
2006-EC-167	Daniels Rd	\$ 84,204
2006-EC-168	Daniels Rd	\$ 126,772
2006-EC-169	Daniels Rd	\$ 80,734
2006-EC-170	Daniels Rd	\$ 235,767
2006-EC-171	Bamfield Dr	\$ 246,977
2006-EC-172	Bamfield Dr	\$ 311,937
2006-EC-173	Mellis Dr	\$ 231,875
2006-EC-174	Mellis Dr	\$ 57,287
2006-EC-175	Mellis Dr	\$ 246,791
2006-EC-176	Mellis Dr	\$ 63,979
2006-EC-180	Dewsbury Dr	\$ 307,326
2006-EC-181	Dewsbury Dr	\$ 97,175
2006-EC-182	Dewsbury Dr	\$ 100,680
2006-EC-184	Bath Rd	\$ 345,797
2006-EC-185	Bamfield Gate	\$ 138,062
2006-EC-186	Bamfield Gate	\$ 23,341
2006-EC-187	Bargen Dr	\$ 175,685
2006-EC-188	Cambie Connector	\$ 13,819
2006-EC-189	Cambie Rd	\$ 82,020
2006-EC-190	Dallyn Rd	\$ 223,527
2006-EC-191	Dallyn Rd	\$ 156,136
2006-EC-192	Sparwood Pl	\$ 473,910
2006-HA-210	Smith Cr	\$ 367,585
2006-HA-214	Willett Ave	\$ 223,720
2006-HA-215	Smith Dr	\$ 333,196
2006-SF-234	Colonial Dr	\$ 516,030
2006-SF-235	Colonial Dr	\$ 206,675
2006-SF-240	Palmer Rd	\$ 102,938
2006-SF-241	Mahood Dr	\$ 309,453
2006-SF-242	Groat Ave	\$ 88,903
2006-SF-243	Geal Rd	\$ 157,930

Project ID	Project Location	Draft Water DCC Recoverable Amount
2006-SF-244	Francis Rd	\$ 50,478
2006-SF-246	Francis Rd	\$ 58,122
2006-SF-247	Francis Rd	\$ 328,480
2006-SF-248	Francis Rd	\$ 387,271
2006-SF-249	Francis Rd	\$ 129,728
2006-SH-271	Francis Rd	\$ 1,055,916
2006-SF-398	Francis Rd	\$ 293,592
2006-SF-399	Francis Rd	\$ 188,849
2006-SH-260	Shell Rd	\$ 107,583
2006-SH-264	Kingcome Ave	\$ 285,605
2006-SH-265	Kingcome Ave	\$ 233,052
2006-SH-266	Kingswood Dr	\$ 158,695
2006-SH-267	Kingcome Ave/Kingswood Dr Connector	\$ 38,550
2006-SH-268	Seacote Rd	\$ 107,214
2006-SH-272	Kingsbridge Dr	\$ 110,179
2006-SH-273	Kingsbridge Dr	\$ 264,884
2006-SH-274	Kingsbridge Dr	\$ 226,850
2006-SH-275	King Rd	\$ 460,815
2006-SH-276	King Rd	\$ 445,190
2006-SH-277	King Rd	\$ 97,896
2006-SH-278	King Rd	\$ 157,058
2006-ST-296	Fortune Ave	\$ 161,024
2006-ST-297	Fortune Ave	\$ 67,012
2006-ST-298	Fundy Dr	\$ 140,260
2006-ST-299	Fundy Dr	\$ 235,548
2006-ST-300	Fundy Dr	\$ 276,036
2006-ST-302	Fundy Dr	\$ 89,278
2006-ST-303	Fundy Dr	\$ 93,521
2006-ST-304	Fundy Dr	\$ 74,025
2006-ST-305	Bonavista Dr	\$ 198,676
2006-ST-310	Garry St	\$ 118,905
2006-ST-311	Garry St	\$ 154,924
2006-ST-312	Windward Gate	\$ 91,935
2006-ST-313	Garry St	\$ 155,747
2006-ST-314	Garry St	\$ 203,200
2006-ST-315	Leeward Gate	\$ 109,749
2006-ST-324	Kingfisher Dr	\$ 317,566
2006-ST-325	Kingfisher Dr	\$ 87,519
2006-ST-326	Plover Dr	\$ 167,251
2006-ST-327	Pintail Dr	\$ 743,337
2006-ST-330	Kittiwake Dr	\$ 121,549
2006-ST-331	Kittiwake Dr	\$ 184,680
2006-ST-332	Kittiwake Dr	\$ 124,597
2006-TH-341	Westminster Hwy/Lynas Lane	\$ 53,067

