From: "Amrolia, Armin"

To: "Direct to Mayor and Council - DL"

Date: 2024-05-31 12:28:17 PM

Subject: Council Memo - REFM - Capital Project Delivery Update

Attachments: Council Memo - REFM - Capital Project Delivery Update.pdf

Good morning Mayor and Council,

This memo provides an update to Mayor & Council on the progress of the City's delivery of capital facilities by Real Estate, Environment, and Facilities Management (REFM) and the Non-Market Housing Development (NMHD) team in the Vancouver Housing Development Office.

If you have any questions please reach out to me.

Thank you, **Armin Amrolia -** Deputy City Manager (she/her)

The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xwməθkwəyəm/Musqueam, Skwxwú7mesh/Squamish and səlilwəta\f\Tsleil-Waututh nations



REAL ESTATE, ENVIRONMENT & FACILITIES MANAGEMENT General Manager's Office

May 30, 2024

MEMORANDUM

TO: Mayor & Council

CC: Paul Mochrie, City Manager

Karen Levitt, Deputy City Manager Sandra Singh, Deputy City Manager

Lon LeClaire, General Manager, Engineering Services

Doug Smith, Acting General Manager of Planning, Urban Design and

Sustainability

Katrina Leckovic, City Clerk

Maria Pontikis, Chief Communications Officer, CEC

Teresa Jong, Administration Services Manager, City Manager's Office

Mellisa Morphy, Director of Policy, Mayor's Office

FROM: Armin Amrolia

Deputy City Manager

SUBJECT: Real Estate Capital Delivery

This memo provides an update to Mayor & Council on the progress of the City's delivery of capital facilities by Real Estate, Environment, and Facilities Management (REFM) and the Non-Market Housing Development (NMHD) team in the Vancouver Housing Development Office.

Background for Memo

Real Estate, Environment & Facilities Management

The 2023-2026 Capital Plan contemplates \$3.5 billion of capital investment. Of that total, REFM manages approximately \$1.4 billion to deliver new and existing facilities, including \$0.7 billion for Council-approved in-kind infrastructure and amenities, delivered through development, and \$73 million allocated to Capital Maintenance (lifecycle rehabilitations of existing building systems).

REFM plans, delivers, and oversees new and renewed capital funded and in-kind facilities and projects, and it provides regular maintenance, operations, and capital life-cycle systems replacement services for approximately 600 civic-use buildings. It also delivers environmental services in support of departments corporate-wide.

Vancouver Housing Development Office / Non-Market Housing Development (NMHD)

As part of the Vancouver Housing Development Office, the NMHD Team manages the City's portfolio of non-market housing (Vancouver Affordable Housing Endowment Fund (VAHEF). The VAHEF portfolio consists of over 230 City-owned sites with existing non-market housing and an active development pipeline. The NMHD Team is responsible for setting the strategic direction of the portfolio and managing the portfolio through effective partnerships (including REFM) and leveraging senior government funding to expand and preserve affordable housing in Vancouver.

In addition to the \$300m in-kind non-market housing delivered by developers contemplated in the 2023-26 Capital Plan, the NMHD Team manages the deployment of \$241m towards the VAHEF portfolio activities above.

Real Estate, Environment and Facilities Management

REFM is comprised of several teams that collaborate to facilitate effective capital delivery including Facilities Planning & Development, Facilities Management and Operational Excellence, Real Estate Services and Environmental Services.

Facilities Planning and Development (FPD)

FPD is responsible for strategic long-term facilities planning and development of a variety of City-owned buildings including community centres, pools and rinks, childcares, housing, cultural spaces, fire halls, police and library buildings, and many others. This group also provides expertise in green sustainable building standards and practices, as well as interior design and space allocation planning and energy management.

Currently, FPD is directly managing or overseeing over 130 active capital design and delivery projects, including:

- Direct management of over 25 capital projects in design or construction funded through the 2023-2026 Capital Plan with an estimated cost of approximately \$250m.
- Direct management of an additional 25 capital projects recently completed, in design or construction funded through the 2019-2022 Capital Plan with an estimated cost of \$360m.
- Oversight of 10 capital projects with an estimated cost of \$140m delivered by government agency partners.

- Oversight of approximately 50 projects with an estimated value of \$1.3 billion delivered in-kind by developers, and an additional 15-20 projects where value is yet to be determined, which cumulatively include:
 - 1,249 childcare spaces these include the negotiated childcare spaces thru the CAC process as well as product REFM coordinates and builds for ACCS
 - o 1,800 social housing units, and
 - 25 unique recreational, social and cultural service spaces with a total approximate area of 300,000 square feet

Recently completed or being delivered; 2019-2022 Capital Plan

Project	Stage	Anticipated Completion
Delivered under direct REFM FPD project management		
Accessibility Program – Gathering Place Public Washroom	Complete	2023 Q1
West Point Grey Library Branch	Complete	2023 Q2
Accessibility Program – West Annex 2 nd Floor Public Washroom Upgrade	Complete	2023 Q3
CRAB Park Public Washroom (2)	Complete	2023 Q3
Accessibility Program – Carnegie Centre Public Washroom	Complete	2023 Q4
Columbia Park Public Washroom (1)	Complete	2023 Q4
Coopers Park Public Washroom (1)	Complete	2023 Q4
Orpheum and QET Civic Theatre Bar Upgrades	Complete	2023 Q4
Firehall 12 Seismic Upgrades	Construction	2024 Q1
Manitoba Yards HydroVac Sheds	Construction	2024 Q2
Archives Annex at 2635 Kaslo	Design	2024 Q4
Tisdall Park Public Washroom (2)	Design	2024 Q4
Coal Harbour Elementary School, 69-space childcare, and Social Housing	Construction	2024 Q4
Renter Centre	Construction	2024 Q4
West Fraser Lands Fieldhouse & Childcare	Construction	2024 Q4
Sunset Yard Renewal	Construction	2025 Q1
Sunset Seniors Centre	Design Development	2025 Q4
Marpole Community Centre, Fieldhouse, & Childcare	Construction	2026 Q2
Firehall 9 & Headquarters	Design Development	2027 Q4
Britannia Community Services Centre – capital upgrades	Planning	TBD

