



City of Richmond

Report to Committee

To: Finance Committee

Date: December 5, 2019

From: Jerry Chong, CPA, CA
Director, Finance

File: 03-1200-05/2019-Vol
01

Re: Active Capital Projects Information - 3rd Quarter September 30, 2019

Staff Recommendation

That the staff report titled, "Active Capital Projects Information - 3rd Quarter September 30, 2019", dated December 5, 2019 from the Director, Finance be received for information.

Jerry Chong, CPA, CA
Director, Finance
(604-276-4064)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Arts Culture and Heritage	<input checked="" type="checkbox"/>	
Community Social Development	<input checked="" type="checkbox"/>	
Sustainability	<input checked="" type="checkbox"/>	
Engineering	<input checked="" type="checkbox"/>	
Information Technology	<input checked="" type="checkbox"/>	
Parks Services	<input checked="" type="checkbox"/>	
Facilities and Project Development	<input checked="" type="checkbox"/>	
Real Estate	<input checked="" type="checkbox"/>	
Recreation	<input checked="" type="checkbox"/>	
Roads and Construction	<input checked="" type="checkbox"/>	
Transportation	<input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

Active Capital Project Information for the 3rd Quarter (ended September 30, 2019) is being provided to the Finance Committee for information. This report includes the approved 2019 Capital Budget and other previously approved capital projects.

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

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

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

Analysis

Active Capital Projects Summary

Active Capital projects represent capital projects previously approved by Council. Projects include construction, non-construction and acquisition (e.g. equipment and land) projects that are in various stages of completion:

Planning and Design – includes projects that were approved in the 2019 budget and other previously approved projects that are undergoing design specifications, design approvals, or public consultation.

Contract Award – this includes preparing to issue a request for proposal, evaluating the proposals received, and finalizing contract award agreements.

Construction – includes build out of the approved design either by City forces or under the executed agreements.

Functional Completion – certain projects are completed in phases that allow for portions of the project to be functionally complete while the next phase is initiated.

Project Completion – may include fully functional assets that are in their final inspection and acceptance stage, which may still require minor deficiencies to be addressed, as-built drawings to be received, collection of grant funding and fulfillment of audit requirements, where applicable.

Final Completion – All aspects of the project are complete including the one year deficiency period which leads to the project removal from the active capital project list and return of any unspent funds to its original funding sources.

A Capital Project is considered active for the purposes of this report if the project is in any of the above stages (except Final Completion). Generally, projects are completed within three years; however due to complexities at each stage it is not unusual for a project to take longer than three years to see through to Final Completion.

Projects also include amounts set aside for Land acquisition, Public Art, Child Care and Affordable Housing which are dependent upon external factors such as market conditions, availability and external partners. Therefore, these projects are presented to Council prior to final project approval.

The approved 2019 Capital Budget of \$102.9M (excluding internal transfers and debt repayments) is included in the figures below as are the amounts relating to capital projects from previous years' Capital Budgets which remain active. The current balance committed to active capital projects is \$317.6M.

The Building Program projects approved in or prior to 2015 includes \$12.3M in committed active capital projects mainly for the Minoru Centre for Active Living, Fire Hall No. 1 and the Major Facilities Phase I Multi Project Contingency and Construction Escalation Contingency.

The tables in this report are presented on a cash-basis, that is, actual progress payments that have been made up to September 30, 2019.

Table 1: Active Capital Projects by Program (in \$'000s)

Program	Plan Year	Adjusted Budget	Actuals as at September 30, 2019	Expected Commitments / Work In Progress
Infrastructure Program	2019	\$37,849	\$6,933	\$30,916
	2018	74,872	29,361	45,511
	2017	38,112	26,035	12,077
	2016	50,198	26,221	23,977
	2015 & older	1,243	662	581
Infrastructure Program Total		\$202,274	\$89,212	\$113,062
Building Program	2019	17,684	361	17,323
	2018	51,367	8,493	42,874
	2017	7,013	3,896	3,117
	2016	1,003	382	621
	2015 & older	114,995	102,678	12,317
Building Program Total		\$192,062	\$115,810	\$76,252
Parks Program	2019	11,620	891	10,729
	2018	10,760	1,802	8,958
	2017	8,380	2,571	5,809
	2016	12,908	9,061	3,847
	2015 & older	13,331	10,187	3,144
Parks Program Total		\$56,999	\$24,512	\$32,487
Construction Related Programs		\$451,335	\$229,534	\$221,801
Affordable Housing Program	2019	775	-	775
	2018	902	-	902
	2017	11,285	6,362	4,923
	2016	585	160	425
Affordable Housing Program Total		\$13,547	\$6,522	\$7,025
Child Care Program	2019	100	-	100
	2018	100	5	95
	2015 & older	209	139	70
Child Care Program Total		\$409	\$144	\$265
Equipment Program	2019	14,278	229	14,049
	2018	10,599	4,544	6,055
	2017	9,228	5,332	3,896
	2016	3,614	1,136	2,478
	2015 & older	2,850	1,995	855
Equipment Program Total		\$40,569	\$13,236	\$27,333
Land Program	2019	10,000	-	10,000
	2018	10,000	-	10,000
	2017	16,020	5,094	10,926
	2016	26,024	7,247	18,777
Land Program Total		\$62,044	\$12,341	\$49,703
Public Art Program	2019	563	118	445
	2018	1,125	255	870
	2017	931	691	240
	2016	1,071	488	583
	2015 & older	3,638	3,287	351
Public Art Program Total		\$7,328	\$4,839	\$2,489
Contingent External Contribution	2019	8,934	-	8,934
Contingent External Contribution Total		\$8,934	\$-	\$8,934
Non-construction Related Programs		\$132,831	\$37,082	\$95,749
Grand Total		\$584,166	\$266,616	\$317,550

