



**AGENDA FOR THE REGULAR MEETING OF COUNCIL TO  
COMMENCE AT 6:00 PM, IN THE COUNCIL CHAMBER, CITY  
HALL, 141 WEST 14<sup>TH</sup> STREET, NORTH VANCOUVER, BC, ON  
MONDAY, DECEMBER 2, 2019**

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**MONDAY, DECEMBER 2, 2019  
COUNCIL MEETING – 6:00 PM**

“Live” Broadcast via City Website [www.cnv.org/LiveStreaming](http://www.cnv.org/LiveStreaming)  
Complete Agenda Package available at [www.cnv.org/CouncilMeetings](http://www.cnv.org/CouncilMeetings)

**CALL TO ORDER**

**APPROVAL OF AGENDA**

1. Regular Council Meeting Agenda, December 2, 2019

**ADOPTION OF MINUTES**

2. Regular Council Meeting Minutes, November 25, 2019

**PROCLAMATION**

National Day of Remembrance and Action on Violence Against Women  
– December 6, 2019

**PUBLIC INPUT PERIOD**

**CONSENT AGENDA**

Items \*3 and \*4 are listed in the Consent Agenda and may be considered separately or in one motion.

**BYLAWS – ADOPTION**

- \*3. “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737” (Schedule C)
- \*4. “Development Cost Charge (Transportation) Reserve Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project)
5. “Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733” (Schedule A)

**PRESENTATION**

Asset Management Policy – Deputy Director, Finance, Deputy Director, Engineering, Parks and Environment, and Deputy Director, Strategic and Corporate Services

*Item 6 refers.*



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**Regular Council Meeting Agenda – December 2, 2019**

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**REPORT**

6. Asset Management Policy

**PRESENTATION**

2020 Utility Rate Setting – Director, Finance, and Director, Engineering, Parks and Environment

*Item 7 refers.*

**REPORT**

7. 2020 Utility Rates

*Items 8, 9 and 10 refer.*

*Information Report, November 20, 2019 – “2020 Water Utility Update”*

*Information Report, November 20, 2019 – “2020 Sewerage and Drainage Utility Update”*

*Information Report, November 20, 2019 – “2020 Solid Waste and Recycling Utility Update”*

**BYLAWS – FIRST, SECOND AND THIRD READINGS**

8. “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2019, No. 8739”
9. “Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2019, No. 8740”
10. “Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2019, No. 8741”

**REPORTS**

11. 2020-2029 Preliminary Project Plan
12. New Pedestrian Crossing Facilities – Funding Appropriation
13. New Traffic Signals – Funding Appropriation
14. Traffic Signs and Pavement Markings – Funding Appropriation
15. Sutherland Field Artificial Turf Replacement – Funding Appropriation





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**REPORTS – Continued**

16. Permits Clerk – Funding Appropriation
17. Pedestrian Scale Lighting – Green Necklace – Funding Appropriation
18. Environment Strategy – Funding Appropriation
19. Civic Centre Improvements – Appropriation
20. North Shore Neighbourhood House Feasibility Study – Appropriation
21. Shipyards and Waterfront – Funding Appropriation
22. Child Minding for Council Meetings Pilot Program – Funding Appropriation
23. North Vancouver Cemetery Bylaw Update

*Item 24 refers.*

**BYLAW – FIRST, SECOND AND THIRD READINGS**

24. “North Vancouver Cemetery Bylaw, 2011, No. 8109, Amendment Bylaw, 2019, No. 8721” (Fee Schedule and Memorial Regulations)

**PUBLIC CLARIFICATION PERIOD**

**COUNCIL INQUIRIES**

**NEW ITEMS OF BUSINESS**

**NOTICES OF MOTION**

**ADJOURN**



## **THE CORPORATION OF THE CITY OF NORTH VANCOUVER**

### **Regular Council Meeting Agenda – December 2, 2019**

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#### **CALL TO ORDER**

#### **APPROVAL OF AGENDA**

1. Regular Council Meeting Agenda, December 2, 2019

#### **ADOPTION OF MINUTES**

2. Regular Council Meeting Minutes, November 25, 2019

#### **PROCLAMATION**

National Day of Remembrance and Action on Violence Against Women  
– December 6, 2019

#### **PUBLIC INPUT PERIOD**

The Public Input Period is addressed in sections 12.20 to 12.28 of “Council Procedure Bylaw, 2015, No. 8500.”

The time allotted for each speaker appearing before Council during the Public Input Period is two minutes, with the number of speakers set at five persons. Speakers’ presentations will be audio and video recorded, as well as live-streamed on the Internet, and will form part of the public record.

To make a submission to Council during the Public Input Period, a person must complete the Public Input Period sign-up sheet at City Hall prior to the Regular Council Meeting. A person who fails to complete, or only partially completes, the Public Input Period sign-up sheet will not be permitted to make a submission to Council during the Public Input Period. The sign-up sheet will be available on the table in the lobby outside the Council Chamber from 5:30 pm until 5:55 pm before a Council meeting.

When appearing before Council, speakers are requested to state their name and address for the record. Speakers may display materials on the document camera at the podium in the Council Chamber and provide written materials to the City Clerk for distribution to Council, only if these materials have been provided to the City Clerk by 4:00 pm on the date of the meeting.

The Public Input Period provides an opportunity for input only, without the expectation of a response from Council, and places the speaker’s concern on record.

Speakers must comply with the General Rules of Conduct set out in section 5.1 of “Council Procedure Bylaw, 2015, No. 8500” and may not speak with respect to items as listed in section 12.25(2).

Speakers are requested not to address matters that refer to items from a concluded Public Hearing/Public Meeting and to Public Hearings, Public Meetings and Committee meetings when those matters are scheduled on the same evening’s agenda and an opportunity for public input is provided when the particular item comes forward for discussion.

Please address the Mayor as “Mayor, followed by his/her surname” or “Your Worship”. Councillors should be addressed as “Councillor, followed by their surname”.



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#### **CONSENT AGENDA**

Items \*3 and \*4 are listed in the Consent Agenda and may be considered separately or in one motion.

#### **RECOMMENDATION:**

THAT the recommendations listed within the “Consent Agenda” be approved.

#### **START OF CONSENT AGENDA**

#### **BYLAWS – ADOPTION**

- \*3. “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737” (Schedule C)

#### **RECOMMENDATION:**

THAT “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737” (Schedule C) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

- \*4. “Development Cost Charge (Transportation) Reserve Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project)

#### **RECOMMENDATION:**

THAT “Development Cost Charge (Transportation) Reserve Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

#### **END OF CONSENT AGENDA**

#### **BYLAW – ADOPTION**

5. “Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733” (Schedule A)

#### **RECOMMENDATION:**

THAT “Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733” (Schedule A) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.



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**PRESENTATION**

Asset Management Policy – Deputy Director, Finance, Deputy Director, Engineering, Parks and Environment, and Deputy Director, Strategic and Corporate Services

*Item 6 refers.*

**REPORT**

6. Asset Management Policy – File: 05-1615-04-0001/2019

Report: Deputy Director, Finance, Deputy Director, Engineering, Parks and Environment, and Deputy Director, Strategic and Corporate Services, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Deputy Director, Finance, the Deputy Director, Engineering, Parks and Environment, and the Deputy Director, Strategic and Corporate Services, dated November 20, 2019, entitled “Asset Management Policy”:

THAT the Asset Management Policy be endorsed.

**PRESENTATION**

2020 Utility Rate Setting – Director, Finance, and Director, Engineering, Parks and Environment

*Item 7 refers.*

**REPORT**

7. 2020 Utility Rates – File: 05-1820-01-0001/2020

Report: Director, Finance, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Director, Finance, dated November 20, 2019, entitled “2020 Utility Rates”:

THAT “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2019, No. 8739” be considered;

*Continued...*



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**REPORT – Continued**

7. 2020 Utility Rates – File: 05-1820-01-0001/2020 – Continued

THAT “Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2019, No. 8740” be considered;

AND THAT “Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2019, No. 8741” be considered.

*Items 8, 9 and 10 refer.*

*Information Report of the Director, Engineering, Parks and Environment,  
November 20, 2019 – “2020 Water Utility Update”*

*Information Report of the Director, Engineering, Parks and Environment,  
November 20, 2019 – “2020 Sewerage and Drainage Utility Update”*

*Information Report of the Director, Engineering, Parks and Environment,  
November 20, 2019 – “2020 Solid Waste and Recycling Utility Update”*

**BYLAWS – FIRST, SECOND AND THIRD READINGS**

8. “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2019, No. 8739”

**RECOMMENDATION:**

THAT “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2019, No. 8739” be given first, second and third readings.

9. “Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2019, No. 8740”

**RECOMMENDATION:**

THAT “Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2019, No. 8740” be given first, second and third readings.

10. “Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2019, No. 8741”

**RECOMMENDATION:**

THAT “Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2019, No. 8741” be given first, second and third readings.



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**REPORTS**

11. 2020-2029 Preliminary Project Plan – File: 05-1705-30-0001/2020

Report: Deputy Director, Finance, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Deputy Director, Finance, dated November 20, 2019, entitled “2020-2029 Preliminary Project Plan”:

THAT the 2020-2029 Preliminary Project Plan for the City of North Vancouver be endorsed;

AND THAT resolutions or bylaws to appropriate funding for the projects included in the 2020 Project Budget be brought forward by staff in a timely manner.

12. New Pedestrian Crossing Facilities – Funding Appropriation  
– File: 11-5460-01-0001/2019

Report: Section Manager, Traffic Engineering, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager, Traffic Engineering, dated November 20, 2019, entitled “New Pedestrian Crossing Facilities – Funding Appropriation”:

THAT (Funding Appropriation #1980) an amount of \$110,000 be appropriated from the Civic Amenity Reserve Fund for the purpose of funding the Lonsdale Avenue and 5<sup>th</sup> Street safety improvements construction work;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Civic Amenity Reserve Fund.

13. New Traffic Signals – Funding Appropriation – File: 11-5460-01-0001/2019

Report: Section Manager, Traffic Engineering, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager, Traffic Engineering, dated November 20, 2019, entitled “New Traffic Signals – Funding Appropriation”:

*Continued...*



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**REPORTS – Continued**

13. New Traffic Signals – Funding Appropriation – File: 11-5460-01-0001/2019  
– Continued

THAT (Funding Appropriation #1981) an amount of \$900,000 be appropriated from the Civic Amenity Reserve Fund for the purpose of funding the construction of New Traffic Signals project;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Civic Amenity Reserve Fund.

14. Traffic Signs and Pavement Markings – Funding Appropriation  
– File: 11-5460-01-0001/2019

Report: Section Manager, Traffic Engineering, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager, Traffic Engineering, dated November 20, 2019, entitled “Traffic Signs and Pavement Markings – Funding Appropriation”:

THAT (Funding Appropriation #1982) an amount of \$100,000 be appropriated from the Tax Sale Land Interest Reserve Fund for the purpose of funding the installation of new and updated traffic signs and pavement markings;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Tax Sale Land Interest Reserve Fund.

15. Sutherland Field Artificial Turf Replacement – Funding Appropriation  
– File: 12-6240-20-0061/1

Report: Parks and Greenways Planner, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Parks and Greenways Planner, dated November 20, 2019, entitled “Sutherland Field Artificial Turf Replacement – Funding Appropriation”:

THAT (Funding Appropriation #1983) an amount of \$1,600,000 be appropriated from the Annual Budget – Transfer to General Reserve Fund for the purpose of funding the Sutherland Field Artificial Turf Replacement project;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Annual Budget – Transfer to General Reserve Fund.



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**REPORTS – Continued**

16. Permits Clerk – Funding Appropriation – File: 13-6970-01-0001/2019

Report: Office Coordinator, Administration, Planning and Development,  
November 19, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Office Coordinator, Administration, Planning and Development, dated November 19, 2019, entitled “Permits Clerk – Funding Appropriation”:

THAT (Funding Appropriation #1984) an amount of \$65,000 be appropriated from the Annual Budget – Transfer to General Reserve Fund for the purpose of funding a temporary dedicated Permits Clerk;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Annual Budget – Transfer to General Reserve Fund.

17. Pedestrian Scale Lighting – Green Necklace – Funding Appropriation  
– File: 12-6240-20-0047/1

Report: Manager, Public Realm Infrastructure, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Public Realm Infrastructure, dated November 20, 2019, entitled “Pedestrian Scale Lighting – Green Necklace – Funding Appropriation”:

THAT (Funding Appropriation #1985) an amount of \$250,000 be appropriated from the Civic Amenity Reserve Fund for the purpose of funding the Pedestrian Scale Lighting – Grand Boulevard Park Project;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Civic Amenity Reserve Fund.





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**REPORTS – Continued**

18. Environment Strategy – Funding Appropriation – File: 11-5280-01-0001/2019

Report: Manager, Environmental Sustainability, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Environmental Sustainability, dated November 20, 2019, entitled “Environment Strategy – Funding Appropriation”:

THAT (Funding Appropriation #1986) an amount of \$125,000 be appropriated from the Annual Budget – Transfer to General Reserve Fund for the purpose of funding the Environmental Sustainability Strategy;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Annual Budget – Transfer to General Reserve Fund.

19. Civic Centre Improvements – Appropriation – File: 02-0890-20-0008/1

Report: Manager, Civic Facilities, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Civic Facilities, dated November 20, 2019, entitled “Civic Centre Improvements – Appropriation”:

THAT (Funding Appropriation #1987) an amount of \$331,700 be appropriated from the General Reserve Fund for the purpose of funding design and implementation of improvements to the Civic Centre (City Clerk’s / CAO area);

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the General Reserve Fund.



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**REPORTS – Continued**

20. North Shore Neighbourhood House Feasibility Study – Appropriation  
– File: 02-0800-30-0022/1

Report: Manager, Civic Facilities, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Civic Facilities, dated November 20, 2019, entitled “North Shore Neighbourhood House Feasibility Study – Appropriation”:

THAT (Funding Appropriation #1988) an amount of \$115,000 be appropriated from the General Reserve Fund for the purpose of funding the feasibility study;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the General Reserve Fund.

21. Shipyards and Waterfront – Funding Appropriation – File: 13-6740-20-0003/1

Report: Manager, Shipyards and Waterfront, November 26, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Shipyards and Waterfront, dated November 26, 2019, entitled “Shipyards and Waterfront – Funding Appropriation”:

THAT (Funding Appropriation #1989) an amount of \$2,020,000 be appropriated from the General Reserve Fund for the purpose of funding the programming, operations and maintenance of the Shipyards and Central Waterfront;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the General Reserve Fund.



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**Regular Council Meeting Agenda – December 2, 2019**

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**REPORTS – Continued**

22. Child Minding for Council Meetings Pilot Program – Funding Appropriation  
– File: 10-4750-20-0033/1

Report: Community Planner, November 26, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Community Planner, dated November 26, 2019, entitled “Child Minding for Council Meetings Pilot Program – Funding Appropriation”:

THAT (Funding Appropriation #1990) an amount of \$15,300 be appropriated from the General Reserve Fund for the purpose of funding the Child Minding for Council Meetings Pilot Program project;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the General Reserve Fund.

23. North Vancouver Cemetery Bylaw Update – File: 12-5810-01-0001/2019

Report: Section Manager, Park Operations, November 20, 2019

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager, Park Operations, dated November 20, 2019, entitled “North Vancouver Cemetery Bylaw Update”:

THAT “North Vancouver Cemetery Bylaw, 2011, No. 8109, Amendment Bylaw, 2019, No. 8721” (Fee Schedule and Memorial Regulations) be considered.

*Item 24 refers.*

**BYLAW – FIRST, SECOND AND THIRD READINGS**

24. “North Vancouver Cemetery Bylaw, 2011, No. 8109, Amendment Bylaw, 2019, No. 8721” (Fee Schedule and Memorial Regulations)

**RECOMMENDATION:**

THAT “North Vancouver Cemetery Bylaw, 2011, No. 8109, Amendment Bylaw, 2019, No. 8721” (Fee Schedule and Memorial Regulations) be given first, second and third readings.



## **THE CORPORATION OF THE CITY OF NORTH VANCOUVER**

### **Regular Council Meeting Agenda – December 2, 2019**

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#### **PUBLIC CLARIFICATION PERIOD**

The Public Clarification Period is limited to 10 minutes in total and is an opportunity for the public to ask a question regarding process or clarification on an item on the Regular Council Agenda. The Public Clarification Period concludes after 10 minutes and the Regular Council Meeting reconvenes.

#### **COUNCIL INQUIRIES**

#### **NEW ITEMS OF BUSINESS**

#### **NOTICES OF MOTION**

#### **ADJOURN**



**MINUTES OF THE REGULAR MEETING OF COUNCIL HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14<sup>TH</sup> STREET, NORTH VANCOUVER, BC, ON **MONDAY, NOVEMBER 25, 2019****

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**PRESENT**

**COUNCIL MEMBERS**

Mayor L. Buchanan  
Councillor H. Back  
Councillor D. Bell  
Councillor A. Girard  
Councillor T. Hu  
Councillor J. McIlroy  
Councillor T. Valente

**STAFF MEMBERS**

L. McCarthy, CAO  
K. Graham, City Clerk  
C. Baird, Deputy City Clerk  
J. Peters, Assistant City Clerk  
B. Pearce, Director, Strategic and Corporate Services  
B. Themens, Director, Finance  
M. Epp, Director, Planning and Development  
S. Galloway, Manager, Planning  
R. Skene, Director, Community and Partner Engagement  
D. Pope, Director, Engineering, Parks and Environment  
B. Willock, Manager, Engineering Planning and Design  
S. Antoniali, Section Manager, Real Estate

The meeting was called to order at 6:00 pm.

**APPROVAL OF AGENDA**

Moved by Councillor Bell, seconded by Councillor Girard

1. Regular Council Meeting Agenda, November 25, 2019

**CARRIED UNANIMOUSLY**

**ADOPTION OF MINUTES**

Moved by Councillor Girard, seconded by Councillor McIlroy

2. Regular Council Meeting Minutes, November 18, 2019

**CARRIED UNANIMOUSLY**

**PUBLIC INPUT PERIOD**

- Ron Sostad, 231 East 15<sup>th</sup> Street, North Vancouver, spoke regarding living wage.
- Stephani Baker, 1232 Heywood Street, North Vancouver, spoke regarding impacts of the Cloverley Neighbourhood Traffic Calming Pilot Project.

## **PRESENTATION**

Heather McNell, Director, Regional Planning and Electoral Area Services, Metro Vancouver

Re: Metro 2050: Updating the Regional Growth Strategy

Heather McNell, Director, Regional Planning and Electoral Area Services, Metro Vancouver, provided a PowerPoint presentation regarding the “Metro 2050: Updating the Regional Growth Strategy” and responded to questions of Council.

## **REPORTS**

### 3. 2019 Round Two Community Grant Recommendations – File: 05-1850-20-0005/2019

Report: Chair, Social Planning Advisory Committee, and Community Planner,  
November 13, 2019

Moved by Councillor Bell, seconded by Mayor Buchanan

PURSUANT to the report of the Chair, Social Planning Advisory Committee, and Community Planner, dated November 13, 2019, entitled “2019 Round Two Community Grant Recommendations”:

THAT grants be allocated to the following organizations from the 2019 Community Grants budget:

AutismBC (Operating)	\$1,200
AutismBC (Program – North Shore Information & Resources and Parent Community Group)	\$1,000
Best Buddies Canada (Program – North Vancouver Expansion)	\$1,000
Big Sisters of BC Lower Mainland (Operating)	\$1,200
Family Services of the North Shore (Program – The First Step)	\$5,000
Fresh Air Learning Society Vancouver (Operating)	\$4,000
Greater Vancouver Youth Unlimited North Shore (Program – Mobile Youth Drop-In)	\$6,000
Living Systems: Family Systems Counselling, Education, Training & Research Society (Program – Access Counselling)	\$3,083
Muscular Dystrophy Canada (Program – Muscular Dystrophy Canada’s Equipment Program)	\$2,400
North Shore Alliance Church (Program – North Shore Community Christmas Dinner)	\$2,500
North Shore Disability Resource Centre (Program – Mobile Snoezelen Multi-Sensory Room)	\$2,000
North Shore Table Tennis Society (Program – Adapted Table Tennis Program for Persons with Disabilities)	\$1,000

*Continued...*

## **REPORTS – Continued**

3. 2019 Round Two Community Grant Recommendations – File: 05-1850-20-0005/2019 – Continued

Spectrum Mothers Support Society	\$5,000
Westcoast Family Centres Society (Program – Blended Families: Family Education)	\$2,000
6 Field Engineer Squadron Museum Association (Operating)	\$1,500
<b>TOTAL</b>	<b>\$38,883</b>

THAT the grant allocated to 6 Field Engineer Squadron Museum Association (Operating) in the amount of \$1,500 be funded from either the 2019 Community Grants budget or the Council Contingency Fund, at staff's discretion;

AND THAT the following organizations be notified that their funding application for a 2019 Round Two Community Grant is denied:

Cousteau School (Program – Green Living Fair)
Westcoast Family Centres Society (Program – Kids Have Stress Too!)

Moved by Councillor Back, seconded by Councillor Bell

THAT the motion be amended by referring the following applications to staff for further review:

North Shore Stroke Recovery Centre (Program – Young Survivor of Stroke)	\$500
North Shore Table Tennis Society (Operating)	\$8,000

Amendment motion, **CARRIED UNANIMOUSLY**

Main motion, as amended, **CARRIED UNANIMOUSLY**

4. Update to Local Area Service Taxes Rates Bylaw – File: 11-5320-01-0001/2019

Report: Manager, Engineering Planning and Design, November 15, 2019

Moved by Councillor McIlroy, seconded by Councillor Girard

PURSUANT to the report of the Manager, Engineering Planning and Design, dated November 15, 2019, entitled "Update to Local Area Service Taxes Rates Bylaw":

THAT "Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733" (Schedule A) be considered.

**CARRIED**

Councillor Bell is recorded as voting contrary to the motion.

## **BYLAW – FIRST, SECOND AND THIRD READINGS**

5. “Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733” (Schedule A)

Moved by Councillor Girard, seconded by Councillor Valente

THAT “Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733” (Schedule A) be given first and second readings.

**CARRIED**

Councillor Bell is recorded as voting contrary to the motion.

Moved by Councillor Girard, seconded by Councillor Valente

THAT “Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733” (Schedule A) be given third reading.

**CARRIED**

Councillor Bell is recorded as voting contrary to the motion.

Councillor Girard left the meeting at 7:22 pm and returned at 7:24 pm.

## **REPORT**

6. Casano Loutet Overpass Project – Funding Appropriation – File: 11-5400-02-0001/1

Report: Manager, Engineering Planning and Design, November 14, 2019

Moved by Councillor Valente, seconded by Mayor Buchanan

PURSUANT to the report of the Manager, Engineering Planning and Design, dated November 14, 2019, entitled “Casano Loutet Overpass Project – Funding Appropriation”:

THAT (Funding Appropriation #1931) an amount of \$673,334 be appropriated from the Civic Amenity Reserve Fund for the purpose of funding the Casano Loutet Overpass project;

THAT “Development Cost Charge (Transportation) Reserve Fund Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project), a Bylaw to appropriate an amount of \$660,000 from the Development Cost Charge (Transportation) Reserve Fund to fund the project, be considered;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the respective fund.

**CARRIED UNANIMOUSLY**



## **BYLAW – FIRST, SECOND AND THIRD READINGS**

7. “Development Cost Charge (Transportation) Reserve Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project)

Moved by Mayor Buchanan seconded by Councillor Valente

THAT “Development Cost Charge (Transportation) Reserve Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project) be given first and second readings.

**CARRIED UNANIMOUSLY**

Moved by Mayor Buchanan seconded by Councillor Valente

THAT “Development Cost Charge (Transportation) Reserve Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project) be given third reading.

**CARRIED UNANIMOUSLY**

## **REPORT**

8. Street and Traffic Bylaw, 1991, No. 6234 Amendment – File: 02-0890-01-0001/2019

Report: Section Manager, Real Estate, November 20, 2019

Moved by Councillor Bell, seconded by Councillor Girard

PURSUANT to the report of the Section Manager, Real Estate, dated November 20, 2019, entitled “Street and Traffic Bylaw, 1991, No. 6234 Amendment”:

THAT “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737” (Schedule C) be considered.

**CARRIED UNANIMOUSLY**

## **BYLAW – FIRST, SECOND AND THIRD READINGS**

9. “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737” (Schedule C)

Moved by Councillor Bell, seconded by Councillor Girard

THAT “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737” (Schedule C) be given first and second readings.

**CARRIED UNANIMOUSLY**

Moved by Councillor Bell, seconded by Councillor Girard

THAT “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737” (Schedule C) be given third reading.

**CARRIED UNANIMOUSLY**

## **PUBLIC CLARIFICATION PERIOD**

Mayor Buchanan declared a recess at 7:28 pm for the Public Clarification Period and reconvened the meeting immediately after.

## **COUNCIL INQUIRIES**

Nil.

## **NEW ITEMS OF BUSINESS**

Nil.

## **NOTICES OF MOTION**

Nil.

## **CITY CLERK'S RECOMMENDATION**

Moved by Councillor McIlroy, seconded by Councillor Back

THAT Council recess to the Committee of the Whole, Closed session, pursuant to the *Community Charter*, Sections 90(1)(c) [labour relations] and 90(1)(e) [land matter].

**CARRIED UNANIMOUSLY**

The meeting recessed to the Committee of the Whole, Closed session, at 7:28 pm and reconvened at 8:07 pm.

## **REPORT OF THE COMMITTEE OF THE WHOLE (CLOSED SESSION)**

10. Land Matter – File: 02-0800-20-0006/1

Report: Section Manager, Real Estate, November 20, 2019

Moved by Councillor Bell, seconded by Councillor McIlroy

PURSUANT to the report of the Section Manager, Real Estate, dated November 20, 2019, regarding a land matter:

THAT the action taken by the Committee of the Whole, Closed Session, be ratified;

AND THAT the wording of the recommendation and the report of the Section Manager, Real Estate, dated November 20, 2019, remain in the Closed session.

**CARRIED UNANIMOUSLY**

## **REPORT OF THE COMMITTEE OF THE WHOLE (CLOSED SESSION) – Continued**

11. Labour Relations Matter – File: 11-5500-06-0001/1

Report: Chief Administrative Officer, November 12, 2019

Moved by Councillor Bell, seconded by Councillor McIlroy

PURSUANT to the report of the Chief Administrative Officer, dated November 12, 2019, regarding a labour relations matter:

THAT the action taken by the Committee of the Whole, Closed Session, be ratified;

AND THAT the wording of the recommendation and the report of the Chief Administrative Officer, dated November 12, 2019, remain in the Closed session.

**CARRIED UNANIMOUSLY**

## **ADJOURN**

Moved by Councillor Back, seconded by Councillor Valente

THAT the meeting adjourn.

**CARRIED UNANIMOUSLY**

The meeting adjourned at 8:08 pm.

*“Certified Correct by the City Clerk”*

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CITY CLERK

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# PROCLAMATION

## NATIONAL DAY OF REMEMBRANCE AND ACTION ON VIOLENCE AGAINST WOMEN

### WHEREAS

December 6 is the National Day of Remembrance and Action on Violence Against Women in Canada, and was established in 1991 to mark the anniversary of the 1989 murder of 14 young women at l'Ecole Polytechnique de Montreal whose lives ended in an act of gender-based violence that shocked the nation; and

### WHEREAS

the National Inquiry into Missing and Murdered Indigenous Women and Girls has highlighted multigenerational and intergenerational trauma and marginalization that has resulted in the diminished status of women and girls in society, leaving them vulnerable to violence; and

### WHEREAS

the Strength and Remembrance Totem Pole erected in the City of North Vancouver on October 25, 2019, honours and remembers all missing and murdered women and girls, and all women who suffer in silence as victims of violence, and provides a place for victims to come together and find strength and comfort;

### NOW THEREFORE

I, Linda Buchanan, Mayor of the City of North Vancouver, do hereby proclaim **December 6, 2019** as **NATIONAL DAY OF REMEMBRANCE AND ACTION ON VIOLENCE AGAINST WOMEN** in the City of North Vancouver, the traditional territories of the Squamish and Tsleil-Waututh Nations.

**So proclaimed on Monday, December 2, 2019**

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**Mayor Linda Buchanan**

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**THE CORPORATION OF THE CITY OF NORTH VANCOUVER**

**BYLAW NO. 8737**

**A Bylaw to amend the Street and Traffic Bylaw, 1991, No. 6234**

The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

1. This Bylaw shall be known and cited for all purposes as “**Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2019, No. 8737**” (Schedule C).

2. Schedule “C” – List of Parking Lots Deemed to be Streets, is amended as follows:

A. In Part .1 City-Owned Parking Lots, by removing the following:

Lot A, Block 60, D.L. 549, Resub 2, Plan 10091	253 East 14 <sup>th</sup> Street
Lot 14, Block 177, D.L. 271, Resub Plan 19492	120 Carrie Cates Court

B. In Part .1 City-Owned Parking Lots, by adding the following:

Strata Plan EPS6231, Block 177, District Lot 271	118 Carrie Cates Court
Lot 5, Block, DL 265, Plan EPP26537	61/63 Bewicke Avenue

READ a first time on the 25<sup>th</sup> day of November, 2019.

READ a second time on the 25<sup>th</sup> day of November, 2019.

READ a third time on the 25<sup>th</sup> day of November, 2019.

ADOPTED on the <> day of <>, 2019.

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CITY CLERK

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8742

**A Bylaw to authorize the expenditure of monies from the  
Development Cost Charge (Transportation) Reserve  
for the Casano Loutet Overpass Project.**

**WHEREAS** the entire City is listed in “Development Cost Charges Bylaw, 2016, No. 8471” as an area where development cost charges for transportation will be levied;

**AND WHEREAS** the development of highway facilities, other than off street parking, is a capital cost permitted to be paid using Development Cost Charge funds under Section 566 of the *Local Government Act*;

**NOW THEREFORE** the Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

1. This Bylaw shall be known and cited for all purposes as “**Development Cost Charge (Transportation) Reserve Bylaw, 2019, No. 8742” (Casano Loutet Overpass Project)**.”
2. An amount of \$660,000 is hereby appropriated from the Development Cost Charge (Transportation) Reserve for the purpose of funding the Casano Loutet Overpass project.

READ a first time on the 25<sup>th</sup> day of November,  
2019.

READ a second time on the 25<sup>th</sup> day of  
November, 2019.

READ a third time on the 25<sup>th</sup> day of November,  
2019.

ADOPTED on the <> day of <>, 2019.

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MAYOR

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CITY CLERK

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8733

**A Bylaw to amend the City of North Vancouver  
“Local Area Service Taxes Rates Bylaw, 1991, No. 6194”**

The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

1. This Bylaw shall be known and cited for all purposes as **“Local Area Service Taxes Rates Bylaw, 1991, No. 6194, Amendment Bylaw, 2019, No. 8733” (Schedule A)**.
2. “Local Area Service Taxes Rates Bylaw, 1991, No. 6194” is amended as follows:  
  
Schedule “A” – Schedule of Local Service Tax Rates is deleted in its entirety and replaced with the Schedule “A” attached to this bylaw.
3. This Bylaw shall be effective as of the 1<sup>st</sup> day of January, 2020.

READ a first time on the 25<sup>th</sup> day of November, 2019.

READ a second time on the 25<sup>th</sup> day of November, 2019.

READ a third time on the 25<sup>th</sup> day of November, 2019.

ADOPTED on the <> day of <>, 2019.

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MAYOR

---

CITY CLERK

**THE CORPORATION OF THE CITY OF NORTH VANCOUVER**

**SCHEDULE 'A' TO BYLAW NO. 6194**

**SCHEDULE OF LOCAL SERVICE TAX RATES**

**Property Owner's Share**

<b>Class of Work</b>	<b>Single Charge *(per m.)</b>
1. Sidewalk with Curb and Gutter	
a. Sidewalk with Curb and Gutter Both Sides	\$132.00
b. Sidewalk Adjacent Side, Curb and Gutter Both Sides	\$107.25
c. Sidewalk Opposite Side, Curb and Gutter Both Sides	\$82.50
2. Sidewalk only (existing Curb and Gutter)	
a. Sidewalk Both Sides	\$123.75
b. Sidewalk Adjacent Side	\$82.50
c. Sidewalk Opposite Side	\$41.25
3. Curbing and Gutter (both sides)	\$57.75
4. Lane Paving (including drainage works)	
a. With Speed Arrestors	\$93.50
b. Without Speed Arrestors	\$82.50
5. Drainage Works in Lane (ditch enclosure)	\$82.50
6. Street Lighting	\$123.75

\* Single Charges shown for Items 1 to 6 are per metre of taxable frontage

<b>Class of Work</b>	<b>Property Owners Share</b>
7. Retaining Wall	50% of actual cost
8. Underground Conversion of Utilities	66 2/3% of actual cost
9. Boulevard Improvements	80% of actual cost
10. Slope Stabilization	50% of actual cost

Annual charges are equal to that amount required to amortize the single charge over a ten year period at an annual interest rate of 3.0% above the Royal Bank Prime Rate, as of January 1<sup>st</sup>, May 1<sup>st</sup> and Sept 1<sup>st</sup>.



# Asset Management Policy

**Presented December 2, 2019**  
Finance, Engineering, Parks &  
Environment and Strategic & Corporate Services

# What is An Asset?

- An asset is defined as physical components that have value, are used to provide services and have an economic useful life greater than 1 year.
  - Includes items such sanitary pipes, buildings, public plazas, computers etc.

# What is Asset Management?

- Asset Management is the process of managing these physical assets overtime to provide sustainable service delivery.
- Key concepts:
  - Ongoing and iterative – not one-time
  - Holistic and integrated
  - Achieving best value

# Asset Management Framework





# Purpose of the Policy

- Foundational step in the “Plan” phase of asset management continuum.
- Formalize corporate commitment to the principles of asset management.
- Provide policy direction to implement sound asset management practices.
  - Necessary resources allocated
  - Information driven
  - Total cost of ownership

# Next Steps

- Phase I – winter 2019
  - Asset management strategies and plans for streets and utility assets.
- Future work will build on framework developed in Phase I.
  - Strategies and plans for all major asset categories.



Thank you.

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 Director Engineering, Parks and Environment	 Director Finance	 Director Strategic and Corporate Services	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**FINANCE, ENGINEERING PARKS & ENVIRONMENT AND STRATEGIC & CORPORATE SERVICES DEPARTMENTS**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Leslie Garber, Deputy Director – Finance  
Karyn Magnusson, Deputy Director – Engineering, Parks & Environment  
Heather Reinhold, Deputy Director – Strategic & Corporate Services

Subject: ASSET MANAGEMENT POLICY

Date: November 20, 2019 File No: 05-1615-04-0001/2019

*The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Deputy Director – Finance, the Deputy Director – Engineering Parks & the Environment and the Deputy Director – Strategic & Corporate Services, dated November 20, 2019, entitled “Asset Management Policy”:

THAT the Asset Management Policy be endorsed;

**ATTACHMENTS:**

1. Asset Management Policy (CityDocs #1828546)
2. Asset Management for Sustainable Service Delivery – A BC Framework (CityDocs #1625899)

**DISCUSSION:**

Assets can be defined as physical components of a system that have value, are used to provide services, and have an economic useful life greater than one year. (Examples of City assets include physical items such as sanitary pipes, street lights, buildings, public plazas, computers, etc.).

Asset management is the process of managing a municipality’s physical assets to provide sustainable service delivery to the community. There are multiple perspectives

and definitions of asset management, but all generally share a number of core concepts:

- Asset management is an ongoing, iterative process or approach, not a one-time project.
- Asset management is holistic and integrated.
- Asset management is about achieving best value and sustainable service delivery.

The graphic below from **Attachment 2** illustrates that the asset management pathway is circular and continuous. The graphic also indicates that in the “Plan” phase, the foundational step is an asset management policy. It is the asset management policy that will connect asset management activities with organizational and community goals and objectives and integrate asset management principles and practices within departmental work plans.



The goal of the Asset Management Policy is to formalize the corporate commitment to asset management and its implementation in a systematic and coordinated way throughout the City.

Although the City has not adopted a formal asset management policy prior to now, several aspects of asset management have been in practice for a significant period of time. In order to be compliant with the PSAB 3150 accounting standards, that came into effect in 2009, an interdepartmental working group was struck with staff from the Finance, Engineering, Parks & Environment, Facilities, and Information Technology departments. Collectively, the group developed asset inventories for all asset classes,



determined acquisition dates and historical costs, and implemented the Infor-Hansen software.

Ongoing activities have been largely focused on the “Assess” phase of the asset management continuum. This has generally involved performing periodic condition assessments for specific asset classes (e.g. sanitary main CCTV inspections; triannual pavement condition assessment), but the practices have not been equally applied to all asset classes. Staff continue to refine the City’s asset inventory, and additional asset classes continue to be transitioned to Infor-Hansen.

The Asset Management Policy will confirm the organization’s and Council’s commitment to asset management principles and provide direction to implement sound asset management practices to all asset classes. The activities and the cultural shift inherent in the policy will serve to move the City’s asset management practices along the asset management journey.

It is important to keep in mind that asset management is a continual process of planning, measuring, assessing and reporting. The next steps to be undertaken will be the development of an asset management strategy and detailed asset management plans for the various asset categories. The first phase in developing detailed asset management strategies and plans will be in winter 2019, lead by Engineering, Parks & Environment, for the City’s utility and streets assets. Future work will build on the framework established through EPE’s work and will include strategies and plans for all major asset categories.

#### **FINANCIAL IMPLICATIONS:**

While the adoption of the Asset Management Policy itself does not have a financial impact, the asset management activities flowing from its adoption will impact the financial planning process. As asset management plans are developed, the results will inform departmental business and work plans, and will be integrated in to the City’s long-term financial plans. This best practice approach will also result in improved collection and review of condition data, which may highlight the need for increased maintenance or renewal investment to achieve proper lowest total cost of ownership asset management.

#### **INTER-DEPARTMENTAL IMPLICATIONS:**

The Asset Management Policy is the product of an interdepartmental working group with staff representation from the Finance, Engineering, Parks & Environment, and Strategic and Corporate Services departments. Its implementation will encourage further inter-departmental collaboration to perform effective asset management planning and other asset management activities. The policy has been reviewed by the City’s Policy and Projects Team and Leadership Team.

#### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

The Asset Management Policy supports the following objectives of the 2014 Official Community Plan:

- 8.1.4 Improve financial models to include cash flow projections that meet capital asset replacement needs, and explore opportunities from senior levels of government in the financing of all capital assets.
- 8.2.2 Identify and monitor the condition of our infrastructure on a regular basis in order to identify the remaining operational useful life of individual elements, and to identify and rectify weaknesses before failure, thereby optimizing capital and maintenance expenditures.

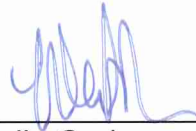
### STRATEGIC PLAN IMPLICATIONS:

The implementation of sound asset management practices will support the infrastructure required for creating a:

- City for People;
- Liveable City;
- Vibrant City;
- Connected City; and
- Prosperous City

for future generations.

RESPECTFULLY SUBMITTED:




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Leslie Garber  
Deputy Director – Finance



---

Karyn Magnusson  
Deputy Director – Engineering, Parks & Environment



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Heather Reinhold  
Deputy Director – Strategic & Corporate Services



**City of North Vancouver**  
**CORPORATE POLICY**

**Policy Name**      **Asset Management Policy**  
**Policy Number**

**PURPOSE**

Asset management is the process of bringing together the skills, expertise and activities of people to manage a community's physical assets and to provide sustainable service delivery. The purpose of this policy is to specify objectives and principles for asset management processes in the City of North Vancouver.

**SCOPE**

This policy applies to all City of North Vancouver activities related to our assets, defined as physical components of a system that have value, are used to provide services, and have an economic useful life greater than one year.

**OBJECTIVES**

This policy will address the management of the City's physical assets in supporting its strategic goals of becoming a highly livable community that is resilient and sustainable for future generations. Specifically, this policy directs staff to address the following objectives:

- **Integrate** - Integrate asset management processes across all City departments and into its organizational culture.
  - Encourage a corporate culture where all employees play a part in overall care for city assets by providing awareness, training and professional development.
  - Incorporate asset management plans during the preparation of the City's long-term financial plan.
  - Ensure necessary capacity and operational capabilities are allocated toward asset management responsibilities.
- **Delivery of Services** - Utilize the City's physical assets to deliver a defined level of service to stakeholders that optimally balances the City's vision, risk and affordability.
  - Define target service levels for major asset categories.
  - Balance delivery of services without sacrificing the ability for future generations to meet their needs.
  - Establish a continuous review and reassessment plan to ensure target service levels are maintained and relevant.
- **Sustainable** - Manage the City's assets in a socio-culturally, environmentally and economically sustainable manner.
  - Adhere to all relevant legislative and regulatory requirements.
  - Integrate community values and priorities and consider political, social, environmental and economic factors in developing asset management strategy and plans.
  - Apply asset management processes to natural assets.

- Risk-based and Information-driven - Incorporate risk-based and information-driven approaches to drive decision making for asset management.
  - Develop an information and evidence-based framework to improve business decision making.
  - Assess asset renewals and alternative options and document risks and consequences as part of asset management plans.
  - Utilize a total cost of ownership approach to make business decisions.
- Systematic - Create a systematic approach to create asset management plans that are formal, consistent and repeatable.
  - Develop asset management plans for major service and asset categories.
  - Demonstrate transparent and responsible asset management processes with best practices.
- Innovative - Establish an innovative organizational culture to encourage continual improvement and adaptability.
  - Implement and continually improve asset management systems to support data management.
  - Consistently review and update asset management plans in response to changing conditions and priorities.

## LEGISLATIVE REFERENCES

- *Community Charter* (SBC 2003) s.7(c) and Chapter 26
- 254/2004 - *Municipal Liabilities Regulation*
- *Local Government Act* [RSBC 1996] Chapter 323
- *Canada Health Act, Fishers Act, BC Building Code, BC Drinking Water Protection Regulation, BC Environment Management Act* (at the asset and corporate levels)

## RELATED DOCUMENTS

- City of North Vancouver Official Community Plan
- Risk Management: ISO 31000
- Asset Management: ISO 55000
- Asset Management for Sustainable Service Delivery – A BC Framework
- FCM The Building Blocks of Asset Management
- FCM How to Develop and Asset Management Policy, Strategy and Governance Framework

## RESPONSIBILITY

- Council is responsible for approving asset management policy, approving and allocating funding and resources and providing oversight regarding asset management strategy and plans.
- The Chief Administrative Officer (CAO) is responsible for providing oversight and establishing the high level vision, objectives and governance structure for asset management. The CAO is also responsible for leading staff in implementing plans for this policy.

## REVIEW DATE

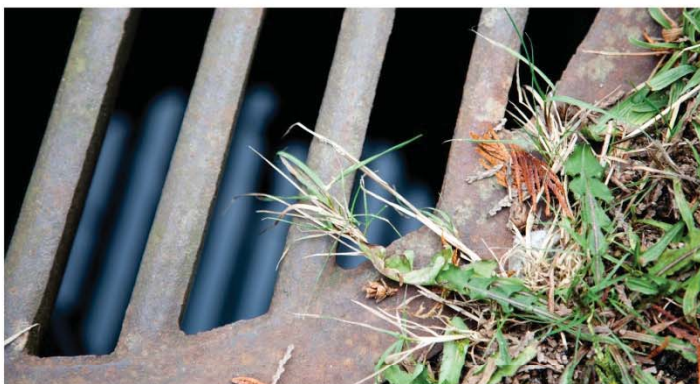
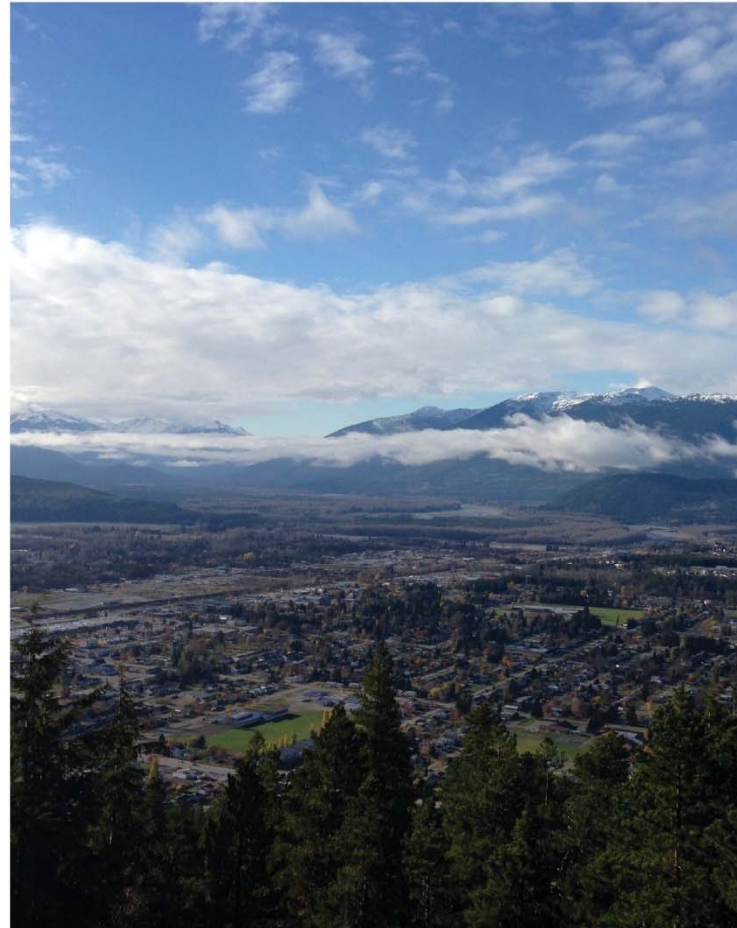
This policy has a life of 4 years. It will be reviewed in 2023.

Approval date:		Approved by:	
----------------	--	--------------	--

# Asset Management for Sustainable Service Delivery

## A BC Framework

## Attachment 2





*"Local Governments too often take core infrastructure for granted until it breaks down. Without robust Asset Management practices it is too easy for local governments to starve capital replenishment and bring in artificially low tax rates and user fees in order to balance budgets – the long term consequences of this can be catastrophic. Sustainable service delivery is critical for the guarantee of future livability with our communities."*

*- Richard Walton, Mayor, District of North Vancouver*



## **Preface**

Local governments in British Columbia are increasingly working to implement asset management practices as a way to deal with aging infrastructure, costs of replacing assets, increasing expectations for service levels, and increasing risk to the delivery of critical services such as water delivery, sewage collection, transportation, recreation, and civic services. *Asset Management for Sustainable Service Delivery: A BC Framework* (the Framework) was developed to provide local governments with a high level view of the process of asset management, components and activities within the process, and identify existing and relevant supporting resources.

## ***The Approach***

The Framework aligns with the 'BC Approach' for asset management which is being led by Asset Management British Columbia (AMBC). It identifies accepted best management practices that have been endorsed internationally, as well as best management practices that have been developed and endorsed by BC local government practitioners. The Framework has been developed to recognize the diversity of BC's communities and be scalable to community size, character and capacity. The Framework focuses on desired outcomes rather than prescribing specific methodologies, thereby allowing local governments to develop and implement an approach that can be measured and incremental, tailored to the specific needs and capacity of individual local governments.