Delivered by government or non-profit (NP) partners with REFM FPD oversight			
Henry Hudson Elementary School 69-space childcare	Construction	2024 Q4	
(delivered by VSB)			

Eric Hamber 69-space childcare (delivered by VSB)	Construction	2024 Q4
QMUNITY Social Service Centre co-located (with 154 social housing units delivered by NMHD/NP delivery partner)	Construction	2025 Q2
Mt Pleasant 960 E 7th – 37-space childcare (with 36 social housing units delivered by NMHD/NP delivery partner)	Planning	2027 Q4
Sunnyhill 37 space childcare (delivered by PHSA)	Design	2027 Q4

Delivered in-kind by developers with REFM FPD & NMHD oversight		
Empire Landmark 83 Social housing units	Construction	2024 Q2
Little Mountain City Building AB; neighbourhood house, 69- space childcare, 48 social housing units	Construction	2025 Q3
Oakridge Community Centre; library, performance space, seniors centre, 69-space childcare, 60-space out of school care, 187 social housing units including 2 family childcare units (Phase 1)	Construction	2025 Q3
Oakridge 103 social housing units including 4 family childcare units (Phase 2)	Design	2028 Q1

Recently completed or being delivered; 2023-2026 Capital Plan

Project	Stage	Anticipated Completion
Delivered under direct REFM FPD project management		·
Won Alexander Cumyow Civic Office	Complete	2023 Q3
City Hall West Annex – Accessible Public Washroom	Complete	2023 Q4
Tiny Shelters	Complete	2023 Q4
City Hall - Revenue Services Renovation	Design	2024 Q3
Manitoba Yard – Equity Public Washroom Renovation	Design	2024 Q4
Civic District; Broadway Plan Policy Update & Rezoning of North Annex and potential inclusion of the new VPD Headquarters	Pre - Planning	2025 Q4 (Rezoning Phase only, design / construction TBD)
Kerrisdale Community Centre and Pool Energy Retrofit	Design	2025 Q3
PNE Amphitheatre	Demo in progress	2025 Q4
VPL Central Library - Children's Library Renovation	In construction	2025 Q4
Kitsilano Community Centre Pre-School Conversion – 44- space childcare	Design	2026 Q1
Kitsilano Outdoor Pool	Scoping	TBD
990 Beatty - Firehall 8, 37-space childcare, 283 units Social Housing	Design/Devel opment	2028 Q2

Vancouver Aquatic Centre	Design	2030 Q4 (TBC)
Animal Services	Design	TBD (possibly Q2 2027)

Delivered by government agency partners with REFM FPD oversight			
RayCam Community Centre and 108-space childcare (BC Housing)	Design	2031 Q1	

Delivered in-kind by developers with REFM FPD oversight		
5740 Cambie Non-Profit Office Hub	Construction	2025 Q4
Burrard & Davie Cultural Hub	Design	2025 Q2
1444 Alberni St. 56-space childcare	Design	2027 Q4
East Fraser Lands Community Centre and 74-space childcare	Design	2028 Q2
1157 Burrard St 37-space childcare	Design	2028 Q2
5910-5998 Cambie St Artist Studios	Design	2028 Q2
427-477 W49th Ave 37-space childcare	Design	2028 Q4
Plaza of Nations Community Centre, Ice rink, Music Presentation Centre, 69-space childcare & 342 to 380 Social Housing Units	Design	New plan recently submitted; staff are reviewing
5812-5844 Cambie St 37-space childcare & Youth Centre	Design	TBD

<u>Facilities Management and Operational Excellence (FMOE) - Capital Maintenance</u> Program

The FMOE team is responsible for facilities sustainment and capital maintenance. FMOE's Capital Maintenance Program focuses on the renewal of building systems or major pieces of equipment that are near failure, can no longer be serviced reliably, or are at end-of-life.

There are currently 148 capital maintenance projects underway. Of those, 65 are in the assessment, planning and design stages and 70 are in the construction and design build stages. Examples of major projects include:

- Library Square Chiller and Cooling Tower Replacement (\$5M+)
- VPD Graveley Elevator 1&2 Modernization (\$1M)
- New Continental Domestic Water Re-piping (\$5M+)

In addition, there are a further 136 capital maintenance projects that have been prioritized to move forward over the next three years. Examples of major projects include:

- Trout Lake Community Centre Exposed Roof Beam Rehabilitation (\$1M)
- Kerrisdale Community Centre Pool Roof Replacement (\$2M)
- City Hall Upper Vehicle Deck and Stairs (Waterproofing) (\$3M)
- Britannia Community Services Centre Aquatic Centre, Arena and Exterior (\$17.5M)
 - o Britannia Aquatic Centre
 - Air Handling Unit (AHU) replacement inc. Cooling
 - Domestic Water Heating System & Piping Replacement
 - Heating System and Boiler Replacement
 - Direct Digital Control (DDC) system upgrade
 - Pool Area Deck Renewal
 - o Britannia Arena
 - HVAC & Mechanical System Replacement
 - Ice Slab & Brine Piping Replacement
 - Rink Compressor Replacement
 - Electrical System Upgrade
 - Dehumidification System Renewal
 - Exterior Pool and Arena
 - Sloped Roof Replacement
 - Exterior Concrete Block Repaint
 - Landscaping, Exterior, Lighting, Hard Surface Upgrade & Renewal

A complete list of FMOE's Active and Planned Projects can be found in Appendix A.

Vancouver Housing Development Office

Non-Market Housing Development (NMHD)

In addition to acquiring new sites, providing grants towards non-profit projects and renewing expiring leases to expand and preserve affordable housing in Vancouver, the NMHD Team is readying a number of City sites for construction with non-profit delivery partners, including undeveloped land, co-location with other civic facilities, and redevelopment of under-utilized sites. Currently, this includes:

- Continued development and construction oversight of 17 projects (~2,000+ homes) on City sites into 2024, including funding from the Provincial Permanent Supportive Housing Initiative and Rapid Housing Initiative
- Advancement of eight new projects (~1,200+ homes) from predevelopment to development in 2023 to access new senior government funding opportunities
- Readying 17 sites for future development (~2,500+ homes)

A summary of estimated affordable housing starts and completions on City sites, as well as the table of projects, is listed in Table 1 and Table 2, respectively.