Included in the 2019 Capital Plan (2019-2023 Financial Plan Bylaw) was an estimate of \$10M for external grants or contributions that may be received throughout the year. As external funding is confirmed, funding is transferred to the approved applicable projects. As of September 30, 2019, \$1,065,818 has been received and the budget for Contingent External Contribution has been adjusted to \$8,934,182.

Capital Budget Reallocations

Council Policy 3001 requires changes to the Capital Budget be reported to the Finance Committee. The following reallocations were recorded in the third quarter ended September 30, 2019:

Table 2: Budget Reallocations (in \$'000s)

Program	Transfer From	Transfer To	Amount
Contingent External Contribution & Equipment	Contingent External Contribution (2019)	Electric Vehicle DC Fast Charging Network Development (2017)	\$360
Contingent External Contribution & Roads	Contingent External Contribution (2019)	Annual Asphalt Re-Paving Program - Non-MRN (2019)	108
Contingent External Contribution & Roads	Contingent External Contribution (2019)	LED Street Name Sign Program (2018)	66
Contingent External Contribution & Roads	Contingent External Contribution (2019)	Special Crosswalk Program (2019)	41
Contingent External Contribution & Parks	Contingent External Contribution (2019)	King George Park Masterplan - Phase 1 (2013)	28
Contingent External Contribution & Traffic	Contingent External Contribution (2019)	Traffic Signal Program (2018)	27
Land	Strategic Land Acquisition (2015)	Strategic Land Acquisition (2016)	20
Equipment	Annual Computer Hardware Refresh (2017)	Microsoft Exchange 2016 Upgrade (2017)	5
Contingent External Contribution & Roads	Contingent External Contribution (2019)	Neighbourhood Walkway Program (2018)	5
Contingent External Contribution & Traffic	Contingent External Contribution (2019)	Traffic Calming Program (2018)	5
Contingent External Contribution & Public Art	Contingent External Contribution (2019)	Public Art Program (2016)	3
Contingent External Contribution & Drainage	Contingent External Contribution (2019)	Drainage System and Irrigation Upgrades - South Sidaway Area - Phase 2 (2016)	1
Total Budget Reallocations			\$669

Highlights of Key Construction Related Capital Projects

Information on key capital projects includes the project budget, inclusive of transfers from other projects and budget amendments, actuals on a cash-basis, and the remaining commitments as at September 30, 2019.

INFRASTRUCTURE

The City's Infrastructure program includes construction for roads, lanes, street systems, public walkways and paths, street lighting, water distribution networks, sanitary sewer systems, and drainage and flood protection systems. Many of the active infrastructure projects are in the design and permitting stage. With the current Provincial and Federal regulatory framework, the design and approval process for many drainage projects (including pump stations and dike upgrades) can take one to two years.

There is a continued upgrade for pump stations, dikes and roads city wide along with infrastructure improvements in Burkeville Area, laneway drainage upgrades and various areas.

Table 3: Key Infrastructure Capital Projects (in \$'000s)

Program	Project Name	Adjusted Budget	Actuals as at September 30, 2019	Expected Commitments / Work In Progress
Drainage	Drainage Pump Station & Diking Upgrades incl. Provincial Grant (2016)*	\$28,185	\$7,072	\$21,113
Drainage & Sanitary	Burkeville Area Drainage and Utility Improvements - Phase 1 (2018, 2019)	3,133	473	2,660
Drainage	Laneway Drainage Upgrade - Afton Drive North and Herbert East Lane (2019)	1,915	1,043	872
Drainage	Gilley and Westminster Hwy Culvert Replacement (2016)	1,250	3	1,247
Road	Annual Asphalt Re-Paving Program - MRN and Non MRN (2019)	4,390	1,377	3,013
Road & Water	River Parkway Extension (2017, 2018)**	15,045	2,571	12,474
Water	Watermain Replacement Program (2019)	5,395	2,274	3,121
Total Key Infrastructure Capital Projects		\$59,313	\$14,813	\$44,500

*Adjusted budget for Drainage Pump Station & Diking Upgrades includes: i) \$16.6M from the Provincial Government under the Flood Protection Program and ii) a budget transfer of \$ 0.18M from Public Works Infrastructure Advanced Design (2013 and 2016) for the completed works relating to the Flood Protection Program.

**Adjusted budget includes: 1) \$800K of design phase approved by Council in 2017 and \$14,245K of construction phase approved by Council in 2018.

Please see Attachment 1 for the Q3 2019 Construction Update. This attachment includes the project budget and the scheduled construction completion.