The Framework describes asset management as a process, providing a guide to the why, what, and how of asset management. It is further supported by additional tools and resources available on the AMBC website, as well as tools and resources that are available on AMBC partner websites.

Finally, for local governments looking for strategic direction and/or guidance with asset management, the Framework becomes the principal resource.

## ***Acknowledgements***

The development of the Framework was funded by the Union of British Columbia Municipalities. The Framework was developed in partnership with the Ministry of Community, Sport, and Cultural Development and Asset Management BC, and was supported through consulting services provided by Urban Systems Ltd.

Special thanks to the members of Asset Management BC for providing input and feedback, and particularly to members of the Asset Management Framework Steering Committee:

- Glen Brown, Chair, Union of British Columbia Municipalities
- Liam Edwards, Ministry of Community, Sport and Cultural Development
- Wally Wells, Asset Management BC
- David Allen, City of Courtenay
- David Love, City of Courtenay
- Andy Wardell, District of North Vancouver
- Rob Bullock, Government Finance Officers of BC
- Doug Allin, Public Works Association of BC

## ***About Asset Management BC***

AMBC is an organization that is a provincial and national leader in building awareness, education, development of tools and resources, and supporting integration and collaboration with respect to asset management. AMBC participants include local government associations, academia, First Nations representation and local governments. AMBC is a stakeholder-driven community of practice that benefits from local government practitioners (local government knowledge and expertise in asset management) providing strategic direction, sharing knowledge, and sharing resources and best management practices, that support all local governments. AMBC's approach - an approach that is created by practitioners, for practitioners - has acceptance within BC and abroad. It is a model that is being mirrored and replicated in other jurisdictions.

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## 1.0 About this Framework

**Asset Management for Sustainable Service Delivery: A BC Framework** (the Framework) establishes a high-level, systematic approach that supports local governments in moving toward service, asset and financial sustainability through an asset management process. The Framework addresses:

1. Why asset management is necessary.
2. What asset management is.
3. How asset management can be implemented.

The Framework is based on the graphic below. It recognizes there are many components to asset management and provides a circular, continuous pathway to link all components of the process together. The circular nature emphasizes that the process is on-going and requires continuous review and improvement.



This full version of the Framework expands on the short version by explaining each component of the graphic in more detail, and providing information about the why, what, and how of asset management.

The Framework focuses on desired outcomes rather than prescribing specific methodologies, thereby allowing local governments to develop and implement an approach that can be measured and incremental, tailored to the specific needs and capacity of individual local governments.

## Overview of Sections of the Framework

### Section 2.0 - Sustainable Service Delivery

Sustainable service delivery is the primary objective of asset management and is at the centre of the process diagram. This section describes why asset management is necessary and the benefits of asset management.

### Section 3.0 - Asset Management

This section presents definitions of asset management and highlights the commonalities between different definitions and the fundamental principles of asset management.

### Section 4.0 - Core Elements

This section describes each of the essential elements shown in the blue circle inside the diagram: assets, information, finances, and people. Each of these elements are required to support all asset management and service delivery activities.

### Section 5.0 - Communicate, Engage, Review

The importance of ongoing communication, engagement, and review throughout the entire process of asset management. This section includes common topics for communication and engagement.

### Section 6.0 - The Process

How to assess, plan, and implement asset management, and how/where to start. This section details each of the assess, plan, and implement components on the outer ring of the framework diagram by identifying why the component is important, activities to undertake, case studies and examples of application, other relevant resources, and where to start. Asset management needs to be tailored to a community's context rather than prescribed, thus the activities listed are intended to be examples of the tangible actions that might be undertaken at each stage in the process, rather than a comprehensive checklist of what must be done at each stage.

### Section 7.0 - Resources and Tools

This Framework draws from and highlights existing resources, and does not attempt to duplicate them. A text box listing additional resources appears in each section of the Framework to highlight the publicly available asset management references and resources that document best practices and examples of that topic. This resources and tools section provides a comprehensive listing of resources referenced throughout the framework. All of the referenced resources are available through [www.assetmanagementbc.ca](http://www.assetmanagementbc.ca)



The Framework has been developed to reflect current international best practices (International Infrastructure Management Manual and the ISO 55000, ISO 55001 and ISO 55002 Standards for Asset Management).

The Framework recognizes the diversity of BC's communities, and that asset management, and the best practices that support asset management, must be scalable to community size, character, and capacity.

Finally, the Framework is a living document. Recognizing that best practices change and are updated, the Framework will also be periodically updated and made publicly available through Asset Management BC.

## 2.0 Sustainable Service Delivery

### 2.1 Why is Asset Management Necessary?

Sustainable service delivery ensures that current community services are delivered in a social, economic, and environmentally responsible manner that does not compromise the ability of future generations to meet their own needs.

Communities build and maintain infrastructure to provide services. These services support quality of life, protect health and safety, and promote social, economic and environmental well-being. Failure to care for infrastructure, manage natural resources and protect the services provided by nature, risks degrading - or even losing - the services communities enjoy and future generations will rely on.

Sound asset management practices support sustainable service delivery by integrating community priorities, values, and an informed understanding of the trade-offs between risks, costs, and services.



#### ASSET MANAGEMENT: THE PARADIGM SHIFT

"Sustainable service delivery integrates all the principles of asset management. It understands the value of land-use planning; and it understands the impacts that land-use planning has on service delivery. It also integrates the 'design with nature' philosophy."

"Asset management usually commences after something is built. The challenge is to think about what asset management entails BEFORE the asset is built. Cost-avoidance is a driver for this 'new business-as-usual'. This paradigm-shift starts with land use and watershed-based planning, to determine what services are affordable, both now and over time."

"We know that if we do things right at the front-end, the outcome will be a lot better, and everyone will wind up saving time and money. And we will have a healthier environment," concludes Derek Richmond, Secretary, Partnership for Water Sustainability in BC.



**the partnership**  
for water sustainability in bc

[http://waterbucket.ca/gi/category/design\\_with\\_nature/sustainable-service-delivery/](http://waterbucket.ca/gi/category/design_with_nature/sustainable-service-delivery/)

Infrastructure represents a significant investment for every local government, and council members are the stewards of a local government's infrastructure assets. A formal approach to the management of infrastructure assets is essential to support making informed decisions, to provide services in the most cost-effective manner over the entire asset life cycle, and to demonstrate this stewardship to customers, investors, and other stakeholders. Applying asset management best practices ensures that infrastructure continues to provide sustainable and economically viable levels of service. These best practices profile and reinforce that:

1. Community infrastructure is a foundation of sustained growing economic and social development.
2. Infrastructure is critical to meeting the recreational, institutional, cultural and other needs of the community.
3. Properly built and effectively maintained infrastructure supports public health and safety, and mitigates potential adverse environmental impacts of society.
4. Financial sustainability requires strong connections between long-term infrastructure investment needs, long-term funding plans and financial performance measures to track progress over time.
5. Well informed decisions contribute to achieving the goals of the community, while balancing the financial capacity of current and future generations.



### **AN OUTCOMES FOCUSED APPROACH A LOCAL GOVERNMENT CAO PERSPECTIVE**

"The Town of Gibsons has recognized, formally and in practice, that nature, and the ecosystem services it provides, are a fundamental and integral part of the Town's infrastructure system. Gibsons is one of the first communities in North America to do so. The policy change occurred with the adoption of the 2013/14 Strategic Plan. This hybrid document combines a sustainability framework with a more traditional strategic plan.

Natural assets are considered cheaper to operate; can last indefinitely, if properly managed; are carbon neutral, and in some cases can be carbon positive. It is important to differentiate green infrastructure, which is designed and built to mimic nature, such as a rain garden, from a natural asset such as a creek. Gibsons is also creating sub-categories in asset lists and financial statements to include Eco-Assets and implementing a strategy to manage these assets specifically.

Ultimately, the goal is to move from simply maintaining infrastructure to a service delivery model, where those services are delivered by the smallest number, the most natural, most energy energy-efficient, and the most reliable municipal assets, that cost the least to operate over the long term.



- Emanuel Machado, Chief Administrative Officer  
[Town of Gibson's Strategic Plan, 2013-2014](#)

## 3.0 Asset Management

### 3.1 What is Asset Management?

**Asset Management is an integrated process**, bringing together skills, expertise, and activities of people; with Information about a community's physical assets; and finances; so that informed decisions that support sustainable service delivery can be made.

There are many perspectives on asset management, and each of the international best practices identifies its own specific definition for asset management. While these definitions are each unique in the words they use, they share some clear and important messages:

1. Asset management is an ongoing, iterative process or approach, not a one-time project.
2. Asset management is holistic and integrated.
3. Asset management is about generating value and sustainable service delivery.

Regardless of whether a local government chooses to embrace one of the provided definitions of asset management, or to develop their own to align with their own culture and terminology, the definition should include consistent messaging.



#### ASSET MANAGEMENT: DEFINITIONS OF THE CONCEPT

**ISO 55000 defines asset management as:**

A coordinated activity of an organization to realize value from assets. Realization of value will normally involve a balancing of costs, risks, opportunities and performance benefits.

**National Roundtable for Sustainable Infrastructure defines asset management as:**

Asset management is an integrated business approach involving planning, finance, engineering and operations to effectively manage existing and new infrastructure to maximize benefits, reduce risk and provide satisfactory levels of service to community users in a socially, environmentally and economically sustainable manner.

**International Infrastructure Management Manual describes asset management:**

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost-effective manner.

## 3.2 Foundational Principles of Asset Management

Understanding asset management requires more than a definition statement. The process of asset management can be further illustrated through a set of foundational principles. These foundational principles are asset-centric statements that profile societal expectations of local government stewardship over community assets:

- ✚ Infrastructure assets exist for the purpose of delivering valuable services to the community.
- ✚ A community's service delivery needs should be met in a socially, economically and environmentally responsible manner that does not compromise the ability of future generations to meet their own needs.
- ✚ Local governments are the stewards of community assets, with a responsibility to ensure the delivery of services.
- ✚ Sustainable service delivery requires assets, people resources, and financial resources.
- ✚ Asset management supports local governments in managing the risks that threaten delivery of service, achieving and demonstrating stewardship of both assets and finances.
- ✚ Local governments are diverse and local conditions matter. Asset management uses best practices that are scalable and adaptable to unique circumstances in each community.
- ✚ Asset management is a process of continuous review and development.
- ✚ Leadership and the integration of asset management into organizational culture are critical.



### ADDITIONAL RESOURCES – WHAT IS ASSET MANAGEMENT?

1. **An Asset Management Governance Framework for Canada** | National Round Table on Sustainable Infrastructure
2. **International Infrastructure Management Manual (IIMM)** | Institute of Public Works Engineering Australasia (IPWEA)
3. **ISO 55000:2014** | International Organization for Standardization
4. **Asset Management Primer – Canadian Infrastructure Report Card** | Federation of Canadian Municipalities, Canadian Construction Association, Canadian Public Works Association, Canadian Society of Civil Engineers



## THE SUSTAINABLE FOUNDATION: SERVICE, ASSET & FINANCIAL SUSTAINABILITY AT THE DISTRICT OF NORTH VANCOUVER

"With clear Council direction, staff expertise and the use of international best practices in asset management, our interdisciplinary Asset Management Steering Committee has been working since 2006 to continuously improve and manage our existing infrastructure assets.

"At the District, our asset management is grounded in what we call "The Sustainable Foundation"; a fully integrated asset management approach that brings the four core elements and our entire organization into alignment. Integration is achieved by:

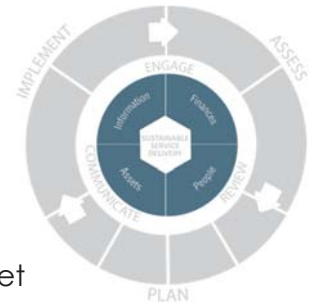
- ↳ Developing asset management plans from the bottom up and setting policy at the top. Strategy brings it all together.
- ↳ Combining best practices in accounting, engineering, financial planning and sustainability performance measurement.
- ↳ Shifting our culture away from silos to a corporate mindset focused on continuously building organizational capacity.
- ↳ Training staff in finance, engineering, operations and planning together on how to develop asset management plans and integrate these requirements into long-term financial planning."

Andy Wardell, Director, Financial Services tells us, "Building a sustainable foundation takes time but if you don't start you will not finish. Once you have a vision you need to make it a shared vision. That is what The Sustainable Foundation is really all about; having a shared vision, continuously striving to bringing alignment to the organization and the key stakeholders that all play a role in stewarding local government toward long-term sustainability".



## 4.0 The Core Elements

People, information, assets, and finances are considered the core elements of asset management. Each of these elements is necessary for sustainable service delivery. Success requires the integration of these four elements throughout the process of asset management. These four core elements can be thought of as the four core resources needed to support the process of asset management, and thus necessary for sustainable service delivery.



As identified in the Foundational Principles of Asset Management, it is important to note that having limited, or scalable core element (or resource) capacity should not prevent the adoption of an asset management process. However, acknowledging and understanding these four core elements and committing to incrementally improve capacity within them, as well as how they integrate, is critical to success.

### Assets

Assets are the physical infrastructure owned by local governments to enable service delivery. Assets include, but are not limited to, water and wastewater systems, drainage and flood protection systems, transportation systems, civic facilities, parks, and fleet. It is also important to understand both existing and new assets, and consider future assets in planning. Assets may also include natural resources and the essential ecological functions nature provides.

### Information

Information is needed to support decisions that are cost effective, manage risks, and support long-term service delivery. The quality of information and its collection and dissemination can evolve over time to strengthen informed decision-making. Answering the following questions provides much of the information needed:

- ↳ What assets do you own and where are they?
- ↳ What is the depreciated value of your assets?
- ↳ What are the conditions (physical, demand/capacity and functionality) and expected remaining life of your assets?
- ↳ What service and asset risks need to be prioritized and managed?
- ↳ What is the current and desired or targeted level of service?
- ↳ When will repair, upgrade, or replacement be required?
- ↳ How much will it cost?
- ↳ Which assets can or should be retired?

### ↳ Which new assets may be required and when?

Compiling this information into a consolidated asset inventory can be helpful for decision-making. Each local government in BC has a basic inventory/register of their assets - developed to support Public Sector Accounting Board reporting requirements - which can serve as a starting point for collecting asset information.

Information should be updated over time to capture asset acquisitions or renewals, changing costs, retired assets, changing asset conditions, risk, or level of service expectations.

## People

Asset management is a corporate responsibility, and the importance of having the right people and the right processes cannot be overlooked. Local governments that successfully implement asset management have:

- ↳ Staff and elected officials who understand the need for and benefits of asset management with a commitment to continuous improvement.
- ↳ Clear community and corporate priorities and asset management objectives.
- ↳ Effective leadership throughout the organization, including top management, that creates and promotes the vision and values reflected in an asset management policy.
- ↳ Culture that fosters teamwork and integration across departments, throughout the organization.
- ↳ Culture that values informed decision-making.
- ↳ Staff and elected officials that understand the need for lifelong learning to develop their knowledge, experience and capacity.

## Finances

A holistic understanding of the infrastructure required to deliver services and associated long-term costs of capital, operations, and maintenance, is a critical element of asset management. Technical and financial information must be linked to inform long-term decision-making. Proactive asset management will yield fewer service disruptions, more predictable results, and lower total lifecycle costs than a reactive approach to repair and replacement.

Debt can be either a useful tool for a local government, or a burden and significant risk. In general terms, the correct amount of debt is subjective and context specific. Holistic and strategic use of debt is best when it augments progress toward steady state replacement of existing assets.



## 5.0 Communicate, Engage and Review

Communicating, engaging, and reviewing are considered to be a set of ongoing activities that are applied, to some extent, within each stage of the process. Although communicating, engaging, and reviewing are ongoing and embedded activities, their importance justifies dedicated consideration to ensure that communication is central to the process, and not an afterthought.



### Purpose

The purpose of communicating, engaging, and reviewing is to ensure that people and departments within an organization are aligned, working towards the same goals, and efficiently implementing asset management by applying the information and outputs in decision-making and programming. Communication and engagement is also important in obtaining support for asset management from elected officials, staff, residents, and other ratepayers.

### Approach

The scope of communication, engagement, and review will vary based on organizational context, culture, and the stage of the process the organization is at. The scope and scale may differ, but there are important considerations about approach that apply to all contexts:

- ✎ Identify the various stakeholders or audiences, and the concerns or perspective of each group (e.g. council, ratepayers, management, operations, etc.).
- ✎ Identify the goals of each type of communication or engagement.
- ✎ Identify when it is necessary to inform or to ask and design communication activities to meet goals.
- ✎ Leverage both formal and informal communication and engagement channels.
- ✎ Use information obtained through communication and engagement to support the review and improvement of the asset management process.

Common topics for asset management communication and engagement include:

- ✎ The importance of infrastructure in service delivery
- ✎ State of assets
- ✎ State of finances and funding challenges
- ✎ Levels of service
- ✎ Service delivery costs and trade-offs

- ↳ The organization's approach to asset management
- ↳ Staff and community members roles
- ↳ The work being done to ensure long-term sustainable service delivery

These topics are relevant both internally and externally to an organization, however, the level of detail and the delivery of the message will differ. It is often advisable to develop internal alignment and an understanding of assets, services, and related costs and risks prior to external communication and engagement.

## Activities

Each organization will develop and tailor communication and engagement activities to suit their unique context. Some examples of activities include:

- ↳ Establishing an Asset Management Steering Committee with a mandate and a regular meeting schedule.
- ↳ Identifying executive sponsors.
- ↳ Developing and regularly communicating an asset management vision statement.
- ↳ Regularly engage staff at meetings (horizontally and vertically throughout the organization).
- ↳ Communicating progress in public reports (e.g. financial plans, annual reports, general purpose financial statements, etc.).
- ↳ Developing and implementing an asset management communication policy, strategy and/or plan.
- ↳ Leveraging public engagement events (e.g. open houses, satisfaction surveys, community workshops, etc.) to obtain input to inform asset management decision-making and priorities (e.g. willingness to pay, levels of service, etc.).
- ↳ Frequent informal reviews that ensure activities are aligned with priorities.
- ↳ Regular formal review of the asset management policy, strategy, and plan(s); and communicate progress.



## THE IMPORTANCE OF COMMUNICATION

Local infrastructure is the foundation of the health, well-being, and economic prosperity of communities across the country. Throughout my tenure in local government as Mayor and Councillor, it had become apparent to me that the general public remains largely unaware of the cost implications of maintaining and renewing existing infrastructure.

During my final term as Mayor, I conducted an inquiry project for the Town of Golden to investigate how the Town of Golden engage the community in Asset Management. The goal was to develop a meaningful process that was focused on engaging the community and providing an opportunity to bring the staff, elected officials, and residents of Golden together to collectively decide what services the people need, want, and are willing to pay for. There were two opportunities for residents to participate in the inquiry. Data analysis led to the following findings:

1. Residents of Golden placed a high value on communication, and they wished to be able to access information through a variety of channels.
2. Although the citizens of Golden recognized the broad range of services provided by the local government, they did not understand the magnitude of the cost associated with providing those services or replacing those services.
3. Minor tax increases were generally acceptable to maintain or to improve levels of service.
4. The roles and responsibilities of local government are not always clearly understood by residents.

These findings, combined with my experience as Mayor of Golden, resulted in the following conclusions:

1. Citizens expect to be involved in local government decisions and to have a say on how their tax dollars are spent.
2. Communication, engagement, and education are critical factors for:
  - a. improving the level of trust between the citizens and the local government;
  - b. building awareness and understanding of the roles, responsibilities, and limitations of the local government; and
  - c. creating capacity in citizens to participate in conversations involving community owned assets.

Local governments need to engage their communities in a dialogue to consider what resources/services they want and, more importantly, what are they willing to pay for. Building a common understanding allows the community to address this complex issue in a collaborative manner.

- Christina Benty, Former Mayor of Golden  
Owner of Christina Benty Strategic Leadership Solutions



## ADDITIONAL RESOURCES – COMMUNICATE, ENGAGE, REVIEW

1. **Asset Management Communication Plan** | City of Prince George
2. **AM Communications Strategy** | Mickelson Consulting Inc.
3. **Asset Management: From Awareness to Action** | Exchange Magazine Fall 2014
4. **Level of Service and Community Engagement: Practice Note 8** | Institute of Public Works Engineering Australasia

## 6.0 The Process of Asset Management

### 6.1 An Overview

Asset management is a continuous quality improvement process. This ongoing process is incremental and scalable, involving:

- ↳ Assessing capacity, demand, and results;
- ↳ Planning what needs to be done; and
- ↳ Implementing the plans.



Continuous quality improvement (CQI) is a process to ensure programs systematically drive improved services and increase positive outcomes. CQI is a cyclical, data-driven process; it is proactive, not reactive. CQI, in an asset management environment, utilizes and integrates the four core elements to make incremental positive changes – even when things are going well. CQI is a process that involves ongoing assessment, planning and implementation cycles.

The process section of the Framework outlines each component of the asset management process and why the component is important. Typical activities have been listed to provide examples of what may be included in developing the process component, but this is not a checklist of what needs to be done. The list is not necessarily comprehensive, but is a good representation of the activities required.

It is important to recognize that within each component, the typical activities that have been identified should be considered scalable to meet the current capacity or address the priorities of each individual local government.

Additional resources for each part of the process have been listed to support deeper understanding.



## TIPS FOR GETTING STARTED

There is no 'correct' place to start. Each local government must consider where they are at within the continuous quality improvement process. Some local governments may choose to invest in **training for key staff or council**, to begin to build awareness of asset management and how to use this Framework. For other local governments, asset management is a process that they have already begun to deliver, whether formally or informally. For those local governments that may be initiating the process for the first time, a reasonable place to begin is with 'assess'. These three steps are a common place for starting the process:

1. **Assess existing practices.** Conduct an assessment of asset management practices and organizational capacity to identify what is being done well and where improvement is needed. Refer to the Assess Asset Management Practices section for additional information, tools and resources.
2. **Take stock of assets and finances.** Assess the asset inventory/registry and condition information (if available) to provide estimated remaining life of assets. This can be integrated with available financial data regarding replacement costs, operations and maintenance costs, and allocations. The existing Tangible Capital Asset registry used for financial reporting is a good starting point for basic asset inventory and historic cost information. Refer to the Assess Current State of Assets section for additional information, tools and resources.
3. **Build awareness.** Raise awareness with staff and council about the current status of assets and finances, compared to long-term goals and objectives. Building awareness is key to getting the commitment needed to move through the asset management process and exercise continuous improvement. Refer to the Review, Communicate and Engage section for additional information, tools and resources.

## 6.2 Assess

### 6.2.1 ASSESS ASSET MANAGEMENT PRACTICES

This stage in the process is about determining the organizational capacity to undertake asset management as an ongoing corporate function. It involves a high level assessment of the maturity of an organization's practices spanning the four core elements:



- ↳ People: development of a cross functional team, asset management knowledge and skills, communication and alignment, clarity of roles and responsibilities.
- ↳ Assets: availability, accessibility, accuracy, reliability, and integration of raw asset data.
- ↳ Information: development and use of asset management policies, strategies, and plans (raw asset data that has been processed into information that can be used for decision-making).
- ↳ Finances: policies and practices related to long-term financial planning, infrastructure backlog, cost recovery, reserves, debt, and financial tracking.

Assessing asset management practices will also help an organization identify the practices and processes that are currently in place; the integration of practices and processes; how well they are applied and how effective they are; and areas of organizational strength and opportunities for improvement.

The assessment results serve as a foundation for developing and implementing the ongoing asset management process.

### Why It's Important

Proven success in the development and implementation of asset management processes relies on a strong corporate alignment to the approach and commitment to continuous improvement. When starting to implement asset management, it is common for people within the organization to have varying perspectives on the effectiveness of practices in place, priorities for improvement, and the ideal approach to asset management. This assessment supports the establishment of a common understanding among different perspectives of the current state of practices. The assessment also:

- ↳ Builds understanding of what is involved in asset management.
- ↳ Identifies asset management practices that may be in place under a different name.

- ↳ Supports alignment across departments for a common approach to asset management.
- ↳ Supports integration and understanding within the organization.
- ↳ Helps organizations identify priority actions for making effective and meaningful improvements.
- ↳ Provides the basis for engaging council/board in adopting asset management processes.
- ↳ Establishes a baseline for monitoring continuous improvement.

### Activities

- ↳ Hold an inter-departmental workshop to assess the asset management practices and competencies of the organization, using a widely accepted assessment tool or framework (see additional resources) and knowledgeable facilitators (internal or external);
- ↳ Conduct a high-level assessment of current organizational policies, strategies, and plans for connection to and alignment with asset management objectives and practices;
- ↳ Use assessment results to establish an organizational benchmark of asset management practices;
- ↳ Communicate the results of the asset management practices assessment to internal stakeholders, such as staff, management, and council; and
- ↳ Conduct an annual review of asset management practices and competencies, tracking progress and improvement against the established benchmark.
- ↳ Keep a collective "Improvement Register" to record future activities beyond your present means.



## WHERE TO START WHEN DEVELOPING A CORPORATE ASSET MANAGEMENT PROGRAM - ASSETSMART

"The City Kelowna faced this dilemma approximately three years ago when they started their corporate asset management journey. Prior to 2012, the City's asset management was being carried out within asset "silos" (e.g. water, wastewater, transportation, parks, building, etc.) with limited cross department integration. This presented a number of challenges and inefficiencies as departments vied for limited funding at budget time and there were lost opportunities to bundle renewal projects. So where do you start? Kelowna utilized the tools and resources from AMBC beginning with Asset SMART – A Local Government Self-Assessment Tool. The process and questions from Asset Smart were presented to the City's asset management cross functional team to identify gaps in the existing asset management practices and to develop priority projects for advancing the asset management program. The priority projects identified in the "up-front" Asset Smart exercise have proven to be very valuable for advancing the City's asset management program and the City continues to work its way through the priority projects identified three years ago. Asset SMART – A Local Government Self-Assessment Tool is an excellent way to start development of a community's asset management program."



– Joel Shaw, Capital Assets and Investment Manager,  
City of Kelowna



## TIPS FOR GETTING STARTED

**Build a team.** Assemble a corporate asset management team with representatives from finance, public works, engineering, planning, and other areas to undertake an integrated assessment. Identify a team champion to ensure the initiative moves forward. The team should evaluate their own capacity and resources available, and accordingly choose to lead the assessment internally, or to access external resources and support to facilitate the assessment.



## ADDITIONAL RESOURCES – ASSESS ASSET MANAGEMENT PRACTICES

1. [AssetSMART](#) | BC Ministry of Community, Sport and Cultural Development
2. [NAMS.PLUS Maturity Assessment](#) | Institute of Public Works Engineering Australasia



### 6.2.2 ASSESS THE CURRENT STATE OF ASSETS

Assessing the current state of assets includes gaining a clear understanding of the:

- ↳ Asset inventory/asset register
- ↳ Asset conditions
- ↳ Customer and technical levels of service
- ↳ Asset risks
- ↳ Asset costs (capital, operations, and maintenance)

Infrastructure report cards and infrastructure status reports are common examples of the output of an assessment of the current state of assets.

Some asset information may not be readily available and may need to be compiled into a consolidated asset register from diverse sources, or created for the first time. Whether from past assessments, studies, plans, or staff knowledge, pulling together existing information is the best place to start. Investing time and resources into creating new information should be prioritized only when the new information will significantly improve decision-making. Improving the organization's understanding of the state of the assets over time is part of the ongoing process of improvement.

This assessment of the current state of assets is the foundation for the development of asset management plans. These plans identify the gaps between the current state of assets and the desired state of assets and service levels; and the activities needed to close these gaps.

#### Why It's Important

This assessment - especially the first time it is conducted - is the beginning of the local government journey into asset management. It provides the basis for knowing the assets and their role in service delivery, identifying risks, understanding the resources required to sustain the assets at current levels of service, and quantifying what (if any) infrastructure backlog exists.

A comprehensive assessment can also:

- ↳ Indicate the effectiveness of existing asset management practices.
- ↳ Be easily communicated with staff and council to build awareness of the current state, risks and priorities.
- ↳ Inform the development of organizational asset management objectives.
- ↳ Form the basis for policy, strategy, and plan development or improvements.

Assessing the current state of assets is not merely a one-time activity that is done at the outset of building asset management practices. It is important that information about what assets are owned, their replacement value, age, risk, and role in service delivery is updated as new assets are added or replaced, degrade in condition or are retired, the replacement costs change, or the community's service needs change. An asset registry is a powerful tool that can inform decision-making about day-to-day activities or long-term plans, and it must be kept up-to-date to add value to the organization.



## ASSET CONDITION ASSESSMENT AND GAS TAX FUNDING

"It is my view that our asset management project is our single, greatest corporate challenge. Every service we deliver depends upon the many millions of dollars in tangible capital assets owned by the City. Led by Council, we have a statutory responsibility for the stewardship of those assets on behalf of all present users, and on behalf of all those who will use them in the future.

Asset condition assessment is an on-going practice that underpins the entire project. However, with a limited flow of funding each year, the approach to it will be strategic. For example, in our early stages, it is generally better to develop basic information on all assets in all asset classes, rather than exhaustive information on a few assets isolated within one or two asset classes or departments. This is because the City's assets exist to deliver a broad range of public services, and each service-delivery unit should have equal assurance that the assets it depends upon will not suffer in-service failure.

To that end, the Asset Management Working Group will use the Condition Grading System regardless of asset class and asset condition assessments will have continuing priority use of Gas Tax revenue as its funding source."



– David Allen, Chief Administrative Officer to Courtenay,  
Asset Management Working Group

## Activities

- ↳ Identify and compile existing sources of asset information, such as the asset register developed for PSAB compliance; asset plans, reports, and studies; condition assessments; operations logs or reports; maintenance history; specialized staff knowledge.
- ↳ Determine the appropriate type of asset register or inventory to develop, based on current capacities, needs, staffing levels, and ability to use software.
- ↳ Develop the asset register to consolidate asset information:
  - Physical asset attributes,
  - Replacement values,
  - Asset conditions - physical condition, demand/capacity condition, and functional condition,
  - Asset risk profiles, including emerging risks such as changing climate,
  - Current and desired levels of service, and,
  - Long-term financial requirements for capital, maintenance and operating expenditures.
- ↳ Conduct asset condition assessments as appropriate, or document known asset condition information.
- ↳ Conduct asset risk assessments, based on the probability and consequence of failure.
- ↳ Define the current customer and technical levels of service.
- ↳ Tabulate current capital, operations and maintenance expenditures by asset class.
- ↳ Identify fully amortized assets and review their suitability for continued service.
- ↳ Extend life cycles of fully amortized assets based on sound condition assessments.
- ↳ Evaluate accumulated amortization by asset class and compare it to past and present maintenance and capital renewal expenditures of that asset class.
- ↳ Identify changes in asset replacement values, condition, risk profiles, and levels of service if the state of assets has been assessed in the past.
- ↳ Compile information from the assessment into a summary report and communicate key messages with staff and council as context for the need for asset management.
- ↳ Develop relevant policies and programs to ensure that the asset register is kept up-to-date as conditions, assets, and costs change.



## TIPS FOR GETTING STARTED

**Start small.** Asset management includes all asset classes, but it may be easier to start with one class as an internal learning exercise to build understanding of the process and achieve a “quick win”.

**Build upon your Tangible Capital Asset (TCA) Registry.** If no other asset registry is in place, the information compiled for TCA reporting can be a good place to start. This information can be compiled into your asset registry. Use widely available software tools, such as Excel and Geographical Information System (GIS) to develop the initial asset registry. More sophisticated tools can be implemented at a later date if needed.

**Invest in training.** Send representatives from finance, public works, and engineering to asset management training together as a team (see Asset Management BC for training opportunities). Up-front training can go a long way to building an organization's capacity for asset management and ensuring that the organization can make progress quickly.



## ADDITIONAL RESOURCES – ASSESS THE CURRENT STATE OF ASSETS

1. [Asset Management Data Register](#) – Master Municipal Construction Documents Association
2. [NAMS.PLUS](#) - Institute of Public Works Engineering Australasia
3. [Developing Levels of Service](#) – Federation of Canadian Municipalities
4. [International Infrastructure Management Manual](#) – Institute of Public Works Engineering Australasia
5. [Primer on Asset Management](#) – Canadian Infrastructure Report Card
6. [Condition Assessment and Asset Performance Guidelines](#) – Institute of Public Works Engineering Australasia
7. [Practice Note 8: Levels of Service & Community Engagement](#) - Institute of Public Works Engineering Australasia
8. [Infrastructure Review Presentation](#) - City of Victoria

## 6.3 Plan

### 6.3.1 ASSET MANAGEMENT POLICY

The asset management policy is a document that formalizes corporate commitment to asset management. The policy broadly outlines the principles and guides the development and implementation of asset management across the organization in a systematic and coordinated way, consistent with the organization's plans.



The asset management policy will identify the connection between community objectives and the management of infrastructure assets; principles to guide decision-making about assets and services; the integration of asset management into other documents, plans, and processes; and the organization's approach to asset renewal and financing.

Some example policy principles include:

- ✦ All relevant legislative requirements together with political, social, and economic environments will be taken into account in asset management.
- ✦ Asset management principles will be integrated within planning and operational processes.
- ✦ A consistent asset management strategy will exist for implementing systematic asset management and appropriate asset management best-practices throughout a municipality.
- ✦ Asset management plans will be developed for major service/asset categories. These plans will be informed by community consultation consistent with engagement strategies and activities; land use planning, financial planning and reporting.
- ✦ Asset renewals and agreed service levels will be identified in asset management plans. Asset management plans will be used to update the long-term financial plan.
- ✦ An inspection regime will be used to ensure agreed service levels are maintained and neither drop nor creep without input or Council approval.
- ✦ Annual budget deliberations will be informed by asset renewal alternative options, along with operating, maintenance and capital budget impacts. Service and risk consequences of asset renewal alternative options will be made clear in both asset management plans and budget documentation.

- ↳ Asset renewal plans will be prioritized and implemented progressively based on agreed service levels and the effectiveness of the current assets to continue providing that level of service.
- ↳ Assets are to be managed, valued and depreciated in accordance with appropriate best practice using replacement values - not historical costs.

### Why It's Important

Having an asset management policy is critical to ensuring effective long-term implementation of asset management. The policy:

- ↳ Sets out clear guidance for council and staff for undertaking the asset management process. This includes corporate goals and objectives and may set up timelines for achieving results.
- ↳ Establishes the organization's commitment to asset management and stable, long-term funding for the operation, maintenance, renewal, replacement or decommissioning of infrastructure.
- ↳ Ensures the approach to asset management is integrated throughout the organization and aligned with high level objectives.
- ↳ Provides direction for developing the asset management strategy and asset management plans.



### ADOPTION OF AN ASSET MANAGEMENT POLICY CITY OF MERRITT

"Adoption of the asset management policy helped formalize some of the good things we were already doing, and define what we could be doing better. Adoption of an asset management policy helped us create a culture of big picture thinking. Every time we take on a new asset, we are looking at what it's going to cost to operate and eventually replace in the future. The asset management policy also helped set the tone for budget deliberations and everyone is always looking forward and not just at today. The policy helped us to look at our utility systems from a full life cycle cost basis. This was instrumental in setting user rates that will sustain the utility systems into the future and plan for their renewal. With our asset management policy, we are no longer in a state of crisis but have set rates that will ensure the safe reliable operation and renewal of our utility systems well into the future."

- Shawn Boven, Public Works Manager/Approving Officer, City of Merritt



## Activities

- ✎ Identify linkages between the long-term community vision, objectives, and plans; and the short- and long-term management of assets including risks and opportunities.
- ✎ Identify the key drivers for asset management.
- ✎ Communicate the state of assets and practices to provide context for policy setting.
- ✎ Establish goals and objectives for the asset management process that are aligned with asset management drivers, in order to set a clear understanding for council/board and staff undertaking the asset management process.
- ✎ Draft a policy (refer to resource links and sample policies referenced).
- ✎ Get council/board endorsement on the policy.
- ✎ Communicate the policy throughout the organization.
- ✎ Review and update the policy as needed, or every three to five years.



### TIPS FOR GETTING STARTED

**Identify the right approach.** The most efficient path to implementing successful asset management depends on the organization. Some find success with a **top-down approach**, starting with the endorsement and support of senior management and council. A top-down approach requires leadership and council buy-in, vision, and strong communication abilities. Endorsing an asset management policy can come early in these organizations. Other organizations begin with a **bottom-up approach**. In these organizations, early asset management plans are developed to provide good and clear examples to senior leadership and council of the value of asset management. A bottom-up approach requires motivated teams working together and strong communication among team members.

These approaches are not mutually exclusive; these approaches can be very effectively used together.



### ADDITIONAL RESOURCES

1. [Guide to Developing a Municipal Asset Management Policy](#) – Local Government Asset Management Working Group
2. [Asset Management Policy Manual](#) | Town of Gibsons
3. [Asset Management Policy](#) | City of Vernon

### 6.3.2 ASSET MANAGEMENT STRATEGY

The asset management strategy is a corporate-level document that summarizes how organizational objectives relate to the development of asset management objectives, and how the organization will approach the development of asset management practices and plans to achieve the objectives. The asset management strategy:

- ↳ Documents the current state of assets (e.g. replacement values, conditions, risk, levels of service), establishing a big picture context for the need for asset management.
- ↳ Outlines current asset management practices.
- ↳ Identifies the desired state of assets, the target levels of service and critical risks to be managed.
- ↳ Provides a guide to each department to effectively implement asset management by documenting the desired asset management practices, including asset management objectives and the corporate approach to developing and implementing asset management plans.
- ↳ Identifies how other corporate plans for finances, community growth, and sustainability are linked to asset management plans, and how asset management decision-making is integrated into the organization.
- ↳ Provides clarity on the roles and responsibilities of the asset management team.
- ↳ Summarizes projected resource requirements for developing and implementing asset management plans, including future requirements for capital, operations, and maintenance.
- ↳ Identifies the approach to reviewing and updating the strategy.

The strategy also outlines a plan for integrating the elements of people, information, assets, and finances to achieve the asset management objectives.

#### Why It's Important

The asset management strategy provides the link between the policy level of the organization and the day-to-day implementation, and links asset management to other corporate initiatives. Without alignment of objectives, priorities, and approach, an organization risks ineffective and inefficient use of assets, staff time, and financial resources.

The benefits of an asset management strategy include:

- ↳ Achieving corporate alignment and capacity in the approach to asset management.



- ↳ Communicating a clear direction on the nature of integration between asset management and other plans and processes.
- ↳ Developing a connection point between asset management policy and asset management plans (tying it all together).
- ↳ Having accessible and uniform information about the state of assets and asset management practices to inform high-level decision making and budgeting.



## MAKING PROGRESS IN ASSET MANAGEMENT

"Prince George assessed its capacity to undertake asset management (AM) in 2004 followed by development of a business plan in 2006 which identified the tools required and how these might be integrated to optimize city systems while managing the costs of ownership. Prince George initiated a "top-down" approach to evaluate the high level and long-term funding requirements for the replacement of its infrastructure.

The funding requirements for its roads, drainage, water and sanitary networks were first reported to Council in 2006. In 2007 the City added an Asset Manager position to develop internal capacity and provide the resources to allow the AM work to continue to develop. In 2013 the city's estimate of the replacement value of its assets was \$2.3 billion as compared to a reported cost (PSAB-3150) of \$810 million. This information together with estimates of the City's backlog of infrastructure re-investments together with Council understanding and support of the importance of the issues to be addressed has increased the City's AM activity.

Prince George's AM Policy was implemented in December 2012 followed by its first Strategic Plan in February 2013. The strategic plan outlines the progress made from 2004 to 2013 and includes a corporate work plan for the short-medium term. The strategic plan is now under review together with updates to the replacement value of the City's infrastructure. All of this activity is scalable to any organization along with a varying sophistication of available tools from spreadsheets to custom software which can be tailored to an organization's AM maturity."

- Frank Blues, Asset Manager,  
City of Prince George



## Activities

- ↳ Articulate asset management drivers.
- ↳ Identify corporate asset management objectives.
- ↳ Define the linkages between asset management and other organizational plans or initiatives.
- ↳ Develop a high level corporate asset management framework.

- ↳ Develop a standard corporate approach to:
  - the development and update of asset management plans,
  - measuring asset management performance against asset management objectives, and,
  - asset management and financial sustainability performance reporting.
- ↳ Communicate progress on the asset management strategy with senior leadership and council annually.
- ↳ Review the asset management strategy every three to five years.
- ↳ Provide an asset management orientation to new councils to ensure understanding of asset management and the corporate asset management strategy.



## TIPS FOR GETTING STARTED

**Build a framework.** Rather than developing a full strategy, it can be helpful to begin by drafting a high-level corporate asset management framework. The framework summarizes the key elements of asset management, the organization's approach to asset management, and how asset management connects to other corporate plans and processes. This framework can be considered the skeleton of the asset management strategy, and can be easily reviewed and iterated by internal stakeholders, building awareness and alignment with staff.



## ADDITIONAL RESOURCES

1. [Infraguide – Managing Infrastructure Assets](#) | Federation of Canadian Municipalities and National Research Council
2. [ISO 55000](#) – International Organization for Standardization
3. [Asset Management Framework](#) | District of North Vancouver

### 6.3.3 ASSET MANAGEMENT PLAN

A local government may choose to have an asset management plan for each asset type, and/or a corporate asset management plan that includes all of the assets owned by the organization. Each asset management plan should tell the story of the assets it discusses. It should be a readable and user-friendly document that is long-term in scope. These asset management plans are continuously improved and regularly incorporate new information or changing requirements.

Asset management plans identify:

- ↳ Assets owned and their condition.
- ↳ Gaps between the current and desired levels of service.
- ↳ Risks to service delivery.
- ↳ Practices, projects, and programs required to meet organizational asset management objectives, manage risks, and achieve the desired level of service in the most cost effective way.
- ↳ A timeline for implementation.
- ↳ Resources required.
- ↳ Necessary future improvements to the plan.

While each asset or group of assets is unique with specialized requirements, certain key elements can be standardized using a corporate approach to achieve the best results including:

- ↳ Condition measures (e.g. very good - 1, good - 2, fair - 3, poor - 4, very poor - 5).
- ↳ Risk frameworks based on the consequence and probability of failure.
- ↳ Levels of service focused on both customers and technical requirements.
- ↳ Capital, maintenance and operating expenditure requirements.
- ↳ The planning time frame (minimum 10 years) and structure to support easy update of long-term financial plans.

#### Why It's Important

Asset management plans provide clear direction on what to do, when to do it and how much it will cost. It should also identify the consequences of not doing it. The plan:

- ↳ Helps plan for and allocate human and financial resources.
- ↳ Provides a practical guide to making decisions about assets.
- ↳ Supports the implementation of the asset management strategy and policy.
- ↳ Identifies actions for achieving the asset management objectives.
- ↳ Provides the basis for developing the long-term financial plan.



## ASSET MANAGEMENT OUR PRACTICE

Our approach to asset management can be compared to living a healthy lifestyle that involves discipline and making good choices; a multifaceted and lifelong endeavor. You can't complete a 6 month program and claim a successful finish. Neither is it a do or don't proposition whereby you don't take care of yourself and you immediately wither and die. Thus, the issue is not whether you do "asset management"; it is whether you manage your assets well. Accordingly, we view asset management as a philosophy that we practice. This helps us imbed what we believe to be a sound and responsible methodology for effective service delivery in everything we do.

Our asset management strategies are founded in achieving sustainable service delivery.

- No unfunded liabilities by reconciling service levels desired by the community with the community's willingness to pay (LOS vs \$).
- Integrated decision making across the service delivery spectrum.

In order to achieve our goals we differentiate and focus on both the technical and political processes involved to secure successful outcomes.

Technical aspects need but follow well established asset management methodologies. The trick is to keep it as simple as possible and avoid overanalyzing.

Political tactics can be much more challenging but are essential to obtaining support from decision makers. Obtaining long-term political support requires achieving community buy-in. Every practical long-range infrastructure plan or initiative involves change and leading the change represents the challenge. We strive to put as much focus and effort into the public aspects of our asset management practice as we do on technical aspects and we believe the combination of these factors has been key achieving success.

Case in point is our Water Master Plan adopted by Council in 2012 which identifies a very ambitious \$80 million capital improvement program intended to be delivered over 20 years. The plan required raising water rates from approximately \$500 per year per household to \$750. Obviously, this had the potential to result in significant community backlash. Our success in obtaining community buy-in resulted from clearly articulating the issues followed by presenting solutions including benefits. Inevitably the questions boil down to "What's in it for me?" and "How much is it going to cost?". We didn't always get enthusiasm but we often got understanding, "I don't like it but I get it!". In the end our objective is not consensus but community solidarity because solidarity is much more powerful and lasting than consensus which is apt to change.



- Greg Buchholz, Director of Infrastructure Services,  
District of Lake Country

## Activities

- ↳ Obtain asset information (outputs from assessing the state of the assets).
- ↳ Identify data gaps.
- ↳ Prioritize and fill data gaps, or make informed and documented assumptions where there are information gaps.
- ↳ Document current levels of service and asset performance.
- ↳ Identify the target level of service for each asset type.
- ↳ Identify actions required to meet the target level of service and the associated costs.
- ↳ Review operations and maintenance costs.
- ↳ Compile information into a minimum 10-year plan for each asset class.
- ↳ Identify improvements to asset management practices and processes.
- ↳ Summarize information into an asset management plan for each service area (e.g. water, transportation, recreation, etc.).
- ↳ Communicate the asset management plan(s) throughout the organization.
- ↳ Review the asset management plan annually, and update with new information or adjustments.



### TIPS FOR GETTING STARTED

**Start wherever you are.** If an asset management strategy is in place, it should outline the corporate approach to developing asset management plans. If the corporate approach has been defined, it can be followed and areas for improvement can be identified. For some organizations, developing a basic asset management plan is the first thing they do, and no corporate approach has been defined yet. In most cases, these early asset management plans are based on available information and anecdotal knowledge. They have large information gaps and significant areas for improvement. However, these early plans are important tools for communicating the process of asset management, and can be very helpful in building momentum in an organization.



## ADDITIONAL RESOURCES

1. [Asset Management Roadmap](#) | Asset Management BC
2. [Roadmap Case Studies](#) | Asset Management BC
3. [Primer on Asset Management](#) – Canadian Infrastructure Report Card
4. [Infrastructure Costs and Urban Growth Management](#) | Sustainable Cities International
5. [Optimized Asset Decision Making @ the Region of Peel](#) | Region of Peel
6. [NAMS.PLUS \(Training Program\)](#) | Institute of Public Works Engineering Australasia
7. [Level of Service & Community Engagement: Practice Note 8](#) | Institute of Public Works Engineering Australasia
8. [Presentation on Developing Levels of Service](#) – City of Prince George

### 6.3.4 INTEGRATE TO LONG-TERM FINANCIAL PLAN

The integration of asset management plans with the long-term financial plan is necessary for sustainable service delivery. This integration identifies gaps between long-term potential costs and available funding, and includes a review of requirements for capital (renewal/growth), operations, and maintenance. Integrating asset management plans with the financial planning process provides the basis for developing, reviewing, updating, and implementing financial strategies for sustainability. This integration may result in the identified need to reduce costs (adjust service levels) or increase funding (raise revenue).