Project ID	Project Location	Draft Water DCC Recoverable Amount
2006-TH-343	Garrison Rd	\$ 48,123
2006-TH-344	Garrison Rd	\$ 74,776
2006-TH-345	Garrison Rd	\$ 80,264
2006-TH-346	Garrison Rd	\$ 3,525
2006-TH-347	Garrison Rd	\$ 83,649
2006-TH-349	Skaha Cr	\$ 66,423
2006-TH-353	Tiffany Blvd	\$ 254,915
2006-TH-354	Tiffany Blvd	\$ 168,760
2006-TH-355	Tiffany Blvd	\$ 87,920
2006-TH-356	Tiffany Blvd	\$ 163,012
2006-TH-358	Granville Cr	\$ 469,311
2006-TH-408	Redfern Cr	\$ 195,269
2006-WC-361	Patterson Rd	\$ 650,121
2006-WC-360	Patterson Rd	\$ 277,235
2006-WC-409	Westminster Hwy b/w No 4 Rd and Shell Rd	\$ 2,082,838
2006-CC-381	Spires Gate	\$ 123,671
2006-CC-382	Cooney Rd	\$ 57,242
2006-CC-383	River Rd	\$ 147,460
2006-SF-401	Pendleton Rd	\$ 390,713
2008-CCAP-411	Capstan Way	\$ 583,254
2008-CCAP-418	Minoru Blvd	\$ 226,499
2008-CCAP-421	Acheson Rd	\$ 333,248
2008-CCAP-422	Bennett Rd	\$ 120,792
2008-CCAP-436	Spires Rd	\$ 240,771
2008-CCAP-437	Cook Cr	\$ 431,072
2008-CCAP-431	South of Granville Ave (w/ St. Albans & Garden City)	\$ 249,874
2008-CCAP-433	No. 4 Rd	\$ 1,254,046
2008-CCAP-439	Citation Dr	\$ 516,680
2008-CCAP-443	No. 3 Rd	\$ 807,589
2008-CCAP-444	Hazelbridge Way	\$ 318,562
2008-CCAP-441	Cook Rd	\$ 592,926
2015-OCP-1	Dunford Rd	\$ 123,750
2015-OCP-2	Garry (Section not covered in list above)	\$ 482,625
2015-OCP-3	Windjammer Dr	\$ 668,250
2015-OCP-4	Beckwith Rd	\$ 482,625
2015-OCP-5	Kingcome Ave	\$ 420,750
2015-OCP-7	East of No 4 Rd & Saunders Rd Intersection	\$ 136,125
2015-OCP-8	Blundell Rd	\$ 1,238,738
2015-OCP-9	Bowen Gate	\$ 99,000
2015-OCP-10	Gabrolia Gate	\$ 123,750
2015-OCP-11	Ruskin Rd loop to Ryan Rd	\$ 247,500
2015-OCP-12	Blundell Rd	\$ 1,904,513
2021-OCP-1	Boundary Road	\$ 40,372
2021-OCP-2	Boundary Road	\$ 393,839

Project ID	Project Location	Draft Water DCC Recoverable Amount
2021-OCP-3	Boundary Road	\$ 60,534
2021-OCP-4	Thompson Road	\$ 370,081
2021-OCP-5	Thompson Road	\$ 315,103
Total DCC Recoverable for Water DCC Program (draft)		\$ 44,055,639