BUILDING

The Building Program includes major building construction and renovation projects as well as minor facility upgrades.

The City has been focused on completing the Major Facilities Phase 1 capital projects:

- Minoru Centre for Active Living remains on budget, and the Seniors Centre and Event Centre were opened to the public on March 11, 2019. The Minoru Centre for Active Living Pools will be opened at a later date due to the lap pool #1 reconstruction.
- Richmond Fire Rescue commenced operations out of Fire Hall No.1 on July 16, 2018 and design/tendering of solar photovoltaic roof panels to offset power needs is in progress.

The City has also moved forward with the advanced design of Major Facilities Capital Plan Phase 2 which includes:

- Animal Shelter – on July 22, 2019, Council approved moving forward with the renovation of the existing 4,580 square foot building and the addition of an approximately 1,600 square foot structure. Procurement of an architect has been completed and design has commenced.
- Minoru Lawn Bowling Clubhouse – on May 27, 2019, Council approved moving forward with the 4,900 square foot single storey facility and associated budget amendment. An Architect was hired in September 2019 and the project is currently progressing through concept design, including the form and character for the building.
- Steveston Community Centre and Branch Library – this project is included as a 2021 capital project in the Consolidated 5 Year Financial Plan (2020-2024).

Table 4: Key Building Capital Projects (in \$'000s)

Project Name	Adjusted Budget	Actuals as at September 30, 2019	Expected Commitments / Work In Progress
Minoru Centre for Active Living (2014)	\$83,138	\$79,144	\$3,994
Phoenix Net Loft (2018)	11,500	450	11,050
Gateway Infrastructure Replacement (2017, 2018, 2019)*	8,095	533	7,562
Enhanced City Centre Police Office (2018)**	6,500	1,779	4,721
Canada Line Capstan Station (2018)	3,500	1,098	2,402
Minoru Place Activity Centre (2019)	2,511	11	2,500
Minoru Arenas Infrastructure Replacements (2017)	1,859	1,740	119
Solar Energy Systems for Fire Hall 1 (2017)	455	17	438
Total Key Building Capital Projects	\$117,558	\$84,772	\$32,786

*Adjusted budget for Gateway Infrastructure Replacement combines the following budgets: Gateway Theatre Main Stage Lighting Replacement approved as a 2017 One-Time Expenditure (\$385K); Gateway Theatre Infrastructure Replacements – First Stage (\$3,337K) and Gateway Theatre Lighting Infrastructure and System Renewal (\$673K) approved in 2018; Gateway Theatre Infrastructure Replacement Phase 2 (\$3,700K) approved in 2019.

**Adjusted budget includes \$1.4M reallocated from Major Facilities Phase I Multi Project Contingency and Construction Escalation Contingency (2014) for the Enhanced City Centre Police Office as approved by Council.

Please see Attachment 1 for the Q3 2019 Construction Update. This attachment includes the project budget and the scheduled construction completion.

PARKS

The Parks Program includes parkland acquisition program, high quality parks, trails and recreation facilities.

The key parks capital projects are summarized below and the project highlights are included in Attachment 2. Note that the percentage of completion in Attachment 2 takes into account the status of contract awards and may not be reflective of actual spending to date.

Table 5: Key Parks Capital Projects (in \$'000s)

Project Name	Adjusted Budget	Actuals as at September 30, 2019	Expected Commitments / Work In Progress
Garden City Lands Phase 2 and 3 (2016-2018)	\$5,995	\$2,768	\$3,227
Aberdeen Park Phase 2 and 3 (2018, 2019)	2,050	94	1,956
The Gardens Agricultural Park (2012, 2014, 2015)	2,267	1,283	984
Hollybridge Pier/Middle Arm (2010, 2012, 2015)*	2,350	1,568	782
Hugh Boyd Fields – Artificial Turf Replacement (2019)	1,800	1	1,799
Alexandra Park (formerly West Cambie Park (2010, 2013, 2016 & 2019)	1,720	153	1,567
Parks Aging Infrastructure (2018)	900	487	413
London/Steveston Park Enhancements (2017, 2019)	550	204	346
Parks Aging Infrastructure (2019)	550	294	256
Playground Improvement & Replacement (2018)	500	93	407
Playground Improvement & Replacement (2016-2017)	481	466	15
Minoru Park - Replacement of the Lawn Bowling Green Synthetic Surfaces (2019)	350	268	82
Parks Identity Signage Program (2018)	200	198	2
Total Key Land & Parks Capital Projects	\$19,713	\$7,877	\$11,836

*Adjusted budget for Hollybridge Pier/Middle Arm includes \$100K allocated from Middlearm Gateway Park (2010-2011) and \$1,250K from Oval West Waterfront Park - Phase 1 2012 approved budget.

Capital Projects Completed in the Quarter

The following active capital projects were closed in the third quarter. Any unspent funding will be returned to the original source (i.e. Reserve Fund) for distribution toward future projects.