Residents and ratepayers are both the recipients of services and the source of funding. Therefore adjustments between service levels and funding should reflect the community's priorities, willingness to pay, and Council decisions in fulfilling their stewardship and governance obligations. Both asset management plans and the long-term financial plan require regular updates and are the foundation for significant parts of the annual budget plan.

## Why It's Important

Integrating services and financial resources is necessary for sustainable service delivery. This integration:

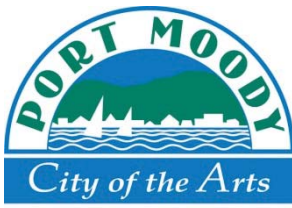
- ↳ Translates your asset management plan from a wish list to an actionable plan.
- ↳ Stabilizes costs over the long-term.
- ↳ Puts you on track to manage and reduce your infrastructure backlog.
- ↳ Provides justification for financial support from higher levels of government, or the basis for evaluating alternative models of service delivery (e.g. Public Private Partnerships), reduced levels of service or service/asset elimination.



### LONG-TERM FINANCIAL PLANNING IN PORT MOODY

Port Moody Council and staff fully endorse the principles of sustainable financial planning to ensure the financial well-being of future generations. In 2012, Council funded a detailed assessment of all of our major assets and then proceeded to develop and implement a long-range strategic financial plan. This plan took into consideration the current asset renewal backlog and the future planned replacement needs. Although our water and sewer utilities were appropriately funded, it was determined that other areas, particularly roads, bridges, and facilities, were under-resourced and required an increase in our asset levy of approximately 10%.

Port Moody Council considered the detailed analysis and the longer-term financial implications and committed to addressing infrastructure renewal before adding new infrastructure. As City Manager, there is nothing more rewarding than having a brave Council who addresses the “unsexy” asset replacement challenges before adding any “sexy” new projects. Port Moody Council should be congratulated on their courage to do the right thing – sustain your existing assets before adding anything new. These great decisions were a direct result of developing the detailed science behind long-term asset renewal.



– Kevin Ramsay, City Manager,  
City of Port Moody

## Activities

- ✎ Compare asset management plans with the long-term financial plan to identify gaps between projected costs and projected revenues.
- ✎ Communicate the value and costs associated with service delivery with Council and residents.
- ✎ Consult residents and ratepayers about willingness to pay for services and service levels.
- ✎ Identify an annual target asset investment level that is considered sustainable.
- ✎ Implement strategies to gradually raise revenues or reduce costs to meet the target annual investment level and desired levels of service.
- ✎ Identify and adjust service levels to reflect affordability and willingness to pay.
- ✎ Update asset management plans and the long-term financial plan to reflect adjustments made or actions identified to reduce costs or increase funding.



### TIPS FOR GETTING STARTED

**Build a shared understanding.** Arrange for a meeting between financial and technical personnel to build a shared understanding around relevant topics such as the use of Tangible Capital Asset data reported for PS3150, long-term financial planning for asset replacement, and financial risks.



### ADDITIONAL RESOURCES

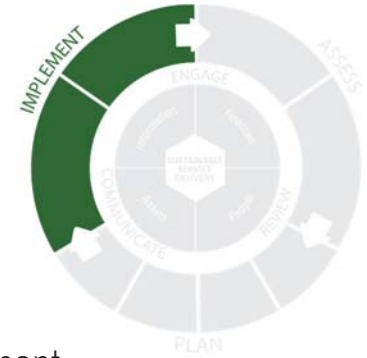
1. **Long-range Financial Planning** | Government Finance Officers Association of BC
2. **Long- term Financial Planning and Asset Management Presentation** | District of North Vancouver
3. **Long-term Financial Plans** | Local Government Association of South Australia
4. **Practice Note 6: Long-term Financial Planning** | Institute of Public Works Engineering Australasia



## 6.4 Implement

### 6.4.1 IMPLEMENT ASSET MANAGEMENT PRACTICES

Plans and practices are developed to be implemented. The asset management strategy outlines the corporate asset management objectives and approach, and the asset management plans identify what projects, programs, and practices need to be implemented to meet the asset management objectives. Implementing these practices is the next step in the process of continuous quality improvement.



The implementation of practices will be related to some or all of the core elements: people, assets, information, and finances. The implementation of practices will be incremental and based on available financial and human resources.

Much of the implementation task is related to updating information (e.g. improving asset condition information, improving risk assessments, etc.) and implementing projects identified in asset management plans to manage risk to service delivery.

### Why It's Important

Although the necessity of implementing plans may seem obvious, many communities become so focused on developing asset management plans that they consider themselves finished once the plans are done. While the development of the plans is important, it is the implementation of the plans and ongoing asset management practices that are most impactful.

Asset management requires a systematic approach, using an array of information for decision-making. This systematic approach of implementing asset management practices in an organization becomes routine practice, and ensures that the initial investments made to establish the asset inventory are not wasted as the inventory becomes out of date. These practices:

- ✎ Build the capacity of your organization to meet asset management objectives on an ongoing basis.
- ✎ Ensure that quality information is available.
- ✎ Ensure that information is used effectively to make better decisions.
- ✎ Embed asset management into your organization as a way of doing business.

## Activities

- ↳ Update the asset inventory by adding new assets, identifying asset renewals, replacements, and decommissioned assets.
- ↳ Update asset replacement costs.
- ↳ Implement risk management plans and projects.
- ↳ Implement asset maintenance, renewal, and replacement projects.
- ↳ Hold regular asset management team meetings to review implementation progress, successes, and challenges.
- ↳ Review and update lifecycle analysis of assets in the asset management plan;
- ↳ Update related corporate plans to reflect asset management information (e.g. utility master plans, the official community plan, etc.).
- ↳ Implement appropriate asset management systems to support data management.
- ↳ Train staff to enhance asset management competencies, skills, and organizational capacity.
- ↳ Develop succession plans.
- ↳ Update and develop job descriptions to align with asset management requirements.

### 6.4.2 MEASURE AND REPORT

Best practices in progress measurement use high-level, corporate-wide indicators expressed in financial terms as overall indicators of progress. These indicators are tangible and measurable, and can help to highlight the connection between cost and service, and performance trends over time.

Reporting demonstrates measurable progress in implementing the process and achieving sustainable service delivery. Annual and financial reports should include progress against the asset management objectives and outcomes identified in the asset management strategy and asset management plans, including performance on the indicators selected.

Each local government may wish to develop their own set of performance measures and processes for reporting.

#### **Why It's Important**

Asset management is a continuous improvement process, and processes are more likely to improve when results are being measured. Setting optimal levels of service requires understanding both the assets and finances needed to sustain service levels over the long-term. Understanding the connection between service and price is fundamental to being able to communicate progress to stakeholders toward achieving service, asset and financial sustainable. Making progress against indicators demonstrates the reduction of infrastructure backlogs and that service levels (and costs) are at a level people are willing to pay for.

#### **Activities**

- ✎ Develop or select key indicators for performance measurement (customers, technical and financial).
- ✎ Report on performance against indicators.
- ✎ Publish performance results in community annual report.



## ASSET MANAGEMENT BC ROADMAP IN PRACTICE

"The Regional District of Nanaimo is finalizing its integrated asset management strategy and implementation plan. Using the Asset Management BC Roadmap (AM BC Roadmap) as a guide we were able to assess where we are with asset management and where to focus in developing an effective and sustainable asset management process.

The Asset Management BC Roadmap is scalable, non-prescriptive and gives a realistic and understandable view of the asset management components. "Modules of practice", six in all, capture the key principles. Using these modules we were able to work through our current strengths and weaknesses and then move on to develop our implementation plan. What we now have is baseline information and a tool that allows us to measure progress as we implement asset management practices.

An important aspect of the Asset Management BC Roadmap is that it allows for plans to be developed that reflect each local government's individual needs. It isn't a one solution fits all approach, it gives you the tools to build a process that meets your community infrastructure profile.

The Asset Management BC Roadmap has been invaluable in clearly setting out the practices that our organization needs to effectively understand, manage and make informed decisions about the long-term sustainability of our community infrastructure."

- Mike Donnelly, Manager of Water & Utility Services



## ADDITIONAL RESOURCES

1. **Long Range Financial Planning** | Government Finance Officers Association of BC
2. **Financial Sustainability Information Paper #9** | Local Government Association (Australia)
3. **Asset Management Roadmap** | Asset Management BC
4. **AssetSmart** | Asset Management BC
5. **Asset Management Framework** | District of North Vancouver
6. **Long-Term Financial Planning – Practice Note 6** | Institute of Public Works Engineering Australasia

## 7.0 Resources & Tools

The following documents and tools have been listed throughout this framework as resources to support the development and implementation of asset management practices. Publicly available presentations, plans, and other documents from BC municipalities have also been listed throughout the framework to provide examples. All of these resources, and more, are also linked on the Asset Management BC website ([www.assetmanagementbc.ca](http://www.assetmanagementbc.ca)).

### ASSET MANAGEMENT BC | ASSET MANAGEMENT ROADMAP

#### Description

A document that guides the reader through the steps of implementing asset management at a basic, intermediate, and advanced level through a modular approach.

#### This may help you with

- ↳ Understanding the scope of asset management activities
- ↳ Developing asset management plans
- ↳ Implementing asset management practices

### ASSET MANAGEMENT BC | ASSET MANAGEMENT ROADMAP CASE STUDIES

#### Description

A report summarizing the approach and results of four case studies in applying the Asset Management Roadmap.

#### This may help you with

- ↳ Understanding how to implement the roadmap
- ↳ Identifying how your results compare to other local governments

### ASSET MANAGEMENT BC | ASSETSMART SELF-ASSESSMENT TOOL

#### Description

An assessment tool for use by organizations to gain a comprehensive and high-level snapshot of the state of their asset management practices.

#### This may help you with

- ↳ Assessing your organization's asset management practices
- ↳ Developing priorities for building or improving asset management practices

## **ASSET MANAGEMENT BC | A GUIDE TO DEVELOPING A MUNICIPAL ASSET MANAGEMENT POLICY**

### **Description**

A draft guide describing the benefits of having an asset management policy, what the policy might include, and a sample asset management policy for reference.

### **This may help you with**

- ↳ Developing asset management policy

## **LOCAL GOVERNMENT MANAGEMENT ASSOCIATION OF BC - EXCHANGE MAGAZINE FALL 2014 | ASSET MANAGEMENT: FROM AWARENESS TO ACTION**

### **Description**

An issue of *Exchange Magazine* dedicated to asset management. It includes accessible articles that describe the asset management journey of a few Canadian local governments and the evolution of asset management.

### **This may help you with**

- ↳ Communicating asset management with non-technical stakeholders
- ↳ Understanding the challenges and successes experienced in other communities

## **FEDERATION OF CANADIAN MUNICIPALITIES | DEVELOPING LEVELS OF SERVICE**

### **Description**

Developed as a best practice to accompany the National Guide to Sustainable Infrastructure, this guide describes why levels of service need to be defined and when, and how to do it. The appendix includes some case studies describing application.

### **This may help you with**

- ↳ Understanding the need to define levels of service
- ↳ Defining levels of service

## **FEDERATION OF CANADIAN MUNICIPALITIES, CANADIAN CONSTRUCTION ASSOCIATION, CANADIAN PUBLIC WORKS ASSOCIATION, CANADIAN SOCIETY OF CIVIL ENGINEERS | ASSET MANAGEMENT PRIMER – CANADIAN INFRASTRUCTURE REPORT CARD**

### **Description**

An accompanying document to the Canadian Infrastructure Report Card, this primer describes asset management and makes a set of recommendations for implementing asset management. The primer also includes an asset management plan outline.

### **This may help you with**

- ↳ Developing asset management plans

- ↳ Understanding key components of asset management

## **INSTITUTE OF ASSET MANAGEMENT AND BRITISH STANDARDS INSTITUTE | PUBLICLY AVAILABLE SPECIFICATION 55: ASSET MANAGEMENT**

### **Description**

A guide that describes the requirements, structure, and development of an organizational asset management system for businesses that are intensive in physical assets ([www.iam.org](http://www.iam.org)).

### **This may help you with**

- ↳ Moving towards the achievement of advanced asset management practices

## **INFRAGUIDE | DECISION MAKING AND INVESTMENT PLANNING: MANAGING INFRASTRUCTURE ASSETS**

### **Description**

A series of 'best practice' documents for public works and asset management ([www.fcm.ca](http://www.fcm.ca)).

### **This may help you with**

- ↳ Developing an asset management plan

## **INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO) | INTERNATIONAL STANDARD 55000, 55001 AND 55002: ASSET MANAGEMENT**

### **Description**

An international standard for asset intensive businesses that provides an overview of the benefits, elements, requirements, and design of an asset management system ([www.iam.org](http://www.iam.org)).

### **This may help you with**

- ↳ Understanding asset management strategy
- ↳ Understanding the role of leadership in asset management
- ↳ Understanding the importance of a communication plan and what should be included

## **INSTITUTE OF PUBLIC WORKS ENGINEERING OF AUSTRALIA | INTERNATIONAL INFRASTRUCTURE MANAGEMENT MANUAL**

### **Description**

A definitive manual that outlines what asset management is and provides guidelines for how to implement asset management, techniques that can be used, and information management ([www.ipwea.org](http://www.ipwea.org)).



**This may help you with**

- ↳ Deepening understanding of asset management concepts through a description of implementation and several case studies

**INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA | NAMS.PLUS****Description**

A subscription based service that includes a set of templates and modelling tools to assist organizations in writing and updating asset management plans, based on the Infrastructure Management Manual.

**This may help you with**

- ↳ Assessing your organization's asset management practices
- ↳ Developing asset management policy and strategy
- ↳ Developing asset management plans
- ↳ Develop long-term maintenance and capital works programs
- ↳ Developing multi-disciplinary teams

**INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA | CONDITION ASSESSMENT AND ASSET PERFORMANCE GUIDELINES****Description**

Generic principles for condition assessment and asset performance, applicable to all asset types.

**This may help you with**

- ↳ Planning for condition assessments or setting up a condition assessment program

**INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA | PRACTICE NOTE 6: LONG-TERM FINANCIAL PLANNING****Description**

A document that provides guidance for the preparation of a long-term financial plan.

**This may help you with**

- ↳ Developing a long-term financial plan.

## **INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA | PRACTICE NOTE 8: LEVEL OF SERVICE AND COMMUNITY ENGAGEMENT**

### **Description**

A guide to support local governments in defining affordable and appropriate levels of service.

### **This may help you with**

- ↳ Community engagement with respect to services
- ↳ Developing levels of service
- ↳ Identifying tradeoffs between cost and level of service

## **LOCAL GOVERNMENT ASSOCIATION OF SOUTH AUSTRALIA FINANCIAL | FINANCIAL SUSTAINABILITY INFORMATION PAPER #9**

### **Description**

A paper that describes the process of assessing financial sustainability, including a set of ready-to-use best practice indicators.

### **This may help you with**

- ↳ Assessing your organization's financial sustainability

## **LOCAL GOVERNMENT ASSOCIATION OF SOUTH AUSTRALIA | LONG-TERM FINANCIAL PLANS**

### **Description**

An information paper, within a series of papers about financial sustainability, describing the purpose and contents of a long-term financial plan.

### **This may help you with**

- ↳ Developing a long-term financial plan
- ↳ Linking your long-term financial plan to asset management

## **MASTER MUNICIPAL CONSTRUCTION DOCUMENTS ASSOCIATION | ASSET MANAGEMENT DATA REGISTER PROJECT**

### **Description**

The project includes an Infrastructure Data Scheme (IDS) that provides conventions for use in an asset register, and an Infrastructure Data Management Utility (IDMU) database that can be used by local governments to create and manage an asset inventory. The MMCD website includes several videos and other resources.

### **This may help you with**

- ↳ Developing your asset inventory
- ↳ Reporting the status of your inventory

## **NATIONAL ROUND TABLE ON SUSTAINABLE INFRASTRUCTURE | AN ASSET MANAGEMENT GOVERNANCE FRAMEWORK FOR CANADA**

### **Description**

A document outlining the role of various stakeholders in improving and enhancing the service by municipalities by promoting better management techniques.

### **This may help you with**

- ↳ Identifying asset management stakeholders

## **MICKELSON CONSULTING INC. | AM COMMUNICATIONS STRATEGY**

### **Description**

A presentation outlining key messages for communication and strategies for effective communication.

### **This may help you with**

- ↳ Internal and external asset management communication and engagement

## **SUSTAINABLE CITIES INTERNATIONAL | INFRASTRUCTURE COSTS AND URBAN GROWTH MANAGEMENT**

### **Description**

A guide for understanding the full costs of infrastructure and urban growth scenarios.

### **This may help you with**

- ↳ Undertaking cost of infrastructure studies



# 2020 Utility Rate Setting

## Water

## Sewerage & Drainage

## Solid Waste

Presented December 2, 2019

# 2020 Utility Rate Setting



## Guiding Principle

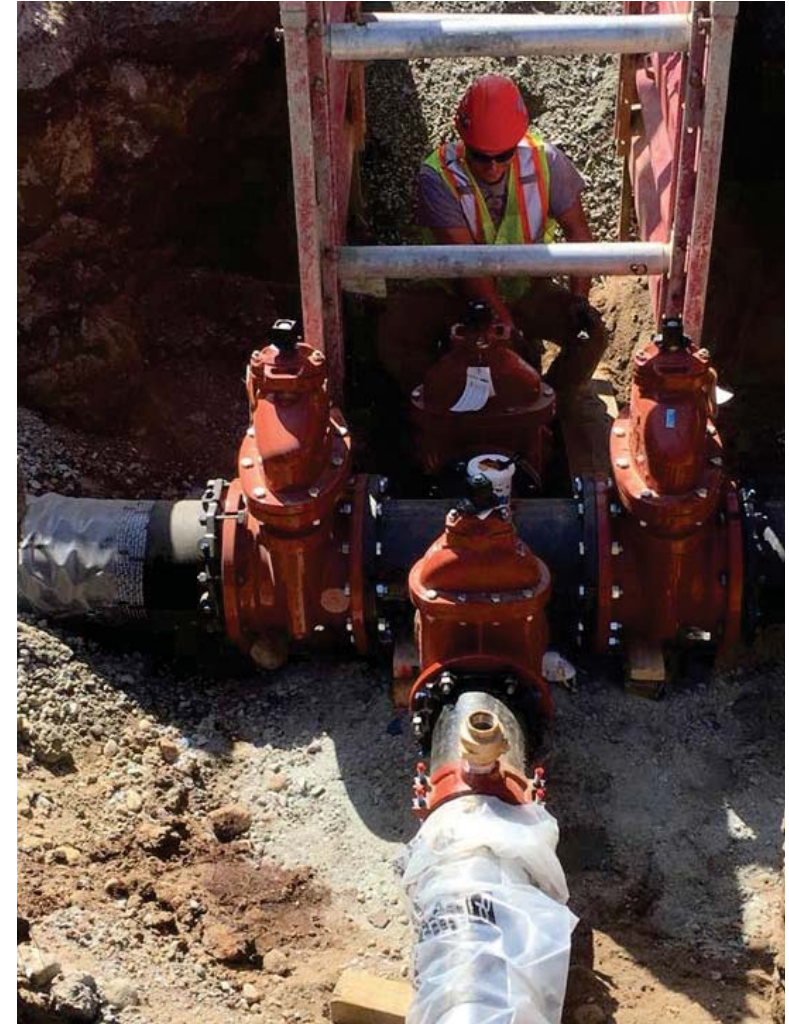
**Revenues collected must provide adequate funds for:**

- Operating & maintenance expenditures
- Infrastructure renewal and growth
- Adequate capital reserves



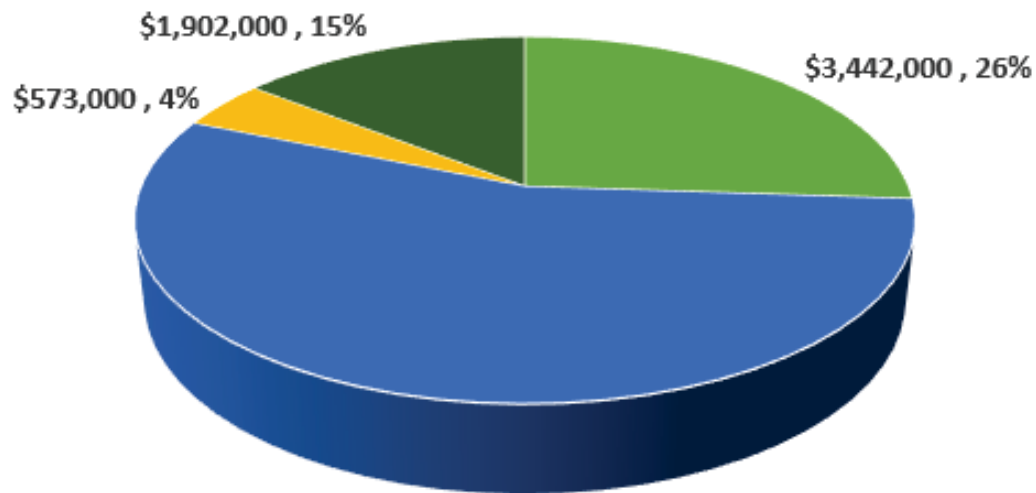
# Water Utility Infrastructure

- 129 km of water mains, 6,600 water connections
- Average pipe age - 50 years; average service life approx. 125 years
- Forecasting significant replacement required of small cast iron pipe
- 3.5% increase in our costs of water from Metro Vancouver; larger increases expected in future



# Water Utility

Expenses \$13,191,000

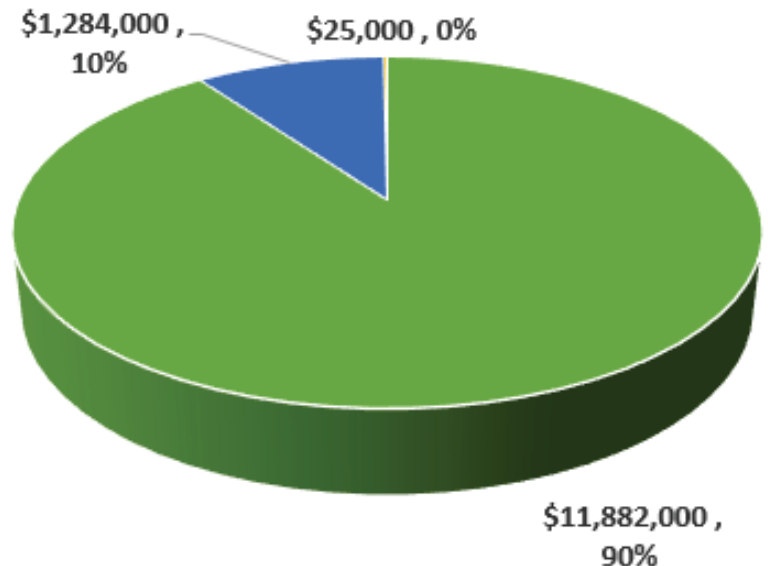


\$7,274,000 , 55%

- Capital & Reserves
- Water Purchases
- Distribution System
- Administration & Corporate Allocation

**\$7.3M for  
water  
purchases**

Revenues \$13,191,000



- Flat & Metered User Fees
- Other Revenues
- Contribution from Reserve



# 2020 Proposed Water Rates

	2019 Rate	2020 Rate	\$ Increase	% Increase
Single Unit*	\$469.30	\$489.00	\$19.70	4.2%
Duplex*	\$393.30	\$410.00	\$16.70	4.2%
Multi Unit*	\$274.55	\$286.00	\$11.45	4.2%
Blended Metered**	\$1.2820	\$1.3281	\$0.0461	3.6%

\*Net of 5% discount in 2019 (discontinued)

\*\*Net of 2% discount in 2019 (discontinued)

# Water Utility – 2020 Increase of 4.2%

Explanation	Increase
<b>Water Purchases</b> increase due to Metro rate increase of 6%, offset by decreased consumption	2.0%
<i>Reserves are used to fund large capital projects in order to off-set rate impacts:</i> <b>Transfers to Reserve</b> decreased by \$1.6M <b>Capital Projects</b> decreased by \$1.4M	13.5% <u>(11.8%)</u> 1.7%
<b>Water Administration</b> increase dues to wages (Re-org of Development staff), offset by reduced financial costs	0.3%
Other (penalties, fees, 3 <sup>rd</sup> party expenses, etc.)	0.2%
<b>2020 Water Utility Rate Increase:</b>	<b>4.2%</b>

# Sewerage/Drainage Infrastructure

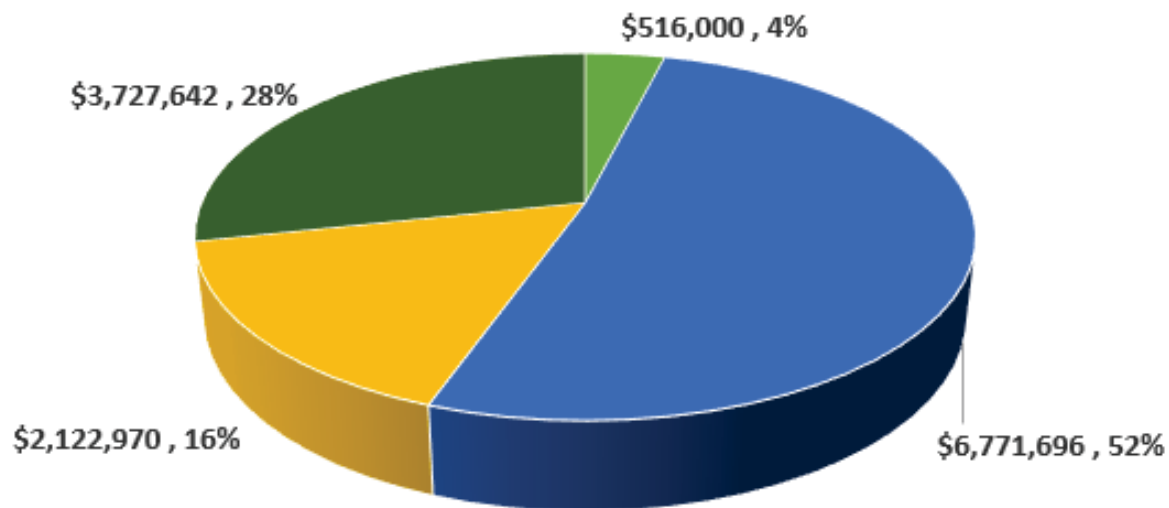
- 124 km of sanitary sewer mains, 6,800 service connections
- 148 km storm sewer mains, 5,161 service connections
- Sanitary pipes average age 61 years; increased replacement rate required
- Storm system vulnerable to climate change
- North Shore WWTP currently being replaced
- Metro Sewer levy up by 9.5% (compared to 21.5% previously expected for 2020); significant Metro increases coming



# Sewerage & Drainage Utility



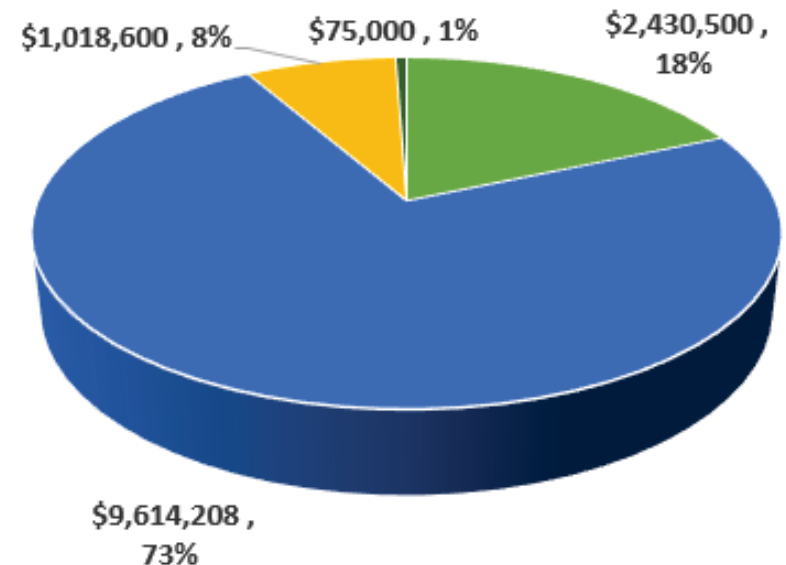
Expenses \$13,138,000



- Sanitary & Drainage Operations
- GVS&DD Charges
- Administration & Corporate Allocation
- Capital & Reserves

\$6.8M for  
GVS&DD  
levy

Revenues \$13,138,000



- Storm Drainage Levy
- Flat & Metered User Fees
- Other Revenues
- Contribution from Reserve

# 2020 Proposed Sewerage Rates

	2019 Rate	2020 Rate	\$ Increase	% Increase
Single Unit*	\$383.80	\$411.00	\$27.20	7.1%
Duplex*	\$355.30	\$380.00	\$24.70	7.0%
Multi Unit*	\$239.40	\$256.00	\$16.60	6.9%
Metered**	\$1.5556	\$1.6781	\$0.1223	7.9%

\* Net of 5% discount in 2019 (discontinued)

\*\* Net of 2% discount in 2019 (discontinued)

## Sewer & Drainage Utility – 2020 Increase of 7.1%

Explanation	Increase
<b>Metro Levy</b> GVS&DD Charges increased by 9.5%	6.3%
<i>Reserves are used to fund large projects in order to off-set rate impacts:</i>	
<b>Transfers to Reserve (net)</b> increased by \$367K	3.9%
<b>Capital Projects</b> decreased \$331K	(3.5%)
<b>Capital Programs</b> decreased by \$65K	<u>(0.7%)</u>
	(0.3%)
<b>Sanitary &amp; Drainage Operations:</b> Sanitary increase of \$31K, Drainage increase of \$75K	1.1%
<b>Sanitary &amp; Drainage Administration</b> increase dues to wages (Re-org of Development staff)	1.0%
<b>Storm Drainage Levy</b> increased revenue received through growth	(1.0%)
<b>2020 Sewer Utility Rate Increase:</b>	<b>7.1%</b>

# Removal of Discount on Water/Sewer Fees

- **What's happening?** In past years, the City has offered a discount of 5% for flat rate, and 2% for metered rate, Water and Sewer fees paid prior to the due date. It is being recommended that this practice be discontinued for 2020.
- **Why?** Some strata's and rental building owners have begun to rebill utilities to individual units, so there is no certainty that the savings are passed on to individual unit owners/renters.
- **What's the impact?** The 2020 annual increase is applied to the rate net of the discount, meaning that the base rate to be paid is already discounted for everyone.



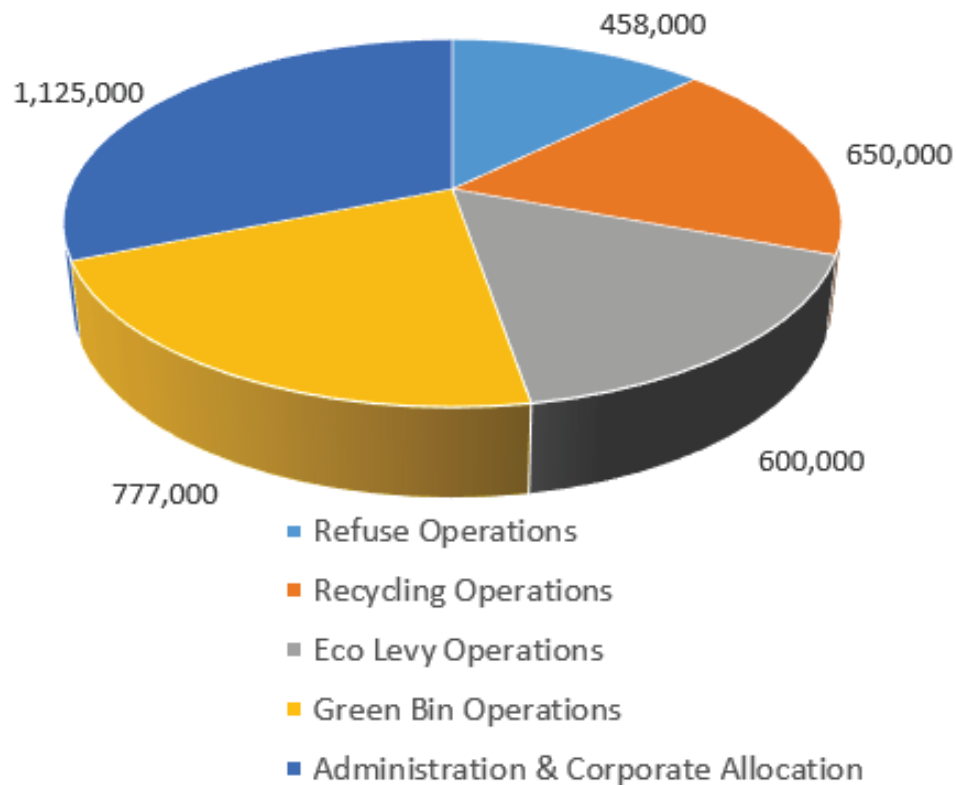
# Solid Waste Activities

- Starting July 2020 Recycle BC will take over residential recycling on the North Shore, resulting in CNV rate decreases
- Curbside refuse and Green Can collection provided to 7,800 households.
- 2018 refuse disposal rate of 213 kg/household (down 3.5% from 2017)
- 2018 Parks and street litter collection of 214 Tons (up 10% from 2017)
- 2018 “Red Bin” dog waste program in parks diverted 25 Tons from the solid waste stream.
- Cigarette butt collection program to be piloted in 2020

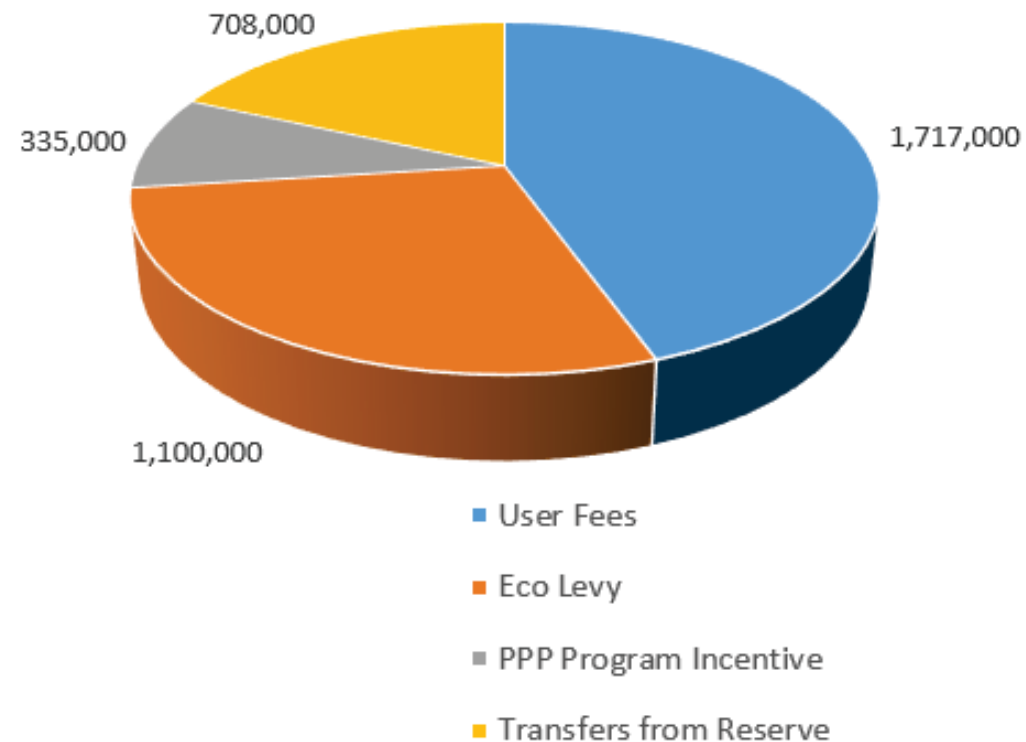


# Solid Waste Utility

Expenses \$3,860,000



Revenues \$3,860,000



# 2020 Proposed Solid Waste Rates

Single Unit	2019 Rate	2020 Rate	\$ Change	% Change
Refuse	\$111.00	\$115.00	\$4.00	3.6%
Green Can	\$118.00	\$125.00	\$7.00	5.9%
Recycling	\$23.50	\$0.00	(\$23.50)	(100%)
Eco Levy*	\$34.43	\$45.90	\$11.47	33.3%
<b>Total Solid Waste</b>	<b>\$286.93</b>	<b>\$285.90</b>	<b>(\$1.03)</b>	<b>(0.4%)</b>

Multi Unit	2019 Rate	2020 Rate	\$ Change	% Change
Recycling	\$18.00	\$0.00	(\$18.00)	(100%)
Eco Levy*	\$16.50	\$22.00	\$5.50	33.3%
<b>Total Solid Waste</b>	<b>\$34.50</b>	<b>\$22.00</b>	<b>(\$12.50)</b>	<b>(36.2%)</b>

\* Estimate – based on assessed value

# 2020 Single Unit Utility Rates

	2019 Rate	2020 Rate	\$ Increase	% Increase
Water*	\$469.30	\$489.00	\$19.70	4.2%
Sanitary Sewer*	\$383.80	\$411.00	\$27.20	7.1%
Drainage**	\$103.71	\$107.86	\$4.15	4.0%
Solid Waste	\$286.92	\$285.90	(\$1.03)	(0.4%)
<b>Total Single Unit</b>	<b>\$1,243.73</b>	<b>\$1,293.76</b>	<b>\$50.03</b>	<b>4.0%</b>

\*Net of 5% discount in 2019 (discontinued)

\*\*Estimated

DNV Comparative	2019 Rate	2020 Rate	\$ Increase	% Increase
Total Single Unit	\$1,677.75	\$1,754.35	\$76.70	4.6%

# 2020 Multi Unit Utility Rates

	2019 Rate	2020 Rate	\$ Increase	% Increase
Water*	\$274.55	\$286.00	\$11.45	4.2%
Sanitary Sewer*	\$239.40	\$256.00	\$16.60	6.9%
Drainage**	\$46.95	\$48.83	\$1.88	4.0%
Solid Waste	\$34.50	\$22.00	(\$12.50)	(36.2%)
<b>Total Multi Unit</b>	<b>\$595.40</b>	<b>\$612.83</b>	<b>\$17.43</b>	<b>2.9%</b>

\* Net of 5% discount in 2019 (discontinued)

\*\*Estimated

DNV Comparative	2019 Rate	2020 Rate	\$ Increase	% Increase
Total Multi Unit	\$1,179.15	\$1,236.10	\$56.95	4.8%

# Looking Ahead



## Significant Future Increases in Regional Rates

	2020	2021	2022	2023	2024	Avg.
<b>Bulk Water</b>	6.0%	6.1%	8.8%	9.9%	10.1%	<b>8.2%</b>
<b>GVS&amp;DD Levy</b>	9.5%	12.2%	18.2%	13.1%	14.1%	<b>13.4%</b>
<b>Tipping Fees</b>	4.6%	6.2%	5.8%	5.5%	5.2%	<b>5.5%</b>

- Funds have been put aside to mitigate impact of NSWWTP – currently \$3M
- Anticipated combined rate increases of 6% - 10% for the next five years

# Looking Ahead

- Managing our Utility infrastructure assets to optimize service life and ensure long term system viability
  - Asset Management Policy
  - Asset Management Strategy
  - Asset Management Plans
- Work with Metro on long range financial planning for regional systems
- Working with DNV, DWV and Recycling BC on the transition for residential recycling service delivery
- Working with Metro on a new organics processing contract for the North Shore





A photograph of a forest stream with mossy rocks and green foliage. The stream flows over dark, moss-covered rocks. The banks are lined with lush green trees and bushes, with some branches hanging over the water. The water is clear and reflects the surrounding greenery.

Thank you.

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Department Manager	Director	CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**FINANCE DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Ben Themens, Director of Finance

Subject: 2020 UTILITY RATES

Date: November 20, 2019

File No: 05-1820-01-0001/2020

*The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Director of Finance, dated November 20, 2019, entitled "2020 Utility Rates":

THAT "Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2019, No. 8739" be considered;

THAT "Sewerage and Drainage Utility Bylaw 1995, No. 6746, Amendment Bylaw, 2019, No. 8740" be considered;

AND THAT "Solid Waste Management Service, Bylaw 1997, No. 6920, Amendment Bylaw, 2019, No. 8741" be considered.

**ATTACHMENTS:**

1. Rates and Levies Summary (CD #1842572)
2. 2020 Water Budget (CD# 1847295)
3. 2020 Sewerage and Drainage Budget (CD# 1847295)
4. 2020 Solid Waste Budget (CD# 1847295)
5. Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2019, No. 8739 (CD #1847144)
6. Sewerage and Drainage Utility Bylaw 1995, No. 6746, Amendment Bylaw, 2019, No. 8740 (CD #1847171)
7. Solid Waste Management Service, Bylaw 1997, No. 6920, Amendment Bylaw, 2019, No. 8741 (CD #1847136)

## **PURPOSE:**

The purpose of this report is to provide Council with the financial impact and recommended bylaw amendments for the 2020 Utility Rates.

## **BACKGROUND:**

The City's Utility Rate Setting Process typically occurs in fall each year in order to allow preparation of utility bills for mailing in January.

Detailed information regarding the programs and projects considered in the various utility plans is provided in information reports prepared by the City's Engineering, Parks and Environment (EPE) Department which are also included in the Regular Council Agenda Package.

## **DISCUSSION:**

The City's Utility programs include water, sewerage and drainage, and solid waste (refuse, green can, recycling and eco levy). The various utilities are self-funded through the annual utility rate setting process. The utility rates reflect the City's requirements for ongoing operations, capital programs, reserves, cost of services provided by Metro Vancouver, and other contractual costs (i.e. recycling).

Council adopted the "Development Cost Charges Bylaw, 2016, No. 8471" on July 25, 2016. The bylaw provides for the collection of DCC's for the water, sanitary sewer and drainage utilities. The fees collected under the bylaw are an important funding source for the utilities as the systems are upgraded and expanded to meet increasing service demands. Due to timing differences between DCC collection and project requirements, other reserves within the utilities may be borrowed against for the DCC portion of project costs.

The City's proposed 2020 flat rate water and sewer utility fees vary by dwelling type (Single Unit Dwelling, Duplex, and Multi-Unit Dwelling). The City has historically offered a discount program to encourage payment by the due date. This has been a successful program with approximately 95% of customers taking advantage of it. However, it lacked transparency, particularly for multi-unit strata owners, as to whether or not the discount was taken. The 2020 rates are designed to increase transparency by assuming a 5% discount for all customers. The rate stated in the bylaw will be the rate paid by customers paying by the due date. As some strata's and rental building owners have begun to rebill utilities to individual units the change will allow individual unit owners/renters to easily verify the per unit rate charged to the strata. To be consistent, the 2020 metered water and sewer rates are designed assuming a 2% discount and the practice of providing a 2% discount to metered customers will also be discontinued. As an estimated 95% of customers take advantage of the discount the change is expected to be fairly revenue neutral to the City. In line with property tax invoicing practices, a late charge will apply if payment is not received by the due date.

The proposed 2020 flat rate utility fees for a **single unit dwelling** are as follows:

<b>Flat Rate Utility Fees Single Unit Dwelling</b>	<b>2020</b>	<b>2019</b>	<b>Net Change \$</b>	<b>Net Change %</b>
<b>Water</b> Water (2019 is net of 5% discount)	489.00	469.30	19.70	4.2%
<b>Sewerage &amp; Drainage</b> Sewer (2019 is net of 5% discount) Storm Drainage (average)*	411.00 <u>107.86</u>	383.80 <u>103.71</u>		
Net Sewerage & Drainage	518.86	487.51	31.35	6.4%
<b>Solid Waste</b> Refuse Green Can Recycling Eco Levy (average) *	115.00 125.00 0.00 <u>45.90</u>	111.00 118.00 23.50 <u>34.43</u>		
Net Solid Waste	285.90	286.92	(1.03)	(0.4%)
<b>Total Flat Rate Utility Fee</b>	<b>1,293.76</b>	<b>1,243.74</b>	<b>50.02</b>	<b>4.0%</b>

The proposed 2020 flat rate utility fees for a **multi-unit dwelling** are as follows:

<b>Flat Rate Utility Fees Multi-Unit Dwelling</b>	<b>2020</b>	<b>2019</b>	<b>Net Change \$</b>	<b>Net Change %</b>
<b>Water</b> Water (2019 is net of 5% discount)	286.00	274.55	11.45	4.2%
<b>Sewerage &amp; Drainage</b> Sewer (2019 is net of 5% discount) Storm Drainage (average)*	256.00 <u>48.83</u>	239.40 <u>46.95</u>		
Net Sewerage & Drainage	304.83	286.35	18.48	6.5%
<b>Solid Waste</b> Recycling Eco Levy (average) *	0.00 <u>22.00</u>	18.00 <u>16.20</u>		
Net Solid Waste	22.00	34.50	(12.50)	(36.2%)
<b>Total Flat Rate Utility Fee</b>	<b>612.83</b>	<b>595.40</b>	<b>17.43</b>	<b>2.9%</b>

\* The Storm Drainage and Eco Levy are estimated. The amount is levied based on taxable assessment.



The table below shows a five year utility rate increase history for single unit dwellings:

2015	2016	2017	2018	2019	Average
2.9%	2.8%	2.9%	2.9%	4.9%	3.3%

**Attachment #1** provides a summary of the proposed 2020 utility rates and levies by dwelling types. The summary also includes current year comparisons between the North Shore municipalities. It should be noted that the City's utility rates are the lowest on the North Shore and continue to be competitive through the region.

### **Water Utility Fund**

The Water Utility provides a water distribution system for the citizens and businesses of the City of North Vancouver. The water is purchased from Metro Vancouver's Greater Vancouver Water District.

The City's 2020 Water budget is \$13.2 million, a \$0.75 million decrease over 2019.

	2019	2020	Change	%
Water Operations	\$577,500	\$573,000	(\$4,500)	(0.8%)
Water Admin	1,863,700	1,901,600	37,900	2.0%
Water Purchases	7,028,500	7,274,000	245,500	3.5%
Capital Projects	2,971,000	1,535,000	(1,436,000)	(48.3%)
Ongoing Capital Programs	726,000	766,000	40,000	5.5%
Transfers to Reserves	161,000	183,500	22,500	14.0%
Other	617,000	957,700	340,700	55.2%
	<b>\$13,944,700</b>	<b>\$13,190,800</b>	<b>(\$753,900)</b>	<b>(5.4%)</b>

Bulk Water purchases from the Greater Vancouver Water District (GVWD) account for approximately 55% of total and 70% of operating expenses of the water utility. The price of bulk water is set to increase 6.0% over 2019, but do to forecast reduced volumes and a shift between peak and non-peak water purchases, the budgeted cost of water is estimated to increasing by only 3.5%.

2019 capital projects included a significant project (\$2.2M) to upgrade water services to the Moodyville area which was partially funded by a transfer from the Waterworks Reserve. Capital funding for 2020 is returning to a normalized level.