Table 1: Housing Unit Starts and Completions Estimated

Summary of Non-Market Housing	Unit
Starts on City sites	# 1 1-2:4-2
Timeline	# Units
Start Construction 2021	490
Start Construction 2022	585
Start Construction 2023	455
Start Construction 2024	440
Start Construction 2025	1,133
Total Starts 2021-2025	3,123
Complete 2024	568
Complete 2025	549
Complete 2026	806
Complete 2027	921
Total Complete 2022-2027*	2,844

^{*}contingent on securing senior government funding to start construction

Table 2: Housing Unit Starts and Completions by Project

Non-Market Housing Construction Starts and Completions on City Sites by Project			
Construction Starts	Est. Completion*		
2021:	2024:		
 58 W Hastings (231 units) 	 3338 Sawmill (337 units) 		
• 710 E 19 (58 units)	 58 W Hastings (231 units) 		
 205 Kingsway (68 units) 	2025:		

- 2075 Kingsway (65 units)
- 162 Main (68 units)

2022:

- 3338 Sawmill (337 units)
- 1015 E Hastings (248 units)

2023:

- 3085 McHardy (102 units)
- 177 W Pender (76 units)
- 1190 Burrard (154 units)
- 2009-2037 Stainsbury (123 units)

2024:

- 1210 Seymour (112 units)
- Arbutus (129 units)
- East King Ed (109 units)
- 450 Pacific (90 units)

2025:

- Grandview (64 units)
- SE Marine (72 units)
- Renfrew (76 units)
- 1050 Expo (296 units)
- 525 Powell (158 units)
- 625 Pacific (184 units)

- 3085 McHardy (102 units)
- 177 W Pender (76 units)
- 2009-2037 Stainsbury (123 units)
- 1015 E Hastings (248 units)

2026:

- 1190 Burrard (154 units)
- 1210 Seymour (112 units)
- Arbutus (129 units)
- East King Ed (109 units)
- Grandview (64 units)
- SE Marine (72 units)
- Renfrew (76 units)
- 450 Pacific (90 units)

2027:

- 1050 Expo (296 units)
- 525 Powell (158 units)
- 625 Pacific(184 units)
- 990 Beatty (283 units)

Next Steps

REFM and VHDO will continue to lead the safe, sustainable and innovative stewardship of the City's properties and facilities, to protect and enhance Vancouver's environment, and to advance the City's mission, goals and services.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Armin Amrolia

Armin Amrolia Deputy City Manager

^{*}Subject to change based on regulatory approvals and securing senior government funding to start construction

APPENDIX A: FMOE LIST OF CAPITAL MAINTENANCE PROJECTS

Table 1. List of Active Projects

Service Area	Capital Plan	Project Type	Project Name
Building System Safety			
Program	2015-2018	Construction	Evans Yard - Door Access - Install
Building System Safet	ty 2015-2018	Construction	Kerrisdale - Ammonia Condenser Replacements
Program Building System Safet		Construction	Rink Ammonia System Design - Kerrisdale Rink Condenser and
Program	2015-2018	Design	Compressors
Building System Safet	-	Dooign	Rink Ammonia System Design - Sunset Low-Ammonia Coolers and
Program	2015-2018	Design	Compressors
Cultural	2015-2018	Design	NCAP VAG Escalator Audit
Admin Offices	2019-2022	Construction	City Hall - Electrical Distribution Upgrades - Construction
Admin Offices	2019-2022	Construction	Park Board Admin - Replace Stair Lifts 1 and 2 - Construction
Admin Offices	2019-2022	Design	City Hall - Upper Deck Rehabilitation - Design
Admin Offices	2019-2022	Design	City Hall distribution Design
Admin Offices	2019-2022	Design	PB Admin Office Chair Lifts Replace (3 units)
Cultural	2019-2022	Assessment	CM Strategic Assessment and Forward Works Plan - QET Complex
Cultural	2019-2022	Construction	Heritage Hall Building Envelope
Cultural	2019-2022	Construction	MoV HVAC Renewals
Cultural	2019-2022	Construction	VAG Annex - Elevator Modernization - Construction
Cultural	2019-2022	Construction	VAG Annex - Skylight - Construction
			VAG - Once Through Cooling - Detailed Design and Construction
Cultural	2019-2022	Design	Documents
Cultural	2019-2022	Design	VAG Annex - Skylight Replacement - Design
Entertainment & Exhibition	2019-2022	Construction	PNE - Forum - Heat Exchanger replacement AHU-3 (HVAC)
Fire Halls	2019-2022	Design	FH-01 - HVAC Boiler Replacement - Design
Fire Halls	2019-2022	Design	FH-03 - HVAC System replacement - zero carbon - design
Fire Halls	2019-2022	Design	FH-18 - HVAC System replacement - zero carbon - design
		<u> </u>	Library Square - Chillers - Investigation and Pre-Construction -
Libraries	2019-2022	Construction	Contractor (LSC)
Libraries	2019-2022	Construction	Library Square - Chillers and Cooling Towers
Libraries	2019-2022	Construction	Library Square - Elevator Construction - Elevators 15 and 16
Libraries	2019-2022	Construction	Library Square -Special Collections Dehumidification - Construction
Libraries	2019-2022	Construction	Renfrew Library - Parkade Sprinkler Main Lines and Backflow Replacement
Libraries	2019-2022		Library Square Chillers & Cooling Towers Design (LSC)
rini ai ies	2013-2022	Design	Library Square - Condition Based Replacement - Domestic Booster
Libraries	2019-2022	Design	Pumps
Libraries	2019-2022	Design	Library Square Elevator Specifications
Libraries	2019-2022	Design	Library Square -Special Collections Dehumidification - Design
Non-Market Housing	2019-2022	Construction	Kingsway Continental - HVAC Replacement
Non-Market Housing	2019-2022	Construction	New Continental Apartments - Domestic Water System Re-piping - Construction