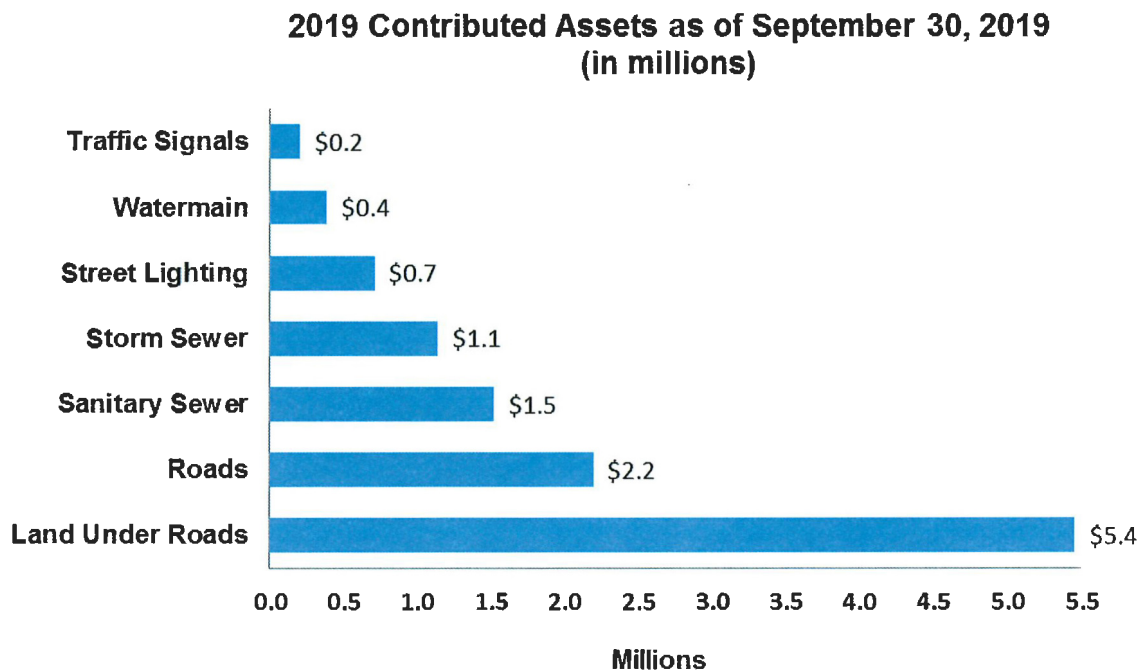
Table 6: Projects Closed in the Quarter Ended September 30, 2019 (in \$'000s)

Project Name	Adjusted Budget	Actuals as at September 30, 2019	Remaining Budget*
Traffic Signal Program (2016)	\$640	\$640	\$-
Minoru Chapel Restoration and Rehabilitation (2014)	625	576	49
London/Steveston Phase 2 (2018)	480	480	-
City Hall Boiler Replacement Upgrade (2017)	408	254	154
City Hall Consolidation (2012)	300	234	66
Public Works Minor Capital - Roads (2018)	300	299	1
Minoru Chapel Restoration (2017)	281	236	45
Public Works Minor Capital - Drainage (2018)	246	246	-
Parks General Development (2017)	244	243	1
ePlans for Residential and Commercial Building (2018)	146	146	-
Traffic Calming Program (2017)	100	94	6
Traffic Signal Power Backup System (UPS) (2019)	100	98	2
Child Care - Research, Studies and City Personnel/Consultant Expenses (2018)	60	60	-
Child Care Projects - City-wide (Capital Grants) (2019)	50	50	-
Total	\$3,980	\$3,656	\$324

* Unspent funds are returned to the original source of funding.

Contributed Assets

Included in the 2019-2023 Financial Plan Bylaw is an estimate of \$50.4M for assets that are transferred to the City by developers. Under the Public Sector Accounting Standards, these are recorded as revenue at the fair market value at the time of contribution. The following assets totalling \$11.6M have been recorded as of September 30, 2019:



Developer community contributions of child care amenities with a combined total of 77,000 sq. ft. are underway. Please see Attachment 1 for the Q3 2019 Construction Update.

Financial Impact

None.

Conclusion

This report provides information on active capital projects that were previously approved by Council. All previously approved active capital projects are currently within budget.

Melissa Shiau, CPA, CA
Manager, Financial Planning and Analysis
(604-276-4231)

MS:sx

Att 1: Q3 2019 Construction Update
2: Capital Highlights

Q3 2019 Construction Update

Flood Protection

Drainage Pump Station and Diking Upgrades – Provincial Grant

The City secured \$16.6 million from the Provincial Government under the Flood Protection Program. This project includes the upgrades of four drainage pump stations and diking upgrades. Construction for the Horseshoe Slough drainage pump station and the South Dike upgrade (Gilbert Road to No. 3 Road) is underway. Detailed designs are ongoing for the South Dike (east of No. 3 Road) upgrades and the drainage pump station at No. 2 Road South. Construction contracts for the No. 7 Road South and Shell Road North drainage pump station upgrades have been awarded with construction scheduled to commence in fall this year.

Culvert Replacement at Westminster Highway and Gilley Road

This project consists of installing new storm pipes to replace the existing box culvert at the intersection of Westminster Highway and Gilley Road, connecting Queens canal to the north and south. Construction is underway.