Significant capital projects included in the plan include:

- \$450,000: Watermain Replacement: 100 West 6<sup>th</sup>
- \$300,000: Watermain Replacement: 100 East 15<sup>th</sup>
- \$210,000: Watermain Replacement: 2200 St. Georges
- \$190,000: Watermain Replacement: 2100 St. Georges
- \$190,000: Watermain Replacement: 200 Block East 24<sup>th</sup>

The City's 2020 Water revenue sources consist of flat rate utility fees, metered charges, use of reserves and other fees (intergovernmental, connection fees, severance fees etc.). The \$0.75 million reduction in funding requirement will be provided by:

	2019	2020	Change	%
Flat Rate Sales	\$7,237,500	\$7,561,400	\$323,900	4.5%
Metered Sales	4,135,300	4,320,400	185,100	4.5%
Other	933,000	1,284,300	351,300	37.7%
Transfers from Reserves	1,638,900	24,700	(1,614,200)	(98.5%)
	<b>\$13,944,700</b>	<b>13,190,800</b>	<b>(\$753,900)</b>	<b>(5.4%)</b>

The rates recommended in this report reflect the City's requirements for ongoing operations, capital programs, reserves and the GVWD's long range projection for water-related services.

The City utilizes seasonal metered water rates to be consistent with Metro Vancouver's model for selling their bulk water to all member municipalities by charging a higher rate from June 1 to September 30 each year. Seasonal rates are designed to create a pricing strategy that values water more in the summer when alpine lake storage is most stressed. The Water utility model assumes 35% in peak water usage and 65% in non-peak periods. The blended rate increase is consistent with the increases to other user groups.

The 2020 proposed seasonal rates are the following:

Period	Rate per cubic meter
Jan1 to May 31	1.2212
June 1 to Sept 30	1.5265
Oct 1 to Dec 31	1.2212
<b>2020 Blended Rate</b>	<b>1.3281</b>
<b>2019 Blended Rate</b>	<b>1.2820</b>
<b>Annual Net Change %</b>	<b>3.6%</b>

**Attachment #2** provides a summary of the 2020 Water Utility Budget.



## **Sewerage & Drainage Utility Fund**

The Sewerage & Drainage Utility provides a sanitary and storm water collection system for the citizens and businesses of the City of North Vancouver. This report recommends rates and transfers from reserves to meet EPE's funding requirements for ongoing operations and capital programs.

The City's 2020 combined Sewerage & Drainage budget is approximately \$13.1 million, a \$0.3 million increase over 2019. The Sewerage & Drainage Utility includes a provision for the new North Shore Wastewater Treatment Plant (NSWWTP) of \$400,000 which is decreased by \$200,000 from 2019. This provision aimed to set aside funds to smooth out future rate increases associated with the construction of the NSWWTP. The current amount of funds set aside to date for the NSWWTP is \$3.0 million. Considering the GVS&DD Levy increase, a reduction of \$200,000 to the amount set aside each year, will smoothen the impact of this year's increase.

	<b>2019</b>	<b>2020</b>	<b>Change</b>	<b>%</b>
Sanitary & Drainage Operations	\$410,000	\$516,000	\$106,000	25.9%
Sanitary & Drainage Admin	2,021,900	2,123,000	101,100	5.0%
GVS&DD Levy	6,184,900	6,771,700	586,800	9.5%
Capital Projects	1,891,000	1,560,000	(331,000)	(17.5%)
Ongoing Capital Programs	701,000	636,000	(65,000)	(9.3%)
Transfer to Reserves for NSWWTP	600,000	400,000	(200,000)	(33.3%)
Transfer to Reserves	283,600	276,500	(7,100)	(2.5%)
Other	765,200	855,100	89,900	11.7%
	<b>\$12,857,600</b>	<b>\$13,138,300</b>	<b>\$280,700</b>	<b>2.2%</b>

The Greater Vancouver Sewer and Drainage District (GVS&DD) levy accounts for approximately 50% of total and 70% of operating expenses of the sewerage and drainage utility. The levy is budgeted to increase 9.5% over 2019.

Significant capital work included in the plan includes:

- \$350,000 – Stormmain – Development Supported Infill
- \$175,000 – St. David's – 1<sup>st</sup> to 3<sup>rd</sup> – sanitary sewer main replacement
- \$150,000 – East 12th - Lonsdale to East Lane – sanitary sewer main replacement
- \$150,000 – Stormmain - Lonsdale @ Keith Road

In addition to the capital construction projects the plan also includes additional funding for ongoing capital programs which include:

- \$200,000 – Sanitary Renewal/Replacement by Area
- \$200,000 – Stormwater Treatment Facilities
- \$100,000 – Sanitary IC and Connection Rehab Program

The City's 2020 Sewer and Drainage revenue sources consist of sanitary sewerage flat rate and metered charges, storm drainage levy, use of reserves and other fees (intergovernmental, connection fees, severance fees etc.). The \$281K additional funding requirement will be provided by:

	2019	2020	Change	%
Flat Rate Sales	\$6,206,300	\$6,660,300	\$454,000	7.3%
Metered Sales	2,741,600	2,953,900	212,300	7.7%
Storm Drainage Levy	2,337,000	2,430,500	93,500	4.0%
Transfers	648,700	75,000	(573,700)	(88.4%)
Other	924,000	1,018,600	94,600	10.2%
	<b>\$12,857,600</b>	<b>\$13,138,300</b>	<b>\$280,700</b>	<b>2.2%</b>

The City uses a single rate billing system for metered sewer, which is consistent with user pay pricing strategy. The proposed metered sewer rate for 2020 is \$1.6781 per cubic meter, which is a 5.7% increase over the 2019 rate of \$1.5876 per cubic meter.

**Attachment #3** provides a summary of the 2020 Sewerage & Drainage Budget.

### **Solid Waste Utility Fund**

The Solid Waste Utility provides for refuse, green can, eco levy and recycling collection services for the citizens of the City of North Vancouver. The rates recommended in this report are used to operate and maintain these services.

The City's 2020 combined Solid Waste budget is approximately \$3.9 million. Over the last few years the Solid Waste Utility has experienced savings due to the agreement signed with Recycle BC and the renewed tri-municipal recycling contract which has resulted in increased reserves totalling \$3.2 million. The 2020 recommended rates increase Refuse and Green Can rate by 3.6% and 5.9%, respectively, while decreasing Recycling rates by 100% resulting in overall solid waste fee decreases of 0.4% for single unit dwellings and 35.3% for multi unit dwellings. It should be noted that multi unit dwellings are responsible for their own Refuse and Green Can disposal through third party entities. This overall reduction in solid waste rates utilizes \$681K funding from these reserves to balance the plan.

<b>Single Unit Solid Waste Rates</b>	<b><u>2020</u></b>	<b><u>2019</u></b>		
Refuse	115.00	111.00		
Green Can	125.00	118.00		
Recycling	0.00	23.50		
Eco Levy (average) *	<u>45.90</u>	<u>34.43</u>		
Net Solid Waste	285.90	286.93	(1.03)	(0.4%)

<b>Multi Unit Solid Waste Rates</b>	<b><u>2020</u></b>	<b><u>2019</u></b>		
Recycling	0.00	18.00		
Eco Levy (average) *	<u>22.00</u>	<u>16.50</u>		
Net Solid Waste	22.00	34.50	(12.50)	(36.2%)

**Attachment #4** provides a summary of the 2020 Solid Waste Budget.



## FINANCIAL IMPLICATIONS:

To summarize, the proposed 2020 flat rate utility fees by dwelling type are the following:

Dwelling Type	2020 Net Flat Rate (proposed)	2019 Net Flat Rate	Net Change \$
Single Unit	1,293.76	1,243.74	50.02
Duplex	1,085.57	1,039.05	46.52
Multi-Unit	612.83	595.40	17.43

This translates in a total annual utility charge increase of 4.0% for single unit dwellings and 2.9% for multi-unit dwellings. The City's utility rates continue to be among the lowest in the region.

It should be noted that significant regional cost increases are anticipated in the coming years, driven predominately by Metro Vancouver's expanding capital programs. The following table indicates the latest forecast percentage increases to regional rates over the next four years.

	2021	2022	2023	2024
Bulk Water	6.1%	8.8%	9.9%	10.1%
GVS&DD Levy	12.2%	18.2%	13.1%	14.1%
Tipping Fees	6.2%	5.8%	5.5%	5.2%

While the City has been planning to buffer the impacts of the NSWWTP coming on-line, if the above increases materialize it is likely that significant future rate increases, estimated at 7% to 12%, will be required in order for the City to reach the capital renewal and rehabilitation goals discussed in the accompanying information reports from the City Engineer.

### ***Option:***

The current recommendation proposes rate adjustments that provide for all programs/projects listed in EPE's 2020 budget request. The request translates in a total annual utility rate increase of 4.0% for single unit dwellings and 2.9% for multi-unit dwellings.

Alternatively, Council could instruct staff to review options to reduce the proposed increases. It should be noted that funding is included in the proposed budget to enhance asset management efforts for the purpose of generating information that will assist in better forecasting asset maintenance needs in future years.

The City has a long-standing policy of prioritizing the maintenance of existing assets over the construction of new ones. The current list of projects includes replacement and upgrade projects as well as additional new infrastructure projects. Council could request staff to review the various projects to determine if any could be postponed to future years. As an example, Council could adopt a resolution requesting staff to prioritize capital

projects included in the plan to provide options to Council to reduce the total annual Utility rate increase to a certain percentage.

### **INTER-DEPARTMENTAL IMPLICATIONS:**

This report has been prepared with the input and participation of the EPE department and should be read in conjunction with the information reports provided by EPE regarding each utility. The Leadership Team reviewed and commented on the report at its November 19, 2019 meeting.

### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

The recommended rates provide the funding to support the following goals and objectives of the 2014 Official Community Plan:

- 8.1.3 Consider stormwater management opportunities in streets, laneways and open spaces where appropriate;
- 8.1.4 Improve financial models to include cash flow projections that meet capital asset replacement needs;
- 8.1.8 Complete work underway to meet the objective of the Metro Vancouver Integrated Solid Waste and Resource Management Plan (ISWRMP) of an average 70% diversion rate by 2015 and 80% by 2020, as well as meet the requirement of the regional Liquid Waste Management Plan for a municipal Integrated Stormwater Management Plan (ISMP) by 2015;
- 8.1.9 Pursue the reduction of waste throughout the full lifecycle of production, consumption, recycling and disposal to achieve local and regional waste management goals;
- 8.2.1 Maintain or improve service levels related to water supply, sewers, transportation, communication and energy infrastructure;
- 8.2.2 Identify and monitor the condition of our infrastructure on a regular basis in order to identify the remaining operational life of individual elements, and to identify and rectify weaknesses before failure, thereby optimizing capital and maintenance program expenditures;

**STRATEGIC PLAN IMPLICATIONS:**

The proposed utility rates support Council's commitment to being "fiscally responsible" through rates that balance operational and capital renewal needs with the impact on the ratepayer.

RESPECTFULLY SUBMITTED:



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Ben Themens  
Director of Finance

The City of North Vancouver  
Rates and Levies Summary

	2019 **DWV	2019 ***DNV	2019 CNV	2020 CNV	Increase \$ %	
<b>SINGLE UNIT DWELLING</b>						
Flat Rate Water	\$ 934.00	\$ 703.50	\$ 494.00	\$ 489.00		
5% Discount			(24.70)	-		
<b>Single Unit Net Water</b>	<b>934.00</b>	<b>703.50</b>	<b>469.30</b>	<b>489.00</b>	<b>19.70</b>	<b>4.2%</b>
Flat Rate Sanitary Sewer	1,051.00	669.00	404.00	\$ 411.00		
5% Discount			(20.20)	-		
<b>Single Unit Net Sewer</b>	<b>1,051.00</b>	<b>669.00</b>	<b>383.80</b>	<b>411.00</b>	<b>27.20</b>	<b>7.1%</b>
Storm Drainage Levy (estimate)	468.56		103.71	107.86 *	4.11	4.0%
<b>Total Single Unit Water/Sanitary/Storm</b>	<b>\$ 2,453.56</b>	<b>\$ 1,372.50</b>	<b>\$ 956.81</b>	<b>\$ 1,007.86</b>	<b>\$ 51.01</b>	<b>5.3%</b>
<b>Other Rates</b>						
Refuse	\$ 200.96	\$ 272.75	\$ 111.00	\$ 115.00	4.00	3.6%
Green Can			118.00	\$ 125.00	7.00	5.9%
Recycling - Single Unit	20.00	32.40	23.50	-	(23.50)	-100.0%
Eco Levy (estimate)	47.24		34.43	\$ 45.90 *	11.47	33.3%
<b>Total Single Unit Solid Waste</b>	<b>\$ 268.20</b>	<b>\$ 305.15</b>	<b>\$ 286.93</b>	<b>\$ 285.90</b>	<b>\$ (1.03)</b>	<b>-0.4%</b>
<b>TOTAL SINGLE UNIT ALL LEVIES</b>	<b>\$ 2,721.76</b>	<b>\$ 1,677.65</b>	<b>\$ 1,243.74</b>	<b>\$ 1,293.76</b>	<b>\$ 50.02</b>	<b>4.0%</b>
<b>DUPLEX Including Infills &amp; Strata SFD)</b>						
Flat Rate Water	\$ 784.00	\$ 599.25	\$ 414.00	\$ 410.00		
5% Discount			(20.70)			
<b>Duplex Net Water</b>	<b>784.00</b>	<b>599.25</b>	<b>393.30</b>	<b>410.00</b>	<b>16.70</b>	<b>4.2%</b>
Flat Rate Sanitary Sewer	873.00	\$ 556.50	374.00	\$ 380.00		
5% Discount			(18.70)			
<b>Duplex Net Sewer</b>	<b>873.00</b>	<b>556.50</b>	<b>355.30</b>	<b>380.00</b>	<b>24.70</b>	<b>7.0%</b>
Storm Drainage Levy (estimate)	468.56		94.02	97.78 *	3.76	4.0%
<b>Total Duplex Water/Sanitary/Storm</b>	<b>\$ 2,125.56</b>	<b>\$ 1,155.75</b>	<b>\$ 842.62</b>	<b>\$ 887.78</b>	<b>\$ 45.16</b>	<b>5.4%</b>
<b>Other Rates</b>						
Refuse	\$ 200.96	\$ 272.75	74.00	\$ 77.00	3.00	4.1%
Green Can			70.00	75.00	5.00	7.1%
Recycling - Duplex	20.00	32.40	18.00	-	(18.00)	-100.0%
Eco Levy (estimate)	47.24		34.43	45.79 *	11.36	33.0%
<b>Total Duplex Solid Waste</b>	<b>\$ 268.20</b>	<b>\$ 305.15</b>	<b>\$ 196.43</b>	<b>\$ 197.79</b>	<b>\$ 1.36</b>	<b>0.7%</b>
<b>TOTAL DUPLEX ALL LEVIES</b>	<b>\$ 2,393.76</b>	<b>\$ 1,460.90</b>	<b>\$ 1,039.05</b>	<b>\$ 1,085.57</b>	<b>\$ 46.52</b>	<b>4.6%</b>
<b>MULTI-UNIT DWELLING</b>						
Flat Rate Water	\$ 369.00	\$ 599.25	\$ 289.00	\$ 286.00		
5% Discount			(14.45)	-		
<b>Multi-Unit Net Water</b>	<b>369.00</b>	<b>599.25</b>	<b>274.55</b>	<b>286.00</b>	<b>11.45</b>	<b>4.2%</b>
Flat Rate Sanitary Sewer	386.00	556.50	252.00	\$ 256.00		
5% Discount			(12.60)	-		
<b>Multi-Unit Net Sewer</b>	<b>386.00</b>	<b>556.50</b>	<b>239.40</b>	<b>256.00</b>	<b>16.60</b>	<b>6.9%</b>
Storm Drainage Levy (estimate)	468.56		46.95	48.83 *	1.88	4.0%
<b>Total Multi Unit Water/Sanitary/Storm</b>	<b>\$ 1,223.56</b>	<b>\$ 1,155.75</b>	<b>\$ 560.90</b>	<b>\$ 590.83</b>	<b>\$ 29.93</b>	<b>5.3%</b>
Recycling - Multi Unit	20.00	23.40	18.00	-	(18.00)	-100.0%
Eco Levy (estimate)	47.24		16.50	22.00 *	5.50	33.3%
<b>Total Multi Family Solid Waste</b>	<b>\$ 67.24</b>	<b>\$ 23.40</b>	<b>\$ 34.50</b>	<b>22.00</b>	<b>(12.50)</b>	<b>-36.2%</b>
<b>TOTAL MULTI-UNIT ALL LEVIES</b>	<b>\$ 1,290.80</b>	<b>\$ 1,179.15</b>	<b>\$ 595.40</b>	<b>\$ 612.83</b>	<b>\$ 17.43</b>	<b>2.9%</b>

\* Average storm and eco levy based on average property assessment, plus overall increase for 2019

\*\* DWV fully metered; therefore, the water and sewer rates are estimates based on average usages of SUD - 350 CUM, Duplex - 280 CUM, MUD - 150 cum;

\*\* DWV MUD estimates are based on a 50 unit building with a 100mm connection

\*\*\* DNV does not have a separate storm drainage levy



## 2020 WATER BUDGET

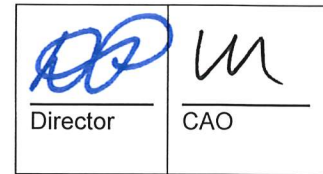
Programs	2019 Annual Budget	2020 Annual Budget	Variance 2020 Annual to 2019 Annual	% Variance	Notes
<b>WATER REVENUE</b>					
PERMITS SPRINKLER	1,000	1,000	0		
FEES CONNECTION-WATER/SANITARY	650,000	990,700	340,700		Increased to reflect projected actuals - offset against expenses
FEES CONSTRUCTION SITE	20,000	20,700	700		
FEES SEVERANCE	60,000	61,800	1,800		
WATER CONNECTION REUSE	46,600	49,200	2,600		
<b>Water Operations</b>	<b>777,600</b>	<b>1,123,400</b>	<b>345,800</b>	<b>44.5%</b>	
FLAT RATE SALES	7,594,400	7,561,391	-33,009		Consistent with proposed rate increase
DISCOUNTS FLAT RATE	-356,900	0	356,900		Consistent with proposed rate increase
METERED SALES	4,212,800	4,320,362	107,562		Consistent with proposed rate increase
DISCOUNTS METERED	-77,500	0	77,500		Consistent with proposed rate increase
PENALTIES FLAT RATE	13,400	13,900	500		
TRANSFER FROM DNV	142,000	147,000	5,000		
<b>Water Admin</b>	<b>11,528,200</b>	<b>12,042,653</b>	<b>514,453</b>	<b>4.5%</b>	
TRANSFER FROM STATUTORY RESERVE	1,638,894	24,750	-1,614,144		2019 included \$1,085,000 borrowing for DCC related projects
<b>Transfers</b>	<b>1,638,894</b>	<b>24,750</b>	<b>-1,614,144</b>	<b>-98.5%</b>	
<b>Total Water Revenue</b>	<b>13,944,694</b>	<b>13,190,803</b>	<b>-753,891</b>	<b>-5.4%</b>	
<b>WATER EXPENSES</b>					
WAGES AND BENEFITS	404,600	401,450	-3,150		
GOODS AND SUPPLIES	69,800	69,260	-540		
SERVICES	47,700	47,330	-370		
FINANCIAL SERVICES	55,400	54,970	-430		
<b>Water Operations</b>	<b>577,500</b>	<b>573,000</b>	<b>-4,500</b>	<b>-0.8%</b>	
WAGES AND BENEFITS	703,550	955,434	251,884		Decrease due to changes made to allocation from internal re-org
GOODS	5,000	5,000	0		
WATER PURCHASES DNV	238,000	245,100	7,100		
WATER PURCHASES GVWD	6,790,500	7,028,900	238,400		6% increase in regional cost of bulk water - 50% of total utility budget
SERVICES	75,500	105,500	30,000		
FINANCIAL SERVICES	1,079,600	835,700	-243,900		Decrease due to changes made to allocation from internal re-org
<b>Water Admin</b>	<b>8,892,150</b>	<b>9,175,634</b>	<b>283,484</b>	<b>3.2%</b>	
<b>Sub Total Water Operating</b>	<b>9,469,650</b>	<b>9,748,634</b>	<b>278,984</b>	<b>2.9%</b>	
<b>OHead Water Capital</b>	<b>-33,000</b>	<b>-33,000</b>	<b>0</b>	<b>0.0%</b>	
TRANSFER TO CAPITAL	3,697,000	2,301,000	-1,396,000		Decrease in capital project requirements
THIRD PART CONNECTIONS	650,000	990,700	340,700		Increased to reflect projected actuals
RESERVE FOR FUTURE EXPENDITURES	0	50,000	50,000		
TRANSFER TO STATUTORY RESERVE	120,000	120,000	0		
TRANSFER TO UN/APPROPRIATED EQUITY	41,044	13,469	-27,575		
<b>Transfers</b>	<b>4,508,044</b>	<b>3,475,169</b>	<b>-1,032,875</b>	<b>-22.9%</b>	
<b>Total Water Expenses</b>	<b>13,944,694</b>	<b>13,190,803</b>	<b>-753,891</b>	<b>-5.4%</b>	

## 2020 SEWERAGE AND DRAINAGE BUDGET

Programs	2019 Annual Budget	2020 Annual Budget	Variance 2020 Annual to 2019 Annual	% Variance	Notes
<b>SEWER AND STORM REVENUES</b>					
FEES CONNECTION-WATER/SANITARY	380,000	384,000	4,000		
FEES SEVERANCE	55,000	57,800	2,800		
MISCELLANEOUS	15,000	15,500	500		
<b>Sanitary Operations</b>	<b>450,000</b>	<b>457,300</b>	<b>7,300</b>	<b>1.6%</b>	
FLAT RATE SALES	6,515,800	6,660,300	144,500		Consistent with proposed rate increase
DISCOUNTS FLAT RATE	-309,500	0	309,500		Consistent with proposed rate increase
METERED SALES	2,794,700	2,953,908	159,208		Consistent with proposed rate increase
DISCOUNTS METERED	-53,100	0	53,100		Consistent with proposed rate increase
PENALTIES FLAT RATE	9,000	9,300	300		
<b>Sanitary Admin</b>	<b>8,956,900</b>	<b>9,623,508</b>	<b>666,608</b>	<b>7.4%</b>	
FEES STORM CONNECTION	430,000	515,200	85,200		Increased to reflect projected actuals - offset against expenses
FEES SEVERANCE STORM	35,000	36,800	1,800		
<b>Storm Operations</b>	<b>465,000</b>	<b>552,000</b>	<b>87,000</b>	<b>18.7%</b>	
STORM DRAINAGE LEVY	2,337,000	2,430,500	93,500		Consistent with proposed rate increase
<b>Storm Admin</b>	<b>2,337,000</b>	<b>2,430,500</b>	<b>93,500</b>	<b>4.0%</b>	
<b>Sub-Total Operating Revenues</b>	<b>12,208,900</b>	<b>13,063,308</b>	<b>854,408</b>	<b>7.0%</b>	
TRANSFER FROM APPROPRIATED EQUITY	648,720	75,000	-573,720		\$75K from Capital Reserves for future expenditures
<b>Sewer and Storm Transfers</b>	<b>648,720</b>	<b>75,000</b>	<b>-573,720</b>	<b>-88.4%</b>	
<b>Total Sewer and Storm Revenue</b>	<b>12,857,620</b>	<b>13,138,308</b>	<b>280,688</b>	<b>2.2%</b>	
<b>SEWER AND STORM EXPENSES</b>					
WAGES AND BENEFITS	105,000	122,600	17,600		Due to increased maintenance requirements on aging infrastructure
CONFERENCES, EDUCATION, TRAVEL	0	0	0		
GOODS AND SUPPLIES	15,400	17,980	2,580		
SERVICES	45,000	52,540	7,540		
FINANCIAL SERVICES	19,600	22,880	3,280		
<b>Sanitary Operations</b>	<b>185,000</b>	<b>216,000</b>	<b>31,000</b>	<b>16.8%</b>	
WAGES AND BENEFITS	372,500	482,664	110,164		Decrease due to changes made to allocation from internal re-org
GOODS AND SUPPLIES	5,000	5,300	300		
SERVICE EXPENSES AND FEES	120,000	145,000	25,000		
GVS&DD LEVY	6,184,868	6,771,696	586,828		9.5% GVS&DD Sewer levy increase - 50% of total utility budget
GVRD GEOSPATIAL LEVY	7,200	7,900	700		
FINANCIAL SERVICES	569,950	476,250	-93,700		Decrease due to changes made to allocation from internal re-org
<b>Sanitary Admin</b>	<b>7,259,518</b>	<b>7,888,810</b>	<b>629,292</b>	<b>8.7%</b>	
WAGES AND BENEFITS	115,400	153,870	38,470		Increase due to addition of Spill Response
GOODS AND SUPPLIES	17,700	23,600	5,900		
SERVICES	68,500	91,330	22,830		
FINANCIAL SERVICES	23,400	31,200	7,800		
<b>Storm Operations</b>	<b>225,000</b>	<b>300,000</b>	<b>75,000</b>	<b>33.3%</b>	
WAGES AND BENEFITS	413,000	505,206	92,206		Decrease due to changes made to allocation from internal re-org
GOODS AND SUPPLIES	5,000	5,300	300		
SERVICES	135,000	195,000	60,000		
FINANCIAL SERVICES	401,450	308,250	-93,200		Decrease due to changes made to allocation from internal re-org
<b>Storm Admin</b>	<b>954,450</b>	<b>1,013,756</b>	<b>59,306</b>	<b>6.2%</b>	
<b>Sub-Total Sewer and Storm Expenses</b>	<b>8,623,968</b>	<b>9,418,566</b>	<b>794,598</b>	<b>9.2%</b>	
FINANCIAL SERVICES	-29,000	-29,000	0		
<b>OHead Sewer Capital</b>	<b>-29,000</b>	<b>-29,000</b>	<b>0</b>		
FINANCIAL SERVICES	-23,000	-23,000	0		
<b>OHead Drainage Capital</b>	<b>-23,000</b>	<b>-23,000</b>	<b>0</b>		
<b>Sub-Total Sewer and Storm Recoveries</b>	<b>-52,000</b>	<b>-52,000</b>	<b>0</b>	<b>0.0%</b>	
TRANSFER TO CAPITAL	2,592,000	2,196,000	-396,000		Decrease in capital project requirements
THIRD PARTY CONNECTIONS	810,000	899,200	89,200		Adjusted to reflect projected actuals - offset against revenues
TRANSFER TO STATUTORY RESERVE	218,000	218,000	0		
TFR SAME FUND TO PROJ TRKG	0	0	0		
TRANSFER TO APPROPRIATED EQUITY	665,652	458,542	-207,110		Decreased reserve contribution for LGWWTP
TRANSFER TO UNAPPROPRIATED EQUITY	0	0	0		
<b>Sewer and Storm Transfers</b>	<b>4,285,652</b>	<b>3,771,742</b>	<b>-513,910</b>	<b>-12.0%</b>	
<b>Total Sewer and Storm Expenses</b>	<b>12,857,620</b>	<b>13,138,308</b>	<b>280,688</b>	<b>2.2%</b>	

## 2020 SOLID WASTE BUDGET

Programs	2019 Annual Budget	2020 Annual Budget	Variance 2020 Annual to 2019 Annual	% Variance	Notes
<b>SOLID WASTE REVENUE</b>					
RECYCLING LEVY/GREEN CAN	1,322,800	876,000	-446,800		Reduced due to transition to Recycle BC for Recycling services
PPP PROGRAM INCENTIVE	670,000	335,000	-335,000		
<b>Recycling &amp; Green Can</b>	<b>1,992,800</b>	<b>1,211,000</b>	<b>-781,800</b>	<b>-39.2%</b>	
REFUSE TAGS COMMERCIAL	3,500	3,500	0		
REFUSE TAGS RESIDENTIAL	9,000	9,000	0		
<b>Refuse</b>	<b>12,500</b>	<b>12,500</b>	<b>0</b>	<b>0.0%</b>	
REFUSE LEVY	789,200	828,932	39,732		
<b>Refuse Admin</b>	<b>789,200</b>	<b>828,932</b>	<b>39,732</b>	<b>5.0%</b>	
ECO LEVY	825,000	1,100,000	275,000		Consistent with proposed rate increase
<b>Eco Levy Programs</b>	<b>825,000</b>	<b>1,100,000</b>	<b>275,000</b>	<b>33.3%</b>	
TRANSFER FROM APPROPRIATED EQUITY	533,740	707,720	173,980		Increase in transfer to mitigate rates
<b>Transfers</b>	<b>533,740</b>	<b>707,720</b>	<b>173,980</b>		
<b>Total Solid Waste Revenue</b>	<b>4,153,240</b>	<b>3,860,152</b>	<b>-293,088</b>	<b>-7.1%</b>	
<b>SOLID WASTE EXPENSES</b>					
SERVICES	1,192,540	649,670	-542,870		Reduced due to transition to Recycle BC for Recycling services
<b>Recycling</b>	<b>1,192,540</b>	<b>649,670</b>	<b>-542,870</b>	<b>-45.5%</b>	
WAGES AND BENEFITS	69,800	71,200	1,400		
GOODS AND SUPPLIES	2,100	2,200	100		
SERVICES	70,000	70,000	0		
FINANCIAL SERVICES	181,700	196,650	14,950		
<b>Recycling &amp; Green Can Admin</b>	<b>323,600</b>	<b>340,050</b>	<b>16,450</b>	<b>5.1%</b>	
GOODS AND SUPPLIES	155,700	125,000	-30,700		\$125K of the Zero Waste costs being moved to the Eco Levy Program
FINANCIAL SERVICES	94,300	0	-94,300		
<b>Zero Waste Challenge</b>	<b>250,000</b>	<b>125,000</b>	<b>-125,000</b>	<b>-50.0%</b>	
WAGES AND BENEFITS	157,100	157,100	0		
SERVICES	231,500	231,500	0		
FINANCIAL SERVICES	69,400	69,400	0		
<b>Refuse</b>	<b>458,000</b>	<b>458,000</b>	<b>0</b>	<b>0.0%</b>	
WAGES AND BENEFITS	144,200	158,400	14,200		
GOODS AND SUPPLIES	2,000	2,000	0		
FINANCIAL SERVICES	212,900	218,750	5,850		
TRANSFER TO APPROPRIATED EQUITY	0	4,282	4,282		
<b>Refuse Admin</b>	<b>359,100</b>	<b>383,432</b>	<b>24,332</b>	<b>6.8%</b>	
WAGES AND BENEFITS	212,400	221,600	9,200		
SERVICES	532,600	555,600	23,000		
<b>Green Can</b>	<b>745,000</b>	<b>777,200</b>	<b>32,200</b>	<b>4.3%</b>	
WAGES AND BENEFITS	721,000	960,600	239,600		Increase due to the growth of the Eco Levy Program
GOODS AND SUPPLIES	15,400	125,000	109,600		\$125K of the Zero Waste costs being moved to the Eco Levy Program
SERVICES	34,900	0	-34,900		
FINANCIAL SERVICES	53,700	41,200	-12,500		
<b>Eco Levy Programs</b>	<b>825,000</b>	<b>1,126,800</b>	<b>301,800</b>	<b>36.6%</b>	
<b>Total Solid Waste Expenses</b>	<b>4,153,240</b>	<b>3,860,152</b>	<b>-293,088</b>	<b>-7.1%</b>	



The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**INFORMATION REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Douglas Pope, City Engineer

SUBJECT: 2020 WATER UTILITY UPDATE

Date: November 20, 2019

File No: 11-5600-01-0001/2020

**PURPOSE:**

The purpose of this report is to provide Council with information related to the operation and infrastructure management of the Water Utility. This report is a companion document to the rate setting report.

**BACKGROUND:**

The Water Utility represents the cooperative effort of the City of North Vancouver and the Greater Vancouver Water District (GVWD) to provide a reliable supply of safe, high-quality drinking water to our businesses and residents and to meet the needs for fire protection. Implicit in this is a capital program for both organizations that reflects the best choices in rehabilitation, replacement and new construction in managing aging infrastructure and increased demands.

The City's Engineering, Parks and Environment Department (EPE) provides for the operation and management of the water distribution system. The City receives water from the Greater Vancouver Water District (Metro Vancouver) and distributes it for domestic, commercial and industrial use as well as for fire protection. The primary functions within EPE are the construction, maintenance, renewal and repair of mains, connections, valves, hydrants and related facilities.

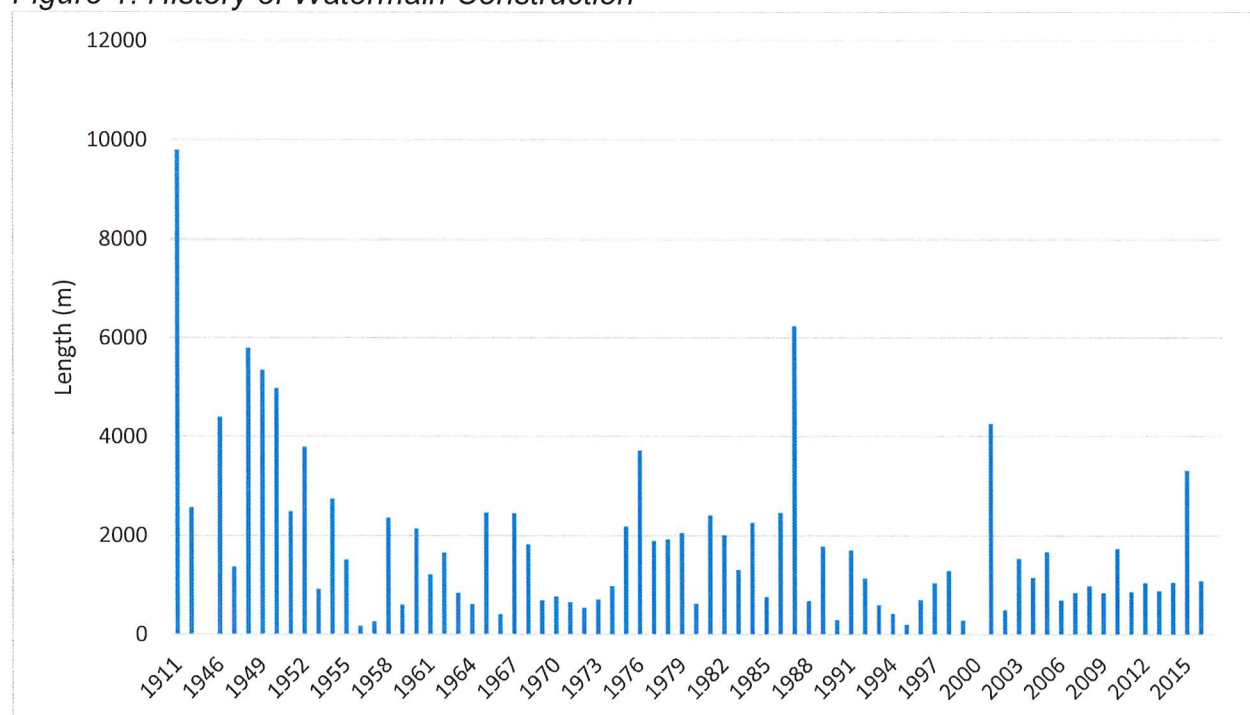
**DISCUSSION:**

The average age of the City's water system is approximately 50 years old (by pipe length) and generally comprises the following primary components:

- 129 kilometres of watermains;
- 6600 water service connections;
- 730 fire hydrants;
- 12 pressure reducing stations; and
- 20 water quality sample stations.

The first segments of the City's water system were constructed in the 1910s and some are still in service today. This includes watermains running along Lonsdale, areas east and west of Lower Lonsdale, and Moodyville.

*Figure 1: History of Watermain Construction*



### Water Utility Infrastructure Renewal

For long-term financial planning of overall water system replacement, an average annual replacement target of 0.8% (1000 metres per year) is included in the Official Community Plan. This annual target provides a simplistic approach to plan how much of the total system should be replaced each year and is based on the assumption that the average economic life of a watermain is 125 years.

The actual period of time a watermain can provide reliable service varies based on a variety of factors such as material, ground conditions, installation practices and system demands. For example, smaller diameter cast iron pipes in corrosive ground may last 60 years or less, while large diameter, thick-walled cast iron pipes may last well over 125 years. Similarly, land-use changes create different system demands that may trigger system upgrades to increase capacity.

Looking ahead to the next 10-15 years, a large quantity of small diameter cast iron watermains will require replacement. To avoid a significant portion of the system requiring



replacement all at once, staff have recommended that we gradually increase the annual replacement rate to 1.2% (1,500 metres per year). This increases system performance and reliability, improves water quality and helps get ahead of the impending spike or backlog in renewals. Staff anticipate this rate of replacement will be needed until about 2030. Beyond 2030, the replacement rate can be adjusted to meet the needs of the system at that time. Taking these steps now proactively helps maintain high water quality, as well as reducing the risk of service interruptions caused by watermain breakages.

The 2019 project plan targeted replacement of about 1.1% (1,400 metre) of the system at a cost of \$2.97 million. The 2019 project included higher cost projects along East 3<sup>rd</sup> Street, which resulted in a slightly below target replacement value at a high capital cost. A total of 1,450 metres of watermain replacement will be completed by the end of 2019 due to some revision and addition of projects to support the watermain works at both Mosquito Creek Bridge and East 15<sup>th</sup> Street. This level of replacement was in part possible due to the use of external contractors for both the Mosquito Creek, and East 15<sup>th</sup> Street projects. About 400 metres of 2019 watermain replacement will be carried over into 2020 for completion due to the limited capacity of our current Water Utility workforce.

For 2020, the proposed budget provides funding to replace approximately 840 metres of watermain, representing approximately 0.65% of the system and a total capital cost of \$1.39 million. The reduced total capital budget for 2020 is in part due to the much larger 2019 capital budget, the planned contribution to capital reserves in 2020 (to offset funds used in 2019) and to limit rate increases. Also with the 400 metre carryover, the total replacement in 2020 should reach about 1% replacement. In future years, in order to meet the 1.2% rate, additional in-house staff and/or more use of contracted construction projects are foreseen.

In addition to watermain replacement, EPE administers ongoing proactive programs to replace aging water service connections, to add new and replace old hydrants, and ongoing capital replacement of pressure regulating stations. In the next decade, the Water Utility will need to consider larger capital upgrades or additional pressure regulating stations to meet system needs, add redundancy to improve reliability, and meet future safety regulations.

The budget also provides funding for technical studies and planning tools for the water system. Highlights for 2020 include an asset management plan and an updated capital plan.

### 2020 Water Utility Budget

The following section summarizes the total new construction (capital) and operational budget for the Water Utility. The budget is separated into four main areas:

- Water Studies: annually funded or periodic studies or updates to planning tools;
- Water Capital Projects: one time large construction projects for new or replacement of existing watermains and structures;
- Ongoing Capital Projects: annually funded construction of small components in the water system; and

- Water Operations: funding for daily activities to support water utility reliability.

The overall Water Utility Operations budget has been kept constant from 2019 to 2020. The largest typical operational (or non-replacement) cost is the repair of watermain breaks. This represents about 25% of the overall budgeted operational effort for the water utility, which typically experiences about 10 watermain breaks per year. Other larger efforts include watermain flushing, water valve maintenance, and fire hydrant maintenance.

The following table presents the breakdown of the proposed 2020 water utility budget:

*Table 1: 2020 Water Utility Budget*

Utility Area	Description	Pre-Design Budget
<b>Water Studies</b>	Water Model	\$20,000
	Record Keeping/As Built Project	\$25,000
	Capital Plan and Asset Management Plan Update	\$65,000
	Utility Benchmarking	\$15,000
	Water Conservation Plan	\$20,000
	<b>Water Studies Total:</b>	<b>\$145,000</b>
<b>Water Capital Projects</b>	Watermain Replacement: Fell 1 <sup>st</sup> to Copping (feasibility investigation)	\$50,000
	Watermain Replacement: 200 Block East 24 <sup>th</sup> and St Andrews	\$190,000
	Watermain Replacement: 2100 St Georges	\$190,000
	Watermain Replacement: 2200 St Georges	\$210,000
	Watermain Replacement: 100 West 6 <sup>th</sup>	\$450,000
	Watermain Replacement: 2200 St Andrews and East 23 <sup>rd</sup>	\$300,000
	<b>Water Projects Total:</b>	<b>\$1,390,000</b>
<b>Ongoing Capital Programs</b>	Water Service Connection Replacement Plan	\$300,000
	Water Valve Replacement Program	\$100,000
	Water Meter Replacement Program	\$160,000
	Water Pressure Reducing Station Capital Upgrades	\$40,000
	Water Hydrant Replacement Program	\$25,000
	Water System Sampling Stations	\$15,000
	Redundant Watermain Decommissioning	\$75,000
	Mainline Trench Restoration	\$45,000
	<b>Water Programs Total:</b>	<b>\$760,000</b>
<b>Water Operations</b>	Watermain Repair	\$150,000
	Watermain Flushing	\$50,000
	Water Sampling	\$20,000
	Water Valve Inspection and Maintenance	\$50,000
	Water Service Installation	\$0
	Water Service Repair	\$40,000
	Water Service On/Off	\$20,000
	Water Service Inquiries	\$40,000
	Water Service Severance	\$0
	Backflow Device Inspection & Maintenance	\$25,000
	Water Meter Repairs	\$25,000



Utility Area	Description	Pre-Design Budget
	Water Meter Reading	\$45,000
	Hydrant Repair	\$15,000
	Hydrant Preventative Maintenance	\$65,000
	PRV Station Inspection	\$28,000
	<b>Water Maintenance Total:</b>	\$573,000
<b>Water Equipment</b>	Small Tools and equipment	\$6,000
	<b>Water Equipment Total:</b>	\$6,000
<b>Water Utility Total:</b>		\$2,874,000

### Connection and Severance Fees

Staff is not proposing an increase in fixed fee costs of standard water connection and severance fees for single dwelling units. The 2020 servicing costs are as follows:

- \$5,100 for a new 19 millimetre diameter water service connection; and
- \$1,100 for a 19 millimetre water severance.

All larger diameter water services are charged at cost, and all other fees will not be changed.

### Water Utility Efficiency and Incentives

The City of North Vancouver consumes approximately 450 litres per person per day which is also the regional average for Metro Vancouver. While this per capita rate of consumption is lower than our neighbouring communities on the North Shore and slightly lower than the City of Vancouver, it is higher than similar communities such as New Westminster, or metered communities such as Richmond or Surrey.

The City adopted a Water Conservation Strategy in 2015, and implementation of the strategy continues to raise awareness around water use and conservation. In 2020, the City will continue with several actions in the plan, including:

- expanding the leak detection program to actively monitor and correlate leak locations on both the public and private systems with leak listening equipment;
- continuing the “meter ready” program, where all new service connections and developments are required to install water meters; and
- supporting water and energy conservation programs, such as the BC Hydro appliance rebate program.

Given that the region can have limitations in drinking water supply, especially in the summer months, anticipated future climate change factors may require that we seek additional conservation opportunities. One potential opportunity could be to use reclaimed and treated wastewater from the North Shore Wastewater Treatment Plant (NSWWTP), currently under construction.

The plant will produce high quality treated and disinfected water that could be readily used for non-potable applications. The City could consider a non-potable water system sourced from the NSWWTP to supply the commercial and new residential development south of Marine Drive and in Harbourside. This type of system could be very effective in limiting outdoor water use in the summer months, which is typically 70% higher than indoor winter water use.

#### **FINANCIAL IMPLICATIONS:**

The information provided in this report is intended to demonstrate the need for adequate funding for current operating and maintenance requirements, replacement and renewal projects, and that the Water Utility remains self-financing.

Details of the actual rate increase impacts are specified in the companion utility rate report.

#### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

The guiding principles used in the rate structure and rate setting process serve the Community Vision as stated in the 2014 Official Community Plan, which reads as follows:

Goal 8.1: Provide the community with public infrastructure that protects the natural environment at an affordable cost.

Goal 8.2: Employ a proactive approach to infrastructure maintenance and upgrades.

Goal 8.3: Use innovative planning and design to ensure infrastructure longevity.

#### **INTER-DEPARTMENTAL IMPLICATIONS:**

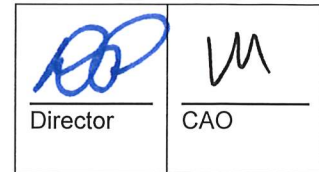
The development of the financial plans for the Water Utility is a coordinated effort between Engineering, Parks and Environment and the Finance Department. The Major Projects Team has reviewed the report.

RESPECTFULLY SUBMITTED BY:



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Douglas T. Pope, P. Eng.  
City Engineer



The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**INFORMATION REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Douglas Pope, City Engineer

SUBJECT: 2020 SEWERAGE AND DRAINAGE UTILITY UPDATE

Date: November 20, 2019 File No: 11-5340-01-0001/2020

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**PURPOSE:**

The purpose of this report is to provide Council with information related to the operation and infrastructure management of the Sewerage and Drainage Utility. This report is a companion document to the rate setting report.

**BACKGROUND:**

The Sewerage component of the Utility provides for the collection and conveyance of sewage from individual properties within the City of North Vancouver to Metro Vancouver's trunk sewers that lead to the Lion's Gate Waste Water Treatment Plant. The City's conveyance system is made up of connection pipes, main pipes, manholes and lift stations.

The Drainage component of the Utility provides for the collection and conveyance of rainstorm water run off from individual properties and City streets to discharge locations into creeks and Burrard Inlet. The system is comprised of infiltration areas (wherever possible) as well as ditches and pipes, catch basins, manholes and culverts.

**DISCUSSION:**

The Engineering Planning and Design staff team work in cooperation with Operations staff to create the optimal approach for operating, maintenance and repair of these assets as well as capital replacement and renewal efforts to maximize their life and minimize the system cost impacts on the rate payer. For each asset component to have the longest



possible operational life, it must be maintained and repaired and then at end of life, be replaced.

The Sewerage and Drainage Utility was formed by Bylaw in 1995 (Bylaw 6746). It is a combined Utility for legal purposes but operated and accounted for as two separate components: one being Sewerage, the other Drainage.