Non-Market Housing	2019-2022	Design	Gresham - MUA Replacement - Design
Non-Market Housing	2019-2022	Design	New Continental-Domestic Water Re-piping
Park Buildings	2019-2022	Construction	Burrard Marina - Lift Station Renewal
Park Buildings	2019-2022	Design	2023 Fieldhouse Roofing Program - Design Consultant
Park Buildings	2019-2022	Design	Burrard Marina-Sanitary Lift Station D
Police Offices	2019-2022	Construction	VPD Graveley Elevators 1&2 Modernization
Recreational Facilities	2019-2022	Assessment	2022 - Kitsilano Pool - Detailed Condition Study - Preliminary Assessment
Recreational Facilities	2019-2022	Assessment	Hillcrest Pool Concrete Assessment
Recreational Facilities	2019-2022	Assessment	Kerrisdale CC - Retscreen Modelling for GIB application
Recreational Facilities	2019-2022	Assessment	Recreation Facilities - DDC Assessments - 8 sites
Recreational Facilities	2019-2022	Assessment	Trout Lake CC Site - Iron Ochre Study
Recreational Facilities	2019-2022	Assessment	Van Aquatic Ctr - Structural Asses
Recreational Facilities	2019-2022	Construction	2022 - 1 Kingsway Mt Pleasant CC - Water Heat Pump Replacements
Recreational Facilities	2019-2022	Construction	Britannia Pool - Boiler Chemical Room Exhaust - Replacement
Recreational Facilities	2019-2022	Construction	Dunbar Community Centre - Replace inverted roof
Recreational Facilities	2019-2022	Construction	Kensington Community Centre - Fire Alarm Panel Replacement
Recreational Facilities	2019-2022	Construction	Kerrisdale - Ammonia Compressor Replacement and Alarm/DDC/Ventilation Works
Recreational Facilities	2019-2022	Construction	Kerrisdale CC Pool-RTU #1  Replacement
Recreational Facilities	2019-2022	Construction	Kerrisdale CC Pool-RTU's 1&2 Replacement
Recreational Facilities	2019-2022	Construction	Killarney Community Centre Rink - Heat Pump Chiller Replacement
Recreational Facilities	2019-2022	Construction	Kits Pool - Storm Damage - Short Term Repairs
Recreational Facilities	2019-2022	Construction	Kitsilano Pool - Basin and Piping Works - Phase 1 - Repairs
Recreational Facilities	2019-2022	Construction	Kitsilano Pool DHW Heat Pump
Recreational Facilities	2019-2022	Construction	Recreation Facilities - DDC Minor Works - Construction
Recreational Facilities	2019-2022	Construction	Renfrew Pool - Chemical Room Exhaust - Construction
Recreational Facilities	2019-2022	Construction	Roundhouse CC - Roofing HVAC units
Recreational Facilities	2019-2022	Construction	Trout Lake Community Centre - Floor Removal and Refinishing
Recreational Facilities	2010 2022	Construction	Vancouver Aquatic Centre - 2022 Structural Repairs and
			Assessments Britannia Aquatic Centre -AHU Replacement
Recreational Facilities		Design	·
Recreational Facilities		Design	Coal Harbour CC DDC System Replace
Recreational Facilities		Design	Feasibility Study - Kitsilano CC - HVAC
Recreational Facilities		Design	Kerrisdale CC Pool Roof Renewal Concept Review
Recreational Facilities		Design	Renfrew Pool - Chemical Room Exhaust - Design
Recreational Facilities		Design	Sunset Rink - Dehumidifier - Detailed Design
Recreational Facilities		Design-Build	Kitsilano CC - AHU1 Replacement - Construction
Service Yards	2019-2022	Construction	Manitoba Yards - EQS - Welding and Fab Shop Lighting - install Manitoba Yards - FMS Carpentry Shop - RTU Heat Pump - RTU CM
Service Yards	2019-2022	Construction	Replacement
Service Yards	2019-2022	Construction	Manitoba Yards - Sanitation Relay Station - HVAC Ducting Replacement

Service Yards	2019-2022	Construction	Manitoba Yards -Lighting Safety Uprades
Service Yards	2019-2022	Construction	National Yard - Parking Ops Underground Heat Piping Replacement - Design
Service Yards	2019-2022	Design	Evans Yard - Dust Collection System - Scoping and Design
Social	2019-2022	Construction	Carnegie Centre - Targeted Building Envelope Repairs
Admin Offices	2023-2026	Construction	2023 - City Hall Sub-Ground Interim Heating - Construction
Admin Offices	2023-2026	Design	2023 - City Hall Sub-Ground Interim Heating - Design
Admin Offices	2023-2026	Design	City Hall - HVAC Systems AHU Replacements - Design
Childcare	2023-2026	Assessment	Electrical System Capacity Review - Childcare - Feasibility Studies
Childcare	2023-2026	Construction	Pooh Corner Daycare - Deck Rehabilitation - Design and Construction
Childcare	2023-2026	Design	Dorothy Lam - Elevator Renewal Design
Cultural	2023-2026	Design	MoV/Planetarium - Passenger Elevators - Design
Oditarai	2020-2020	Design	Museum of Vancouver - Planetarium - Entrance Door Rehabilitation
Cultural	2023-2026	Construction	- Repairs
Entertainment & Exhibition	2023-2026	Assessment	PNE Agrodome - Ice Slab Assessment and Design
Entertainment &	2020 2020	7 tooocomon	
Exhibition Entertainment 8	2023-2026	Assessment	PNE Coliseum - Ice Slab Assessment and Design
Entertainment & Exhibition	2023-2026	Construction	PNE - Pacific Coliseum - Ice Rink Compressor Replacement (2018)
Fire Halls	2023-2026	Assessment	Electrical Systems Capacity Reviews - Fire - Assessment
Fire Halls	2023-2026	Assessment	Fire Hall #12 - Unit Heater Replacement - Feasibility Study
Fire Halls	2023-2026	Construction	FH-01 - HVAC Boiler Replacement - Construction
Fire Halls	2023-2026	Design	Fire Hall #18 - RTU Replacement - Detailed Design
Libraries	2023-2026	Assessment	Integrated Life Safety Systems Testing Program 2023 - Library Square
Libraries	2023-2026	Assessment	Library Square - Skylight Assessment
Libraries	2023-2026	Assessment	Library Square Exterior Stair Feasibility Study
Libraries	2023-2026	Construction	Library Square - Domestic Booster Pumps - Construction
Libraries	2023-2026	Construction	Library Square - Elevator 17 - Renewal - Construction
Libraries	2023-2026	Construction	Library Square - Elevator 18 - Renewal - Construction
Libraries	2023-2026	Construction	Library Square -Special Collections AHU - Construction
Libraries	2023-2026	Design	Fraserview Library - Roof Renewal - Design
Libraries	2023-2026	Design	Fraserview Library - RTU Replacement - Design
Libraries	2023-2026	Design	Library Square - Elevators 17 and 18 - Design
Libraries	2023-2026	Design	Library Square - Exterior Stairs Rehabilitation - Design
Libraries	2023-2026	Design	Library Square - Escalator Renewals - Preliminary Design
Non-Market Housing	2023-2026	Construction	3484 Kingsway HVAC Upgrade Design
Non-Market Housing	2023-2026	Construction	Taylor Manor - Boiler Replacement - Construction
Non-Market Housing	2023-2026	Design	Granville Residences - MUA Replacement - Design
Park Buildings	2023-2026	Construction	2023 - Fieldhouse Asphalt Shingle Roofing Replacement Program - Construction
Park Buildings	2023-2026	Construction	QE Park Lookout Fieldhouse - Roof Replacement - Construction
Police Offices	2023-2026	Assessment	Integrated Life Safety Systems Testing Program 2023 - Police Headquarters 3