Burkeville Area Drainage, Watermain and Sanitary Sewer Upgrades – Phase 1

This project consists of upgrades to the City's storm sewer capacity. Ageing watermains and sanitary sewers will also be upgraded at the same time to minimize ongoing disruption to residents and overall construction costs. This project will be performed in phases over 5 to 10 years with Phase 1 construction well underway.

Roads

River Parkway Extension

This project is eligible to receive up to \$2.55 million from Translink. The scope of this project includes the construction of an interim two-lane road along the former railway corridor, from 200m northeast of Gilbert Road to Cambie Road including protected bike lanes. The new road will connect to the existing Leslie Road, Gilbert Road, Cambie Road and future Minoru Boulevard as well as access to the future Middle Arm Waterfront Park. When completed this new road would replace the existing River Road between Gilbert Road and Cambie Road and provide a continuous alternate route to No. 3 Road and existing River Road. The construction work is ongoing.

2019 Paving Program – Various Locations – City-Wide

The 2019 Paving Contract is underway. Completed locations include: 8,000 Block of Alderbridge Way, 10,000 Block of Alderbridge Way, 9,000 Block of Alderbridge Way, Russ Baker Way (No. 2 Road to Inglis Drive), and Mond's Subdivision. Upcoming locations include: Bridgeport Road (Viking Way to No. 6 Road), 7,000 Block of No. 5 Road, 11,000 Block of No. 5 Road, 12,000 Block of No. 5 Road; and various vibration complaint locations.

Sanitary Sewers**Hamilton Sanitary Pump Station**

This project includes the construction of the new Hamilton Sanitary Pump Station located at the southeast corner of Hamilton VLA Park and installation of new sanitary utility in the area. The purpose of the project is to provide sanitary service for the Willet sanitary catchment in order to support population densities projected by the Hamilton Official Community Plan Update. This area does not have an existing City sanitary system and is currently serviced by septic systems.

Water**2019 Watermain Replacement Project**

This project replaces and upsizes ageing watermains at the end of their service life with PVC pipe, in line with the City's Ageing Infrastructure Replacement Strategy. This will minimize unplanned maintenance and improve fire protection. The McDonald Road area is completed and construction of the Colbeck area is nearing completion. The Palmberg area is scheduled to commence later this year and Gilhurst/Bates area in early 2020.

Buildings**Minoru Centre for Active Living**

The Minoru Centre for Active Living project remains on budget. Lap Pool 1 leak investigation is complete and insurance coverage has been confirmed. A full opening is currently estimated for the fall of 2020 while the new 790 square metre (8,500 square feet) Fitness Centre will open to the public in January 2020. The Seniors Centre and Event Centre opened to the public on March 11, 2019.

Childcare Centres

A combined total of approximately 77,000 sq. ft. has been designed to accommodate about 262 children in various licensed child care programs. Funding was collected through both the Development Cost Charges and community amenities charges. Design and construction are underway for the following:

- River Green Child Care - Aspac Development Ltd.
- Seedlings Early Childhood Development Hub
- Sprouts Early Childhood Development Hub
- River Run Early Care and Learning Centre - Western-Citimark

Gateway Theatre

The theatre improvements include envelope rehabilitation, modernization of fire safety, mechanical and electrical systems replacements, with minor structural and finishes upgrades. Construction continues and is estimated to be completed by Q4 2020.

Minoru Arena Refrigeration Plant Upgrade

Multiple components in the Minoru Arenas (Stadium and Silver Rinks) refrigeration systems reached the end of their serviceable life expectancy and required replacement to prolong the life of the building and ensure the health and safety of its users. Construction has been completed as planned, and the arenas are in operation.

Minoru Place Activity Centre

The Minoru Place Activity Centre will be repurposed to a Community Arts Program and Education space. Stakeholder engagement and schematic design is currently underway. Enabling works began in August 2019 and detailed design is estimated to be completed in Q1 2020.

2019 Capital Construction Program Update

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
INFRASTRUCTURE - ENGINEERING				
ROADS				
1	Railway Crossings and Environmental Works (2018)	Westminster and Nelson rail crossings and environmental works at Woodward's Slough	\$3,384	Q2 2020
2	Annual Asphalt Re-Paving Program – MRN (2019)	Annual asphalt re-paving	\$1,151	Q4 2019
3	Annual Asphalt Re-Paving Program - Non-MRN (2019)	Annual asphalt re-paving	\$3,131	Q4 2019
4	Streetlight LED Upgrade Program (2019)	Year 3 - Continuation of LED replacement program	\$430	Q4 2019
5	Neighbourhood Walkway Program (2019)	No. 6 Road Multi-Use Pathway Cambie Road to Bridgeport Road	\$500	Q4 2019
6	Transit-Related Roadway Improvement Program (2019)	Bus Stops at various locations Citywide including Westminster Highway and Steveston Highway	\$400	Q4 2019
7	Westminster Highway Pedestrian and Cyclist Enhancements, Smith Crescent to Fraserside Gate (2019)	Smith Crescent to Fraserside Gate	\$1,100	Q2 2020
8	Arterial Roadway Improvement Program (2019)	Railway Greenway intersections at Blundell Road, Francis Road and Williams Road	\$450	Q4 2020
9	Active Transportation Improvement Program (2019)	i. Charles Street Multi-Use Pathway - Sexsmith to Bridgeport Canada Line Station ii. Crosstown Neighbourhood Bike Route – complete along Bowcock Road – Garden City Road – Dayton Avenue to connect to the Parkside Neighbourhood Bike Route iii. Midtown Neighbourhood Bike Route – Steveston Highway to Granville Avenue iv. Neighbourhood Bike Route – Saunders - Woodward's	\$1,000	Q4 2020
10	Alderbridge Way Multi-Use Pathway, No. 4 Road to Shell Road (2018)	Alderbridge Way Multi-Use Pathway - Shell Road to No. 4 Road	\$1,200	Q2 2020