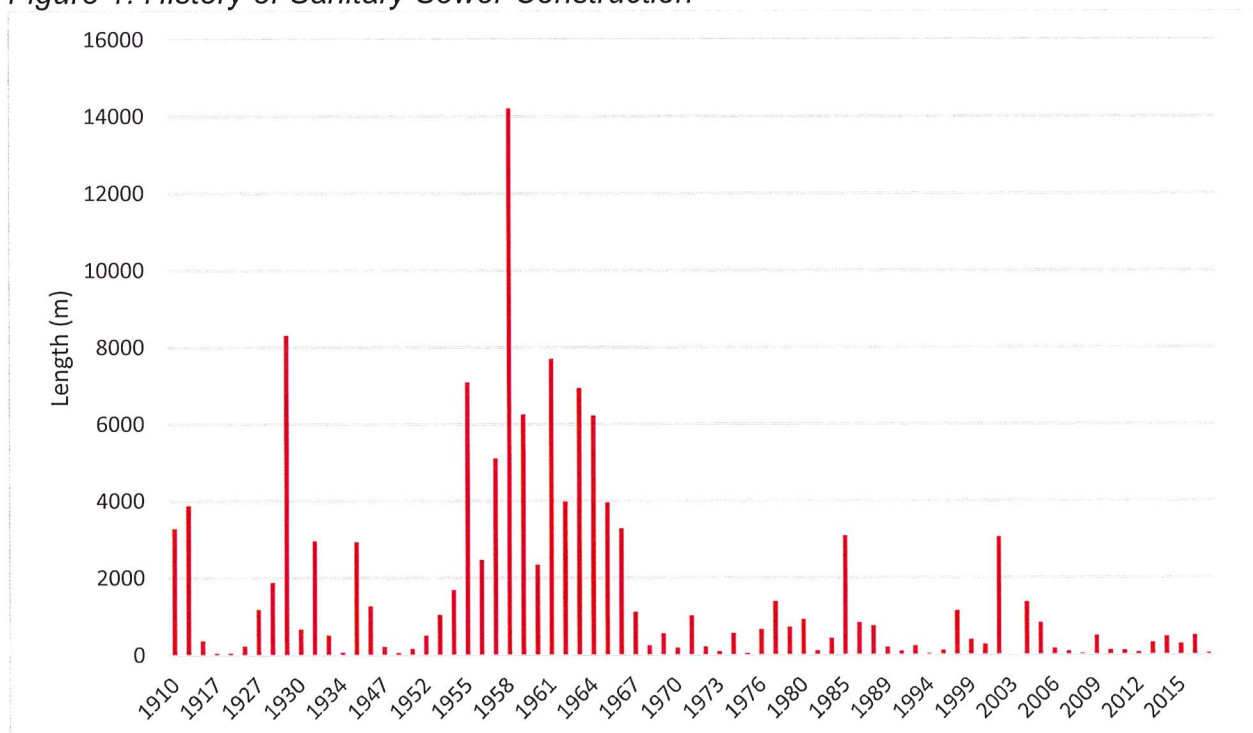
### **Sanitary Sewer System**

The average age of the City's sanitary sewer system is approximately 61 years old, based on total pipe length, and was constructed between 1910 and the present, as shown in the following Figure 1. The peak period of sanitary sewer construction occurred during the 1960's, when many of the City's subdivisions were constructed.

Overall, the sanitary sewer system is comprised of the following primary components:

- 124 kilometres of sanitary sewer main;
- 1,800 manholes;
- 6,800 sanitary service connections; and
- 4 lift stations.

*Figure 1: History of Sanitary Sewer Construction*



The majority of the sanitary sewer mains are vitrified clay pipe which was used extensively until the early 1980's. Since then, PVC pipe has been used almost exclusively.

### Sanitary System Condition Assessment

In 2015, staff initiated a methodical condition assessment program of the system, with the goal of inspecting between 5-10% of the system each year starting with the oldest areas. About 6% (7,400 metres) of sanitary sewer mains are at least 100 years old.

Over the past four years, approximately 22% (27,600 metres) of the sanitary system has been inspected using CCTV to assess pipe condition, the findings of which can be summarized as follows:

- 13,000 metres are in good condition with no or marginal structural defects;
- 7,600 metres are in fair condition with low or moderate structural defects;
- 7,000 metres are in poor condition with poor or very poor structural defects.

### Sanitary System Infrastructure Renewal

For long-term financial planning of overall sanitary system replacement, an annual replacement target of 1.0% (1,240 metres) is included in the Official Community Plan. The goal would be to structurally reline or replace these mains where necessary. This annual target provides a simplistic approach to plan how much of the total system should be replaced each year, based on the assumption that the average economic life of a sanitary sewer main is 100 years. While the economic life of a typical sanitary sewer main is in the order of 100 years, the actual period of time a pipe can provide reliable service varies based on a variety of factors such as material, ground conditions, installation practices and system demands. As the program matures, it is the goal to reach a consistent rate of replacement; however, currently the City may only reach this goal on a rolling two to three year average.

Currently, based on the 7,000 metres of pipes rated in poor condition, there are about six years of high priority work based on 1% replacement per year.

Since the early 2000s, the City has had a sanitary relining and joint repair program focusing on trenchless rehabilitation techniques to repair and reline existing pipes without requiring excavation. Over the past several years, sanitary sewer replacement and upgrade projects have been added periodically to the annual capital program to increase capacity to excavate and replace pipes where relining is not practical, as well as to install larger pipes to increase system capacity where required.

The proposed capital renewal and upgrade program for 2020 includes a contribution to approximately 470 metres of sanitary sewer upgrades to increase capacity in the Moodyville neighbourhood, and about 75 metres in the Central Lonsdale neighbourhood that is coordinated with developer contributed sewer replacements. The sewer capital projects proposed for 2020 represent the replacement of about 0.43% of the sanitary sewer system, which falls short of the 1% replacement target. However, approximately 550 metres of sanitary sewer will be contributed or cost-shared with developers in the next year which will increase the projected new sewer replacement to about 0.9% based on the proposed funding.

Presently, with higher increases to regional conveyance and treatment costs, the available capital funding for sewer replacement is limited. It is proposed that the annual



capital renewal and replacement program be increased incrementally over the next several years to ensure pipes are relined or replaced before they fail.

## 2020 Proposed Sewerage Budget

Table 1 below presents the breakdown of the sewerage portion of the proposed 2020 budget. The budget is comprised of four main areas: studies, one-time capital projects, annual capital projects, and operations.

Studies are capital projects that may occur annually or less frequently to support utility planning and asset management. The largest study item is the annual condition assessment and CCTV program, which is core to ongoing sewer asset management. This represents about half of sewerage study funding and was increased by 20% over 2019 levels to further accelerate condition assessment. Also included in the study funding is \$65,000 for a sanitary sewer asset management plan to follow the engineering asset management strategy currently under development.

In 2020, the total capital projects are limited to one new sewer replacement project and funding to replenish the St. David's Avenue sewer trunk project. As a result of increases to the Metro Vancouver levy, ongoing capital programs, operating budgets, and capital projects were curtailed for 2020.

Table 1: 2020 Sewerage Budget

Utility Area	Description	Pre-Design Budget
<b>Sewerage Studies</b>	Sanitary Model Update and Calibration	\$10,000
	Annual CCTV and Sanitary Sewer Condition Assessment Reporting	\$90,000
	Record Keeping/As Built Project	\$20,000
	Capital Plan and Asset Management Plan Update	\$65,000
	Sewer Utility Benchmarking	\$15,000
	<b>Sewerage Studies Total:</b>	<b>\$200,000</b>
<b>Sewerage Capital Projects</b>	St. Davids - 1st to 3rd Replacement (replenish funds allocated to 100 Block East 15 <sup>th</sup> project)	\$175,000
	East 12th - Lonsdale to East Lane - Sewer Replacement	\$150,000
	Sanitary Main Capital Renewal - Relining	\$0
	<b>Sewerage Projects Total:</b>	<b>\$325,000</b>
<b>Ongoing Capital Programs</b>	Sanitary Sewer System - Renewal / Replacement by Area	\$200,000
	Sanitary Sewer IC and Connection Program	\$100,000
	Sanitary Sewer Private Side - I&I Management	\$45,000
	Trench Restoration Contingency	\$35,000
	Sanitary Sewer Manhole Replacement	\$25,000
	<b>Sewerage Programs Total:</b>	<b>\$405,000</b>
<b>Sewerage Operations</b>	Sanitary Sewer Flow Monitoring Program	\$50,000
	Capital Paving	\$5,000
	Concrete Sidewalk Construction	\$5,000
	Pump Repairs - Pump Station Maintenance	\$20,000
	Pump Station Monitoring	\$10,000

Utility Area	Description	Pre-Design Budget
	Sanitary Main Cleaning	\$15,000
	Sanitary Main Inspection	\$10,000
	Sanitary Main Repair or Grouting	\$50,000
	Sanitary Manhole Adjust / Repair / Inspection	\$10,000
	Sanitary Service (Connection)	\$0
	Sanitary Service Repair / Blockage Assistance / Video	\$25,000
	Sanitary Severance	\$0
	Wet Well Cleaning	\$15,000
	<b>Sewerage Maintenance Total:</b>	<b>\$215,000</b>
<b>Sew/Drge Equipment</b>	Small Tools and equipment	\$6,000
	<b>Sewerage &amp; Drainage Equipment Total:</b>	<b>\$6,000</b>

**Sewerage Utility Total:** **\$1,151,000**

### Budget Provision for New North Shore Wastewater Treatment Plant

Over the past six budget cycles, Council has approved budget allocations to the sewer and drainage reserve to reduce future rate shock for the North Shore Waste Water Treatment Plant (NSWWTP). Council approved a \$600,000 contribution to the reserve in 2018, \$600,000 in 2019, and a \$400,000 contribution to the reserve is proposed for 2020. Construction of the new NSWWTP is underway and although it has been delayed, it is projected that the new plant will be operational by 2023.

### Sanitary Sewer Connection and Severance Fees

Staff is proposing the following increase in fixed fee costs of standard sanitary sewer connection installation and removal:

- \$5,100 for standard 100 millimetre diameter sanitary service connection installation;
- \$1,100 for a sanitary sewer severance.

The proposed sanitary sewer connection fee has an increase of \$300 over 2019 rates and no increase is proposed for severance fees over 2019 rates. These fee increases are intended to ensure the fee covers the actual cost of the work. All larger diameter sanitary sewer services are charged at cost, and all other fees remain unchanged.

The changes include a proposed service connection inspection chamber installation fee of \$2,500. This gives the City the option to provide a lower cost upgrade to an existing sewer connection instead of the complete connection replacement fee.

The proposed changes also introduce a Private Sewer Connection Inspection and Certification deposit. This deposit of \$2,500 could be used, in the case of large renovations to an older home, to incentivize homeowners to have their plumber video and inspect the underground sewer pipes on private property. These private pipes are often in poor condition, and homeowners are generally unaware of the condition of pipes until



they fail. These pipes are also a large source of uncontrolled inflow and infiltration which places significant demands on the entire system.

Once a simple report has been received and reviewed by the Engineering Development Technician, the deposit would be returned to the homeowner.

### Sanitary Sewer Efficiency and Incentives

The City's sewer system is one of the older systems in the region. As many municipalities with very old sewer systems had combined sewers, they have been aggressively replacing them as part of a sewer separation program. While the City of North Vancouver did not have purpose-built combined sewers, the sewer system has a strong response to rain storms where the peak sewer flow could be many times higher due to rain inflow and groundwater infiltration into sewer connections.

This inflow and infiltration into the sewer system consumes excess capacity in the City's and Metro Vancouver's sewer mains, as well as in the treatment plant. Consequently, the cost of sewer treatment is much higher than it should be and there may be a premature need to upgrade sewer pipes and increase capacity to prevent untreated sewage being released to Burrard Inlet during large rainfall events.

The City has had an extensive program of repairing and sealing main sewer pipes for more than 10 years. However, the majority of rainwater inflow results from the much smaller connection pipes on both the private and public parts of the sewer system. In order to improve sewer collection efficiency, the City supports a number of programs to help reduce inflow and infiltration from sewer connections. These include:

- Proactive sewer connection camera inspections in problematic areas: this is a specialty contractor program where a camera is launched from the sewer main pipe to connection pipes (both public and private pipes).
- Proactive sewer inspection chamber installations: this is a program where inspection points are installed on older connections between the public and private connection pipes to provide access to inspect the pipes and maintain the connection if needed.
- Homeowner sewer inspection program: for larger renovations, the City has required that the homeowner contribute a fee for sewer and water connection upgrades. This is to support good and reliable utility connections. Under the bylaw revisions, a deposit fee is being proposed so that homeowners can inspect their own sewer, rather than contribute funds to the City, and take ownership of sewer pipes on their property.

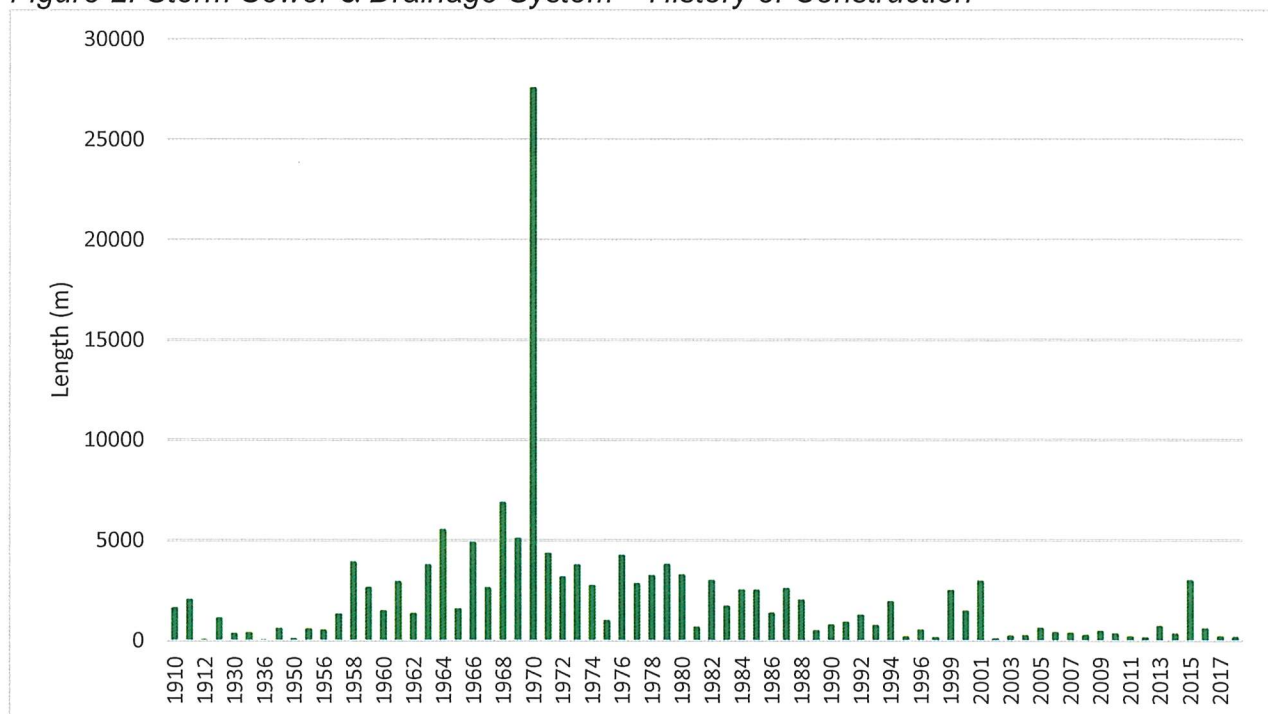
All of these programs are intended to support property owner awareness and their ability to maintain and care for their own sewer piping. The first two programs are funded by the utility and are used to target problematic areas. The third proposed program would reduce the potential utility fees charged under renovation and would incentivize owner responsibility and stewardship of private infrastructure.

It is the City's goal to reduce rain inflow and groundwater infiltration into the sewer system to reduce regional operating costs which are borne by municipalities, and to reduce the potential for environmental impacts associated with sewer overflows.

### **Storm Sewer and Drainage System**

The average age of the City's storm sewer and drainage system is approximately 45 years based on pipe length. While some storm sewers in Lower Lonsdale date back to the 1910s, much of the storm sewer system was constructed during the 1960s and 1970s. Figure 2 shows the history of storm sewer construction.

*Figure 2: Storm Sewer & Drainage System – History of Construction*



Storm sewers constructed in the late 1960s and early 1970s were often not well documented. Where the specific date was unknown, sewers were assigned a construction year of 1970, explaining the spike for that particular year.

The storm sewer system generally comprises the following primary components:

- 148 kilometres of storm sewer main;
- 1,550 manholes;
- 5,300 storm service connections;
- 3,200 catch basins; and
- 2 detention ponds (Wagg and Tempe).

The majority of the storm sewer mains are concrete pipe. Since the mid-1980's, smaller diameter storm sewers (typically 600 millimetres and smaller) have been constructed using PVC pipe while larger diameter storm sewers (750 millimetres and larger) are still constructed using concrete pipe.



The system collects precipitation and groundwater and transports it to the following receiving waters:

- Lynn Creek;
- Keith Creek;
- Mackay Creek;
- Mosquito Creek;
- Mission Creek;
- Wagg Creek;
- Thain Creek; and
- Burrard Inlet.

### Storm Sewer System Condition Assessment

Similar to the sanitary system, in 2015 staff initiated a methodical condition assessment program of the storm sewer system. Since then, approximately 12% (17,400 metres) of the storm system has been inspected using CCTV to assess pipe condition, with findings being summarized as follows:

- 10,800 metres are in good condition with no or marginal structural defects;
- 4,000 metres are in fair condition with low or moderate structural defects;
- 2,500 metres are in poor condition with poor or very poor structural defects.

The pipes rated in poor condition are high priority candidates to be relined or replaced in the near future.

### Storm Sewer and Drainage System Infrastructure Renewal

For long-term financial planning purposes, the recommended economic life of storm sewer mains, like sanitary sewers, is 100 years. However, due to land use changes and increasingly impervious urban areas, parts of the existing storm sewer system may not have the capacity to meet future system demands and will require upgrades before reaching the end of their economic lives. Conversely, some parts of the system may reach the end of their economic lives but continue to perform well and meet current demand, allowing replacement to be deferred.

Future storm system capacity planning considers the anticipated increase in total impervious (hard surface) area contained in the Official Community Plan as well as potential increased precipitation due to climate change. In March 2017, Council endorsed the Integrated Stormwater Management Plan (ISMP) which is primarily an approach to improve overall watershed health, but also serves to extend the service-capacity life of the storm sewer system.

In addition to capacity concerns of the existing system due to increased development and climate change, there are also about 30 blocks of the City that do not have storm sewers. On these blocks, drainage has historically been provided by a combination of ditches and small diameter “back-of-walk” perforated pipes or clay tiles. This combination of ditches and back-of-walk pipes does not provide an adequate level of service, therefore new storm sewers are required. Starting in 2015, the annual budget has included funding to incrementally extend the storm sewer system to unserved blocks. In 2019, more than

950 metres of storm sewer has been constructed under the program in conjunction with development funding. Future project locations will be coordinated with private developments to provide service to new buildings on unserviced blocks. Continuing this approach will extend service to all blocks over the next 20 to 30 years, and will also limit the rain inflow into the sanitary sewer.

In addition to areas with no or insufficient storm sewer servicing, 2,500 metres of the 17.4 kilometres inspected were found to have poor or very poor pipe condition rating. These sections of storm main represent almost 2% of the storm system and should be also funded for replacement.

### 2020 Drainage Budget

The Drainage budget, like the Sewerage budget, has a studies component for non-construction related capital costs. These costs include pipe inspection and condition assessment, asset management planning, environmental monitoring, and related planning tools. In 2019, \$135,000 was budgeted for studies and increases for 2020 are due to the asset management plan funding, environmental monitoring, and a 65% increase to pipe inspections.

In 2020, the Drainage Capital Plan includes the provision of storm sewer on East 23<sup>rd</sup> Street for the new Lawn Bowling Facility, a storm sewer upgrade on Lonsdale Avenue and Keith Road (to be coordinated with traffic signal work), and improvements to the creek inlet at 23<sup>rd</sup> Street and Ridgeway Avenue (Rippers Creek) which is prone to surcharge and nuisance flooding.

Funding for Operations has been increased slightly from \$225,000 to \$300,000. The increase is predominately due to the provision of \$50,000 for spill response. In the past two years, the incidents and costs associated to responding to spills entering natural creeks has grown substantially. The remainder of the increase is due to an emphasis on service connection response and blockage assistance.

Table 2 on the following page presents the breakdown of the drainage portion of the proposed 2020 budget.

Table 2: 2019 Proposed Drainage Budget

Utility Area	Description	Pre-Design Budget
Drainage Studies	Record Keeping/As Built Project	\$20,000
	CCTV Inspection and data management	\$90,000
	Environmental Monitoring (MAMF)	\$35,000
	Drainage Model Update and Calibration	\$0
	Capital Plan Development and Asset Management Plan	\$50,000
	Integrated Stormwater Management Plan	\$20,000
	Infrastructure Benchmarking	\$15,000
	<b>Drainage Studies Total:</b>	<b>\$230,000</b>
Drainage Capital Projects	Stormmain - 200 East 23rd	\$55,000
	Stormmain - Lonsdale at Keith Road	\$150,000
	Culvert Capital Improvements (Ripper's Creek Inlet - 2020)	\$50,000
	Stormmain - Development Supported Infill	\$350,000
	<b>Drainage Projects Total:</b>	<b>\$605,000</b>
Ongoing Capital Programs	Storm Service IC Installation and Connection Replacement	\$50,000
	Storm Manhole Installation	\$25,000
	Catchbasin Installation	\$50,000
	Driveway Culvert Installation	\$10,000
	Creek - Hazard Management	\$50,000
	Trench Restoration Contingency	\$35,000
	Stormwater Treatment Facilities	\$200,000
	Creek Environmental Improvements	\$0
	<b>Drainage Programs Total:</b>	<b>\$420,000</b>
Drainage Operations	Storm Main Repair	\$30,000
	Storm Main Blockage Response	\$20,000
	Storm Main Inspection	\$10,000
	Storm Main Cleaning	\$25,000
	Storm Service - New Connection	\$0
	Storm Service - Severence	\$0
	Storm Connection Blockage Assistance / Video / Clear	\$50,000
	Storm Manhole Adjust / Repair / Inspection	\$15,000
	Catchbasin Adjust / Repair / Inspection	\$25,000
	Catchbasin Cleaning	\$40,000
	Culvert Repair / Clean	\$10,000
	Ditch Maintenance	\$15,000
	Water Course Maintenance	\$10,000
	Spill Response	\$50,000
	<b>Drainage Maintenance Total:</b>	<b>\$300,000</b>

**Drainage Total:** **\$1,555,000**



### Storm Sewer Connection and Severance Fees

Staff is not proposing any changes to the new storm sewer connections or severances. The current connection and severance fees are:

- \$4,800 for standard 150 millimetre diameter storm service connection installation;
- \$1,100 for a storm sewer severance.

The City also has a storm sewer extension fee for single unit detached homes. In parts of the City modern storm sewers were not constructed during the 1960s. These areas drain to shallow ditches or shallow segmental clay pipe, and are not suitable for servicing modern homes with deep foundations and intensive site coverage. To support this development, the City created a fixed fee for storm extensions in 2016 to provide some cost certainty for homeowners, which was \$800/metre based on the width of property frontage. This rate has not changed since it was developed, and is being proposed to be increased to \$1,100/metre. This rate reflects the cost of the work and includes the service connection cost. Where costs of the project exceed the cost of the fee, the City has established a storm sewer infill fund to address any shortfall.

All larger diameter storm sewer services are charged at cost, and all other fees remain unchanged.

### Storm Sewer Efficiency and Incentives

The City's storm sewer system is a combination of some old infrastructure, some undersized infrastructure, and some infrastructure in poor condition. As part of the City's integrated stormwater management plan, a number of initiatives have been developed to improve the utility efficiency, environmental performance, and longevity. The approach of the plan is to introduce rainwater source controls to lessen the impact of development and climate change on the City's storm water utility and the natural receiving waters of Mosquito Creek, Mackay Creek, Lynn Creek, and Burrard Inlet. The strategy includes:

- All new private construction shall include rainwater infiltration or detention facilities to limit the water released from new development.
- All new City hardscape shall include opportunities to mitigate and treat the hard surfaces at the source with storage and infiltration works.
- City stormwater outfalls will incrementally be upgraded to include stormwater quality treatment works through underground treatment filters.
- Instream habitat and barriers to fish passage shall be incrementally improved and barriers removed.

Through implementing private and public rainwater source controls, the City can extend the useful life of the storm sewer in the face of increased intensity of land use and precipitation associated with climate change. Upgrades will be used strategically to address chronic capacity problems or sections of poor condition.



## **FINANCIAL IMPLICATIONS:**

The information provided in this report is intended to demonstrate the need for adequate funding for current operating and maintenance requirements, replacement and renewal projects, and that the Sewerage and Drainage Utility remains self-financing.

Details of the actual rate increase impacts are specified in the companion utility rate report.

## **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

The guiding principles used in the rate structure and rate setting process serve the Community Vision as stated in the Official Community Plan, which reads as follows:

Goal 8.1: Provide the community with public infrastructure that protects the natural environment at an affordable cost;

Goal 8.2: Employ a proactive approach to infrastructure maintenance and upgrades;

Goal 8.3: Use innovative planning and design to ensure infrastructure longevity.

## **INTERDEPARTMENTAL IMPLICATIONS:**

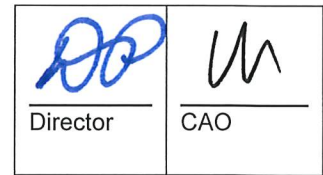
The development of financial plans for the utility has been a co-ordinated effort between the Engineering, Parks and Environment and the Finance Departments.

RESPECTFULLY SUBMITTED:



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Douglas T. Pope, P.Eng.  
City Engineer



The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**INFORMATION REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Douglas Pope, Director, Engineering, Parks and Environment

Subject: 2020 SOLID WASTE AND RECYCLING UTILITY UPDATE

Date: November 20, 2019 File No: 11-5380-01-0001/2019

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**PURPOSE:**

The purpose of this report is to provide background information regarding the City's Solid Waste Utility which includes residential garbage, Green Can, recycling, and Eco Levy programs. This report is a companion document to the annual rate setting report, which proposes an overall reduction to the 2020 Solid Waste Utility of 0.4% for single-family units and 35.3% for multi-family units.

**BACKGROUND:**

The City's Solid Waste program provides for the collection and disposal of residential curbside garbage, the recycling of Green Can materials (yard trimmings and food scraps) and the collection of recyclable materials from single-family and multi-family homes. In addition, public realm litter collection (including parks, streetscape, and plazas), as well as community waste reduction initiatives are funded by the Eco Levy.

**DISCUSSION:**

Solid Waste Collection and Recycling Services

The City provides collection and disposal of residential garbage and Green Can materials from single-family homes and apartments and townhouses with 9 units or less. The garbage and Green Can material collected curbside by City staff is then transported to the North Shore Transfer Station, which is operated by Metro Vancouver. These materials are then transported by Metro Vancouver to facilities either within or outside of the region for processing. Each year, Metro Vancouver establishes the rate or "tipping fee" for materials received at the Transfer Station, with separate rates for garbage and organics



(Green Can). The 2020 Metro Vancouver fee for municipal garbage disposal will be \$113 per tonne, representing a \$5 per tonne increase from 2019. These increased operating costs result in a 3.6% increase in the Refuse Levy for a single unit residence.

The City's three refuse trucks that are used to provide curbside collection of garbage and Green Can are scheduled for replacement in the next few years. The replacement of this equipment provides an opportune time to review new and emerging technologies, including electrically powered trucks and automated lifting/tipping systems.

To facilitate the most efficient use of equipment and staffing, a minor collection route revision will be implemented beginning January 2020. This minor change will not effect the day of the week that residents receive curbside pick up, but may change the week that they receive their bi-weekly garbage collection. This will be communicated to residents via the City's 2020 Collection Guide, the collection app, as well as social media.

In an ongoing effort to reduce wildlife conflict, residents are being asked to place their garbage, Green Can and recycling out no earlier than 5:30 a.m. and not later than 7:30 a.m. when collections begins. This minimises the amount of time that the materials are potentially available to animals and is consistent with the requirements in neighbouring municipalities and the recommendations of the North Shore Black Bear Society.

#### Recycling Service Update

Recycling service is currently provided for both single-family and multi-family homes through a tri-municipal shared contract with Smithrite Disposal Ltd. The contract is administered by the District of West Vancouver on behalf of the three North Shore municipalities on a cost share basis, and expires on June 30, 2020.

Recycle BC is the industry appointed product stewardship organization that is responsible for the recycling of packaging and paper products (PPP) in BC. This includes the range of recyclable materials in the curbside yellow bag, blue and grey box collection program, in addition to other materials collected through various depots. The North Shore municipalities currently act as contractors by having Smithrite Disposal provide residential recycling service to residents on behalf of Recycle BC. In return, Recycle BC provides a financial incentive to the City for collection of PPP materials. The cost of the recycling program is therefore partially offset by revenue received from Recycle BC, with the annual shortfall funded through the solid waste utility budget.

In March 2018, City Council, along with the Districts of North and West Vancouver, approved the transition of single-family and multi-family recycling collection on the North Shore to "direct service" by Recycle BC at the end of the current recycling contract, and beginning July 1, 2020. This means Recycle BC will directly provide residential recycling services on the North Shore, as they currently do in 176 other communities in BC. This includes responsibility for all contract administration, customer service, education and outreach for the residential collection program at no additional cost to residents.

This approach streamlines delivery of recycling services by removing the City as a contractor, maintains existing service levels, and reduces the City's 2020 Solid Waste Utility rates. By transitioning residential recycling service to Recycle BC, the City is also supporting the principles of extended producer responsibility by shifting the responsibility



for recycling entirely to industry, saving residents from having to pay both Recycle BC fees embedded in product prices along with a Recycling Levy as part of the Solid Waste Utility fees. As a result, the City's Recycling Levy has been eliminated from the proposed 2020 Solid Waste fees, with the final 6-months of the current recycling contract funded from the Solid Waste Reserve.

Under the current tri-municipal recycling contract, recycling services are also provided to the North and West Vancouver School District, as well as a number of community churches, the latter of which have been receiving services free of charge. Institutional and commercial properties cannot be included in Recycle BC's residential program and will need to secure alternative collection options. Staff will provide support to these organizations to help those secure appropriate services prior to the end of the current contract in June 2020.

#### Recycling Drop-off Area at the North Shore Transfer Station

The consolidated Recycling Drop-Off Area adjacent to the main North Shore Transfer Station has been in operation since January 2017. The Recycling Drop-Off Area is operated by Metro Vancouver, and accepts a wider range of recyclable items, such as metal, electronics, and paints. It is funded by the three North Shore municipalities, along with funding from product stewards under the Province's Extended Producer Responsibility programs.

#### Reduction in waste tonnages

The City has made significant progress in diverting food scraps and other organic material from the waste stream through the curbside Green Can program, along with the implementation of bi-weekly garbage collection in January 2014. Single unit garbage generation in the City continues to decrease, with 213 kilograms/household in 2018, a 3.5% decrease from 2017.

#### Regional Organics Update

Metro Vancouver's organics disposal ban implemented in January 2015 encourages all residential homes, buildings and businesses to separate their food scraps from the garbage. To encourage compliance with the ban, staff implemented an ongoing communications strategy targeting the single-family, multi-family and commercial sectors, including printed materials, promotion on the website and social media, as well as education and outreach at community events.

Organics collected through the City's curbside Green Can program are deposited at the North Shore Transfer Station. Metro Vancouver then coordinates the bulk transport of the materials to a contracted compost processing facility. This arrangement is unique within the region, as other Metro Vancouver members are in closer proximity to processing sites, have their own processing contracts, and do not require a Metro Vancouver operated transfer station as part of their organics collection program. With the current processing contract for the North Shore municipalities expiring in June 2020, Metro Vancouver will be seeking a new multi-year processing contract in the coming months. Metro Vancouver organics tipping fees will be increased by \$5 to \$100 per tonne in 2020, but are expected to increase again with the next processing contract, to ensure full cost recovery. The City's Green Can Levy has therefore been increased by 5.9% for 2020.

### Zero Waste Challenge

Management of the City's Solid Waste Utility is guided by the regional Integrated Solid Waste and Resource Management Plan (ISWRMP). The current ISWRMP was written in 2010 and Metro Vancouver is about to begin a process to update the plan over the next three years.

A key deliverable of the ISWRMP is the implementation of the region's Zero Waste Challenge. This initiative requires emphasis in the following areas:

- Education and outreach to increase waste reduction and recycling across all sectors (residential, institutional, commercial, and industrial);
- Recycling for all multi-family and institutional, commercial, and industrial buildings;
- Organics including food waste diversion for single-family, multi-family, institutional, commercial and industrial buildings;
- Increased reuse and recycling on demolition and construction sites; and,
- Acceleration of provincial EPR (extended producer responsibility) programs.

### Zero Waste Coach Program

The City provides a Zero Waste Coach program to support residents, schools and businesses with recycling and food scraps diversion. The Zero Waste Coach is available to visit buildings to assess recycling needs and space challenges, resolve collection challenges, provide education sessions at strata meetings or lobby events, and assist with signage and posters. This program plays a key role in ensuring that City residents, schools and businesses are separating food scraps from the garbage in compliance with the regional organics ban, and are maximizing recycling opportunities available in the City and region.

### Corporate Zero Waste Program

Staff have implemented a Corporate Zero Waste Program to increase recycling and food scraps collection opportunities in all civic facilities. The program is a key component of the City's Corporate Climate Action Plan, and has been implemented at City Hall, the Operations Centre, Fire Hall, RCMP, Library, Centennial Theatre, Harry Jerome and John Braithwaite Recreation Centres, North Shore Neighbourhood House and the Community Policing Office. The program has reduced the amount of garbage sent to landfill by as much as 70% in some facilities. Staff continue to provide outreach to these facilities to further increase diversion and reduce contamination of recycling streams.

### Eco Levy

In 2011, the City implemented an Eco Levy so that waste diversion programs are funded by both residential and non-residential sectors. The Eco Levy ensures that the City's litter program and additional waste diversion initiatives, such as the provision of public realm recycling and the dog waste collection (red bin) program, are now managed and funded through the City's solid waste utility. Commencing in 2020, with the end of the Recycling Levy, the Eco Levy scope will be expanded to include the City's waste reduction programs as part of the Zero Waste Challenge, including community outreach and education. As a result, the Eco Levy will increase by 33.3%; however, with the reduction in recycling costs, there will still be a net decrease in the overall 2020 Solid Waste Utility for 0.4% for single unit properties and 35.3% for multi unit properties. The greater decrease in the multi-



family sector is because those properties do not receive curbside refuse and Green Can service from the City, and are therefore not impacted by those proposed levy increases.

#### **FINANCIAL IMPLICATIONS:**

The information in this report is provided to help ensure that the Solid Waste Utility remains self-financing, and that adequate funds for current operating requirements and reserves are provided.

Details of the actual rate increase impacts are specified in the companion rate report authored by the Finance Department.

#### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

The waste management services delivered through the Solid Waste Utility support the City's corporate and community greenhouse gas reductions strategies, as well as the Official Community Plan goal 8.1: *Provide the community with public infrastructure that protects the environment at an affordable cost.*

#### **INTERDEPARTMENTAL IMPLICATIONS:**

Financial planning for the solid waste and recycling programs has been a coordinated effort between the Finance, Planning and Development, and the Engineering, Parks and Environment Departments.

RESPECTFULLY SUBMITTED:



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Douglas T. Pope, P. Eng.  
City Engineer

**THE CORPORATION OF THE CITY OF NORTH VANCOUVER**

**BYLAW NO. 8739**

**A Bylaw to Amend “Water Utility Bylaw, 1994, No. 6417”**

The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

1. This Bylaw shall be known and cited for all purposes as **“Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2019, No. 8739”**.
2. “Water Utility Bylaw, 1994, No. 6417” is amended as follows:
  - A. Delete Section 706 – Date of Payment, Discounts and Penalties in its entirety and replace with the following:

Section 706 – Date of Payment, Discounts and Penalties

    1. The date of payment, discounts and penalties are listed in Schedule “B” of this bylaw.
  - B. SCHEDULES:
    - (1) Delete Schedule “A” in its entirety and replace with the new Schedule “A” attached to this bylaw.
    - (2) Delete Schedule “B” in its entirety and replace with the new Schedule “B” attached to this bylaw.
3. This Bylaw shall be effective as of the 1<sup>st</sup> day of January, 2020.

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READ a second time on the <> day of <>, 2019.

READ a third time on the <> day of <>, 2019.

ADOPTED on the <> day of <>, 2019.

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MAYOR

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CITY CLERK

## SCHEDULE A

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### Water Services

#### 2020 CONNECTIONS AND SEVERANCE RATES

**1. Water Service Connections**

Size	Fee
Standard 19 mm	\$5100
>19 mm	At Cost, with a minimum charge equal to the standard fee.

**2. Water Service Severance**

For Standard 19 mm Replacement	\$1100
>19 mm service replacement	At Cost, with a minimum charge equal to the standard fee.

**3. Water Connection Reuse** \$2500

**4. Turn on/off** \$50

**5. Flat fee for installation and removal of temporary meter** \$400

A 50% rebate is available for standard 19mm water service replacements that are installed less than 2 years in advance of a City initiated programmed replacement of water services within the block.

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## SCHEDULE B

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### 2020 Water Use Rates

#### 1. WATER RATES

##### 1. For Temporary Service during construction

###### *Building Size (Total Floor Area)*

46 sq. m to 460 sq. m	\$165
Over 460 sq. m but not exceeding 4,600 sq. m	\$325
Over 4,600 sq. m but not exceeding 23,000 sq. m	\$540
Over 23,000 sq. m	\$860

##### 2. Flat Rates (un-metered premises)

Single Unit Dwelling	\$489 per year
Duplexes (including infills) per unit	\$410 per year
Multiple Unit Dwellings (including extra living units within single unit dwellings, apartments, condominiums, garden apartments and coach houses) for each dwelling	\$286 per year
Stores, offices, other commercial premises not elsewhere designated; Churches and Public Halls per fixture	\$115 per year
Water Cooling Units	\$800 per year
Schools per Classroom	\$369 per year
Minimum charge for any service	\$489 per year

## **2. METERED WATER RATES**

For commercial and industrial properties, hospitals and schools served by water meters the following scale of charges shall apply:

1.	January 1 to May 31	\$ 1.2212 per cubic metre
	June 1 to September 30	\$ 1.5265 per cubic metre
	October 1 to December 31	\$ 1.2212 per cubic metre

A minimum bill for 30 cubic metres per month will be charged if a lesser quantity or no water is consumed.

### **2. Metered Charges for Mixed Use Premises**

The charge for Mixed Use Premises on metered rates shall be the greater of the flat rate for Multiple Dwelling Units provided in this Schedule times the number of dwelling units or the metered rates.

## **3. MISCELLANEOUS CHARGES**

### **1. Testing a Meter as Provided in Section 703**

For meters 50 mm and smaller	\$115
For meters over 50 mm	\$225

## **4. DATE OF PAYMENT AND PENALTIES**

### **1. FOR FLAT RATE (un-metered premises)**

1. Rates set out above shall be due on the last business day in February each year.
2. A penalty of five percent (5%) shall be added to rates which are not paid on or before the last business day of February and a further penalty of five percent (5%) shall be added to rates which are not paid before the last business day of April in the year which the rates are due.

### **2. FOR METERED PREMISES**

1. A penalty of five percent (5%) shall be added to rates which are not paid on or before the due date as indicated on metered account bills.



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8740

**A Bylaw to Amend “Sewerage and Drainage Utility Bylaw, 1995, No. 6746”**

The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

1. This Bylaw shall be known and cited for all purposes as **“Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2019, No. 8740”**.
2. “Sewerage and Drainage Utility Bylaw, 1995, No. 6746” is amended as follows:
  - A. SCHEDULES:
    - (1) Delete Schedule “A” in its entirety and replace with the new Schedule “A” attached to this bylaw.
    - (2) Delete Schedule “B” in its entirety and replace with the new Schedule “B” attached to this bylaw.

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READ a third time on the <> day of <>, 2019.

ADOPTED on the <> day of <>, 2019.

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MAYOR

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CITY CLERK

## **SCHEDULE A**

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### **Sewer and Drainage Services**

#### **2020 CONNECTION AND SEVERANCE FEES**

##### **1. SANITARY CONNECTION**

<b>Size</b>	<b>Fee</b>
Standard 100mm Replacement or Relining	\$5,100
>100mm	At Cost, with a minimum charge equal to the standard fee
Inspection Chamber	\$2,500
Private Sewer Connection Inspection and Certification Deposit	\$2,500
Sanitary Severance	\$1,100

##### **2. STORM CONNECTION**

<b>Size</b>	<b>Fee</b>
Standard 150mm Replacement or Relining	\$4,800
>150mm	At Cost, with a minimum charge equal to the standard fee
Storm Sewer Extension and Connection for Single Unit Developments exceeding \$150,000 and excluding subdivision	\$1,100 per linear metre based on the total width of the lot serviced
Storm Severance	\$1,100
Off-Site Stormwater Management Facility Fees	\$30 per square metre of premises lot area or at cost to provide works on public property
Storm Collection System Ditch Culvert	\$250 per linear metre based on Construction the length of the culvert pipe

## SCHEDULE B

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### 2020 Sewer and Drainage Rates

The following rates shall apply to all real property used for one or more of the following purposes and from which there is a connection to the sewer systems of the City:

#### 1. SANITARY SEWER

#### 2020 Rates

1. **Annual Sewer Parcel Tax** \$ 0 per year

#### 2. **Flat Rates (un-metered premises)**

Single Unit Dwelling ..... \$411 per year

Duplexes (including infills) per unit ..... \$380 per year

Multiple Unit Dwellings (including extra living units  
within single unit dwellings, apartments,  
condominiums, garden apartments and coach houses)  
for each dwelling ..... \$256 per year

Stores, offices, other commercial premises  
not elsewhere designated; Churches and Public Halls  
per fixture ..... \$107 per year

Minimum charge for any service is ..... \$411 per year

#### 3. **Metered Rates**

For commercial and industrial properties, hospitals and schools served by water meters the following scale of charges shall apply:

\$1.6781 per cubic metre

A minimum bill for 30 cubic metres per month will be charged if a lesser quantity or no water is consumed.

#### **4. GVS & DD Special Industrial User Charge**

Where the owner or occupier of a parcel of real property is a special industrial user, that owner or occupier shall pay to the municipality for the use of the sewerage system the greater of:

- A. the charges payable under Schedule B, subsections .1, .2, and .3, or
- B. the GVS & DD special industrial user charge as determined by the GVS & DD for that owner or occupier, prorated if necessary for monthly or quarterly billings.

#### **5. Charges for Contaminated Groundwater Discharges to Sanitary Sewer**

Ground Water Discharges \$0.33/m<sup>3</sup>, or as determined by the GVS & DD.

#### **6. Metered Charges for Mixed Use Premises**

The charge for Mixed Use Premises on metered rates shall be the greater of the flat rate for Multiple Dwelling Units provided in this Schedule times the number of dwelling units or the metered rates.

#### **7. Sewer Use Charges**

Users having a metered water service, who return less than 40% of water purchased to the sanitary sewer system, may make application to the Director of Finance for a Flat Rate Sewer charge based on their number of plumbing fixtures discharging into the sewer outlet of the premises, together with a charge of \$400 per million dollars of taxable assessment.

Applications for flat rate sewer charges must be received prior to December 1 of the year of application, and must include a full description of water usage and the total number of fixtures on the property, as described in Schedule "B" of this Bylaw.

The Director of Finance will examine each application and the supporting documentation and may visit the site to ensure that the conditions described are representative of a complete year's usage and that the total number of fixtures is accurate.

The Director of Finance will either reject the application providing reasons, or approve a Flat Rate charge. This charge, if approved, will be billed annually.

Any user rate so adjusted will be subject to periodic review by the Director of Finance and may, at any time, be returned to a user rate based on metered water consumption and the applicant so notified.

In no case shall the annual charge for a sewer-user having a metered water connection be less than the rate for a Single Unit Dwelling.

## **8. Date of Payment and Penalties**

### **A. FOR FLAT RATE (un-metered premises)**

- 1) Rates set out above shall be due on the last business day in February each year.
- 2) A penalty of five percent (5%) shall be added to rates which are not paid on or before the last business day of February and a further penalty of five percent (5%) shall be added to rates which are not paid on or before the last business day of April in the year which the rates are due.

### **B. FOR METERED PREMISES**

- 1) A penalty of five percent (5%) shall be added to rates which are not paid on or before the due date as indicated on metered account bills.

## **2. STORM DRAINAGE**

1. The Storm Drainage Levy is based on the taxable assessment of a property and is charged on the following classes per thousand dollars of taxable assessment based on the BC Assessment assessed value of:

- Residential
- Utility
- Major Industry
- Light Industry
- Business
- Recreation/non-profit

and is included on the Property Tax Notice payable annually in July of each year as set by Council.

### **2. Storm Drainage Charges**

A user, who is aggrieved by the application of Schedule B 2.1 to a specific parcel, may make application to the City Engineer, in writing, stating the basis for the complaint. The City Engineer will respond, in writing, to the applicant's concern outlining any appropriate adjustment that may be authorized.

### **3. Penalty**

A 5% penalty will be added to the balance owed if unpaid by the end of the first working day in July, and a further 5% penalty will be added to the balance owed if unpaid by the first working day of September.



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# THE CORPORATION OF THE CITY OF NORTH VANCOUVER

## BYLAW NO. 8741

### **A Bylaw to Amend “Solid Waste Management Service Bylaw, 1997, No. 6920”**

The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

1. This Bylaw shall be known and cited for all purposes as **“Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2019, No. 8741”**.
2. “Solid Waste Management Service Bylaw, 1997, No. 6920” is amended as follows:
  - A. Delete Sections 704 and 705 in Part 7 – Containers in their entirety and replace with the following:

#### **704 Location and Placement of Containers**

1. All users of the Solid Waste Management Service shall ensure that containers for garbage, yard trimmings, food scraps, and recyclable materials are:
  - (a) Stored on private property in such a manner that they do not rest on, encroach upon or project over any highway (which includes streets, lanes, and boulevards) or other public place and do not impede or endanger vehicle or pedestrian traffic on any street or other public place;
  - (b) Placed at the property line, at the level of the adjacent lane, or if no lane exists, the adjoining street at the curb or pavement area, clear of the traveled pavement area, no earlier than 5:30 a.m. and no later than 7:30 a.m. on the designated collection day, and returned to private property by no later than 9:00 p.m. the same day.

#### **705 Maintenance of Containers and Enclosures**

1. Any enclosures for the storage of garbage, yard trimmings and or recyclable material containers shall be located within private property, built to comply with the Building Bylaw, and prevent access by domestic or wild animals, birds, rodents or other pests;
2. All garbage containers and bulk garbage containers for household garbage, commercial garbage, yard trimmings, food scraps, and or recyclable materials, and any enclosure used to store the containers shall be stored in a tidy manner on private property, and maintained in good condition. The City Engineer may identify containers or enclosure which are unfit for their purpose and inform the Owner that the containers or enclosures shall no longer be used. Each Owner of a container or enclosure so identified shall forthwith replace, modify, or repair the container to the satisfaction of the City Engineer.

B. PART 11 – SCHEDULES:

- (1) Delete Schedule “A” in its entirety and replace with the new Schedule “A” attached to this bylaw;
  - (2) Delete Schedule “E” in its entirety and replace with the new Schedule “E” attached to this bylaw.
3. This Bylaw shall be effective as of the 1<sup>st</sup> day of January, 2020.

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2019.

READ a third time on the <> day of <>, 2019.

ADOPTED on the <> day of <>, 2019.

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MAYOR

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CITY CLERK

## PART 11 – SCHEDULES

### SCHEDULE “A” SCHEDULE OF USER CHARGES FOR SOLID WASTE MANAGEMENT SERVICE

#### 1101 DEFINITIONS

1. *Standard Residential Service* = A maximum of two (2) garbage containers per dwelling unit collected every other week.
2. *Commercial Service* = As arranged.
3. *Recycling Service* = Weekly collection of recyclables and an unlimited number of Green Can designated containers, kraft bags and/or tied bundles of yard trimmings.