Police Offices	2023-2026	Assessment	TTC - Skylight Assessment and Feasibility Study
Police Offices	2023-2026	Construction	236 E Cordova Parkade - Traffic Membrane Wear Surface and Repairs
Police Offices	2023-2026	Construction	VPD Gravely - Elevators 3-4-5 Modernization - Construction
Police Offices	2023-2026	Design	VPD Graveley - Elevators 3-4-5 Modernization - Design
Recreational Facilities	2023-2026	Assessment	Integrated Life Safety Systems Testing Program 2023 - Creekside CC
Recreational Facilities	2023-2026	Assessment	Killarney Pool - System Flow Rate - Detailed Review
Recreational Facilities	2023-2026	Assessment	Kitsilano Pool - Detailed Rehabilitation Assessment
Recreational Facilities	2023-2026	Construction	Britannia Pool - AHU Replacements and DDC - Construction
Recreational Facilities	2023-2026	Construction	Britannia Pool - Heat Pumps Repairs - Construction
Recreational Facilities	2023-2026	Construction	Dunbar CC - RTU Replacement - Heat Pump - Construction
Recreational Facilities	2023-2026	Construction	Kerrisdale Community Centre - Lobby Re-roof - Construction
Recreational Facilities	2023-2026	Construction	Renfrew CC - DDC Controls System - Design and Replace
Recreational Facilities	2023-2026	Construction	Sunset Rink - Ammonia - Compressor Evaporator - Construction
Recreational Facilities	2023-2026	Construction	Sunset Rink - Dehumidification System Replacement
Recreational Facilities	2023-2026	Construction	West End CC - Elevator Upgrade - Construction
Recreational Facilities	2023-2026	Design	Britannia Pool - Sloped Roof Replacement - Design
Recreational Facilities	2023-2026	Design	Britannia Rink - Sloped Roof Replacement - Design
Recreational Facilities	2023-2026	Design	Dunbar CC - RTU Replacement - Heat Pump - Design
Recreational Facilities	2023-2026	Design	Hillcrest Indoor Pool - Overflow Gutters - Waterproofing - Design
Recreational Facilities	2023-2026	Design	Kerrisdale CC - Pool Roof Structure - Design
Recreational Facilities	2023-2026	Design	Kerrisdale Community Centre - Lobby Re-roof - Design
Recreational Facilities	2023-2026	Design	Kitsilano Community Centre - Roof Renewal Design - South and West Roof areas
D (LE 370	2222 2222	Б.	Kitsilano Community Centre Rink - Asphalt Shingle Replacement -
Recreational Facilities		Design	Design
Recreational Facilities	2023-2026	Design	Kitsilano Rink - Dehumidifier - Detailed Design Low Ammonia Implementation Plan - Hillcrest Arena - Feasibility
Recreational Facilities	2023-2026	Design	Study
Recreational Facilities	2023-2026	Design	Low Ammonia Implementation Plan - Trout Lake Ice Rink - Feasibility Study
Recreational Facilities	2023-2026	Design	Low Ammonia Implementation Plan - West End CC Ice Rink - Feasibility Study
			Rink Ammonia System Design - Kitsilano Rink Low-Ammonia
Recreational Facilities	2023-2026	Design	Coolers and Compressors (CCS-00130-18-F Subproject) Trout Lake CC and Rink - Exposed Roof Beams - Mock-Up
Recreational Facilities	2023-2026	Design	Construction
Recreational Facilities	2023-2026	Design	West End CC - Elevator Assessment and Design
Recreational Facilities	2023-2026	Design-Build	Kensington CC - DDC Controls System - Design and Construction
Service Yards	2023-2026	Design	Manitoba Yards Admin Building - Reroofing - Design
Service Yards	2023-2026	Design	Manitoba Yards Central Stores - Reroofing - Design
Social	2023-2026	Design	Mount Pleasant Neighbourhood House - HVAC RTU Feasibility Study