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
11	River Parkway Road Extension - Gilbert Road to Cambie Road (2017, 2018) Cambie Road Improvement, River Road to No. 3 Road (2018) Leslie Road Improvement, River Parkway to approximately 150m to the east (2018) Watermain Replacement River Parkway (2018)	River Parkway Road Extension - Gilbert Road to Cambie Road	\$15,045	Q3 2020
12	Garden City Road Pedestrian and Cyclist Enhancements, Westminster Highway to Lansdowne Road (2019)	Garden City Pedestrian and Cyclist Enhancements - Westminster Highway to Lansdowne Road	\$1,000	Q4 2020
13	Steveston Highway Multi-Use Pathway, Shell Road to Mortfield Gate (2019)	Steveston Highway Multi-Use Pathway - Shell Road to Mortfield Gate	\$2,000	Q4 2020
14	Streetlight LED Upgrade Program (2019)	Year 3 – Continuation of LED replacement program	\$430	Q1 2020
DRAINAGE				
15	Drainage System and Irrigation Upgrades – South Sidaway Area Phase 2 (2016)	Watercourse and culvert realignment; automatic irrigation gate installation	\$450	Q4 2019
16	Gilley and Westminster Highway Culvert Replacement (2016)	Replacement of existing culvert at intersection	\$1,250	Q4 2019
17	East Richmond Drainage & Irrigation Upgrades - (2017)	Various locations Citywide including Steveston Hwy, Sidaway Rd, Palmberg Rd, Westminster Hwy, and Gilley Rd	\$1,285	Q2 2020
18	Burkeville Drainage Improvements (2018)	Burkeville Drainage Upgrades (phase 1 of construction)	\$2,000	Q1 2020
19	Laneway Drainage Upgrade - Afton Drive (North) (2019)	Laneway Drainage Upgrade - Afton Drive (North)	\$1,373	Q2 2020
20	Laneway Drainage Upgrade - Herbert East Lane (2019)	Laneway Drainage Upgrade - Herbert East Lane	\$542	Q4 2019
21	Box Culvert Repair (2018)	Box Culvert Repair – No. 4 Rd and Citywide	\$1,500	Q3 2020
22	Headwall Replacement and Ditch Infills (2018)	Steveston area, No. 9 Road and Dyke Road, and No. 7 Road and Cambie Road	\$500	Q4 2020

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
23	Canal Stabilization (2017)	Canal stabilization and assessments and geotechnical investigations for various sections of canal Citywide	\$300	Q4 2020
24	Dike Upgrades (2018)	Dike Upgrades - Various location including No. 9 Rd, No. 3 Rd, and Garden City Rd	\$5,850	Q4 2020
25	Box Culvert Repair (2017)	Citywide and at No. 2 Rd south Drainage Pump Station	\$1,500	Q1 2021
26	2016 Flood Protection Program (2016)	South dike - No. 3 Road to Gilbert Road, Horseshoe Slough Pump Station, No. 7 Road South Drainage Pump Station, Shell North Drainage Pump Station, No. 2 Road South Drainage Pump Station	\$28,185	Q3 2021
27	East Richmond Drainage & Irrigation Upgrades (2018)	Irrigation gates, ditch re-grading and culvert upgrades various locations Citywide, including Blundell, Burrows, Woodward's Slough, Sidaway Road, Westminster Highway and Granville Avenue	\$466	Q4 2021
SANITARY				
28	City Centre Sanitary Sewer Rehabilitation (2016)	Point repairs of existing sanitary sewer/ Minoru Park sanitary-storm reconnection	\$1,160	Q4 2019
29	Sanitary Sewer Tie-in and Restoration (2018)	Sanitary Sewer Tie-in and Restoration	\$500	Q4 2019
30	Gravity Sewer Assessment Program (2018)	Citywide Closed Circuit Television inspections	\$450	Q3 2020
31	Burkeville Utility Upgrades (2019)	Burkeville Utility Upgrades - Sanitary (phase 1 of construction)	\$1,133	Q2 2020
32	Eckersley B Sanitary Pump Station (2018)	Eckersley B Sanitary Pump Station	\$2,650	Q4 2019
33	Hamilton Area Sanitary Sewer and Pump Station (2017)	Sanitary Pump station located in Hamilton VLA Park	\$1,700	Q2 2020
34	Steveston Gravity Sewer Replacement and Rehabilitation (2018)	Steveston Gravity Sewer Assessment, Replacement and Rehabilitation	\$1,839	Q4 2020
WATER				
35	Water Metering Program (2017)	Fixed base network implementation	\$2,120	Q4 2019