#### 1102 ANNUAL USER CHARGE

<b>GARBAGE</b>	<b>2020</b>
1. Per dwelling unit for single unit dwelling, duplex and infill	\$115.00
2. Per dwelling unit for secondary suite, coach house and multi-unit dwellings greater than 2 units	\$77.00
3. Per Residential garbage tag	\$4.00
4. Per Commercial garbage tag	\$4.50
<b>GREEN CAN</b>	<b>2020</b>
1. Per dwelling unit for single unit dwelling, duplex and infill	\$125.00
2. Per dwelling unit for secondary suite, coach house and multi-unit dwellings greater than 2 units	\$75.00
<b>ECO LEVY</b>	
<p>The Eco Levy is based on the taxable assessment of a property and is charged on the following classes per thousand dollars of taxable assessment based on the BC Assessment assessed value of:</p> <ul style="list-style-type: none"><li>• Residential</li><li>• Utility</li><li>• Major Industry</li><li>• Light Industry</li><li>• Business</li><li>• Recreation / non-profit</li></ul> <p>and is included on the Property Tax Notice payable annually in July of each year as set by Council.</p>	

## **1103 PENALTY**

1. A 5% penalty will be added to the balance owed if unpaid by the end of the first working day in July, and a further 5% penalty will be added to the balance owed if unpaid by the first working day of September.

## **SCHEDULE “E”**




### **1107 RECYCLABLE MATERIALS COLLECTED BY THE SOLID WASTE MANAGEMENT SERVICE**

#### **Packaging and Paper Products (PPP)**

1. Mixed Paper Recyclables	Newspaper, flyers, writing/home office paper, magazines, catalogues, boxboard boxes, molded boxboard, corrugated cardboard, multi-layer paper bags, paper bags, non-foil gift-wrap, greeting cards, telephone books, shredded paper.  Paper which is soiled, food contaminated, or wet should be placed into containers intended for organic material collection.
2. Glass Containers Recyclables	All clear or coloured glass food and beverage bottles or jars.
3. Non-glass Mixed Container Recyclables	All hard plastic containers, steel containers, aluminum foil and containers, cold drink cups, paper cups, gable top cartons, aseptic containers, spiral wound paper cans, empty aerosol cans, frozen dessert boxes





			
Department Manager		Director	CAO

The Corporation of **THE CITY OF NORTH VANCOUVER**  
**FINANCE DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Leslie Garber, Deputy Director of Finance

Subject: 2020-2029 PRELIMINARY PROJECT PLAN

Date: November 20, 2019 File No: 05-1705-30-0001/2020

*The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Deputy Director of Finance, dated December 02, 2019, entitled "2020-2029 Preliminary Project Plan":

THAT the 2020-2029 Preliminary Project Plan for the City of North Vancouver be endorsed;

AND THAT resolutions or bylaws to appropriate funding for the projects included in the 2020 Project Budget be brought forward by staff in a timely manner.

**ATTACHMENTS:**

1. 2020-2029 Preliminary Project Plan, dated December 2, 2019 (CityDocs# 1850265)

**PURPOSE:**

This report is a follow up to the Draft 2020-2029 Preliminary Project Plan presented to Council November 4, 2019 and provides details changes that have been made since the November 4, 2019 Regular Council Meeting.

## BACKGROUND:

At the November 4, 2019 Regular Meeting, Council received a copy of the 2020-2029 Draft Preliminary Project Plan for review and comment. Council provided feedback on the Plan including the inclusion in the Plan of additional initiatives.

## DISCUSSION:

The 2020-2029 Draft Preliminary Project Plan was a draft, working document. The 2020-2029 Preliminary Project Plan, included as **Attachment 1**, incorporates Council feedback as well as changes to provisions from dedicated funds and changes as a result of revised departmental requests and other adjustments. The requested funding in the 2020-2029 Preliminary Project Plan varies from the Draft 2020-2029 Preliminary Project Plan presented to Council November 4, 2019, as follows:

<b>Project Categories</b>	<b>Preliminary Project Plan 2020 Only</b>	<b>Change</b>	<b>Preliminary Project Plan 2020-2029</b>	<b>Change</b>
Land/Major Investments	\$34.5M	\$3.5M	\$42.2M	\$8.5
Buildings	\$20.9M	\$0.1M	\$249.7M	\$0.1
Structures	\$19.0M	(\$0.1M)	\$154.7M	\$0.5
Equipment	\$6.4M	(\$0.1M)	\$43.2M	(\$0.2)
<b>Total Requested</b>	<b>\$80.8M</b>	<b>\$3.4M</b>	<b>\$489.8M</b>	<b>\$8.9</b>

### Land and Major Investments:

- The provision from the Affordable housing reserve has been increased to include the full balance of the reserve each year, making an additional \$3.5M available in 2020 and giving council the ability to use the funds when needed. The annual contribution to the reserve has also been increased from \$200K to \$750K.

### Buildings:

- Civic Centre 13<sup>th</sup> Street Frontcourt Improvements (Project 2-51), has been added to the plan in the amount of \$150K in 2020, \$50K of which is externally funded.
  - The purpose of this funding is to hire a Landscape Architect consultant to provide design and specifications as well as to hire a general contractor to carry out the improvements.

### Structures:

- Active Transportation Wayfinding (Project 3-12), has been increased from \$25K to \$150K in 2020, and from \$360K to \$490K in 10 years spanning 2020-2029.
  - The purpose of this project is to develop an active transportation wayfinding strategy for the City and support the implementation of the strategy to improve the navigability of the City.

- Priority Mobility Networks Improvements (Project 3-15), has been reduced from \$1.8M to \$1.5M in 2020, and increased from \$14.7M to \$15.0M in the 10 years spanning 2020-2029, largely due to increased expected external funding in 2021 and 2022.
  - The purpose of this project is to promote cycling as a safe and convenient mode of transportation by improving and completing facilities for cyclists
- Central Lonsdale Wayfinding (Project 3-79), has been added to the 2020-2029 Preliminary Project Plan, which has \$30K of funding in 2020.
  - The purpose of this project is to provide pedestrian wayfinding signage to direct people to locations of civil importance such as City Hall, the library, RCMP and Lions Gate Hospital.
- Public Art Provision of 1% of LL Land Sales (Project 5-3), has been added to the plan in the amount of \$86K in 2020.
  - This is a provision added to the plan to make available 1% of Lower Lonsdale land sales that have been received and contributed to the Public Art Reserve Fund.

#### **Equipment:**

- Public WiFi Upgrades (NVRCC) (Project 7-23), has been increased from \$0 to \$35K in 2029 of the 2020-2029 Preliminary Project Plan.
  - The purpose of this project is to upgrade and replace NVRCC's existing public WiFi system.
- Mobile Device Applications (NVRCC) (Project 7-24), has increased from \$27K to \$81K in the 10 years spanning 2020-2029, with the entire increment being external funding.
  - The purpose of this project is to fund the development of a mobile application to allow customers and community members to view NVRC program and service offerings on their mobile devices.
- Website Content Management Program Update (NVRCC) (Project 7-26), has been increased from \$0 in 2020 to \$39K in 2020 (\$26K being external) and reduced from \$195K to \$39K in the 10 years spanning 2020-2029.
  - The purpose of this project is to replace the technology that manages content on the www.nvrc.ca website, which has reached the end of its useful life.
- CleanBC Better Homes and Home Renovation Program (Project 10-46), has been decreased from \$200K in 2020 to \$60K in 2020 (all external funding).
  - The purpose of this project is to reduce community-wide emissions from residential buildings.



Changes by project are summarized in the following table:

Project	2020	2021-2029	Total
Affordable Housing Provision	\$3.5 M	\$4.9 M	\$8.4 M
Civic Centre 13th Street Forecourt Improvements	\$0.2 M	\$0.0 M	\$0.2 M
Active Transportation Wayfinding	\$0.1 M	\$0.0 M	\$0.1 M
Priority Mobility Network Improvements	(\$0.4 M)	\$0.7 M	\$0.3 M
Central Lonsdale Wayfinding	\$0.03 M	\$0.00 M	\$0.03 M
Public Art Provision 1% of LL Land Sales	\$0.1 M	\$0.0 M	\$0.1 M
Public WiFi Upgrades (NVRCC)	\$0.00 M	\$0.04 M	\$0.04 M
Website Content Management (NVRCC)	\$0.0 M	(\$0.2 M)	(\$0.2 M)
Mobile Device Applications	\$0.0 M	\$0.1 M	\$0.1 M
CleanBC Better Homes Home Renovation Program	(\$0.1 M)	\$0.0 M	(\$0.1 M)
	\$3.4 M	\$5.5 M	\$8.9 M

Support for the current Plan is part of an ongoing process; Council will have many more opportunities to make modifications to funding provisions to projects in the 10-Year plan. Support for the current Plan ‘freezes’ funding to projects, but does not allow spending. Council must pass funding resolutions (or bylaws in the case of DCC funding) before spending can take place. Council will have the opportunity to comment on each project at the time of funding appropriation, and can modify or withhold funding approval on a project by project basis at that time

#### **FINANCIAL IMPLICATIONS:**

Financial implications are addressed throughout the report and additional materials provided.

#### **INTER-DEPARTMENTAL IMPLICATIONS:**

The 2020 – 2029 Project Plan is a reflection of the policies of the City, and the work plans of all City departments. Finance staff relies on their close working relationship with staff in other departments and the City’s shared-cost agencies, in developing this plan. Finance wishes to thank all the members of staff who contribute so much of their time and effort to this process.

#### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

The Financial Plan is a key component in achieving the City’s Community Vision outlined in the Official Community Plan (OCP).

The budget and Financial Plan processes are consistent with Paragraph 9.2, Financial Planning and Budget Process, of the OCP.

- All budget requests are reviewed for consistency with the goals of the OCP.
- Through considered long-range financial planning the City seeks to:

- Anticipate and prepare for future costs, including planning in advance for infrastructure replacement;
- Diversify its revenue and reduce its reliance on property taxation and increase the City's resiliency;
- Maintain reserves for unexpected expenses;
- Apply taxes fairly between property types;
- Tax at a rate that encourages investment in the City;
- Continue to build a Tax Sale Land Reserve as a permanent fund held in trust for future generations;
- Attempt to maintain a revenue surplus for use in the event of declared emergencies.

### **STRATEGIC PLAN IMPLICATIONS:**

The 2020-2029 Preliminary Project Plan was prepared with consideration of the 2018-2022 Council Strategic Plan.

RESPECTFULLY SUBMITTED:



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Leslie Garber  
Deputy Director of Finance

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## 2020 – 2029 Preliminary Project Plan

December 2, 2019 | Finance Department





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**Basic assumptions underlying the Plan include:**

1. When provided, costs are based upon the best currently available information, and this means that some of the costs are more accurate than others. Factors affecting accuracy include the level of detailed planning which has been completed for the individual projects and plans, and the timing of the projects. In general, 2020 costs are more accurate than costs for future years.
2. There is an important exception. An estimated cost for Harry Jerome Redevelopment and Renewal will not be known until the scope of the project has been determined. The amount included in the Plan is a "placeholder" indicating the amount of funding the City may be able to provide toward the projects, assuming priorities are not changed.

**Forecast Assumptions**

3. The Plan reflects the current forecast for the budget year, and provides an allocation basis for subsequent year-to-year funding. Only the current year budgets will be used to appropriate funds; the subsequent years' budgets will be revised in the following years' Plans.
4. The Plan reflects the City's longstanding practice of using internal reserves as the basis for financing. The Plan is therefore sensitive to interest rate and reserve contribution fluctuations (including contributions from land sales), and also reflects the necessity to postpone projects until reserve funds are sufficient to support them.
5. The City currently has no debt, and there is no borrowing forecast in the Plan.

**Contribution Assumptions**

6. Contributions include amounts anticipated through fundraising and other private contributions, including those provided by developers, as well as contributions from senior levels of government, where these may be available.
7. Anticipated contributions from outside sources are shown as a source of funds for projects in the Plan, where it is reasonable to anticipate receipt of the funds. However, it should be noted that, for projects funded by contributions, the project scope as envisioned cannot be guaranteed if the contributions are not forthcoming.

## **Structure of the Plan**

The materials included provide summary information, followed by complete detailed listings of all projects included in the Plan.

Projects are grouped into ten categories as follows:

1. Land and Major Investments;
2. Buildings;
3. Structures – Streets and Transportation;
4. Structures – Parks and Environment;
5. Structures – Public Art;
6. Equipment – General;
7. Equipment – Information Technology;
8. Equipment – Engineering;
9. Equipment – Fire; and
10. Block Funding, On-Going Programs and Other Projects.

It should also be noted that, the 10 sections are further summarized into four additional categories. The Plan information is summarized into those four categories on page 4 of the Plan:

1. Land/Major Investments - Section 1
2. Buildings - Section 2
3. Structures - Sections 3 to 5
4. Equipment - Sections 6 to 10

## Project Types

Projects have been grouped into six project types, which are identified in the top right-hand corner of each project sheet:

1. Maintenance & Replacement;
2. Ongoing Program;
3. Provision;
4. Major Renovation;
5. New Capital Asset; and
6. Other Projects

It is the City's long-standing policy to place the maintenance of existing infrastructure as a first priority, and to only take on new facilities and programs when both an operating and capital source of funds sufficient to ensure successful completion and maintenance of facilities and ongoing program delivery can be identified. Based on this premise, and given the fact that there is generally little discretion about funding basic maintenance projects, the projects identified as "Maintenance & Replacement" are considered as being part of the Base Program. Also included in the Base Program are ongoing programs such as the annual allocation of \$85,000 to public art.

Provisions are included in the plan to provide Council with some flexibility to fund projects from various designated sources of funding are also included in the Base Program. Such provisions can only be appropriated after a project has been identified and approved by Council. These projects are mainly colour coded in Green at the top right-hand corner of the project sheets, as well as in the left-hand column of the detailed project listings following each tab. Because the priorities for maintenance are based primarily on condition and requirements of the infrastructure, these projects have been so coded by the respective Project Manager and funding for those projects has been identified.

Projects in the Major Renovation, New Capital Assets, and Other Projects categories would provide new facilities and/or new levels of service to the community. These projects have been colour coded in Blue or in Red in the left-hand column of the detailed project listings as well as in the top right-hand corner of the project sheets. Blue projects are those that have a dedicated source of funding in conformity with the terms of reference of the reserve bylaws. Red projects are projects that do not have a dedicated source of funding and for which a source of funding remains to be identified. Please note some maintenance and replacement projects have been colour coded Blue if they have a dedicated source of funds, for example, the Justice Administration Building Reserve. Council will be asked to rank Amenity and non-infrastructure projects.

A summary of the total value, including external funding, of base program projects vs. non-base program projects is as follows:

### 10 Year Summary (Excluding Utilities)

Section	Base Program	Dedicated Funds	New Initiatives	Total
1 - Land & Major Investments	\$ -	\$ 42,163,801	\$ -	\$ 42,163,801
2 - Buildings	10,950,280	204,706,993	34,086,750	249,744,023
3 - Streets & Transportation	29,560,000	40,817,240	54,369,426	124,746,666
4 - Parks & Environment	10,961,250	6,945,250	11,136,000	29,042,500
5 - Public Art	-	936,822	-	936,822
6 - General Equipment	4,268,893	1,085,407	-	5,354,300
7 - IT Equipment	5,693,403	422,150	4,407,000	10,522,553
8 - Engineering Equipment		6,904,000	-	6,904,000
9 - Fire Equipment		6,450,000	-	6,450,000
10 - Block Funding, Ongoing Progr, Other Projects	8,623,530	1,597,963	3,790,050	14,011,543
<b>TOTAL</b>	<b>\$ 70,057,356</b>	<b>\$ 312,029,626</b>	<b>\$ 107,789,226</b>	<b>\$ 489,876,208</b>

## 2020 - 2029 PROJECT PLAN SUMMARY

	2020	2021	2022	2023	2024	2025-2029	TOTAL
<b>LAND/MAJOR INVESTMENTS</b>							
Funding Requested	34,513,801	850,000	850,000	850,000	850,000	\$4,250,000	\$42,163,801
City Funding	19,513,801	850,000	850,000	850,000	850,000	4,250,000	27,163,801
Contributions	15,000,000	-	-	-	-	-	15,000,000
Funded Amount	34,513,801	850,000	850,000	850,000	850,000	4,250,000	42,163,801
Funding Excess (Shortfall)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>BUILDINGS</b>							
Funding Requested	\$ 20,923,717	\$ 165,732,826	\$ 26,435,610	\$ 11,140,965	\$ 2,114,630	\$23,396,275	\$249,744,023
City Funding	20,609,074	164,670,577	25,803,935	9,017,009	2,716,971	25,102,844	247,920,408
Contributions	314,644	403,400	631,676	104,067	56,510	313,320	1,823,615
Funded Amount	20,923,717	165,073,976	26,435,610	9,121,076	2,773,480	25,416,164	249,744,023
Funding Excess (Shortfall)	\$0	(\$658,850)	\$0	(\$2,019,889)	\$658,850	\$2,019,889	\$0
<b>STRUCTURES</b>							
Funding Requested	\$ 18,989,488	\$ 22,677,000	\$ 18,872,000	\$ 39,341,500	\$ 12,802,000	\$42,044,000	\$154,725,988
City Funding	16,889,488	12,934,819	15,527,000	23,601,500	11,882,000	45,861,181	126,695,988
Contributions	2,100,000	5,035,000	2,875,000	15,740,000	1,390,000	890,000	28,030,000
Funded Amount	18,989,488	17,969,819	18,402,000	39,341,500	13,272,000	46,751,181	154,725,988
Funding Excess (Shortfall)	\$0	(\$4,707,181)	(\$470,000)	\$0	\$470,000	\$4,707,181	\$0
<b>EQUIPMENT</b>							
Funding Requested	\$ 6,353,543	\$ 5,912,867	\$ 4,409,717	\$ 4,266,167	\$ 3,450,967	\$ 18,849,135	\$ 43,242,396
City Funding	5,620,293	4,104,329	4,024,472	3,968,157	4,489,035	17,939,916	40,146,199
Contributions	733,251	441,251	385,246	298,011	329,221	909,220	3,096,197
Funded Amount	6,353,543	4,545,579	4,409,717	4,266,167	4,818,255	18,849,135	43,242,396
Funding Excess (Shortfall)	\$0	(\$1,367,288)	\$0	\$0	\$1,367,288	\$0	\$0
<b>GENERAL CAPITAL TOTALS</b>							
FUNDING REQUESTED	\$ 80,780,549	\$195,172,693	\$50,567,327	\$55,598,632	\$19,217,597	\$88,539,410	\$489,876,208
CITY FUNDING	62,632,655	182,559,724	46,205,406	37,436,666	19,938,005	93,153,940	441,926,396
CONTRIBUTIONS	18,147,894	5,879,650	3,891,921	16,142,078	1,775,730	2,112,540	47,949,812
FUNDING EXCESS (SHORTFALL)	\$0	(\$6,733,319)	(\$470,000)	(\$2,019,889)	\$2,496,138	\$6,727,070	\$0



# 2020 - 2029 PROJECT PLAN

## PROJECTS FUNDED MATCHED TO FUNDING SOURCES

	2020	2021	2022	2023	2024	2025-2029	TOTAL
<b>LAND &amp; MAJOR INVESTMENTS - TAB 1</b>							
Various Land Acquisitions	3,500,000	-	-	-	-	-	3,500,000
Parks Acquisition	10,000,000	-	-	-	-	-	10,000,000
Major Investments	20,688,801	750,000	750,000	750,000	750,000	3,750,000	27,438,801
Cemetery	325,000	100,000	100,000	100,000	100,000	500,000	1,225,000
<b>Funding Requested</b>	<b>\$ 34,513,801</b>	<b>\$ 850,000</b>	<b>\$ 850,000</b>	<b>\$ 850,000</b>	<b>\$ 850,000</b>	<b>\$ 4,250,000</b>	<b>\$ 42,163,801</b>
<b>City Funding Provided</b>							
TSL Principal	3,500,000	-	-	-	-	-	3,500,000
Parks DCC Reserve	9,900,000	-	-	-	-	-	9,900,000
General Reserve	100,000	-	-	-	-	-	100,000
Affordable Housing Reserve	5,688,801	750,000	750,000	750,000	750,000	3,750,000	12,438,801
Cemetery Development Reserve	325,000	100,000	100,000	100,000	100,000	500,000	1,225,000
<b>City Funding Provided</b>	<b>19,513,801</b>	<b>850,000</b>	<b>850,000</b>	<b>850,000</b>	<b>850,000</b>	<b>4,250,000</b>	<b>27,163,801</b>
Contributions	15,000,000	-	-	-	-	-	15,000,000
<b>Total Funding Provided</b>	<b>34,513,801</b>	<b>850,000</b>	<b>850,000</b>	<b>850,000</b>	<b>850,000</b>	<b>4,250,000</b>	<b>42,163,801</b>
<b>Excess Funding (Shortfall)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>BUILDINGS - TAB 2</b>							
<b>Capital Maintenance</b>							
<b>Funding Requested</b>	<b>\$ 2,182,400</b>	<b>\$ 2,759,115</b>	<b>\$ 2,222,110</b>	<b>\$ 1,133,565</b>	<b>\$ 902,430</b>	<b>\$ 3,289,275</b>	<b>\$ 12,488,895</b>
<b>City Funding Provided</b>							
Annual Budget	1,592,112	2,151,370	1,590,435	1,029,498	845,921	2,975,955	10,185,289
Justice Administration Building Reserve	39,140	4,346	-	-	-	-	43,486
Building Reserve	86,505	-	-	-	-	-	86,505
General Reserve	200,000	200,000	-	-	-	-	400,000
<b>City Funding Provided</b>	<b>1,917,757</b>	<b>2,355,716</b>	<b>1,590,435</b>	<b>1,029,498</b>	<b>845,921</b>	<b>2,975,955</b>	<b>10,715,280</b>
Contributions	264,644	403,400	631,676	104,067	56,510	313,320	1,773,615
<b>Total Funding Provided</b>	<b>2,182,400</b>	<b>2,759,115</b>	<b>2,222,110</b>	<b>1,133,565</b>	<b>902,430</b>	<b>3,289,275</b>	<b>12,488,895</b>
<b>Excess Funding (Shortfall)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Harry Jerome CRC</b>							
<b>Funding Requested</b>	<b>\$ 13,140,058</b>	<b>\$ 161,034,861</b>	<b>\$ 21,042,100</b>	<b>\$ 6,386,000</b>	<b>\$ 1,190,800</b>	<b>\$ -</b>	<b>\$ 202,793,819</b>
<b>City Funding Provided</b>							
Civic Amenity Fund HJ	13,140,058	161,034,861	21,042,100	6,386,000	1,190,800	-	202,793,819
Building Reserve	-	-	-	-	-	-	-
<b>City Funding Provided</b>	<b>13,140,058</b>	<b>161,034,861</b>	<b>21,042,100</b>	<b>6,386,000</b>	<b>1,190,800</b>	<b>-</b>	<b>202,793,819</b>
Contributions	-	-	-	-	-	-	-
<b>Total Funding Provided</b>	<b>13,140,058</b>	<b>161,034,861</b>	<b>21,042,100</b>	<b>6,386,000</b>	<b>1,190,800</b>	<b>-</b>	<b>202,793,819</b>
<b>Unfunded</b>							
<b>Excess Funding (Shortfall)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Proposed New Projects</b>							
<b>Funding Requested</b>	<b>5,601,259</b>	<b>1,938,850</b>	<b>3,171,400</b>	<b>3,621,400</b>	<b>21,400</b>	<b>20,107,000</b>	<b>34,461,309</b>
<b>City Funding Provided</b>							
Annual Budget	235,000	-	-	-	-	-	235,000
TSL Interest	-	-	-	-	-	-	-
Civic Amenity Fund	2,710,000	1,280,000	2,550,000	-	-	10,000,000	16,540,000
Heritage Reserve Fund	89,559	-	-	-	-	-	89,559
General Reserve	2,516,700	-	621,400	1,601,511	680,250	12,126,889	17,546,750
<b>City Funding Provided</b>	<b>5,551,259</b>	<b>1,280,000</b>	<b>3,171,400</b>	<b>1,601,511</b>	<b>680,250</b>	<b>22,126,889</b>	<b>34,411,309</b>
Contributions	50,000	-	-	-	-	-	50,000
<b>Total Funding Provided</b>	<b>5,601,259</b>	<b>1,280,000</b>	<b>3,171,400</b>	<b>1,601,511</b>	<b>680,250</b>	<b>22,126,889</b>	<b>34,461,309</b>
<b>Unfunded</b>							
<b>Excess Funding (Shortfall)</b>	<b>0</b>	<b>(658,850)</b>	<b>0</b>	<b>(2,019,889)</b>	<b>658,850</b>	<b>\$2,019,889</b>	<b>\$0</b>
<b>TOTAL Buildings</b>							
Requirements	\$ 20,923,717	\$ 165,732,826	\$ 26,435,610	\$ 11,140,965	\$ 2,114,630	\$ 23,396,275	\$ 249,744,023
City Funding Provided	20,609,074	164,670,577	25,803,935	9,017,009	2,716,971	25,102,844	247,920,408
Contributions	314,644	403,400	631,676	104,067	56,510	313,320	1,823,615
Unfunded	-	-	-	-	-	-	-
<b>Excess Funding (Shortfall)</b>	<b>\$0</b>	<b>(658,850)</b>	<b>\$0</b>	<b>(2,019,889)</b>	<b>\$658,850</b>	<b>\$2,019,889</b>	<b>\$0</b>

# 2020 - 2029 PROJECT PLAN

## PROJECTS FUNDED MATCHED TO FUNDING SOURCES

	2020	2021	2022	2023	2024	2025-2029	TOTAL
<b>STRUCTURES</b>							
<b>STREETS MASTER PLAN - TAB 3</b>							
Funding Requested	\$ 14,733,666	\$ 19,983,000	\$ 13,063,000	\$ 33,345,000	\$ 9,363,000	\$ 34,259,000	\$ 124,746,666
<b>City Funding Provided</b>							
Annual Budget	528,983	1,170,000	270,000	120,000	170,500	1,180,750	3,440,233
TSL Interest	683,970	1,006,553	759,678	758,660	810,000	3,850,000	7,868,862
Civic Amenity Fund	6,968,093	5,098,000	3,853,250	10,256,000	2,906,250	9,928,750	39,010,343
Marine Drive Amenity	9,833	-	-	-	-	-	9,833
Infrastructure Fund	925,108	613,000	613,000	613,000	313,000	1,565,000	4,642,108
LAS Fund	500,000	-	-	-	-	-	500,000
Parking Fund	-	-	-	-	-	-	-
Transportation DCCs	1,345,740	1,287,000	1,806,750	2,134,000	1,163,250	1,509,750	9,246,490
Sustainable Transportation	175,000	136,790	80,000	80,000	80,000	-	551,790
Carbon Fund	-	-	-	-	-	-	-
General Reserve	1,536,939	929,475	2,335,322	3,643,339.64	3,000,000	20,041,931	31,487,007
City Funding Provided	12,673,666	10,240,819	9,718,000	17,605,000	8,443,000	38,076,181	96,756,666
Contributions	2,060,000	5,035,000	2,875,000	15,740,000	1,390,000	890,000	27,990,000
Total Funding Provided	14,733,666	15,275,819	12,593,000	33,345,000	9,833,000	38,966,181	124,746,666
<b>Unfunded</b>							
Excess Funding (Shortfall)	\$0	(\$4,707,181)	(\$470,000)	\$0	\$470,000	\$4,707,181	\$0
<b>PARKS MASTER PLAN- TAB 4</b>							
Funding Requested	\$ 4,084,000	\$ 2,609,000	\$ 5,724,000	\$ 5,911,500	\$ 3,354,000	\$ 7,360,000	\$ 29,042,500
<b>City Funding Provided</b>							
Annual Budget	2,509,000	559,000	324,000	474,000	2,054,000	5,041,250	10,961,250
Civic Amenity Fund	956,873	1,406,500	2,801,250	2,962,500	1,300,000	1,700,000	11,127,123
Parks DCC Fund	569,250	643,500	2,598,750	2,475,000	-	618,750	6,905,250
Lower Lonsdale Amenity	8,877	-	-	-	-	-	8,877
City Funding Provided	4,044,000	2,609,000	5,724,000	5,911,500	3,354,000	7,360,000	29,002,500
Contributions	40,000	-	-	-	-	-	40,000
Total Funding Provided	4,084,000	2,609,000	5,724,000	5,911,500	3,354,000	7,360,000	29,042,500
Excess Funding (Shortfall)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>PUBLIC ART PROGRAM - TAB 5</b>							
Funding Requested	\$ 171,822	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000	\$ 425,000	\$ 936,822
<b>City Funding Provided</b>							
Public Art Fund	171,822	85,000	85,000	85,000	85,000	425,000	936,822
City Funding Provided	171,822	85,000	85,000	85,000	85,000	425,000	936,822
Contributions	-	-	-	-	-	-	-
Total Funding Provided	171,822	85,000	85,000	85,000	85,000	425,000	936,822
Excess Funding (Shortfall)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL Structures</b>							
Funding Required	\$ 18,989,488	\$22,677,000	\$18,872,000	\$39,341,500	\$12,802,000	\$42,044,000	\$ 154,725,988
Funding provided	16,889,488	12,934,819	15,527,000	23,601,500	11,882,000	45,861,181	126,695,988
Contributions	2,100,000	5,035,000	2,875,000	15,740,000	1,390,000	890,000	28,030,000
Unfunded	-	-	-	-	-	-	-
Excess Funding (Shortfall)	\$0	(\$4,707,181)	(\$470,000)	\$0	\$470,000	\$4,707,181	\$0

# 2020 - 2029 PROJECT PLAN

## PROJECTS FUNDED MATCHED TO FUNDING SOURCES

	2020	2021	2022	2023	2024	2025-2029	TOTAL
<b>EQUIPMENT</b>							
<b>GENERAL EQUIPMENT - TAB 6</b>							
Funding Requested	\$ 575,000	\$ 568,950	\$ 652,000	\$ 660,950	\$ 758,300	\$ 2,139,100	\$ 5,354,300
City Funding Provided							
Annual Budget	434,430	340,015	552,969	491,903.50	687,632.50	1,679,676	4,186,625
General Equipment Fund	47,134	13,499	-	-	21,636	-	82,269
City Funding Provided	481,564	353,514	552,969	491,904	709,269	1,679,676	4,268,893
Contributions	93,437	165,437	99,032	169,047	99,032	459,425	1,085,407
Total Funding Provided	575,000	518,950	652,000	660,950	808,300	2,139,100	5,354,300
Unfunded	-	-	-	-	-	-	-
Excess Funding (Shortfall)	\$0	(\$50,000)	\$0	\$0	\$50,000	\$0	\$0
<b>INFORMATION TECHNOLOGY - TAB 7</b>							
Funding Requested	\$ 1,248,953	\$ 860,700	\$ 1,320,500	\$ 1,215,000	\$ 1,157,450	\$ 4,719,950	\$ 10,522,553
City Funding Provided							
Computer Equipment Fund	62,686	8,464	-	-	20,918	-	92,068
Annual Budget	640,917	288,886	1,156,750	1,210,500	980,807	4,442,475	8,720,335
General Reserve	470,000	-	100,000	-	518,000	200,000	1,288,000
General Equipment							
TSL Interest							
City Funding Provided	1,173,603	297,350	1,256,750	1,210,500	1,519,725	4,642,475	10,100,403
Contributions	75,350	45,350	63,750	4,500	155,725	77,475	422,150
Total Funding Provided	1,248,953	342,700	1,320,500	1,215,000	1,675,450	4,719,950	10,522,553
Excess Funding (Shortfall)	\$0	(\$518,000)	\$0	\$0	\$518,000	\$0	\$0
<b>ENGINEERING EQUIPMENT - TAB 8</b>							
Funding Requested	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
City Funding Provided							
Engineering Equipment Fund	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
General Reserve							
TSLI							
City Funding Provided	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
Contributions	-	-	-	-	-	-	-
Total Funding Provided	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
Excess Funding (Shortfall)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>FIRE EQUIPMENT - TAB 9</b>							
Funding Requested	\$ 1,115,000	\$ 1,690,000	\$ 215,000	\$ 590,000	\$ 70,000	\$ 2,770,000	\$ 6,450,000
Fire Equipment Fund	1,115,000	1,690,000	215,000	590,000	70,000	2,770,000	6,450,000
City Funding Provided	1,115,000	1,690,000	215,000	590,000	70,000	2,770,000	6,450,000
Contributions	-	-	-	-	-	-	-
Total Funding Provided	1,115,000	1,690,000	215,000	590,000	70,000	2,770,000	6,450,000
Excess Funding (Shortfall)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>BLOCK FUNDING, ON-GOING PROGRAMS &amp; OTHER PROJECTS - TAB 10</b>							
Funding Requested	\$ 2,946,590	\$ 1,917,217	\$ 1,541,217	\$ 1,135,217	\$ 960,217	\$ 5,511,085	\$ 14,011,543
City Funding Provided							
Annual Budget	1,246,057	775,753	970,753	810,753	810,753	4,113,765	8,727,834
Tax Sale Land Interest	383,854	-	83,000	50,000	-	-	516,854
Environmental Stewardship Fund	32,842	-	-	-	-	-	32,842
General Reserve Fund	505,000	-	175,000	150,000	874,288	1,025,000	2,729,288
Child Care Improv Fund	9,323	-	-	-	-	-	9,323
Carbon Fund	205,050	92,142	90,000	-	-	-	387,192
Sustainable Transportation	-	19,570	-	-	-	-	19,570
City Funding Provided	2,382,126	887,465	1,318,753	1,010,753	1,685,041	5,138,765	12,422,903
Contributions	564,464	230,464	222,464	124,464	74,464	372,320	1,588,640
Total Funding Provided	2,946,590	1,117,929	1,541,217	1,135,217	1,759,505	5,511,085	14,011,543
Excess Funding (Shortfall)	\$0	(\$799,288)	\$0	\$0	\$799,288	\$0	\$0
<b>TOTAL Equipment</b>							
Requested	\$ 6,353,543	\$ 5,912,867	\$ 4,409,717	\$ 4,266,167	\$ 3,450,967	\$ 18,849,135	\$ 43,242,396
City Funding provided	5,620,293	4,104,329	4,024,472	3,968,157	4,489,035	17,939,916	40,146,199
Contributions	733,251	441,251	385,246	298,011	329,221	909,220	3,096,197
Excess Funding (Shortfall)	\$0	(\$1,367,288)	\$0	\$0	\$1,367,288	\$0	\$0
<b>TOTAL Requirements</b>							
Land	34,513,801	850,000	850,000	850,000	850,000	4,250,000	42,163,801
Buildings	20,923,717	165,732,826	26,435,610	11,140,965	2,114,630	23,396,275	249,744,023
Structures	18,989,488	22,677,000	18,872,000	39,341,500	12,802,000	42,044,000	154,725,988
Equipment	6,353,543	5,912,867	4,409,717	4,266,167	3,450,967	18,849,135	43,242,396
	\$ 80,780,549	\$ 195,172,693	\$ 50,567,327	\$ 55,598,632	\$ 19,217,597	\$ 88,539,410	\$ 489,876,208

**2020-2029 PROJECT PLAN  
LAND AND MAJOR INVESTMENTS**

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
<b>Various Land Acquisitions</b>									
1 - 2	TSL Princ	Strategic Land Acquisition	3,500,000	-	-	-	-	-	3,500,000
			\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,500,000
<b>Parks Acquisition - DCC Bylaw Commitment</b>									
1 - 3	Park DCC / Gen. Res.	Provision for Park Acquisition - DCC	10,000,000	-	-	-	-	-	10,000,000
			\$ 10,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000,000
<b>Major Investments</b>									
1 - 4	Aff Hsing	Affordable Housing Reserve	5,688,801	750,000	750,000	750,000	750,000	3,750,000	12,438,801
	External	Provision for External Funding and Contributions	15,000,000	-	-	-	-	-	15,000,000
			\$ 20,688,801	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 3,750,000	\$ 27,438,801
<b>Cemetery</b>									
1 - 5	Cemetery	City Cemetery Program	200,000	100,000	100,000	100,000	100,000	500,000	1,100,000
1 - 6	Cemetery	Cemetery Accessible Public Restroom and Staff Facility	125,000	-	-	-	-	-	125,000
			\$ 325,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000	\$ 1,225,000
<b>TOTAL FUNDING REQUESTED IN PROJECT SHEETS</b>			\$ 34,513,801	\$ 850,000	\$ 850,000	\$ 850,000	\$ 850,000	\$ 4,250,000	\$ 42,163,801
<b>TOTAL CONTRIBUTIONS</b>			\$ 15,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,000,000
<b>NET FUNDING REQUESTED</b>			\$ 19,513,801	\$ 850,000	\$ 850,000	\$ 850,000	\$ 850,000	\$ 4,250,000	\$ 27,163,801

## 2020-2029 PROJECT PLAN BUILDINGS

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Summary of Building Projects</b>							
<b>FUNDING REQUESTED IN PROJECT SHEETS</b>							
Capital Maintenance	2,182,400	2,759,115	2,222,110	1,133,565	902,430	3,289,275	12,488,895
Harry Jerome CRC	13,140,058	161,034,861	21,042,100	6,386,000	1,190,800	-	202,793,819
Proposed New Projects	5,601,259	1,938,850	3,171,400	3,621,400	21,400	20,107,000	34,461,309
<b>TOTAL FUNDING REQUESTED</b>	<b>\$ 20,923,717</b>	<b>\$ 165,732,826</b>	<b>\$ 26,435,610</b>	<b>\$ 11,140,965</b>	<b>\$ 2,114,630</b>	<b>\$ 23,396,275</b>	<b>\$ 249,744,023</b>
<b>CONTRIBUTIONS</b>							
Capital Maintenance	264,644	403,400	631,676	104,067	56,510	313,320	1,773,615
Harry Jerome CRC	-	-	-	-	-	-	-
Proposed New Projects	50,000	-	-	-	-	-	50,000
<b>TOTAL CONTRIBUTIONS</b>	<b>\$ 314,644</b>	<b>\$ 403,400</b>	<b>\$ 631,676</b>	<b>\$ 104,067</b>	<b>\$ 56,510</b>	<b>\$ 313,320</b>	<b>\$ 1,823,615</b>
<b>NET FUNDING REQUESTED</b>							
Capital Maintenance	1,917,757	2,355,716	1,590,435	1,029,498	845,921	2,975,955	10,715,280
Harry Jerome CRC	13,140,058	161,034,861	21,042,100	6,386,000	1,190,800	-	202,793,819
Proposed New Projects	5,551,259	1,938,850	3,171,400	3,621,400	21,400	20,107,000	34,411,309
<b>TOTAL CITY FUNDING REQUESTED</b>	<b>\$ 20,609,074</b>	<b>\$ 165,329,427</b>	<b>\$ 25,803,935</b>	<b>\$ 11,036,898</b>	<b>\$ 2,058,121</b>	<b>\$ 23,082,955</b>	<b>\$ 247,920,408</b>

## 2020-2029 PROJECT PLAN BUILDINGS

			2020	2021	2022	2023	2024	2025-2029	Total
<b>Page</b>	<b>Funding Source</b>	<b>Capital Maintenance</b>							
2 - 4	Annual Bud / Gen Build.	Maintenance & Replacement for Civic Centre	222,560	252,520	342,400	38,520	56,710	247,170	1,159,880
2 - 6	Ann. Budget / Justice	Maintenance & Replacement for Gerry Brewer Building	208,357	317,601	497,325	81,933	44,491	246,680	1,396,385
2 - 6	External	Maintenance & Replacement for Gerry Brewer Building - Required outside funding	264,644	403,400	631,676	104,067	56,510	313,320	1,773,615
2 - 8	Ann. Budget	Maintenance & Replacement for Fire Hall	113,955	117,165	51,895	25,145	46,545	296,925	651,630
2 - 10	Ann. Budget	Maintenance & Replacement for City Owned/Non-City Used Buildings	393,760	688,545	60,990	47,615	48,150	233,795	1,472,855
2 - 12	Ann. Budget	Maintenance & Replacement for Parks Buildings	89,880	89,880	89,880	73,830	73,830	369,150	786,450
2 - 14	Ann. Budget	Maintenance & Replacement for Operations Centre	74,365	33,705	47,615	15,515	26,215	131,075	328,490
2 - 16	Ann. Budget	Maintenance & Replacement for Civic Library	89,880	96,300	20,330	151,940	14,980	201,160	574,590
2 - 18	Ann. Budget	The Shipyards - Lot 3 Building Maintenance	160,000	160,000	160,000	160,000	160,000	800,000	1,600,000
<b>North Vancouver Recreation &amp; Culture Commission</b>									
2 - 19	Ann. Budget	Harry Jerome Community Recreation Centre	75,000	75,000	75,000	75,000	-	-	300,000
2 - 20	Ann. Budget	Memorial Community Recreation Centre	15,000	15,000	15,000	15,000	-	-	60,000
2 - 21	Ann. Budget	Mickey McDougall Community Recreation Centre	15,000	15,000	15,000	15,000	-	-	60,000
2 - 22	Ann. Budget	Centennial Theatre	110,000	265,000	140,000	280,000	325,000	200,000	1,320,000
2 - 24	Ann. Budget	John Braithwaite Community Centre	75,000	30,000	75,000	50,000	50,000	250,000	530,000
2 - 26	Ann. Budget	Harry Jerome Community Recreation Centre - Minor 4-year Pool Shutdown	75,000	-	-	-	-	-	75,000
2 - 28	General Res.	Harry Jerome Complex - Major Repairs	200,000	200,000	-	-	-	-	400,000
<b>TOTAL REQUESTED IN PROJECT SHEETS</b>			<b>\$ 2,182,400</b>	<b>\$ 2,759,115</b>	<b>\$ 2,222,110</b>	<b>\$ 1,133,565</b>	<b>\$ 902,430</b>	<b>\$ 3,289,275</b>	<b>\$ 12,488,895</b>
<b>CONTRIBUTIONS</b>			<b>\$ 264,644</b>	<b>\$ 403,400</b>	<b>\$ 631,676</b>	<b>\$ 104,067</b>	<b>\$ 56,510</b>	<b>\$ 313,320</b>	<b>\$ 1,773,615</b>
<b>NET FUNDING REQUESTED</b>			<b>\$ 1,917,757</b>	<b>\$ 2,355,716</b>	<b>\$ 1,590,435</b>	<b>\$ 1,029,498</b>	<b>\$ 845,921</b>	<b>\$ 2,975,955</b>	<b>\$ 10,715,280</b>
<b>Major Renovation</b>									
<b>Harry Jerome CRC</b>									
2 - 27	Civic Amenity - HJ	Harry Jerome Community Recreation Centre	10,825,058	161,034,861	21,042,100	6,386,000	1,190,800	-	200,478,819
2 - 29	Civic Amenity - HJ	Harry Jerome Neighbourhood Lands Site Development Plan	150,000	-	-	-	-	-	150,000
2 - 50	Civic Amenity - HJ	HJ Precinct Related Relocation Expenses	2,165,000	-	-	-	-	-	2,165,000
<b>TOTAL REQUESTED IN PROJECT SHEETS</b>			<b>\$ 13,140,058</b>	<b>\$ 161,034,861</b>	<b>\$ 21,042,100</b>	<b>\$ 6,386,000</b>	<b>\$ 1,190,800</b>	<b>\$ -</b>	<b>\$ 202,793,819</b>
<b>CONTRIBUTIONS</b>			<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>NET FUNDING REQUESTED</b>			<b>\$ 13,140,058</b>	<b>\$ 161,034,861</b>	<b>\$ 21,042,100</b>	<b>\$ 6,386,000</b>	<b>\$ 1,190,800</b>	<b>\$ -</b>	<b>\$ 202,793,819</b>



# 2020-2029 PROJECT PLAN BUILDINGS

			2020	2021	2022	2023	2024	2025-2029	Total
<b>Page</b>	<b>Funding Source</b>	<b>Proposed New Projects</b>							
<i>Library</i>									
2 - 31	Ann. Budget	Room Divider Replacement	135,000	-	-	-	-	-	135,000
<i>Shipyards site</i>									
2 - 35	Civic Amenity	Shipyards Commons Site Improvements	85,000	50,000	50,000	-	-	-	185,000
2 - 36	General Bud. - NEW	Shipyards & Waterfront Operations (previously known as Central Waterfront Public Realm)	2,020,000	-	-	-	-	-	2,020,000
2 - 37	Civic Amenity	Shipyards Commons Branding and Marketing Start Up	25,000	25,000	-	-	-	-	50,000
<i>City</i>									
2 - 38	Civic Amenity	Lonsdale Quay Public Realm	-	480,000	-	-	-	-	480,000
2 - 39	General Bud. - NEW	2025 New North Shore Neighborhood House Facility	115,000	-	-	-	-	20,000,000	20,115,000
2 - 41	General Bud. - NEW	Civic Centre Addition Feasibility Study	-	25,000	-	3,000,000	-	-	3,025,000
2 - 42	Ann. Budget	Fire Hall Vestibule	100,000	-	-	-	-	-	100,000
2 - 43	General Bud. - NEW	Civic Centre Improvements	331,700	58,850	21,400	21,400	21,400	107,000	561,750
2 - 45	General Bud. - NEW	Replacement of City Hall Single Glazed Windows	50,000	550,000	600,000	600,000	-	-	1,800,000
2 - 46	Civic Amenity	Burrard Dry Dock Electrical Building	-	350,000	-	-	-	-	350,000
2 - 47	Civic Amenity	PGE Station Provision	-	400,000	-	-	-	-	400,000
2 - 48	Heritage	Heritage Reserve Fund	89,559	-	-	-	-	-	89,559
2 - 49	Civic Amenity	Child Care Capital Program (City Facilities)	2,500,000	-	2,500,000	-	-	-	5,000,000
2 - 51	Civic Amenity	Civic Centre 13th Street Forecourt Improvements	100,000					-	100,000
2 - 51	External	Civic Centre 13th Street Forecourt Improvements - ROF	50,000					-	50,000
<b>TOTAL REQUESTED IN PROJECT SHEETS</b>			<b>\$ 5,601,259</b>	<b>\$ 1,938,850</b>	<b>\$ 3,171,400</b>	<b>\$ 3,621,400</b>	<b>\$ 21,400</b>	<b>\$ 20,107,000</b>	<b>\$ 34,461,309</b>
<b>CONTRIBUTIONS</b>			<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,000</b>
<b>NET FUNDING REQUESTED</b>			<b>\$ 5,551,259</b>	<b>\$ 1,938,850</b>	<b>\$ 3,171,400</b>	<b>\$ 3,621,400</b>	<b>\$ 21,400</b>	<b>\$ 20,107,000</b>	<b>\$ 34,411,309</b>
Base Program									
DCC's Fund									
Dedicated Fund									
New Initiatives									