Table 2. List of Planned Projects

Service Area	Year	Project Type	Project Name
Admin Offices	2024	Design	515 W 10th Ave - West Annex - Piping - Main Riser Replacements - Design
Admin Offices	2024	Design	Park Board Admin Building - Fire Alarm System - Design
Admin Offices	2024	Construction	City Hall - HVAC Systems AHU Replacements - Phase 1 - Construction
Admin Offices	2024	Construction	City Hall - Upper Deck and Stairs - Construction
Admin Offices	2025	Assessment	Integrated Life Safety Systems Testing - Admin Offices - Program
Admin Offices	2025	Construction	515 W 10th Av - West Annex (Van City) - Penthouse Envelope - Construction
Admin Offices	2025	Construction	City Hall - HVAC Systems AHU Replacements - Phase 2 - Construction
Admin Offices	2025	Construction	Park Board Admin - Fire Alarm System - Construction
Admin Offices	2026	Construction	515 W 10th Av - West Annex (Van City) - Roof Replacement - Construction
Childcare	2024	Construction	Dorothy Lam - Elevator - Upgrade - City Share - Construction
Childcare	2024	Construction	Kimount - Roof Replacement
Cultural	2024	Assessment	Integrated Life Safety Systems Testing - Cultural - Program
Cultural	2024	Assessment	MOV Roof Feasibility Assessment
Cultural	2024	Assessment	Orpheum - Building Systems Assessment and Needs Forecast
Cultural	2024	Assessment	QET - Building Envelope - Exterior Envelope - Review
Cultural	2024	Assessment	QET - Building Systems Assessment and Needs Forecast - Assessment
Cultural	2024	Design	MOV - Crab Pond Membrane Replacement - Design
Cultural	2024	Design	MOV Flat Roof Replacement - Design
Cultural	2024	Design	Orpheum - DDC System Renewal - Design
Cultural	2024	Design	VMM - Basement Water Ingress Mitigation - Design
Cultural	2024	Design-Build	Museum of Vancouver - Planetarium - Entrance Door Rehabilitation - Repairs
Cultural	2024	Construction	MoV - Humidification Project - Additional Scope
Cultural	2024	Construction	MoV/Planetarium - Passenger Elevators Modernization - Construction
Cultural	2024	Construction	Orpheum - Catwalk Upgrade - Construction
Cultural	2024	Construction	VAG - OTC systems replacement - construction
Cultural	2024	Construction	VMM - Basement Water Ingress Mitigation - Construction
Cultural	2025	Construction	Orpheum - DDC System Renewal - Construction
Cultural	2026	Assessment	Integrated Life Safety Systems Testing - Cultural - Program
Cultural	2026	Construction	MOV - Crab Pond Membrane Replacement - Construction
Cultural	2026	Construction	MOV - Flat Roof Replacement - Construction
Entertainment & Exhibition	2024	Construction	PNE Agrodome - Rink Slab and Piping Replacement
Fire Halls	2024	Design	Fire Hall #03 - HVAC Renewal - Detailed Design

Fire Halls	2024	Design	Fire Hall 1 - RTU Replacement - Detailed Design
Fire Halls	2024	Design	Fire Hall 1 - RTU Replacement - Feasibility Study
Fire Halls	2024	Design	Fire Hall HVAC Renewal and Electrification Plan - Feasibility Study
Fire Halls	2024	Construction	FH #18 - HVAC replacement - construction
Fire Halls	2025	Construction	FH #03 - HVAC - Replacement - Construction
Libraries	2024	Design	Climate Funding - Detailed Design - Kitsilano Library
Libraries	2024	Design	Library Square - Elevators 13 & 14 - Renewal - Design
Libraries	2024	Design	library Square - Skylight Gutter Membrane - Design
Libraries	2024	Construction	Fraserview Library - Roof Renewal - Construction
Libraries	2024	Construction	Fraserview Library - RTU Replacement - Construction
Libraries	2025	Construction	Library Square - Elevators 13 & 14 - Renewal - Construction
Libraries	2025	Construction	Library Square - Exterior Stairs Rehabilitation - Construction
Libraries	2025	Construction	Library Square - Skylight Gutter Membrane - Construction
Non-Market Housing	2024	Design	Kingsway Continental - Fire System - Design
Non-Market Housing	2024	Construction	Gresham - AHU Replacement - Construction
Non-Market Housing	2024	Construction	Gresham - Cooling - Construction
Non-Market Housing	2024	Construction	Kingsway Continental - HVAC PTAC Replacements - Phase 1 - Construction
Non-Market Housing	2024	Construction	Kingsway Continental - HVAC PTAC Replacements - Phase 2 - Construction
Dark Buildings	2024	Dooign	2024 - Asphalt Shingle Roof Replacement Program -
Park Buildings	2024	Design	Assessment and Design Concession Sites Sanitary Pump Replacements Program -
Park Buildings	2024	Design	Design
Park Buildings	2024	Design	QE Park - Seasons Restaurant - Foundation Retrofit Design
Park Buildings	2024	Design	QE Park Precinct - Electrical Services and Distribution Systems - Review
Park Buildings	2024	Design	Stanley Park Precinct - Electrical Services and Distribution Systems - Review
Park Buildings	2024	Construction	Spanish Banks West Concession - Sanitary Pumps - Rehabilitation
Park Buildings	2024	Construction	Sunset Beach Concession - Sanitary Pumps - Rehabilitation
Park Buildings	2025	Construction	2025 - Asphalt Shingle Roof Replacement Program - Construction
Police Offices	2024	Assessment	236 E Cordova - Electrical Supply - Review 312 Main Report
Police Offices	2024	Design	236 E Cordova - AHU Assessment and Design
Police Offices	2024	Design	Kootenay HVAC Unit Replacements - Feasibility Study
Police Offices	2024	Design	VPD 236 E Cordova - Skylight Envelope Repairs - Design
Police Offices	2024	Construction	VPD 236 E Cordova - Skylight Envelope Repairs - Construction
Police Offices	2024	Construction	VPD Graveley - Building Controls - Upgrade
Police Offices	2024	Construction	VPD Kootenay HVAC Unit Replacements - Construction
Police Offices	2025	Assessment	Integrated Life Safety Systems Testing - Police - Program
Police Offices	2025	Construction	236 E Cordova - AHU Replacement - Construction
Police Offices	2025	Construction	312 Main - 236 E Cordova Electrical Service Replacement