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
36	Watermain Tie-in and Restoration (2018)	Watermain Tie-in and Restoration	\$250	Q4 2019
37	Water Replacement Program (2019)	Watermain Replacement Program - McDonald Road area, Colbeck Area, Palmberg Area and Gilhurst/Bates Area.	\$5,395	Q2 2020
38	Thompson Gate Pressure Reducing Valve station (2017)	Water Pressure Reducing Valve in development property	\$600	Q3 2020
39	Water Metering Program (2018)	Upgrade touch pad meters to radio meters; volunteer multi-family dwelling meters	\$6,506	Q4 2020
BUILDINGS - PROJECT DEVELOPMENT				
40	Watermania System Ageing Mechanical and Building Envelope Infrastructure Replacement (2018)	Infrastructure replacements	\$1,000	Complete
41	Minoru Arena Infrastructure Replacements (2017)	Infrastructure Replacement	\$1,859	Complete
42	City Hall Annex Transformer Replacement (2019)	Transformer Replacement	\$500	Q1 2020
43	East Richmond Community Hall Envelope and Mechanical System Renewals (2019)	Renewal of HVAC Systems, Roof Replacement, Interior Upgrades	\$402	Q1 2020
44	Minoru Centre for Active Living (2014)	New Construction of an Aquatics Centre and Older Adults Centre	* \$83,100	Q2 2020
45	Thompson Community Centre Heat Pump Replacements (2018)	Infrastructure replacements	\$520	Q1 2020
46	Enhanced City Centre Police Office (2018)	Construction of tenant improvement for support relocation of Community Police Office to City Hall West	\$6,500	Q1 2020
47	Fire Hall No. 1(2014)	Solar Photovoltaic Panels - Energy Systems	\$455	Q2 2020
48	Gateway Theatre (2016, 2018, 2019)	Main Stage Lighting Replacement, Infrastructure Replacements – Phase 1 and Phase 2, Lighting Infrastructure and System Renewal	\$8,095	Q4 2020
49	Japanese Canadian Cultural Centre – Front Entry Accessibility Upgrade (2019)	Entrance Upgrade	\$258	Q2 2020
50	Minoru Place Activity Centre Program - Implementation (2019)	Repurposing	\$2,511	Q4 2020

*Includes multi-project contingency

	Project Name	Scope of Work	Capital Funding (x1000)	Scheduled Construction Completion
51	Works Yard Mechanical Replacements (2019)	Mechanical Systems Replacement	\$1,707	Q4 2020
52	Works Yard Salt Shed Repairs (2019)	Salt Shed Repair	\$266	Q4 2020
53	Works Yard Ageing Mechanical and Building Envelope Infrastructure Replacement (2018)	Design of site wide infrastructure replacements	\$2,515	Q4 2020
54	City Hall Upgrades and Repairs (2019)	Mechanical Upgrades and repairs	\$980	Q2 2020
55	Library Cultural Centre Conveyance Replacements (2019)	Conveyance Replacement	\$709	Q2 2020
56	Energy Management Projects (2017)	Library Cultural Centre (includes \$750K Grant). Mechanical System Renewals	\$1,660	Q4 2020
57	Minoru Arena System Renewals (2019)	Systems Renewal	\$3,300	Q3 2020
58	Watermania Aging Mechanical and Building Envelope Infrastructure Replacement Phase 2 (2019)	Mechanical and Envelope Replacement	\$1,341	Q4 2021
59	Lawn Bowling Club Replacement (2018)	Replacement of Clubhouse	\$5,300	Q3 2021
60	Minor Capital Buildings Project Development (2018)	64 projects (roof replacement, flooring, mechanical equipment, etc.)	\$3,964	Q4 2019

Capital Highlights**Community Services/Parks***Garden City Lands Phase 2 and 3:*

Approved Budget: \$5,995,000 (2016, 2017, 2018) 50% Complete

- The Garden City Lands - Legacy Landscape Plan was endorsed by Council in June 2014.
- Preparation of the farm area licensed to Kwantlen Polytechnic University has been completed and farming began in June 2018.
- Staff are preparing a Non-Farm Use Application for Council's review prior to filing with the Agricultural Land Commission (ALC) in Q4, 2019 or Q1, 2020. The purpose of the application is to gain the ALC's approval to construct a wide range of park infrastructure and site elements.

Aberdeen Park Phase 2 and 3:

Approved Budget: \$2,050,000 (2018 & 2019) 15% Complete

- Council approved the naming of this new park at Cambie Road and Hazelbridge Way in July 2017 from Cambie City Centre to Aberdeen Park.
- Phase 2 detailed design will be completed in Fall 2019.
- Construction is anticipated to begin in Spring 2020 and be completed that year.

The Gardens Agricultural Park:

Approved Budget: \$2,267,000 (2012, 2014, 2015) 55% Complete

- Rehabilitation of the existing park features is ongoing including pathways, a bridge, planting and site furnishings.
- The southern part of the park is open to the public with a northern section anticipated to be open by the end of 2019.
- Redevelopment of the existing ponds for storm water retention was completed in 2016.
- Full implementation of the approved park concept is currently on hold due to the potential impacts of the George Massey Tunnel project.