## 2020-2029 PROJECT PLAN STRUCTURES SUMMARY

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Summary of Structure Projects</b>							
<b>FUNDING REQUESTED IN PROJECT SHEETS</b>							
Streets and Transportation	14,733,666	19,983,000	13,063,000	33,345,000	9,363,000	34,259,000	124,746,666
Parks	4,084,000	2,609,000	5,724,000	5,911,500	3,354,000	7,360,000	29,042,500
Public Art	171,822	85,000	85,000	85,000	85,000	425,000	936,822
<b>TOTAL FUNDING REQUESTED</b>	<b>\$ 18,989,488</b>	<b>\$ 22,677,000</b>	<b>\$ 18,872,000</b>	<b>\$ 39,341,500</b>	<b>\$ 12,802,000</b>	<b>\$ 42,044,000</b>	<b>\$ 154,725,988</b>
<b>CONTRIBUTIONS</b>							
Streets and Transportation	2,060,000	5,035,000	2,875,000	15,740,000	1,390,000	890,000	27,990,000
Parks	40,000	-	-	-	-	-	40,000
Public Art	-	-	-	-	-	-	-
<b>TOTAL CONTRIBUTIONS</b>	<b>\$ 2,100,000</b>	<b>\$ 5,035,000</b>	<b>\$ 2,875,000</b>	<b>\$ 15,740,000</b>	<b>\$ 1,390,000</b>	<b>\$ 890,000</b>	<b>\$ 28,030,000</b>
<b>DCC FUNDING</b>							
Streets and Transportation	1,345,740	1,287,000	1,806,750	3,564,000	1,163,250	2,920,500	12,087,240
Parks	569,250	643,500	2,598,750	2,475,000	-	618,750	6,905,250
Public Art	-	-	-	-	-	-	-
<b>TOTAL DCC FUNDING</b>	<b>\$ 1,914,990</b>	<b>\$ 1,930,500</b>	<b>\$ 4,405,500</b>	<b>\$ 6,039,000</b>	<b>\$ 1,163,250</b>	<b>\$ 3,539,250</b>	<b>\$ 18,992,490</b>
<b>NET FUNDING REQUESTED</b>							
Streets and Transportation	11,327,926	13,661,000	8,381,250	14,041,000	6,809,750	30,448,500	84,669,426
Parks	3,474,750	1,965,500	3,125,250	3,436,500	3,354,000	6,741,250	22,097,250
Public Art	171,822	85,000	85,000	85,000	85,000	425,000	936,822
<b>TOTAL CITY FUNDING REQUESTED</b>	<b>\$ 14,974,498</b>	<b>\$ 15,711,500</b>	<b>\$ 11,591,500</b>	<b>\$ 17,562,500</b>	<b>\$ 10,248,750</b>	<b>\$ 37,614,750</b>	<b>\$ 107,703,498</b>

## 2020-2029 PROJECT PLAN TRANSPORTATION AND STREETS

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
<b>Active Transportation &amp; Safe Mobility</b>									
3 - 7	TSL Int. - NEW	Existing Infrastructure Safety Improvements	300,000	390,000	390,000	390,000	390,000	1,950,000	3,810,000
3 - 7	External	Existing Infrastructure Safety Improvements - ROF	50,000	50,000	50,000	50,000	50,000	250,000	500,000
3 - 8	Civic Amenity	New Sidewalks to Complete Pedestrian Network	151,500	252,500	252,500	252,500	252,500	1,262,500	2,424,000
3 - 8	DCC	New Sidewalks to Complete Pedestrian Network-DCC	148,500	247,500	247,500	247,500	247,500	1,237,500	2,376,000
3 - 9	TSL Int./ General Bud.	Sidewalk Infill & Reconstruction	170,000	170,000	170,000	170,000	170,000	850,000	1,700,000
3 - 10	Civic Amenity	New Sidewalks on East side St Andrews: Keith Road to 13th Str	220,000	-	-	-	-	-	220,000
3 - 11	Civic Amenity	New Sidewalks 400 Block E 2nd Street	-	450,000	-	-	-	-	450,000
3 - 12	Civic Amenity	Active Transportation Wayfinding Program	150,000	100,000	30,000	30,000	30,000	150,000	490,000
3 - 13	Annual Bud.	Fell Avenue: Slope stability and Retaining Walls	-	750,000	-	-	-	-	750,000
3 - 14	Civic Amenity	Semisich Greenway (W3rd to Semisich Park)	50,500	151,500	-	-	-	-	202,000
3 - 14	DCC	Semisich Greenway (W3rd to Semisich Park) - DCC	49,500	148,500	-	-	-	-	198,000
3 - 15	Civic Amenity	Priority Mobility Network Improvements	850,000	227,250	883,750	2,146,250	656,500	-	4,763,750
3 - 15	External	Priority Mobility Network Improvements - ROF	600,000	600,000	2,050,000	1,900,000	1,200,000	-	6,350,000
3 - 15	DCC	Priority Mobility Network Improvements - DCC	-	222,750	866,250	2,103,750	643,500	-	3,836,250
3 - 18	Civic Amenity	East Keith Road Multi-Modal Corridor Improvements, East Grand to Brooksbank	-	-	-	300,000	-	-	300,000
3 - 19	Civic Amenity	Covered Bike Shelter & Secured Bike Parking	-	-	25,000	50,000	50,000	40,000	165,000
3 - 20	Civic Amenity	Micro Mobility (E-Bike Docking)	50,000	50,000	-	-	-	-	100,000
3 - 21	Civic Amenity	Active & Safe Routes to School Implementation	200,000	300,000	50,000	50,000	50,000	250,000	900,000
3 - 22	Civic Amenity	Casano Loutet Overpass	847,726	-	-	-	-	-	847,726
3 - 22	External	Casano/Loutet Overpass - ROF	1,275,000	-	-	-	-	-	1,275,000
3 - 22	DCC	Casano Loutet Overpass - DCC	830,940	-	-	-	-	-	830,940
3 - 23	Civic Amenity - NEW	Upper Levels Greenway - Lonsdale to Lynn Valley Road	50,500	505,000	-	-	-	-	555,500
3 - 23	External	Upper Levels Greenway - ROF	-	2,000,000	-	-	-	-	2,000,000
3 - 23	DCC	Upper Levels Greenway - Lonsdale to Lynn Valley Road - DCC	49,500	495,000	-	-	-	-	544,500
3 - 24	Civic Amenity - NEW	Upper Levels Greenway - Lonsdale to Westview	-	-	505,000	-	-	-	505,000
3 - 24	External	Upper Levels Greenway - ROF	-	-	600,000	-	-	-	600,000
3 - 24	DCC	Upper Levels Greenway - Lonsdale to Westview - DCC	-	-	495,000	-	-	-	495,000
3 - 25	Civic Amenity	Queensbury Avenue Greenway Connection	-	-	-	350,000	-	-	350,000
3 - 25	External	Queensbury Avenue Greenway Connection -ROF	-	-	-	650,000	-	-	650,000
3 - 26	TSL Int. - NEW	Cloverley Access Management Adjustments	30,000	80,000	-	-	-	-	110,000

## 2020-2029 PROJECT PLAN TRANSPORTATION AND STREETS

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
3 - 27	Civic Amenity	Installation of Accessible Pedestrian Signal Units	35,000	35,000	35,000	35,000	35,000	175,000	350,000
3 - 29	Civic Amenity	Pedestrian Scale Lighting - Green Necklace	250,000	650,000	-	-	-	-	900,000
3 - 30	Civic Amenity	Pedestrian and Roadway Lighting Implementation	151,500	176,750	202,000	227,250	227,250	1,136,250	2,121,000
3 - 30	DCC	Pedestrian and Roadway Lighting Implementation - DCC	148,500	173,250	198,000	222,750	222,750	1,113,750	2,079,000
3 - 32	Civic Amenity	New Traffic Signals	995,000	940,000	1,010,000	1,040,000	1,010,000	5,000,000	9,995,000
3 - 34	Civic Amenity	New Pedestrian Crossing Facilities	300,000	685,000	745,000	670,000	500,000	1,500,000	4,400,000
3 - 79	Civic Amenity	Central Lonsdale Wayfinding	30,000	-	-	-	-	-	30,000
<b>Total - Active Transportation &amp; Safe Mobility</b>			<b>\$ 7,983,666</b>	<b>\$ 9,850,000</b>	<b>\$ 8,805,000</b>	<b>\$ 10,885,000</b>	<b>\$ 5,735,000</b>	<b>\$ 14,915,000</b>	<b>\$ 58,173,666</b>

### Transit Improvement Program

3 - 36	General Bud. - NEW	Transit Stop Improvements	65,000	65,000	65,000	65,000	65,000	325,000	650,000
3 - 36	External	Transit Stop Improvements - ROF	65,000	65,000	65,000	65,000	65,000	325,000	650,000
3 - 37	Civic Amenity	City Transit Shelter Program	-	-	40,000	20,000	20,000	40,000	120,000
3 - 37	External	City Transit Shelter Program - ROF	-	-	40,000	20,000	20,000	40,000	120,000
3 - 38	General Bud. - NEW	Bus Speed and Reliability	50,000	50,000	50,000	50,000	50,000	250,000	500,000
3 - 38	External	Bus Speed and Reliability - ROF	50,000	50,000	50,000	50,000	50,000	250,000	500,000
<b>Total - Transit Improvements Program</b>			<b>\$ 230,000</b>	<b>\$ 230,000</b>	<b>\$ 310,000</b>	<b>\$ 270,000</b>	<b>\$ 270,000</b>	<b>\$ 1,230,000</b>	<b>\$ 2,540,000</b>

### Traffic Engineering Program

3 - 39	General Bud. - NEW	Traffic Signal System Upgrades	250,000	180,000	470,000	300,000	300,000	2,500,000	4,000,000
3 - 41	General Bud. - NEW	Traffic Signal Pre-Emption for Fire Emergency Vehicles	80,000	80,000	80,000	-	-	-	240,000
3 - 43	General Bud.	Street Light and Traffic Signal Aging Pole Replacement	350,000	250,000	50,000	50,000	50,000	500,000	1,250,000
3 - 45	Annual Bud.	Traffic Signal LED Replacement	-	300,000	-	-	-	-	300,000
3 - 46	General Bud. - NEW	City-Wide LED Streetlight upgrade	150,000	250,000	250,000	-	-	-	650,000
3 - 47	Civic Amenity	Moodyville Traffic Signals	121,200	-	-	-	-	-	121,200
3 - 47	DCC	Moodyville Traffic Signals - DCC	118,800	-	-	-	-	-	118,800
3 - 48	General Bud. - NEW	Street Lighting Central Management System	-	100,000	-	-	-	-	100,000
<b>Total - Traffic Engineering Program</b>			<b>\$ 1,070,000</b>	<b>\$ 1,160,000</b>	<b>\$ 850,000</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 3,000,000</b>	<b>\$ 6,780,000</b>

### Public Realm and Streetscapes Program

3 - 49	General Bud.	Street Banner And Furnishing Program	60,000	35,000	60,000	35,000	60,000	225,000	475,000
3 - 50	General Bud. - NEW	Seasonal Decorations - Lonsdale Street Light Poles	-	-	-	-	-	85,000	85,000
3 - 51	Civic Amenity	New Street Activation	25,000	75,000	75,000	75,000	75,000	375,000	700,000
3 - 52	Annual Bud.	Living City Tree Planting Program	120,000	120,000	120,000	120,000	120,000	600,000	1,200,000
3 - 52	External	Living City Tree Planting Program - ROF	5,000	5,000	5,000	5,000	5,000	25,000	50,000
3 - 53	Civic Amenity	Sidewalk Patios - Lower Lonsdale	-	150,000	-	-	-	-	150,000

## 2020-2029 PROJECT PLAN TRANSPORTATION AND STREETS

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
3 - 54	Annual Bud. - NEW	200 East 2nd Street - Parking & Streetscape improvements	-	-	-	-	50,500	-	50,500
3 - 54	DCC	200 East 2nd Street - Parking & Streetscape improvements-DCC	-	-	-	-	49,500	-	49,500
3 - 55	Annual Bud. - NEW	100 East 2nd Street - Parking & Streetscape Improvements	-	-	-	-	-	227,250	227,250
3 - 55	DCC	100 East 2nd Street - Parking & Streetscape Improvements-DCC	-	-	-	-	-	222,750	222,750
3 - 56	Annual Bud. - NEW	100 East 1st Street - Streetscape Improvements	-	-	-	-	-	353,500	353,500
3 - 56	DCC	100 East 1st Street - Streetscape Improvements - DCC	-	-	-	-	-	346,500	346,500
<b>Total - Public Realm and Streetscapes Program</b>			<b>\$ 210,000</b>	<b>\$ 385,000</b>	<b>\$ 260,000</b>	<b>\$ 235,000</b>	<b>\$ 360,000</b>	<b>\$ 2,460,000</b>	<b>\$ 3,910,000</b>

### Major Projects

3 - 57	Civic Amenity - BASE / Marine Dr Amenity	Mosquito Creek Bridge	2,400,000	-	-	-	-	-	2,400,000
3 - 58	Civic Amenity	Marine Drive Bridge Replacement over Mackay Creek	-	-	-	1,010,000	-	-	1,010,000
3 - 58	External	Marine Drive Bridge Replacement over Mackay Creek - ROF	-	-	-	4,000,000	-	-	4,000,000
3 - 58	DCC	Marine Drive Bridge Replacement over Mackay Creek - DCC	-	-	-	990,000	-	-	990,000
3 - 59	Civic Amenity	Lonsdale Corridor Transit & Safety Improvements (Esplanade to 29th)	-	-	-	1,400,000	-	-	1,400,000
3 - 59	External	Lonsdale Corridor Transit & Safety Improvements (Esplanade to 29th) - ROF	-	-	-	400,000	-	-	400,000
3 - 60	General Bud. - NEW	Marine-Main Corridor Improvements	-	350,000	-	2,600,000	-	-	2,950,000
3 - 61	External	Marine-Main Corridor Improvements - ROF	-	250,000	-	8,600,000	-	-	8,850,000
3 - 62	Civic Amenity	Esplanade Complete Streets	100,000	3,000,000	-	-	-	-	3,100,000
3 - 62	External	Esplanade Complete Streets - ROF	-	2,000,000	-	-	-	-	2,000,000
<b>Total - Major Projects</b>			<b>\$ 2,500,000</b>	<b>\$ 5,600,000</b>	<b>\$ -</b>	<b>\$ 19,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 27,100,000</b>

### Pavement and Bridge Management

3 - 63	TSL Int.	Traffic Signs and Pavement Markings	100,000	100,000	100,000	100,000	100,000	500,000	1,000,000
3 - 64	TSL Int.	Major Structure Rehabilitation	75,000	75,000	75,000	75,000	75,000	375,000	750,000
3 - 65	TSL Int.	Integrated Survey Monument Update	35,000	-	-	-	-	-	35,000
3 - 66	General Res /Annual Bud/ Infrastr. Res	Pavement Management: Streets and Lanes	1,300,000	2,000,000	2,000,000	2,000,000	2,000,000	10,000,000	19,300,000
3 - 68	TSL Int.	Pavement Condition Testing	25,000	75,000	25,000	25,000	75,000	175,000	400,000
<b>Total - Pavement Management</b>			<b>\$ 1,535,000</b>	<b>\$ 2,250,000</b>	<b>\$ 2,200,000</b>	<b>\$ 2,200,000</b>	<b>\$ 2,250,000</b>	<b>\$ 11,050,000</b>	<b>\$ 21,485,000</b>

## 2020-2029 PROJECT PLAN TRANSPORTATION AND STREETS

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
<b>Local Area Services</b>									
3 - 69	LAS	Provision for Local Area Services - City Share	500,000	-	-	-	-	-	500,000
<b>Total - Local Area Services</b>			<b>\$ 500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500,000</b>
<b>TOTAL FUNDING REQUESTED - ENGINEERING DEP</b>			<b>\$ 14,028,666</b>	<b>\$ 19,475,000</b>	<b>\$ 12,425,000</b>	<b>\$ 32,940,000</b>	<b>\$ 8,965,000</b>	<b>\$ 32,655,000</b>	<b>\$ 120,488,666</b>
<b>TOTAL CONTRIBUTIONS</b>			<b>\$ 2,045,000</b>	<b>\$ 5,020,000</b>	<b>\$ 2,860,000</b>	<b>\$ 15,740,000</b>	<b>\$ 1,390,000</b>	<b>\$ 890,000</b>	<b>\$ 27,945,000</b>
<b>TOTAL DCC STREETS AND TRANSPORTATION</b>			<b>\$ 1,345,740</b>	<b>\$ 1,287,000</b>	<b>\$ 1,806,750</b>	<b>\$ 3,564,000</b>	<b>\$ 1,163,250</b>	<b>\$ 2,920,500</b>	<b>\$ 12,087,240</b>
<b>NET FUNDING REQUESTED</b>			<b>\$ 10,637,926</b>	<b>\$ 13,168,000</b>	<b>\$ 7,758,250</b>	<b>\$ 13,636,000</b>	<b>\$ 6,411,750</b>	<b>\$ 28,844,500</b>	<b>\$ 80,456,426</b>
<b>Planning and Development</b>									
3 - 70	General Bud. - NEW	Rapid Transit Planning Office	-	-	150,000	150,000	150,000	750,000	1,200,000
3 - 71	General Bud. - NEW	Community & School Active Travel Planning	175,000	168,000	168,000	100,000	93,000	479,000	1,183,000
3 - 71	External	Community & School Active Travel Planning-ROF	15,000	15,000	15,000	-	-	-	45,000
3 - 73	Sust. Transport	Mobility Plan Implementation - Curbside Management	-	-	80,000	80,000	80,000	-	240,000
3 - 74	General Bud. - NEW	Mobility Plan	100,000	-	-	-	-	-	100,000
3 - 75	Annual Bud. - NEW	Great Streets - Corridor Studies	150,000	150,000	150,000	-	-	-	450,000
3 - 75	External	Great Streets - Corridor Studies - ROF	-	-	-	-	-	-	-
3 - 77	Sust Transport -New	INSTPP Implementation (Previously known as North Shore Transportation Improvements)	175,000	175,000	75,000	75,000	75,000	375,000	950,000
3 - 78	General Bud. - NEW	Bicycle Master Plan Update & Bicycle Route Conceptual Design	90,000	-	-	-	-	-	90,000
<b>Total - Planning</b>			<b>\$ 705,000</b>	<b>\$ 508,000</b>	<b>\$ 638,000</b>	<b>\$ 405,000</b>	<b>\$ 398,000</b>	<b>\$ 1,604,000</b>	<b>\$ 4,258,000</b>
<b>TOTAL FUNDING REQUEST - PLANNING DEP</b>			<b>\$ 705,000</b>	<b>\$ 508,000</b>	<b>\$ 638,000</b>	<b>\$ 405,000</b>	<b>\$ 398,000</b>	<b>\$ 1,604,000</b>	<b>\$ 4,258,000</b>
<b>TOTAL CONTRIBUTIONS</b>			<b>\$ 15,000</b>	<b>\$ 15,000</b>	<b>\$ 15,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 45,000</b>
<b>TOTAL DCC STREETS AND TRANSPORTATION</b>									
<b>NET FUNDING REQUESTED</b>			<b>\$ 690,000</b>	<b>\$ 493,000</b>	<b>\$ 623,000</b>	<b>\$ 405,000</b>	<b>\$ 398,000</b>	<b>\$ 1,604,000</b>	<b>\$ 4,213,000</b>



# 2020-2029 PROJECT PLAN TRANSPORTATION AND STREETS

Page	Funding Source	2020	2021	2022	2023	2024	2025-2029	Total
	TOTAL FUNDING REQUEST IN PROJECT SHEETS	\$ 14,733,666	\$ 19,983,000	\$ 13,063,000	\$ 33,345,000	\$ 9,363,000	\$ 34,259,000	\$ 124,746,666
	TOTAL CONTRIBUTIONS	\$ 2,060,000	\$ 5,035,000	\$ 2,875,000	\$ 15,740,000	\$ 1,390,000	\$ 890,000	\$ 27,990,000
	TOTAL DCC STREETS AND TRANSPORTATION	\$ 1,345,740	\$ 1,287,000	\$ 1,806,750	\$ 3,564,000	\$ 1,163,250	\$ 2,920,500	\$ 12,087,240
	NET FUNDING REQUESTED	\$ 11,327,926	\$ 13,661,000	\$ 8,381,250	\$ 14,041,000	\$ 6,809,750	\$ 30,448,500	\$ 84,669,426
	Base Program							
	DCC's Fund							
	Dedicated Fund							
	New Initiatives							

**2020-2029 PROJECT PLAN  
PARKS AND ENVIRONMENT**

Page	Funding Source	Park Specific	2020	2021	2022	2023	2024	2025-2029	Total
4 - 3	Ann. Budget	Greenwood Park Trail and Forest Restoration	250,000	-	-	-	-	-	250,000
4 - 4	Ann. Budget	Sutherland Field Renovation	1,600,000	-	-	-	-	-	1,600,000
4 - 4	External	Sutherland Field Renovation - ROF	40,000	-	-	-	-	-	40,000
4 - 5	Civic Amenity	Temporary Dog Off leash Facilities	200,000	-	-	-	-	-	200,000
4 - 6	Civic Amenity	Mahon Park Beach Volleyball	35,000	-	-	-	-	-	35,000
4 - 7	Civic Amenity	Hamersley Park Improvements	353,500	-	-	-	-	-	353,500
4 - 7	DCC	Hamersley Park Improvements - DCC	346,500	-	-	-	-	-	346,500
4 - 8	Ann. Budget	St. Andrews Park Infrastructure Replacement	300,000	-	-	-	-	-	300,000
4 - 9	Civic Amenity / LL Amenity	Waterfront Park Master Plan & Implementation	227,250	-	2,525,000	2,525,000	-	-	5,277,250
4 - 9	DCC	Waterfront Park Master Plan & Implementation - DCC	222,750	-	2,475,000	2,475,000	-	-	5,172,750
4 - 10	Civic Amenity	1600 Eastern Avenue Park	-	555,500	-	-	-	-	555,500
4 - 10	DCC	1600 Eastern Avenue Park - DCC	-	544,500	-	-	-	-	544,500
4 - 11	Civic Amenity	Green Necklace Outdoor Fitness Equipment Stations	-	400,000	-	-	-	-	400,000
4 - 12	Civic Amenity	Victoria Park Washroom	-	200,000	-	-	-	-	200,000
4 - 13	Civic Amenity	St. Andrews Park Washrooms	-	101,000	-	-	-	-	101,000
4 - 13	DCC	St. Andrews Park Washrooms - DCC	-	99,000	-	-	-	-	99,000
4 - 14	Civic Amenity	Sunrise Park Trail Improvements	-	-	126,250	-	-	-	126,250
4 - 14	DCC	Sunrise Park Trail Improvements - DCC	-	-	123,750	-	-	-	123,750
4 - 15	Civic Amenity	Casano Park Trail & Habitat Improvements	-	-	-	400,000	-	-	400,000
4 - 16	Ann. Budget	Mahon Park Playground and Spray Park Replacement	-	-	-	250,000	1,800,000	-	2,050,000
4 - 17	Civic Amenity	Park Picnic Shelters	-	-	-	-	850,000	-	850,000
4 - 18	Civic Amenity	High Place Park Development	-	-	-	-	250,000	-	250,000
4 - 19	Ann. Budget	Wagg Park Playground Replacement	-	-	-	-	100,000	550,000	650,000
4 - 20	Civic Amenity	Gravel Sports Field Turf Conversion	-	-	-	-	200,000	1,700,000	1,900,000
4 - 21	Ann. Budget	Confederation Field Turf Replacement	-	-	-	-	-	900,000	900,000
4 - 22	Ann. Budget	Derek Inman Park Renovations	-	-	-	-	-	631,250	631,250
4 - 22	DCC	Derek Inman Park Renovations - DCC	-	-	-	-	-	618,750	618,750
4 - 23	Ann. Budget	Tempe Heights Park Playground Replacement	-	-	-	-	-	670,000	670,000
4 - 24	Ann. Budget	Loutet Park Playground Replacement	-	-	-	-	-	670,000	670,000

## 2020-2029 PROJECT PLAN PARKS AND ENVIRONMENT

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
4 - 25	Ann. Budget	Fen Burdett Turf Replacement	-	-	-	-	-	900,000	900,000
4 - 26	Ann. Budget	Victoria Park Master Plan	-	-	-	-	-	250,000	250,000
4 - 36	Civic Amenity - NEW	Public School Playground Funding	150,000	150,000	150,000	37,500	-	-	487,500
<b>Total - Park Specific</b>			<b>\$ 3,725,000</b>	<b>\$ 2,050,000</b>	<b>\$ 5,400,000</b>	<b>\$ 5,687,500</b>	<b>\$ 3,200,000</b>	<b>\$ 6,890,000</b>	<b>\$ 26,952,500</b>

<b>City Wide Programs</b>									
4 - 27	Ann. Budget	Play Equipment Replacement	35,000	35,000	-	-	-	-	70,000
4 - 28	Ann. Budget	Natural Area and Urban Forest Management	100,000	100,000	100,000	-	-	-	300,000
4 - 29	Ann. Budget	Chafer Beetle Turf Restoration	45,000	45,000	45,000	45,000	-	-	180,000
4 - 30	Ann. Budget	Wooden Bridge and Stair Replacement	25,000	25,000	25,000	25,000	-	-	100,000
4 - 31	Ann. Budget	Grass Sports Field Renovations	75,000	75,000	75,000	75,000	75,000	75,000	450,000
4 - 32	Ann. Budget	Irrigation System Upgrades	34,000	34,000	34,000	34,000	34,000	170,000	340,000
4 - 33	Ann. Budget	Park & Greenways Trail Resurfacing	10,000	10,000	10,000	10,000	10,000	50,000	100,000
4 - 34	Ann. Budget	Parks Furnishings and Signage	35,000	35,000	35,000	35,000	35,000	175,000	350,000
4 - 35	Ann. Budget	Parks Master Plan Update	-	200,000	-	-	-	-	200,000
<b>Total - City Wide Programs</b>			<b>\$ 359,000</b>	<b>\$ 559,000</b>	<b>\$ 324,000</b>	<b>\$ 224,000</b>	<b>\$ 154,000</b>	<b>\$ 470,000</b>	<b>\$ 2,090,000</b>

<b>TOTAL FUNDING REQUESTED IN PROJECT SHEETS</b>	<b>\$ 4,084,000</b>	<b>\$ 2,609,000</b>	<b>\$ 5,724,000</b>	<b>\$ 5,911,500</b>	<b>\$ 3,354,000</b>	<b>\$ 7,360,000</b>	<b>\$ 29,042,500</b>
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<b>TOTAL CONTRIBUTIONS</b>	<b>\$ 40,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 40,000</b>
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<b>TOTAL CONTRIBUTIONS - DCC FUNDING</b>	<b>\$ 569,250</b>	<b>\$ 643,500</b>	<b>\$ 2,598,750</b>	<b>\$ 2,475,000</b>	<b>\$ -</b>	<b>\$ 618,750</b>	<b>\$ 6,905,250</b>
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<b>NET FUNDING REQUESTED</b>	<b>\$ 3,474,750</b>	<b>\$ 1,965,500</b>	<b>\$ 3,125,250</b>	<b>\$ 3,436,500</b>	<b>\$ 3,354,000</b>	<b>\$ 6,741,250</b>	<b>\$ 22,097,250</b>
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Base Program
DCC's Fund
Dedicated Fund
New Initiatives

2020-2029 PROJECT PLAN  
PUBLIC ART

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
5 - 2	Public Art	Civic Public Art Program	85,000	85,000	85,000	85,000	85,000	425,000	850,000
5 - 3	Public Art	Provisions of 1% of revenue from LL Land Sales to Public Art Projects	86,822	-	-	-	-	-	86,822
TOTAL FUNDING REQUESTED IN PROJECT SHEETS			\$ 171,822	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000	\$ 425,000	\$ 936,822
NET FUNDING REQUESTED			\$ 171,822	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000	\$ 425,000	\$ 936,822

## 2020-2029 PROJECT PLAN EQUIPMENT SUMMARY

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Summary of Equipment Projects</b>							
<b>FUNDING REQUESTED IN PROJECT SHEETS</b>							
General Equipment	575,000	568,950	652,000	660,950	758,300	2,139,100	5,354,300
Information Technology Equipment	1,248,953	860,700	1,320,500	1,215,000	1,157,450	4,719,950	10,522,553
Engineering Equipment	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
Fire Equipment	1,115,000	1,690,000	215,000	590,000	70,000	2,770,000	6,450,000
Block Funding & Other Projects	2,946,590	1,917,217	1,541,217	1,135,217	960,217	5,511,085	14,011,543
<b>TOTAL FUNDING REQUESTED</b>	<b>\$ 6,353,543</b>	<b>\$ 5,912,867</b>	<b>\$ 4,409,717</b>	<b>\$ 4,266,167</b>	<b>\$ 3,450,967</b>	<b>\$ 18,849,135</b>	<b>\$ 43,242,396</b>
<b>CONTRIBUTIONS</b>							
General Equipment	93,437	165,437	99,032	169,047	99,032	459,425	1,085,407
Information Technology Equipment	75,350	45,350	63,750	4,500	155,725	77,475	422,150
Engineering Equipment	-	-	-	-	-	-	-
Fire Equipment	-	-	-	-	-	-	-
Block Funding & Other Projects	564,464	230,464	222,464	124,464	74,464	372,320	1,588,640
<b>TOTAL CONTRIBUTIONS</b>	<b>\$ 733,251</b>	<b>\$ 441,251</b>	<b>\$ 385,246</b>	<b>\$ 298,011</b>	<b>\$ 329,221</b>	<b>\$ 909,220</b>	<b>\$ 3,096,197</b>
<b>NET FUNDING REQUESTED</b>							
General Equipment	481,564	403,514	552,969	491,904	659,269	1,679,676	4,268,893
Information Technology Equipment	1,173,603	815,350	1,256,750	1,210,500	1,001,725	4,642,475	10,100,403
Engineering Equipment	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
Fire Equipment	1,115,000	1,690,000	215,000	590,000	70,000	2,770,000	6,450,000
Block Funding & Other Projects	2,382,126	1,686,753	1,318,753	1,010,753	885,753	5,138,765	12,422,903
<b>TOTAL CITY FUNDING REQUESTED</b>	<b>\$ 5,620,293</b>	<b>\$ 5,471,617</b>	<b>\$ 4,024,472</b>	<b>\$ 3,968,157</b>	<b>\$ 3,121,747</b>	<b>\$ 17,939,916</b>	<b>\$ 40,146,199</b>

## 2020-209 PROJECT PLAN GENERAL EQUIPMENT

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
6 - 2	Annual Bud	Furniture and Equipment	107,000	90,950	107,000	90,950	96,300	246,100	738,300
6 - 4	Gen Equip	Gerry Brewer Furniture	47,134	47,134	47,134	47,134	47,134	141,401	377,068
6 - 4	External	Gerry Brewer Furniture - Required Outside Funding	59,867	59,867	59,867	59,867	59,867	179,600	478,932
6 - 6	Annual Bud	Pool Vehicle Replacement	50,000	5,000	50,000	50,000	40,000	155,000	350,000
6 - 8	Annual Bud	Police Pool Vehicle Replacement	26,430	26,430	30,835	19,820	30,835	154,175	288,525
6 - 8	External	Police Pool Vehicles Repl - Required outside Funding	33,570	33,570	39,165	25,180	39,165	195,825	366,475
6 - 9	Annual Bud	Bylaw Vehicles Replacement	-	-	45,000	-	-	-	45,000
6 - 10	Annual Bud	NVRC Maintenance Vehicles	-	36,000	-	42,000	-	42,000	120,000
6 - 10	External	NVRC Maintenance Vehicles - Required Outside Funding	-	72,000	-	84,000	-	84,000	240,000
6 - 12	Annual Bud	NVRC Recreation Program Equipment	183,000	130,000	155,000	225,000	445,000	695,000	1,833,000
6 - 14	Annual Bud	Automated Materials Handling & RFID System Replacements	18,000	18,000	68,000	17,000	-	196,000	317,000
6 - 16	Annual Bud	Self-Service Payment Renewal	-	-	-	-	-	20,000	20,000
6 - 17	Annual Bud	A/V Systems Renewal	-	-	-	-	-	30,000	30,000
6 - 18	Annual Bud	Automated Traffic Counters	50,000	50,000	50,000	-	-	-	150,000
<b>TOTAL FUNDING REQUESTED IN PROJECT SHEETS</b>			<b>\$ 575,000</b>	<b>\$ 568,950</b>	<b>\$ 652,000</b>	<b>\$ 660,950</b>	<b>\$ 758,300</b>	<b>\$ 2,139,100</b>	<b>\$ 5,354,300</b>
<b>TOTAL CONTRIBUTIONS</b>			<b>\$ 93,437</b>	<b>\$ 165,437</b>	<b>\$ 99,032</b>	<b>\$ 169,047</b>	<b>\$ 99,032</b>	<b>\$ 459,425</b>	<b>\$ 1,085,407</b>
<b>NET FUNDING REQUESTED</b>			<b>\$ 481,564</b>	<b>\$ 403,514</b>	<b>\$ 552,969</b>	<b>\$ 491,904</b>	<b>\$ 659,269</b>	<b>\$ 1,679,676</b>	<b>\$ 4,268,893</b>



## 2020-2029 PROJECT PLAN INFORMATION TECHNOLOGY

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
<b>I.T. Department</b>									
7 - 3	Annual Bud / Comp Equip.	User Device Replacements	150,000	150,000	150,000	150,000	150,000	750,000	1,500,000
7 - 4	Annual Bud	Data Centre Infrastructure	125,000	50,000	350,000	250,000	150,000	875,000	1,800,000
7 - 5	Annual Bud	Fibre Infrastructure Improvement	50,000	50,000	50,000	50,000	50,000	250,000	500,000
7 - 6	General Bud. - NEW	Enhanced VOIP Solutions	200,000	-	-	-	-	-	200,000
7 - 7	General Bud. - NEW	Open Data & GIS 3D Modeling	120,000	100,000	100,000	-	-	200,000	520,000
7 - 8	General Bud. - NEW	Business Intelligence & Reporting	150,000	100,000	-	-	-	-	250,000
7 - 9	Annual Bud	CNV Website Refresh	50,000	-	75,000	-	200,000	650,000	975,000
7 - 10	Annual Bud - NEW	Parks IPS Asset Management	-	-	125,000	125,000	-	-	250,000
7 - 11	Annual Bud	Data and Workflow Improvements	92,253	-	-	-	-	-	92,253
7 - 12	Annual Bud - NEW	Permits Clerk	65,000	68,000	-	-	-	-	133,000
7 - 13	Annual Bud	Engineering Business Process Owner	100,000	-	-	-	-	-	100,000
7 - 14	Annual Bud - NEW	Enterprise Application Lifecycle Planning	-	120,000	350,000	550,000	350,000	1,600,000	2,970,000
<b>Total - I.T. Department</b>			<b>\$ 1,102,253</b>	<b>\$ 638,000</b>	<b>\$ 1,200,000</b>	<b>\$ 1,125,000</b>	<b>\$ 900,000</b>	<b>\$ 4,325,000</b>	<b>\$ 9,290,253</b>
<b>Library</b>									
7 - 16	Annual Bud - NEW	Integrated Library System (ILS) Renewal	-	50,000	-	-	-	-	50,000
7 - 17	Annual Bud	Library Website Renewal	5,000	80,000	-	-	-	85,000	170,000
<b>Total - Library</b>			<b>\$ 5,000</b>	<b>\$ 130,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 85,000</b>	<b>\$ 220,000</b>
<b>North Vancouver Museum &amp; Archives</b>									
7 - 18	Annual Bud	IT Refresh	15,350	7,350	7,750	4,500	5,725	37,475	78,150
7 - 18	External	Museum & Archives Technology Refresh - Required Outside Funding	15,350	7,350	7,750	4,500	5,725	37,475	78,150
<b>Total - North Vancouver Museum &amp; Archives</b>			<b>\$ 30,700</b>	<b>\$ 14,700</b>	<b>\$ 15,500</b>	<b>\$ 9,000</b>	<b>\$ 11,450</b>	<b>\$ 74,950</b>	<b>\$ 156,300</b>

## 2020-2029 PROJECT PLAN INFORMATION TECHNOLOGY

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
<b>North Vancouver Recreation &amp; Culture Commission</b>									
7 - 19	Annual Bud	Facility Desktop Hardware Refresh	21,000	21,000	21,000	21,000	21,000	105,000	210,000
7 - 21	Annual Bud	Perfect Mind Implementation: Integration Project	10,000	10,000	10,000	-	10,000	20,000	60,000
7 - 21	External	Perfect Mind Implementation: Integration Project - ROF	20,000	20,000	20,000	-	20,000	40,000	120,000
7 - 22	Annual Bud	Network Hardware Replacements	-	-	-	30,000	-	35,000	65,000
7 - 23	Annual Bud	Public Wifi Replacement	-	-	-	30,000	-	35,000	65,000
7 - 24	Annual Bud - NEW	Mobile Device Applications	-	9,000	18,000	-	-	-	27,000
7 - 24	External	Mobile Device Applications - ROF	-	18,000	36,000	-	-	-	54,000
7 - 25	Annual Bud	VOIP Phone System Replacement	-	-	-	-	65,000	-	65,000
7 - 25	External	VOIP Phone System Replacement - Required Outside Funding	-	-	-	-	130,000	-	130,000
7 - 26	Annual Bud	Website Content Management Replacement	13,000	-	-	-	-	-	13,000
7 - 26	External	Website Content Management Program Upgrade - ROF	26,000	-	-	-	-	-	26,000
7 - 27	Annual Bud - NEW	Digital Tools Development Plan	7,000	-	-	-	-	-	7,000
7 - 27	External	Digital Tools Development Plan - ROF	14,000	-	-	-	-	-	14,000
<b>Total - North Vancouver Recreation Commission</b>			<b>\$ 111,000</b>	<b>\$ 78,000</b>	<b>\$ 105,000</b>	<b>\$ 81,000</b>	<b>\$ 246,000</b>	<b>\$ 235,000</b>	<b>\$ 856,000</b>
<b>TOTAL FUNDING REQUESTED IN PROJECT SHEETS</b>			<b>\$ 1,248,953</b>	<b>\$ 860,700</b>	<b>\$ 1,320,500</b>	<b>\$ 1,215,000</b>	<b>\$ 1,157,450</b>	<b>\$ 4,719,950</b>	<b>\$ 10,522,553</b>
<b>TOTAL CONTRIBUTIONS</b>			<b>\$ 75,350</b>	<b>\$ 45,350</b>	<b>\$ 63,750</b>	<b>\$ 4,500</b>	<b>\$ 155,725</b>	<b>\$ 77,475</b>	<b>\$ 422,150</b>
<b>NET FUNDING REQUESTED</b>			<b>\$ 1,173,603</b>	<b>\$ 815,350</b>	<b>\$ 1,256,750</b>	<b>\$ 1,210,500</b>	<b>\$ 1,001,725</b>	<b>\$ 4,642,475</b>	<b>\$ 10,100,403</b>
Base Program									
DCC's Fund									
Dedicated Fund									
New Initiatives									

## 2020-2029 PROJECT PLAN ENGINEERING EQUIPMENT

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
8 - 2	Eng Equip	Engineering, Parks and Environment Operations Vehicle/Equipment Replacement Program	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
<b>TOTAL FUNDING REQUESTED IN PROJECT SHEETS</b>			<b>\$ 468,000</b>	<b>\$ 876,000</b>	<b>\$ 681,000</b>	<b>\$ 665,000</b>	<b>\$ 505,000</b>	<b>\$ 3,709,000</b>	<b>\$ 6,904,000</b>
<b>TOTAL CONTRIBUTIONS</b>									
<b>NET FUNDING REQUESTED</b>			<b>\$ 468,000</b>	<b>\$ 876,000</b>	<b>\$ 681,000</b>	<b>\$ 665,000</b>	<b>\$ 505,000</b>	<b>\$ 3,709,000</b>	<b>\$ 6,904,000</b>

2020-209 PROJECT PLAN  
FIRE EQUIPMENT

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
9 - 2	Fire Equip	Fire Equipment Replacement Program	1,115,000	1,690,000	215,000	590,000	70,000	2,770,000	6,450,000
TOTAL FUNDING REQUESTED IN PROJECT SHEETS			\$ 1,115,000	\$ 1,690,000	\$ 215,000	\$ 590,000	\$ 70,000	\$ 2,770,000	\$ 6,450,000
TOTAL CONTRIBUTIONS									
NET FUNDING REQUESTED			\$ 1,115,000	\$ 1,690,000	\$ 215,000	\$ 590,000	\$ 70,000	\$ 2,770,000	\$ 6,450,000

**2020-2029 PROJECT PLAN**  
**BLOCK FUNDS, ONGOING PROGRAMS AND OTHER PROJECTS**

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
<b>Block Funds</b>									
10 - 3	Annual Bud.	Block Funding - City Used Buildings	100,000	100,000	100,000	100,000	100,000	500,000	1,000,000
10 - 4	Annual Bud.	Block Funding - Non-City Used Building	100,000	100,000	100,000	100,000	100,000	500,000	1,000,000
10 - 5	Annual Bud.	Block Funding - Gerry Brewer Building	28,728	28,728	28,728	28,728	28,728	143,640	287,280
10 - 5	External	Gerry Brewer Building - Required Outside Funding	36,489	36,489	36,489	36,489	36,489	182,445	364,890
10 - 6	Annual Bud.	Block Funding - Information Technology	100,000	100,000	100,000	100,000	100,000	500,000	1,000,000
10 - 7	Annual Bud.	Block Funding - Parks Infrastructure	75,000	75,000	75,000	75,000	75,000	375,000	750,000
10 - 8	Annual Bud.	Block Funding - Transportation	30,000	30,000	30,000	30,000	30,000	150,000	300,000
10 - 9	Annual Bud.	Block Funding - Engineering Equipment	50,000	50,000	50,000	50,000	50,000	250,000	500,000
10 - 10	Annual Bud.	Block Funding - Waterfront Asset Infrastructure	50,000	50,000	50,000	50,000	50,000	250,000	500,000
10 - 11	Annual Bud.	Block Funding - Shipyards Waterfront	25,000	25,000	50,000	50,000	50,000	250,000	450,000
10 - 12	Annual Bud.	Block Funding - Planning & Development	10,000	10,000	10,000	10,000	10,000	50,000	100,000
10 - 13	Annual Bud.	Block Funding - Fire Department	50,000	50,000	50,000	50,000	50,000	250,000	500,000
10 - 13	Annual Bud.	Block Funding - Police Equipment	22,025	22,025	22,025	22,025	22,025	110,125	220,250
10 - 14	External	Block Funding - Police Equipment - Required Outside Funding	27,975	27,975	27,975	27,975	27,975	139,875	279,750
10 - 15	Annual Bud.	Block Funding - Library Equipment	20,000	20,000	20,000	20,000	20,000	100,000	200,000
10 - 15	Annual Bud.	Block Funding - Museum and Archives	10,000	10,000	10,000	10,000	10,000	50,000	100,000
10 - 16	External	Museum & Archives - Required Outside Funding	10,000	10,000	10,000	10,000	10,000	50,000	100,000
10 - 17	Annual Bud.	Block Funding - NVRC	75,000	75,000	75,000	80,000	80,000	410,000	795,000
10 - 18	Annual Bud.	NVRC Emergency Capital Replacement Fund	30,000	30,000	30,000	35,000	35,000	185,000	345,000
<b>TOTAL - BLOCK FUNDS</b>			<b>\$ 850,217</b>	<b>\$ 850,217</b>	<b>\$ 875,217</b>	<b>\$ 885,217</b>	<b>\$ 885,217</b>	<b>\$ 4,446,085</b>	<b>\$ 8,792,170</b>
<b>On-Going Programs</b>									
10 - 19	CCCIF	Child Care Capital Improvement Fund	9,323	-	-	-	-	-	9,323
<b>TOTAL - ON-GOING PROGRAMS</b>			<b>\$ 9,323</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 9,323</b>
<b>Other Projects</b>									
10 - 21	General Bud. - NEW	Economic Development Strategy	70,000	-	-	-	-	-	70,000
10 - 22		Economic Impact Assessment of Fixed Link Rapid Transit to North Shore	-	-	-	-	-	-	-
10 - 22	External	Economic Impact Assessment of FLR - Required Outside Funding	200,000	-	-	-	-	-	200,000
10 - 23	General Bud. - NEW	City Plaza Programming	25,000	25,000	25,000	-	-	-	75,000
10 - 24	TSL Int	City Studio Partnership with CapU	30,000	36,000	48,000	50,000	-	-	164,000
10 - 24	External	City Studio Partnership - Required Outside Funding	30,000	36,000	48,000	50,000	-	-	164,000
10 - 25	TSL Int	Placemaking	40,000	40,000	-	-	-	-	80,000

**2020-2029 PROJECT PLAN**  
**BLOCK FUNDS, ONGOING PROGRAMS AND OTHER PROJECTS**

Page	Funding Source		2020	2021	2022	2023	2024	2025-2029	Total
10 - 27	TSL Int	CNV4ME - School The City Implementation	15,000	15,000	-	-	-	-	30,000
10 - 28	TSL Int - NEW	Community Engagement	160,000	-	-	-	-	-	160,000
10 - 29	General Bud. - NEW	Library Services for Lower Lonsdale	-	200,000	-	-	-	-	200,000
10 - 30	General Bud. - NEW	Child Minding for Council Meetings	25,000	25,000	25,000	25,000	25,000	125,000	250,000
10 - 31	General Bud. - NEW	Child Care Strategy Implementation Projects	40,000	-	-	-	-	-	40,000
10 - 32	General Bud. - NEW	Land Use Studies - OCP Review	-	-	-	-	50,000	900,000	950,000
10 - 33	General Bud. - NEW	Special Study, Site Planning and Development	-	-	100,000	100,000	-	-	200,000
10 - 34	TLS Int / Annual Bud. - NEW	Environmental Strategy Implementation	225,000	125,000	125,000	-	-	-	475,000
10 - 34	External	Environmental Strategy Implementation - Required Outside Funding	-	50,000	50,000	-	-	-	100,000
10 - 35	Carbon Fund - NEW	Electric Vehicle Strategy Implementation	205,050	135,000	-	-	-	-	340,050
10 - 35	External	Electric Vehicle Strategy - Required Outside Funding	100,000	20,000	-	-	-	-	120,000
10 - 36	General Bud. - NEW	E-Bike and Micromobility Coordinator	75,000	25,000	25,000	25,000	-	-	150,000
10 - 36	External	E-Bike and Micromobility Coordinator - ROF	50,000	-	-	-	-	-	50,000
10 - 37	Enviro Steward / Annual Bud.	Corporate Climate Action Implementation	150,000	150,000	150,000	-	-	-	450,000
10 - 37	External	Corporate Climate Action Implementation - Required Outside Funding	50,000	50,000	50,000	-	-	-	150,000
10 - 38	Annual Bud. - NEW	COR (Certificate of Recognition)	60,000	-	20,000	-	-	40,000	120,000
10 - 39	Annual Bud.	Strategic & Corporate Planning	100,000	100,000	-	-	-	-	200,000
10 - 40	TSL Int	Community Recreation Strategy	67,000	35,000	-	-	-	-	102,000
10 - 41	General Bud. - NEW	Review of Human Resources Policy Manual	120,000	-	-	-	-	-	120,000
10 - 42	TSL Int - NEW	Exempt Compensation Market Review	40,000	-	-	-	-	-	40,000
10 - 44	General Bud. - NEW	Lonsdale Energy Corporation Renewable Energy Strategy	100,000	-	-	-	-	-	100,000
10 - 45	General Bud. - NEW	Where Matters 2.0 - Measuring Health Impacts of Built Environment and Policy	25,000	-	-	-	-	-	25,000
10 - 46	General Bud. - NEW	CleanBC Better Homes and Home Renovation Rebate Program - Municipal Top-Up Rebates	25,000	-	-	-	-	-	25,000
10 - 46	External	CleanBC Better Homes and Home Renovation Rebate Program - Municipal Top-Up Rebates -Required Outside Funding	60,000	-	-	-	-	-	60,000
<b>TOTAL - OTHER PROJECTS</b>			<b>\$ 2,087,050</b>	<b>\$ 1,067,000</b>	<b>\$ 666,000</b>	<b>\$ 250,000</b>	<b>\$ 75,000</b>	<b>\$ 1,065,000</b>	<b>\$ 5,210,050</b>
<b>TOTAL FUNDING REQUESTED IN PROJECT SHEETS</b>			<b>\$ 2,946,590</b>	<b>\$ 1,917,217</b>	<b>\$ 1,541,217</b>	<b>\$ 1,135,217</b>	<b>\$ 960,217</b>	<b>\$ 5,511,085</b>	<b>\$ 14,011,543</b>
<b>TOTAL CONTRIBUTIONS</b>			<b>\$ 564,464</b>	<b>\$ 230,464</b>	<b>\$ 222,464</b>	<b>\$ 124,464</b>	<b>\$ 74,464</b>	<b>\$ 372,320</b>	<b>\$ 1,588,640</b>
<b>NET FUNDING REQUESTED</b>			<b>\$ 2,382,126</b>	<b>\$ 1,686,753</b>	<b>\$ 1,318,753</b>	<b>\$ 1,010,753</b>	<b>\$ 885,753</b>	<b>\$ 5,138,765</b>	<b>\$ 12,422,903</b>



# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

Average for the Year 3.00% 3.00% 3.00% 3.00% 3.00% 3.00%

Each year an amount is transferred from the annual budget to fund various capital projects. These funds are unrestricted and can be used for any capital project. Approximately 15% of the City's annual tax levy is transferred to capital projects or to fund capital reserves.