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Recreational	0004		Integrated Life Safety Systems Testing - Recreation -
Facilities	2024	Assessment	Program
Recreational			
Facilities	2024	Assessment	Kitsilano CC - Domestic Water Piping Replacement - Review
Recreational			
Facilities	2024	Assessment	Sunset Rink - Domestic Water Piping Replacement - Review
Recreational			Ammonia Strategy - Multiple Ice Rinks - Low Ammonia
Facilities	2024	Design	Implementation Plan - Detailed Design
Recreational			
Facilities	2024	Design	Britannia Pool - DDC Controls Upgrades - Design
Recreational			Britannia Rink - Slab and Brine Piping - Assessment and
Facilities	2024	Design	Design
Recreational			
Facilities	2024	Design	Climate Funding - Detailed Design - Kensington CC
Recreational		<u> </u>	Ţ Ţ
Facilities	2024	Design	Climate Funding - Feasibility Study - Champlain Heights CC
Recreational			J , , , , , , , , , , , , , , , , , , ,
Facilities	2024	Design	Climate Funding - Feasibility Study - Hastings CC
Recreational			Climate Funding - Feasibility Study - Killarney CC Seniors
Facilities	2024	Design	Centre
Recreational	2021	Boolgii	Solido
Facilities	2024	Design	Killarney Pool - HVAC Air Quality System Renewal - Design
Recreational	2027	Design	Roundhouse CC - Exterior Mews and Courtyard Membrane -
Facilities	2024	Design	Design
Recreational	2024	Design	Roundhouse CC - Heritage Doors - Repair Procedures and
Facilities	2024	Design	Methods - Design
Recreational	2024	Design	Trout Lake CC and Rink - Exposed Roof Beams -
	2024	Doolan	
Facilities	2024	Design	Rehabilitation Strategy and Detailed Design
Recreational	0004	Design Desile	Kitailana Baal. Commhal ina Olana Outa and Inamation
Facilities	2024	Design-Build	Kitsilano Pool - Supply Line Clean-Outs and Inspection
Recreational	0004	0 ' '	Ammonia Strategy - Killarney Ice Rink - Compressor
Facilities	2024	Construction	Renewal
Recreational	2224	• • •	Ammonia Strategy - Kitsilano Rink - Low Ammonia Cooler
Facilities	2024	Construction	and Compressor Replacement - Construction
Recreational			
Facilities	2024	Construction	Britannia Pool - DDC Controls Upgrades - Construction
Recreational			
Facilities	2024	Construction	Britannia Pool - Sloped Roof Replacement - Construction
Recreational			
Facilities	2024	Construction	Britannia Rink - Sloped Roof Replacement - Construction
Recreational			
Facilities	2024	Construction	Hillcrest - Acoustical Panel Fittings - Repairs
Recreational			Hillcrest Indoor Pool - Overflow Gutters - Waterproofing -
Facilities	2024	Construction	Construction
Recreational			
Facilities	2024	Construction	Kerrisdale CC - Pool Roof Structure - Replacement
Recreational			Killarney Pool - HVAC Air Quality Renewals - Phase 1 -
Facilities	2024	Construction	Construction
Recreational			Killarney Pool - Pool Primary Recirculation System Pump
Facilities	2024	Construction	Upgrades - Construction
Recreational			Kitsilano Community Centre Rink - Asphalt Shingle
Facilities	2024	Construction	Replacement - Construction
Recreational	- ·	2 2 11 20 21 21 1	
Facilities	2024	Construction	Kitsilano Pool - Control Valve Replacement
Recreational	_v_ 1	3 011311 4011011	
Facilities	2024	Construction	Kitsilano Rink - Dehumidification System Replacement
dominos	2027	CONSTRUCTION	Tatoliano Talia - Donamiamoalion Oystom Nopiacoment

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Social	2024	Assessment	Gathering Place Showers Ventilation - Assessment
Social	2024	Design	Climate Funding - Carnegie Clean Air - Detailed Design
			Mount Pleasant Neighbourhood House - Sloped Roof
Social	2024	Design	Assessment and Design
Social	2024	Construction	Climate Funding - Carnegie Clean Air - Construction
			Collingwood Neighbourhood House - Skylight and Roof
Social	2024	Construction	Replacements - Roof C and D - Construction
Social	2024	Construction	Gathering Place - Ventilation
Social	2024	Construction	Kiwassa Neighbourhood House - Boiler Replacement
			Four Corner's Bank - Roof Replacement and Diaphragm
Social	2025	Construction	upgrade
Social	2026	Assessment	Integrated Life Safety Systems Testing - Social - Program
			Mount Pleasant Neighbourhood House - HVAC RTU -
Social	2026	Construction	Construction

APPENDIX B - CONFIDENTIAL 2024 PEF BUDGET - CAPITAL PROGRAMS (NEW & CARRY FORWARD)

. Asset Acquisitions						
Programs/Projects	Description	Carry forward 2023-2024	Requested 2024 budget	2024 Total Budget including Carry Forward		
Property purchases	Funding for strategic acquisitions	4,400,000	65,600,000	70,000,000		
Pre acquisition and disposition costs	Funding for costs related to the disposition & acquistion of sites	474,836	25,164	500,000		
		4,874,836	65,625,164	70,500,000		

. Planned Renovations and Upgrades for PEF Properties					
Programs/Projects	Description	Carry forward 2023-2024	Requested 2024 budget	2024 Total Budget including Carry Forward	
1106/1122 SW Marine Drive	Freight elevator upgrade	350,000	-	350,000	
1065 & 1075 Seymour	Demolishing demising walls prior to suite consolidation	110,000	-	110,000	
2605 Kaslo & 2633 Kaslo	Electrical distribution board and miscellaneous upgrades	127,000	193,000	320,000	
5757 Battison	New windows installation	-	60,000	60,000	
1830 W 5th Ave	Common area upgrades	-	60,000	60,000	
Electrical submetering	Electrical submetering (various locations)	-	200,000	200,000	
Tenant improvements	Tenant improvements (various locations)	550,000	116,000	666,000	
Emerging priorities	Contingency for emerging items	262,500	237,500	500,000	
4 year forecst					
		1,399,500	866,500	2,266,000	

(i). Capital Maintenance for PEF Properties					
Programs/Projects	Description	Carry forward 2023-2024	Requested 2024 budget	2024 Total Budget including Carry Forward	
312 Main Street	Support base building improvements for 312 Main Social Hub	1,160,062	-	1,160,062	
Library Square CRU	Library Square CRU doors replacement	140,000	30,000	170,000	
3214 W 10th Ave	Main electrical distribution equipment, furnace/boiler replacement	-	260,000	260,000	
600 Stamps Landing (Heather Marina)	Docks repair	-	150,000	150,000	
2133/2137 Cypress	Complete study and envelope repair	-	50,000	50,000	
1193 Kingsway	HVAC replacement - feasibility study & design work	-	30,000	30,000	
Emerging priorities	Contingency for emerging items	500,000	-	500,000	
4 year forecast					
1,800,062 520,000					