Parks Aging Infrastructure 2018:

Approved Budget: \$900,000 (2018) 72% Complete

- King George Spray Park Resurfacing was completed on June 22, 2018.
- No. 2 Road Pier – Structural Conditional Assessment was completed in August 2018. Planning and preparation for the construction repairs scheduled for 2020.
- Nature Park Boardwalk Replacement - Planning & Design has been completed Feb 2019. Construction of the 300 metre long x 8 feet wide accessible boardwalk along the Nature Park pond trail was completed in June 2019. Enhancement to the facility entrance area to be completed by Spring 2020.

Parks Identity Signage Program:

Approved Budget: \$200,000 (2018) 95% Complete

- City Centre urban ID signage was installed at Lang Park, Aberdeen and Richmond Oval fabricated and installed.
- Comprehensive signage plan for Terra Nova Rural Park (TNRP) and Natural Area (TNNA) precincts (including wayfinding and identification signage) fabrication is

Capital Highlights**Community Services/Parks**

complete. TNRP + TNNA wayfinding installation was complete (Summer 2018) and identification signage installation was completed in Spring 2019.

- Identification signage for Capstan area including Ketcheson and Capstan Neighbourhood Parks was completed and signing was installed in July 2019.
- Alexandra Greenway sign design complete. Fabrication and installation delayed due to site works.

Playground Improvement & Replacement:

Approved Budget: \$481,000 (2016 & 2017)

100% Complete

Palmer Garden City Neighbourhood School Park Playground:

- Playground construction was completed in early September 2019 and the playground is open to the public.

Richmond Nature Park Playground Expansion

- The playground expansion was completed in July 2018 and is open to the public.

Playground Improvement & Replacement:

Approved Budget: \$500,000 (2018)

40% Complete

Terra Nova Adventure Playground Improvement

- The 'treehouse' tower is being upgraded to address wear and tear associated with the high degree of use it receives.
- The improvements completed in September 2019.

South Arm Community Park Playground

- Public engagement process to take place from September – October, 2019.
- Concept plan development to take place in Fall/Winter 2019.
- Request For Proposal and contract award process for design-build services to take place in Winter 2020.
- Construction expected to start in Spring 2020.

London/Steveston Park Enhancements:

Approved Budget: \$1,030,000 (2017, 2018 & 2019)

80% Complete

- Construction of new landforms and pathways were completed in Summer 2019.
- Tree planting and grass establishment to take place in Fall 2019.
- The contract for design-build services for the children's playground was awarded in August 2019. Design will take place in Fall 2019. Construction expected to start in late Fall 2019 or Spring 2020, depending on weather and manufacturing lead times.

Hollybridge Pier/Middle Arm:

Approved Budget: \$2,350,000 (2012 & 2015)

30% Complete

- Continuation of the Oval West waterfront development as part of the Middle Arm

Capital Highlights**Community Services/Parks**

waterfront with a new public pier at the end of Hollybridge Way.

- Contract for design services for the pier has been awarded to Amec Foster Wheeler.
- Contract for construction services for the pier has been awarded to Fraser River Pile & Dredge.
- **Project delayed.** Awaiting permitting/construction approvals from the Ministry of Forest, Lands and Resources Operations and First Nations consultation. The Musqueam Band is opposing the project and has requested further consultation with the City of Richmond.

Parks Aging Infrastructure 2019:

Approved Budget: \$550,000 (2019) 70% Complete

- McNair Sandfield Renewal – Upgrades to the soccer and rugby sized (70x120 m) sand field included new irrigation heads and replacement of the existing sand base and grass sod began in late-May 2019 and was completed in mid-June 2019.
- Minoru Tennis Courts – perimeter fence replacement on the Richmond Tennis Club facility was completed in July.
- Minoru Tennis Court Repairs and Resurfacing were completed in August.
- King George Tennis Court Repairs and Resurfacing were completed in August.
- King George Waterpark – UV System upgrades - the design build of a secondary UV filtration system as per the new standards/requirements from Vancouver Coastal Health Authorities. Anticipated installation in the Fall/Winter 2019.

Hugh Boyd Fields – Artificial Turf Replacement 2019:

Approved Budget: \$1,800,000 (2019) 65% Complete

- Tender was completed in April and award of contract was issued in May.
- Removal of the existing surfacing system completed.
- Grading and levelling the field is underway.
- Installation of a new surfacing system started in September and was substantially completed on November 15, 2019.

Minoru Park – Replacement of the Lawn Bowling Green Synthetic Surfaces 2019:

Approved Budget: \$350,000 (2019) 95% Complete

- Tender was completed in April and award of contract was issued in June 2019.
- Testing of existing conditions such as percolation rate was completed in June 2019.
- Work started in August with substantial completion on September 4, 2019. Pending final testing of the bowling greens for facility certification.

Alexandra Park (formerly West Cambie Park):

Approved Budget: \$1,720,000 (2010, 2013, 2016 & 2019) 55% Complete

- Council approved the re-naming of this park in March of 2019 from West Cambie to Alexandra Park.
- Issue for Tender drawings and specifications, RFP are being finalized with the consultant team.
- Site prep work is underway. Phase 1 park construction is anticipated to begin spring 2020.