C (ii). Capital Maintenance for Parkades - COV Lead					
Programs/Projects	Description	Carry forward 2023-2024	Requested 2024 budget	2024 Total Budget including Carry Forward	
180 Keefer	CP07 Exterior paint on masonary walls; lifecycle replacement -sloped ceramic tile assembly	800,000	-	800,000	
101/107 E Cordova	CP04 Repair / replace staircase, exhaust & supply fans	474,668	-	474,668	
1100 The Castings Parkade	CP10 Power supply replacement (cost sharing with adjacent strata building)	150,000	-	150,000	
700 West Georgia	CP 09 Update/replace switchboard, transformer, and fire detection system/garage sprinkler heads; repair/replace HVAC systems, upgrade parkade electrical distribution, and repair parkade sidewalk/ramps ceiling	901,000	1,300,000	2,201,000	
160 Water	CP31 Traffic coating replacement Phase 2 (design); elevator lobby reroof; elevator modernization; tree replacement on new green roof	-	920,000	920,000	
909 Mainland	CP55 Elevator modernization	-	300,000	300,000	
151 W. Cordova	CP126 Roof renewal; Traffic coating replacement Phase 2 (design)	150,000	80,000	230,000	
5750 Yew	CP128 Consultant study (leak)	-	10,000	10,000	
Emerging priorities	Contingency for emerging items	410,000	90,000	500,000	
4 year forecast					
		2,885,668	2,700,000	5,585,668	

C (ili). Capital Maintenance for Parkades - EasyPark Lead					
Programs/Projects	Description	Carry forward 2023-2024	Requested 2024 budget	2024 Total Budget including Carry Forward	
535 Hornby	CP01 Expansion joints replacement; resurface membrane P1-P6	-	300,100	300,100	
535 Richards	CP03 Stairwell repairs; install bird spikes & pest control devices		175,000	175,000	
107 E. Cordova	CP04 New overhead gate, install diamond mesh window covers	-	127,000	127,000	
180 Keefer	CP07 Various capital maintenance projects (fire hose/cabinet removal, repaint entry/exist/interior walls/pillars; replace emergency exit doors)	-	215,000	215,000	
65 W. Cordova	CP08 New overhead gate	-	50,000	50,000	
700 W. Georgia	CP09 Various capital maintenance projects (fire hose/cabinet removal, painting entry/exit, replace floor tiles P1 & P2, light replacement)	-	218,000	218,000	
1067 Seymour	CP18 Stairwell flooring upgrade	-	68,000	68,000	
775 Hamilton	CP27 Access control system for P3 compound	-	35,000	35,000	
160 Water St	CP31 Fire hose & cabinet removal	-	75,000	75,000	
1095 W. Waterfront	CP54 Painting entryway P1 & P2	-	48,000	48,000	
1 Kingsway	CP61 Install cell repeaters	-	40,000	40,000	
Sunset on Fraser	CP106 Line painting and lane markings	-	37,000	37,000	
151 W. Cordova	CP126 Fire hose & cabinet removal; install bird spikes & pest control devices	-	95,000	95,000	
5750 Yes	CP128 Fire hose & cabinet removal	-	77,000	77,000	

Security Cameras	Various locations	-	302,000	302,000
Ticketless access system	Install ZipBy Frictionless parking system	-	60,000	60,000
Parking Meters Inventory	T2 meters (to replace remaining Global meters)	-	200,000	200,000
Spare parts inventory	Spare parts for revenue control equipment & meters	-	84,000	84,000
Laptops/ Docking Stations	Replace/ refresh Head Office computers	-	31,000	31,000
4 yr forecast				
		-	2,237,100	2,237,100

D. Soil and Hazmat Assessments & Remediation				
Programs/Projects	Description	Carry forward	Requested 2024	
		2023-2024	budget	including Carry Forward
SEFC Area 1 (Former Cambie Works Yard)	Investigation activities to fulfill the requirements of the AiP previously issued for the site	120,000	-	120,000
Pacific & Hornby Site: 1402, 1430, 1444, 1460 Burrard St. 1401, 1441, 1447, 1451 Hornby St.; 900 Pacific St.	Due Diligence environmental work to support rezoning and eventual future development	40,000	-	40,000
False Creek Flats	Contaminated soil investigation	25,000	-	25,000
1405 Main Street & 1510 Quebec Street	Due diligence environmental work to support rezoning and eventual future development	20,000	-	20,000
1st & Clark (BCH)	Contaminated soil investigation	20,000	-	20,000
688 Cambie Street - Art Gallery	Site remediation	-	3,000,000	3,000,000
Burrard Slopes Park	Broadway transit site remediation - Phase 2	-	240,000	240,000
Emerging priorities	Contingency for emerging items	66,519	133,481	200,000
4 yr forecast				
291			3,373,481	3,665,000

E(i). PEF Strategic Site Development				
Programs/Projects	Description	Carry forward 2023-2024	Requested 2024 budget	2024 Total Budget including Carry Forward
,	Construction of a load bearing structure within the proposed Broadway line expansion.	2,700,000	-	2,700,000
False Creek South	Area planning cost contribution	1,496,325	-	1,496,325
Reconfiguration of North Granville Loops	Reconfiguration to "H" network	585,180	-	585,180
False Creek South – Lease Extension/Prepayment program	Consultant, legal, professional fees	200,000	-	200,000
PEF Pre-development consulting	Real estate, engineering, valuation and architectural consulting costs associated with advancing the PEF's large sites deployment project	1,988,507	511,493	2,500,000
Emerging priorities	Contingency for emerging items	1,500,000	-	1,500,000
4 yr Forecast				
8,470,0			511,493	8,981,505

E(ii). PEF Feasibility Studies				
Programs/Projects	Description	,	Requested 2024	•
		2023-2024	budget	including Carry Forward
Feasibility studies	Feasibility studies	150,000	-	150,000
		150,000		150,000

E(iii). PEF Facility Condition				
Assessments Programs/Projects Description Carry forward Requested 2024 2024 Total				2024 Total Budget
Programs/ Projects	Description	2023-2024	budget	including Carry Forward
Facility assessments	PEF building condition assessments; Parkades assessment program	-	230,000	230,000
		-	230,000	230,000

Total 19,871,597 76,063,738 95,935,335

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