	2020	2021	2022	2023	2024	2025-2029	Total
Tax Levy	\$ 10,453,800	\$ 10,953,800	\$ 11,453,800	\$ 11,953,800	\$ 12,453,800	\$ 69,769,000	\$ 127,038,000
Total Available	\$ 10,453,800	\$ 10,953,800	\$ 11,453,800	\$ 11,953,800	\$ 12,453,800	\$ 69,769,000	\$ 127,038,000
Allocated to :							
Tax Sale Land						-	-
Civic Amenity HJCRC	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	-	13,000,000
General Building						-	-
General Equipment						-	-
Fire Equipment	429,802	1,690,000	350,000	455,000	350,000	2,573,239	5,848,041
Computer Equipment						-	-
General Reserve		1,024,607	3,397,599	4,524,646	3,766,687	46,574,390	59,287,928
TSLI		116,670	3,795			-	120,465
Public Art	85,000	85,000	85,000	85,000	85,000	425,000	850,000
Affordable Housing						-	-
Sustainable Transportation	87,500	87,500	87,500	87,500	87,500	437,500	875,000
Carbon Fund	65,000	65,000	65,000	65,000	65,000	325,001	650,001
Total to Reserves	3,267,302	5,668,777	6,588,894	7,817,146	6,954,187	50,335,130	80,631,435
Transfer to Annual Budget	\$ 7,186,498	\$ 5,285,023	\$ 4,864,906	\$ 4,136,655	\$ 5,499,613	\$ 24,933,484	\$ 46,406,565

### ANNUAL BUDGET - Direct Transfer to Capital

	2020	2021	2022	2023	2024	2025-2029	Total
	\$ 7,186,498	\$ 5,285,023	\$ 4,864,906	\$ 4,136,655	\$ 5,499,613	\$ 19,433,871	\$ 46,406,565
Available Balance	\$ 7,186,498	\$ 5,285,023	\$ 4,864,906	\$ 4,136,655	\$ 5,499,613	\$ 19,433,871	\$ 46,406,565
Withdrawals							
Base							
Buildings							
Capital Maintenance	1,727,112	2,151,370	1,590,435	1,029,498	845,921	2,975,955	10,320,289
Fire Hall Vestibule	100,000	-	-	-	-	-	100,000
Structures							
Traffic & Transportation							
Fell Avenue: Slope stability and Retaining Walls	-	750,000	-	-	-	-	750,000
Traffic Signal LED Replacement	-	300,000	-	-	-	-	300,000
200 East 2nd Street - Parking & Streetscape improvements	-	-	-	-	50,500	-	50,500
100 East 2nd Street - Parking & Streetscape Improvements	-	-	-	-	-	227,250	227,250
100 East 1st Street - Streetscape Improvements	-	-	-	-	-	353,500	353,500
Living City Tree Planting Program	120,000	120,000	120,000	120,000	120,000	600,000	1,200,000
Great Streets - Corridor Studies	150,000		150,000	-	-	-	300,000
Pavement Management: Streets and Lanes	258,983					-	258,983
Parks & Environment							
City Wide Programs	359,000	559,000	324,000	224,000	154,000	470,000	2,090,000
Sutherland Field Renovation	1,600,000					-	1,600,000
Replacements and Restoration Projects	550,000	-	-	250,000	1,900,000	4,571,250	7,271,250
Equipment							
Over \$10,000							
General	434,430	340,015	552,969	491,904	637,633	1,679,676	4,136,625
IT	640,917	288,886	1,156,750	1,210,500	980,807	4,442,475	8,720,335
Block Funding							
One-time studies/projects							
Ongoing Programs	775,753	775,753	800,753	810,753	810,753	4,073,765	8,047,530
COR (Certificate of Recognition)	60,000	-	20,000	-	-	40,000	120,000
Strategic & Corporate Planning	100,000		-	-	-	-	100,000
Corporate Climate Action Implementation	117,158		150,000			-	267,158
Environmental Strategy Implementation	193,146					-	193,146
Total Expended	\$ 7,186,498	\$ 5,285,023	\$ 4,864,906	\$ 4,136,655	\$ 5,499,613	\$ 19,433,871	\$ 46,406,565
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### TAX SALE LAND Principal

The Tax Sale Lands Fund is made up of the proceeds of sale of all lands sold by the City which originally became City property through non-payment of taxes. Most of this land came to the City in the 1930's, during the Great Depression. The balance in the Tax Sale Land reserve is used to invest in projects that have a prospective rate of return equal to or greater than the City's benchmark rate of return; to invest in infrastructure and land management, in order to enhance the marketability and increase the value of marketed lands, or to invest in the purchase of land assets to be held by the City. By long-standing Council policy, Tax Sale Land principal is not used to fund depreciable assets such as civic buildings, infrastructure or equipment.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance (unappropriated)	\$ 31,387,774	\$ 27,937,774	\$ 27,987,774	\$ 71,510,524	\$ 91,560,524	\$ 91,610,524	\$ 31,387,774
<b>Loan repayments:</b>							
-AT Field User Fee rpmt	50,000	50,000	50,000	50,000	50,000	250,000	500,000
<b>Proceeds of Sale:</b>			62,375,000				62,375,000
-Land Sales - LL							
-Land Sales - Alder Str		-	22,347,750				22,347,750
<b>Loans/Transfers</b>							
-Transfer to CAF HJFUND			(20,000,000)	20,000,000			
-Land Sale			(21,250,000)				(21,250,000)
<b>Available Balance</b>	\$ 31,437,774	\$ 27,987,774	\$ 71,510,524	\$ 91,560,524	\$ 91,610,524	\$ 91,860,524	\$ 95,360,524
<b>-Purchases</b>							
Strategic Land Purchase	3,500,000	-	-	-	-	-	3,500,000
Other Sites	-	-	-	-	-	-	-
	\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,500,000
<b>-Other Withdrawals - Capital Funding</b>							
	-	-	-	-	-	-	-
<b>Total Expenditures</b>	\$ 3,500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,500,000
<b>Closing Balance</b>	\$ 27,937,774	\$ 27,987,774	\$ 71,510,524	\$ 91,560,524	\$ 91,610,524	\$ 91,860,524	\$ 91,860,524

### TAX SALE LANDS interest

The previous year's earned interest of the Tax Sales Land reserve is unrestricted and is used to fund various projects. Along with the Annual Budget tax levy, this is the major unrestricted source that the City has for funding capital projects.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 1,067,824	\$ 889,883	\$ 838,883	\$ 1,492,474	\$ 2,446,066	\$ 26,194,629	\$ 32,929,759
Transfer from Annual	-	116,670	3,795				120,465
Transfer to General				(704,328)	(1,685,148)	(2,047,193)	(4,436,669)
Interest for the year				20,514	49,082	670,339	739,935
<b>Available Balance</b>	1,067,824	1,006,553	842,678	808,661	810,000	24,817,775	29,353,490
<b>Withdrawals</b>							
<b>Streets and Transportation</b>							
Pavement and Bridge Management	235,000	250,000	200,000	200,000	250,000	1,050,000	2,185,000
Existing Infrastructure Safety Improvements	300,000		390,000	390,000	390,000	1,950,000	3,420,000
Sidewalk Infill & Reconstruction	118,970	160,553	169,678	168,660	170,000	850,000	1,637,862
Cloverley Access Management Adjustments	30,000		-	-	-	-	30,000
Pavement Management: Streets and Lanes		596,000					596,000
	\$ 683,970	\$ 1,006,553	\$ 759,678	\$ 758,660	\$ 810,000	\$ 3,850,000	\$ 7,868,862
<b>Block Funding</b>							
Placemaking	40,000		-	-	-	-	40,000
CNV4ME - School The City Implementation	15,000		-	-	-	-	15,000
Community Engagement	160,000		-	-	-	-	160,000
Community Recreation Strategy	67,000		-	-	-	-	67,000
City Studio Partnership with CapU	30,000		48,000	50,000	-	-	128,000
Environmental Strategy Implementation	31,854		35,000	-	-	-	66,854
Exempt Compensation Market Review	40,000		-	-	-	-	40,000
	\$ 383,854	\$ -	\$ 83,000	\$ 50,000	\$ -	\$ -	\$ 516,854
<b>Total Expended</b>	\$ 1,067,824	\$ 1,006,553	\$ 842,678	\$ 808,660	\$ 810,000	\$ 3,850,000	\$ 8,385,716
<b>Closing Balance</b>	\$ -	\$ (0)	\$ -	\$ 0	\$ 0	\$ 20,967,775	\$ 20,967,775

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### CIVIC AMENITY - HARRY JEROME FUND

The CAF HJF is specifically dedicated to fund Harry Jerome Recreation Centre and Lands capital projects . In 2013, Council approved a 1% tax rate increase to be set aside for the Harry Jerome Recreation Centre project. This provided \$400,000 in annual funding for this purpose. Council approved similar increases in following years bringing the annual amount set aside for the Harry Jerome Recreation Project to \$2.6million.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 10,540,058</b>	<b>-</b>	<b>\$ -</b>	<b>\$ 69,145,344</b>	<b>\$ 65,359,344</b>	<b>\$ 14,065,389</b>	<b>\$ 10,540,058</b>
Completed Projects						-	-
Early Appropriations						-	-
Contributions:						-	-
- Amenity Levy	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	-	13,000,000
Land lease - HJNL		68,434,861	87,587,444		37,296,845	-	193,319,150
Transfer from TSL						-	-
MFA debt		90,000,000			(90,000,000)	-	-
Interest for the year						-	-
<b>Available Balance</b>	<b>\$ 13,140,058</b>	<b>\$ 161,034,861</b>	<b>\$ 90,187,444</b>	<b>\$ 71,745,344</b>	<b>\$ 15,256,189</b>	<b>\$ 14,065,389</b>	<b>\$ 216,859,208</b>
<b>Withdrawals</b>							
Harry Jerome Community Recreation Centre	10,825,058	161,034,861	21,042,100	6,386,000	1,190,800	-	200,478,819
Harry Jerome Neighbourhood Lands Site Development Plan	150,000	-	-	-	-	-	150,000
HJ Precinct Related Relocation Expenses	2,165,000	-	-	-	-	-	2,165,000
<b>Total Expended</b>	<b>13,140,058</b>	<b>161,034,861</b>	<b>21,042,100</b>	<b>6,386,000</b>	<b>1,190,800</b>	<b>-</b>	<b>202,793,819</b>
<b>Closing Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 69,145,344</b>	<b>\$ 65,359,344</b>	<b>\$ 14,065,389</b>	<b>\$ 14,065,389</b>	<b>\$ 14,065,389</b>

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### CIVIC AMENITY

The City also owns land that was acquired through purchase, i.e., not through tax defaults. Such property is considered as being a non-Tax Sale land property. The proceeds of sale are placed in the City Amenity fund. The CAF is specifically dedicated to fund capital projects which will enhance the use and enjoyment of the City by members of the public, such as parks, recreation centers, libraries, plazas, and other community amenities.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 8,877,563</b>	<b>\$ 3,738,030</b>	<b>\$ 688,586</b>	<b>\$ 23,914,886</b>	<b>\$ 14,143,328</b>	<b>\$ 13,361,240</b>	<b>\$ 8,877,563</b>
Completed Projects	204,000						204,000
Early Appropriations							-
Contributions:							
- CAC estimate		3,000,000	3,000,000	3,000,000	3,000,000	15,000,000	27,000,000
- Land sales - Lower Lonsdale							-
- Land sales - Alder Str			7,449,250				7,449,250
- Centennial Seat Surcharge	35,000	35,000	35,000	35,000	35,000	175,000	350,000
- West 23rd		1,680,000					1,680,000
- Northmount Medical	5,147,558						5,147,558
Land Sale	-		21,250,000	-			21,250,000
1% of LL Land Sales to Public Art	-	-	-	-	-	-	-
Interest for the year	108,875	20,056	696,550	411,942	389,162	539,787	2,166,372
<b>Available Balance</b>	<b>\$ 14,372,996</b>	<b>\$ 8,473,086</b>	<b>\$ 33,119,386</b>	<b>\$ 27,361,828</b>	<b>\$ 17,567,490</b>	<b>\$ 29,076,027</b>	<b>\$ 74,124,743</b>
Withdrawals							
Buildings							
Shipyards Commons Site Improvements	85,000	50,000	50,000	-	-	-	185,000
Shipyards Commons Branding and Marketing Start Up	25,000		-	-	-	-	25,000
Lonsdale Quay Public Realm	-	480,000	-	-	-	-	480,000
2025 New North Shore Neighborhood House Facility		-	-	-	-	10,000,000	10,000,000
Burrard Dry Dock Electrical Building	-	350,000	-	-	-	-	350,000
PGE Station Provision	-	400,000	-	-	-	-	400,000
Child Care Capital Program (City Facilities)	2,500,000	-	2,500,000	-	-	-	5,000,000
Civic Centre 13th Street Forecourt Improvements	100,000	-	-	-	-	-	100,000
Parks							
Temporary Dog Off leash Facilities	200,000					-	200,000
Mahon Park Beach Volleyball	35,000	-	-	-	-	-	35,000
Hamersley Park Improvements	353,500	-	-	-	-	-	353,500
Waterfront Park Master Plan & Implementation	218,373	-	2,525,000	2,525,000	-	-	5,268,373
1600 Eastern Avenue Park	-	555,500	-	-	-	-	555,500
Green Necklace Outdoor Fitness Equipment Stations	-	400,000	-	-	-	-	400,000
Victoria Park Washroom	-	200,000	-	-	-	-	200,000
St. Andrews Park Washrooms	-	101,000	-	-	-	-	101,000
Sunrise Park Trail Improvements	-	-	126,250	-	-	-	126,250
Casano Park Trail & Habitat Improvements	-	-	-	400,000	-	-	400,000
Park Picnic Shelters	-	-	-	-	850,000	-	850,000
High Place Park Development	-	-	-	-	250,000	-	250,000
Gravel Sports Field Turf Conversion	-	-	-	-	200,000	1,700,000	1,900,000
Public School Playground Funding	150,000	150,000	150,000	37,500	-	-	487,500
Streets and Transportation							
New Sidewalks to Complete Pedestrian Network	151,500	252,500	252,500	252,500	252,500	1,262,500	2,424,000
New Sidewalks on East side St Andrews: Keith Road to 13th Str	220,000	-	-	-	-	-	220,000
New Pedestrian Crossing Facilities	300,000	685,000	745,000	670,000	500,000	1,500,000	4,400,000
New Sidewalks 400 Block E 2nd Street	-	450,000	-	-	-	-	450,000
Active Transportation Wayfinding Program	150,000	100,000	30,000	30,000	30,000	150,000	490,000
Semisch Greenway (W3rd to Semisch Park)	50,500	151,500	-	-	-	-	202,000
Priority Mobility Network Improvements	850,000	227,250	883,750	2,146,250	656,500	-	4,763,750
East Keith Road Multi-Modal Corridor Improvements, East Grand to Brooksbank	-	-	-	300,000	-	-	300,000
Covered Bike Shelter & Secured Bike Parking	-	-	25,000	50,000	50,000	40,000	165,000
Micro Mobility (E-Bike Docking)	50,000	50,000	-	-	-	-	100,000
Active & Safe Routes to School Implementation	200,000	300,000	50,000	50,000	50,000	250,000	900,000
Casano Loutet Overpass	847,726	-	-	-	-	-	847,726
Upper Levels Greenway - Lonsdale to Lynn Valley Road	50,500	505,000	-	-	-	-	555,500
Upper Levels Greenway - Lonsdale to Westview	-	-	505,000	-	-	-	505,000
Queensbury Avenue Greenway Connection	-	-	-	350,000	-	-	350,000
Installation of Accessible Pedestrian Signal Units	35,000	35,000	35,000	35,000	35,000	175,000	350,000
Pedestrian Scale Lighting - Green Necklace	250,000		-	-	-	-	250,000
Pedestrian and Roadway Lighting Implementation	151,500	176,750	202,000	227,250	227,250	1,136,250	2,121,000
City Transit Shelter Program	-	-	40,000	20,000	20,000	40,000	120,000
Moodyville Traffic Signals	121,200	-	-	-	-	-	121,200
New Street Activation	25,000	75,000	75,000	75,000	75,000	375,000	700,000
Sidewalk Patios - Lower Lonsdale	-	150,000	-	-	-	-	150,000
Mosquito Creek Bridge	2,390,167	-	-	-	-	-	2,390,167
Marine Drive Bridge Replacement over Mackay Creek	-	-	-	1,010,000	-	-	1,010,000
Lonsdale Corridor Transit & Safety Improvements (Esplanade to 29th)	-	-	-	1,400,000	-	-	1,400,000
Marine-Main Corridor Improvements	-	350,000	-	2,600,000	-	-	2,950,000
Pedestrian Scale Lighting - Green Necklace		650,000	-	-	-	-	650,000
Esplanade Complete Streets	100,000		-	-	-	-	100,000
Central Lonsdale Wayfinding	30,000	-	-	-	-	-	30,000
New Traffic Signals	995,000	940,000	1,010,000	1,040,000	1,010,000	5,000,000	9,995,000
<b>Total Expended</b>	<b>10,634,966</b>	<b>7,784,500</b>	<b>9,204,500</b>	<b>13,218,500</b>	<b>4,206,250</b>	<b>21,628,750</b>	<b>66,677,466</b>
<b>Closing Balance</b>	<b>\$ 3,738,030</b>	<b>\$ 688,586</b>	<b>\$ 23,914,886</b>	<b>\$ 14,143,328</b>	<b>\$ 13,361,240</b>	<b>\$ 7,447,277</b>	<b>\$ 7,447,277</b>

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### LOWER LONSDALE AMENITY

The LLAFF was originally created to set aside funds from non-Tax Sale land or density transfer in Lower Lonsdale. Funding from this source was to be used with respect to capital projects in the Lower Lonsdale area relating to the provision of affordable and adaptable rental housing, a community arts gallery, a photographic and media arts gallery, a museum, a 150-200 seat theatre, a multi-purpose activity centre, and other Lower Lonsdale amenities. In 2011, Council adopted a bylaw that requires all land sales to be consolidated into one reserve, the Civic Amenity Reserve Fund. While no new funding will be set aside in the LLAFF, funds that are in place will be used toward the construction of Lower Lonsdale amenities as it was originally intended.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 8,877	-	\$ -	\$ -	\$ -	\$ -	8,877
Contributions:							
- Other							-
- Completed Projects							-
Interest for the year							-
Available Balance	\$ 8,877	-	\$ -	\$ -	\$ -	\$ -	8,877
Withdrawals							
Waterfront Park Master Plan & Implementation	8,877						8,877
Total Expended	\$ 8,877	-	\$ -	\$ -	\$ -	\$ -	8,877
Closing Balance	-	-	-	-	-	-	-

### MARINE DRIVE AMENITY

This reserve originally aimed to set aside proceeds from land sales of non-Tax Sale properties in the Marine Drive area for the purpose of funding projects in the area. In 2011, Council adopted a bylaw that requires all land sales to be consolidated into one reserve, the Civic Amenity Reserve Fund. While no new funding will be set aside in this reserve, funds that are in place will be used toward projects in the Marine Drive area.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 9,833	-	\$ -	\$ -	\$ -	\$ -	9,833
Contributions:							
Interest for the year							-
Available Balance	\$ 9,833	-	\$ -	\$ -	\$ -	\$ -	9,833
Withdrawals							
Mosquito Creek Bridge	9,833						9,833
Closing Balance	\$ -	-	\$ -	\$ -	\$ -	\$ -	-

### GENERAL BUILDING

The General Building Reserve is used for capital building maintenance, renovation, and building replacement. The City owns in excess of \$100m in buildings. The GB reserve was established in 1995 to begin the process of setting aside sufficient funds to replace these buildings as required.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 86,505	(0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	86,505
- Budgeted							-
Completed projects							-
Interest for the year							(0)
Available Balance	\$ 86,505	(0)	\$ (0)	\$ (0)	\$ (0)	\$ (1)	86,504
Withdrawals							
Capital Maintenance	86,505						86,505
Total Expended	\$ 86,505	\$ -	\$ -	\$ -	\$ -	\$ -	86,505
Closing Balance	\$ (0)	(0)	\$ (0)	\$ (0)	\$ (0)	\$ (1)	(1)

### JUSTICE ADMINISTRATION BUILDING

The Justice Administration Building Reserve is used for capital building maintenance, renovation, and replacement of the Gerry Brewer Building. Because the Justice Administration (Gerry Brewer) Building is co-owned with the District of North Vancouver, it has its own replacement reserve.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 43,486	4,346	\$ 0	\$ 0	\$ 0	\$ 0	43,486
Contributions:							
- Completed projects							-
Interest for the year							0
Available Balance	\$ 43,486	4,346	\$ 0	\$ 0	\$ 0	\$ 0	43,486
Withdrawals							
GB Building	39,140	4,346					43,486
Total Expended	\$ 39,140	\$ 4,346	\$ -	\$ -	\$ -	\$ -	43,486
Closing Balance	\$ 4,346	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	0

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### INFRASTRUCTURE

The Infrastructure Reserve funds engineering infrastructure replacement projects such as those included in the category "Structures". A long term goal for the fund would be to more closely match the amount transferred each year to this reserve from the annual budget with the City's infrastructure maintenance requirements. This would be achievable only over many years, because the value of the required infrastructure reinvestment is high.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 312,108</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>312,108</b>
Gas Tax	313,000	313,000	313,000	313,000	313,000	1,565,000	3,130,000
MRN Capital	300,000	300,000	300,000	300,000			1,200,000
Contributions:							
- Budgeted							
- Levy							
Interest for the year							
<b>Available Balance</b>	<b>\$ 925,108</b>	<b>613,000</b>	<b>\$ 613,000</b>	<b>\$ 613,000</b>	<b>\$ 313,000</b>	<b>\$ 1,565,000</b>	<b>4,642,108</b>
Withdrawals							
Pavement Management: Streets and Lanes	925,108	613,000	613,000	613,000	313,000	1,565,000	4,642,108
<b>Total Expended</b>	<b>\$ 925,108</b>	<b>\$ 613,000</b>	<b>\$ 613,000</b>	<b>\$ 613,000</b>	<b>\$ 313,000</b>	<b>\$ 1,565,000</b>	<b>4,642,108</b>
<b>Closing Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

### GENERAL EQUIPMENT

Used for general equipment and machinery replacement including office equipment, and pool and bylaw vehicles.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 48,277</b>	<b>7,563</b>	<b>\$ 478</b>	<b>\$ 7,394</b>	<b>\$ 14,723</b>	<b>\$ 87</b>	<b>48,277</b>
Completed Projects							
Contributions:							
- Budgeted							
- Eq. Sales proceeds	6,200	6,400	6,700	6,900	7,000	35,000	68,200
Interest for the year	220	14	215	429		3,293	4,171
<b>Available Balance</b>	<b>\$ 54,697</b>	<b>13,977</b>	<b>\$ 7,394</b>	<b>\$ 14,723</b>	<b>\$ 21,723</b>	<b>\$ 38,379</b>	<b>120,648</b>
Withdrawals							
Furniture and Equipment	47,134	13,499			21,636		82,269
<b>Total Expended</b>	<b>47,134</b>	<b>13,499</b>	<b>-</b>	<b>-</b>	<b>21,636</b>	<b>-</b>	<b>82,269</b>
<b>Closing Balance</b>	<b>\$ 7,563</b>	<b>478</b>	<b>\$ 7,394</b>	<b>\$ 14,723</b>	<b>\$ 87</b>	<b>\$ 38,379</b>	<b>38,379</b>

### FIRE EQUIPMENT

Used for fire equipment, and replacement and upgrades.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 685,198</b>	<b>(0)</b>	<b>\$ (0)</b>	<b>\$ 139,050</b>	<b>\$ 4,171</b>	<b>\$ 292,697</b>	<b>685,198</b>
Closed projects							
Contributions:							
- Budgeted	429,802	1,690,000	350,000	455,000	350,000	2,573,239	5,848,041
Interest for the year			4,050	121	8,525	22,514	35,211
<b>Available Balance</b>	<b>\$ 1,115,000</b>	<b>1,690,000</b>	<b>\$ 354,050</b>	<b>\$ 594,171</b>	<b>\$ 362,697</b>	<b>\$ 2,888,450</b>	<b>6,568,450</b>
Withdrawals							
Equipment and Vehicles	1,115,000	1,690,000	215,000	590,000	70,000	2,770,000	6,450,000
<b>Closing Balance</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ 139,050</b>	<b>\$ 4,171</b>	<b>\$ 292,697</b>	<b>\$ 118,450</b>	<b>118,450</b>

### COMPUTER EQUIPMENT

Used for computer equipment replacement and upgrades.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 62,686</b>	<b>-</b>	<b>\$ -</b>	<b>\$ 8,718</b>	<b>\$ 17,697</b>	<b>\$ 5,401</b>	<b>62,686</b>
Closed Projects							
Contributions:							
- Budgeted		8,464	8,464	8,464	8,464	42,320	76,176
Interest for the year			254	515	157	4,825	5,751
<b>Available Balance</b>	<b>\$ 62,686</b>	<b>8,464</b>	<b>\$ 8,718</b>	<b>\$ 17,697</b>	<b>\$ 26,319</b>	<b>\$ 52,545</b>	<b>144,614</b>
Withdrawals							
User Device Replacements	62,686	8,464			20,918		92,068
<b>Closing Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 8,718</b>	<b>\$ 17,697</b>	<b>\$ 5,401</b>	<b>\$ 52,545</b>	<b>52,545</b>



## 2020-2029 PROJECT PLAN

### RESERVES AND OTHER FUNDING

#### ENGINEERING EQUIPMENT

Used for engineering equipment and vehicle replacement. Engineering has a fleet of several vehicles. Contributions to the Reserve are based on the hourly rates charged to the different projects and programs using the vehicles.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 1,396,708	1,368,570	\$ 919,347	\$ 708,997	\$ 508,817	\$ 518,932	\$ 1,396,708
Closed Projects						-	-
Contributions:							
- Budgeted	400,000	400,000	450,000	450,000	500,000	3,369,077	5,569,077
Interest for the year	39,861	26,777	20,650	14,820	15,115	70,992	188,215
Available Balance	\$ 1,836,570	1,795,347	\$ 1,389,997	\$ 1,173,817	\$ 1,023,932	\$ 3,959,000	\$ 7,154,000
Withdrawals							
Vehicles	468,000	876,000	681,000	665,000	505,000	3,709,000	6,904,000
Closing Balance	\$ 1,368,570	\$ 919,347	\$ 708,997	\$ 508,817	\$ 518,932	\$ 250,000	\$ 250,000

#### LOCAL AREA SERVICES

Local Area Services (LAS) Projects, formerly called Local Improvement Projects, are jointly funded by the City and the benefiting property owner. The Community Charter requires that LAS Reserve funds be used only to fund the city share of new local area services projects.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 721,163	227,798	\$ 234,632	\$ 241,671	\$ 248,921	\$ 256,389	\$ 721,163
Contributions:							
- Levies from Property Owners						-	-
- Other						-	-
Interest for the year	6,635	6,834	7,039	7,250.12	7,468	40,836	76,062
Available Balance	\$ 727,798	\$ 234,632	\$ 241,671	\$ 248,921	\$ 256,389	\$ 297,225	\$ 797,225
Withdrawals							
City Share of LAS Projects	500,000	-	-	-	-	-	500,000
Closing Balance	\$ 227,798	234,632	\$ 241,671	\$ 248,921	\$ 256,389	\$ 297,225	\$ 297,225

#### PARKING

This reserve has been funded from parking revenues from 1998-2002. Moneys in the fund and any interest thereon shall be expended for purchase, acquisition, construction, installation or improvement of new and existing on and off-street parking spaces.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 145,178	149,534	\$ 154,020	\$ 158,640	\$ 163,399	\$ 168,300	\$ 145,178
Completed Projects							
Contributions:							
- Pay in lieu of Parking						-	-
Interest for the year	4,355	4,486	4,621	4,759	4,902	26,806	49,929
Available Balance	\$ 149,534	154,020	\$ 158,640	\$ 163,399	\$ 168,300	\$ 195,105	\$ 195,107
Withdrawals							
Total Expended	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Balance	\$ 149,534	154,020	\$ 158,640	\$ 163,399	\$ 168,300	\$ 195,105	\$ 195,107

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### PARKS DCC

The Parks DCC fund can only be used to fund the purchase of parkland and certain specific parks improvements. DCC's in general are to be used to create capital works required due to growth, therefore the City plans to use these funds to provide parks and improvements in areas impacted by growth.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 13,363,426</b>	<b>\$ 3,809,390</b>	<b>\$ 4,201,256</b>	<b>\$ 2,158,629</b>	<b>\$ 102,618</b>	<b>\$ 1,791,549</b>	<b>\$ 13,363,426</b>
Contributions:							
- Lease revenue 15 Chesterfield						-	-
- Levy	1,800,000	1,800,000	1,800,000	1,800,000	1,800,000	9,000,000	18,000,000
- Completed projects						-	-
Loan to Transportation DCC	(896,740)	(243,500)	(811,750)	(1,384,000)	(163,250)	-	(3,499,240)
Repayment from Transportation DCC	-	-	-	-	-	8,853,820	8,853,820
Interest for the year	110,953	122,367	62,873	2,989	52,181	1,597,366	1,948,729
<b>Available Balance</b>	<b>\$ 14,377,640</b>	<b>\$ 5,488,256</b>	<b>\$ 5,252,379</b>	<b>\$ 2,577,618</b>	<b>\$ 1,791,549</b>	<b>\$ 21,242,735</b>	<b>\$ 38,666,735</b>
Withdrawals							
New Parks	9,900,000	-	-	-	-	-	9,900,000
Hamersley Park Improvements - DCC	346,500	-	-	-	-	-	346,500
Waterfront Park Master Plan & Implementation - DCC	222,750	-	2,475,000	2,475,000	-	-	5,172,750
1600 Eastern Avenue Park - DCC	-	544,500	-	-	-	-	544,500
St. Andrews Park Washrooms - DCC	-	99,000	-	-	-	-	99,000
Sunrise Park Trail Improvements - DCC	-	-	123,750	-	-	-	123,750
Derek Inman Park Renovations - DCC	-	-	-	-	-	618,750	618,750
Semisch Greenway (W3rd to Semisch Park) - DCC	49,500	148,500	-	-	-	-	198,000
Upper Levels Greenway - Lonsdale to Lynn Valley Road - DCC	49,500	495,000	-	-	-	-	544,500
Upper Levels Greenway - Lonsdale to Westview - DCC	-	-	495,000	-	-	-	495,000
<b>Total Expended</b>	<b>\$ 10,568,250</b>	<b>\$ 1,287,000</b>	<b>\$ 3,093,750</b>	<b>\$ 2,475,000</b>	<b>\$ -</b>	<b>\$ 618,750</b>	<b>\$ 18,042,750</b>
<b>Closing Balance</b>	<b>\$ 3,809,390</b>	<b>\$ 4,201,256</b>	<b>\$ 2,158,629</b>	<b>\$ 102,618</b>	<b>\$ 1,791,549</b>	<b>\$ 20,623,985</b>	<b>\$ 20,623,985</b>

### TRANSPORTATION DCC

Transportation DCC's are to be used for transportation projects required due to growth.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Levy	350,000	400,000	500,000	750,000	1,000,000	10,363,570	13,363,570
Repayment to Parks DCC						(8,853,820)	(8,853,820)
Loan from Parks DCC	896,740	243,500	811,750	1,384,000	163,250	-	3,499,240
<b>Available Balance</b>	<b>\$ 1,246,740</b>	<b>\$ 643,500</b>	<b>\$ 1,311,750</b>	<b>\$ 2,134,000</b>	<b>\$ 1,163,250</b>	<b>\$ 1,509,750</b>	<b>\$ 8,008,990</b>
Withdrawals							
New Sidewalks to Complete Pedestrian Network-DCC	148,500	247,500	247,500	247,500	247,500	495,000	1,633,500
Casano Loutet Overpass - DCC	830,940	-	-	-	-	-	830,940
Pedestrian and Roadway Lighting Implementation - DCC	148,500	173,250	198,000	222,750	222,750	445,500	1,410,750
Moodyville Traffic Signals - DCC	118,800	-	-	-	-	-	118,800
Priority Mobility Network Improvements - DCC	-	222,750	866,250	673,750	643,500	-	2,406,250
Marine Drive Bridge Replacement over Mackay Creek - DCC	-	-	-	990,000	-	-	990,000
200 East 2nd Street - Parking & Streetscape improvements-DCC	-	-	-	-	49,500	-	49,500
100 East 2nd Street - Parking & Streetscape Improvements-DCC	-	-	-	-	-	222,750	222,750
100 East 1st Street - Streetscape Improvements - DCC	-	-	-	-	-	346,500	346,500
<b>Closing Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## 2020-2029 PROJECT PLAN

### RESERVES AND OTHER FUNDING

#### AFFORDABLE HOUSING

The Affordable Housing Reserve had been funded by a contribution from taxes collected set at \$260,000 per year - this was suspended once the reserve fund balance exceeded \$2.5M. As of the adoption of the revised Community Benefits Policy in 2015, the reserve is funded by a 20% allocation of the Community Benefit Cash Contributions received by the City. The fund is to be used for the provision of new non-market and special needs housing units.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 4,401,911</b>	<b>(0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ 4,401,911</b>
Contributions:							
- Levy	-	750,000	750,000	750,000	750,000	3,750,000	6,750,000
- Northmount Medical	1,286,890						1,286,890
Interest for the year							-
<b>Available Balance</b>	<b>\$ 5,688,801</b>	<b>750,000</b>	<b>\$ 750,000</b>	<b>\$ 750,000</b>	<b>\$ 750,000</b>	<b>\$ 3,750,000</b>	<b>\$ 12,438,801</b>
Withdrawals							
							-
Projects & Grants	5,688,801	750,000	750,000	750,000	750,000	3,750,000	12,438,801
<b>Total expended</b>	<b>\$ 5,688,801</b>	<b>750,000</b>	<b>\$ 750,000</b>	<b>\$ 750,000</b>	<b>\$ 750,000</b>	<b>\$ 3,750,000</b>	<b>\$ 12,438,801</b>
<b>Closing Balance</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>

#### SUSTAINABLE TRANSPORTATION

Created in 2008, The Sustainable Transportation Reserve Fund sets aside funding for the implementation of sustainable transportation initiatives included in the City's Transportation Plan.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 156,360</b>	<b>68,860</b>	<b>\$ 0</b>	<b>\$ 7,725</b>	<b>\$ 15,682</b>	<b>\$ 23,877</b>	<b>\$ 156,360</b>
Contributions:							
- Annual	87,500	87,500	87,500	87,500	87,500	437,500	875,000
- Budgeted			225	457	695	44,789	46,166
Interest for the year							-
	<b>\$ 243,860</b>	<b>\$ 156,360</b>	<b>\$ 87,725</b>	<b>\$ 95,682</b>	<b>\$ 103,877</b>	<b>\$ 506,166</b>	<b>\$ 1,077,526</b>
Mobility Plan Implementation - Curbside Management	-	-	80,000	80,000	80,000	-	240,000
Electric Vehicle Strategy Implementation		19,570				-	19,570
INSTPP Implementation (Previously known as North Shore Transportation Improvements)	175,000	136,790				-	311,790
<b>Total expended</b>	<b>\$ 175,000</b>	<b>\$ 156,360</b>	<b>\$ 80,000</b>	<b>\$ 80,000</b>	<b>\$ 80,000</b>	<b>\$ -</b>	<b>\$ 571,360</b>
<b>Closing Balance</b>	<b>\$ 68,860</b>	<b>0</b>	<b>\$ 7,725</b>	<b>\$ 15,682</b>	<b>\$ 23,877</b>	<b>\$ 506,166</b>	<b>\$ 506,166</b>

#### PUBLIC ART

This reserve is funded by a contribution from taxes collected, currently set at \$85,000 annually. It is used to fund public art projects as recommended to Council by the Public Art program Steering Committee.

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 291,577</b>	<b>210,898</b>	<b>\$ 217,225</b>	<b>\$ 223,742</b>	<b>\$ 230,454</b>	<b>\$ 237,367</b>	<b>\$ 291,577</b>
Closed Projects							-
Contributions:							
- Budgeted	85,000	85,000	85,000	85,000	85,000	425,000	850,000
Transfer from TSL	-	-	-	-	-	-	-
Interest for the year	6,143	6,327	6,517	6,712	6,914	37,806	70,419
<b>Available Balance</b>	<b>\$ 382,720</b>	<b>302,225</b>	<b>\$ 308,742</b>	<b>\$ 315,454</b>	<b>\$ 322,367</b>	<b>\$ 700,174</b>	<b>\$ 1,211,996</b>
Withdrawals							
Public Art Projects	85,000	85,000	85,000	85,000	85,000	425,000	850,000
Public Art - 1% of LL Land Sales	86,822	-	-	-	-	-	86,822
<b>Total expended</b>	<b>\$ 171,822</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>	<b>\$ 85,000</b>	<b>\$ 425,000</b>	<b>\$ 936,822</b>
<b>Closing Balance</b>	<b>\$ 210,898</b>	<b>\$ 217,225</b>	<b>\$ 223,742</b>	<b>\$ 230,454</b>	<b>\$ 237,367</b>	<b>\$ 275,174</b>	<b>\$ 275,174</b>

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### OTHER FUNDING SOURCES

#### Cemetery Development Fund

The Cemetery Development Fund is a non-statutory reserve which is used to fund capital improvement projects in the city's cemetery. It is generally funded by net cemetery revenues. In 2004, the Cemetery Fund also received a contribution of \$954,000 from the GVRD because of the impact of the Region's watermain project on the cemetery

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 1,107,600	809,828	\$ 731,123	\$ 650,056	\$ 566,558	\$ 480,555	\$ 1,107,600
Contributions:							
Interest for the year	27,228	21,295	18,934	16,501.69	13,997	29,699	127,654
Available Balance	\$ 1,134,828	831,123	\$ 750,056	\$ 666,558	\$ 580,555	\$ 510,254	\$ 1,235,254
Withdrawals							
Cemetery Accessible Public Restroom and Staff Facility	125,000	-	-	-	-	-	125,000
Cemetery Provision	200,000	100,000	100,000	100,000	100,000	500,000	1,100,000
Closing Balance	\$ 809,828	\$ 731,123	\$ 650,056	\$ 566,558	\$ 480,555	\$ 10,254	\$ 135,254

#### Child Care Capital Improvement Fund

The Child Care Capital Improvement Fund is a non-statutory reserve used to provide grants to child care services in the City. It was created in 1997 with a \$150,000 sale of density transfer from the old library site to a developers. Over the years, it has provided grants to Heywood House, St. Andrew's Daycare, Mahon Park Child Care, North Shore Neighbourhood House and Lonsdale Creek Daycare.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 9,323	-	\$ -	\$ -	\$ -	\$ -	\$ 9,323
Contributions:							
Available Balance	\$ 9,323	-	\$ -	\$ -	\$ -	\$ -	\$ 9,323
Child Care Capital Improvement Fund	9,323	-	-	-	-	-	9,323
Closing Balance	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -

#### Carbon Fund

The Carbon Fund is to be used for greenhouse gas emissions reducing initiatives within the City of North Vancouver, such as sustainable transportation initiatives, building energy retrofits, solar hot water, geo-exchange, fleet conversion, urban forestry and other emissions-reducing improvements. Funding is provided by an annual budget contribution as well as the Climate Action Revenue Incentive Program (CARIP).

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 117,192	2,142	\$ (0)	\$ (0)	\$ 90,000	\$ 180,000	\$ 117,192
Early Appropriations							
Contributions:							
CARIP	25,000	25,000	25,000	25,000	25,000	125,001	250,001
Annual Budget	65,000	65,000	65,000	65,000	65,000	325,001	650,001
Available Balance	\$ 207,192	92,142	\$ 90,000	\$ 90,000	\$ 180,000	\$ 630,002	\$ 1,017,194
Withdrawals							
Environmental Strategy Implementation			90,000	-	-	-	90,000
Electric Vehicle Strategy Implementation	205,050	92,142	-	-	-	-	297,192
Closing Balance	\$ 2,142	\$ (0)	\$ (0)	\$ 90,000	\$ 180,000	\$ 630,002	\$ 630,002

#### Heritage Reserve

The Heritage Reserve Fund was established in 1994 and received additional funding from the sale of Hammersley House in 1998. The purpose of the Reserve Fund is to fund projects on an as-needed basis that support the City's Heritage Program and goals in the Official Community Plan related to the conservation of heritage resources on the Heritage Register.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 92,053	2,569	\$ 2,646	\$ 2,725	\$ 2,807	\$ 2,891	\$ 92,053
Contributions:							
Interest for the year	75	77	79	82	84	447	760
Available Balance	\$ 92,128	2,646	\$ 2,725	\$ 2,807	\$ 2,891	\$ 3,338	\$ 92,813
Withdrawals							
Heritage Reserve Fund	89,559	-	-	-	-	-	89,559
Closing Balance	\$ 2,569	\$ 2,646	\$ 2,725	\$ 2,807	\$ 2,891	\$ 3,338	\$ 3,254

#### Environmental Stewardship Fund

Fund originated from unused projects(s) related to Environmental cleanup, and has been balanced and maintained by the City since.

	2020	2021	2022	2023	2024	2025-2029	Total
Opening Balance	\$ 32,842	(0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 32,842
Contributions:							
Interest for the year							
Available Balance	\$ 32,842	(0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ 32,842
Withdrawals							
Corporate Climate Action Implementation	32,842	-	-	-	-	-	32,842
Closing Balance	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)	\$ (0)

# 2020-2029 PROJECT PLAN

## RESERVES AND OTHER FUNDING

### General Reserve

	2020	2021	2022	2023	2024	2025-2029	Total
<b>Opening Balance</b>	<b>\$ 4,225,108</b>	<b>104,868</b>	<b>\$ (0)</b>	<b>\$ 165,877</b>	<b>\$ -</b>	<b>\$ 2,825,435</b>	<b>\$ 4,225,108</b>
2019 Revised Budget	208,400					-	208,400
Contributions:							
Transfer from Annual Budget	-	1,024,607	3,397,599	4,524,646	3,766,687	46,574,390	59,287,928
Transfer from TSLI				704,328.33	1,685,147.68	2,047,193	4,436,669
Waterfront Revenue	1,000,000					-	1,000,000
<b>Available Balance</b>	<b>\$ 5,433,508</b>	<b>\$ 1,129,475</b>	<b>\$ 3,397,599</b>	<b>\$ 5,394,851</b>	<b>\$ 5,451,835</b>	<b>\$ 51,447,017</b>	<b>\$ 69,158,105</b>
Land Acquisition 1% Municip Assist	100,000	-	-	-	-	-	100,000
Harry Jerome Complex - Major Repairs	200,000	200,000	-	-	-	-	400,000
<b>IT</b>							
Enhanced VOIP Solutions	200,000	-	-	-	-	-	200,000
Open Data & GIS 3D Modeling	120,000		100,000	-	-	200,000	420,000
Business Intelligence & Reporting	150,000		-	-	-	-	150,000
<b>Buildings</b>							
Civic Centre Addition Feasibility Study	-		-	980,111	-	-	980,111
Civic Centre Improvements	331,700		21,400	21,400	21,400	107,000	502,900
Replacement of City Hall Single Glazed Windows	50,000		600,000	600,000	-	-	1,250,000
Shipyards & Waterfront Operations (previously known as Central Waterfront Public Realm)	2,020,000	-	-	-	-	-	2,020,000
2025 New North Shore Neighborhood House Facility	115,000					8,962,233	9,077,233
Shipyards Commons Branding and Marketing Start Up			-	-	-	-	-
<b>Streets, Traffic and Transportation</b>							
Pavement Management: Streets and Lanes	115,909	635,029	1,387,000	1,387,000	1,687,000	8,435,000	13,646,938
Sidewalk Infill & Reconstruction	51,030	9,447	322	1,340	-	-	62,138
Street Banner And Furnishing Program	60,000	35,000	60,000	35,000	60,000	225,000	475,000
Seasonal Decorations - Lonsdale Street Light Poles	-	-	-	-	-	85,000	85,000
Esplanade Complete Streets			-	-	-	-	-
Transit Stop Improvements	65,000		65,000	65,000	65,000	325,000	585,000
Bus Speed and Reliability	50,000		50,000	50,000	50,000	250,000	450,000
Traffic Signal Pre-emption for Fire Emergency Vehicles	80,000		80,000	-	-	-	160,000
Street Light and Traffic Signal Aging Pole Replacement	350,000	250,000	50,000	50,000	50,000	500,000	1,250,000
City-Wide LED Streetlight upgrade	150,000		250,000	-	-	-	400,000
Street Lighting Central Management System	-		-	-	-	-	-
Traffic Signal System Upgrades	250,000			300,000	300,000	2,500,000	3,350,000
Priority Mobility Network Improvements				1,430,000		-	1,430,000
New Sidewalks to Complete Pedestrian Network-DCC						742,500	742,500
Pedestrian and Roadway Lighting Implementation - DCC						668,250	668,250
<b>Planning and Development</b>							
Rapid Transit Planning Office	-	-	150,000	150,000	150,000	750,000	1,200,000
INSTPP Implementation (Previously known as North Shore Transportation Improvements)			75,000	75,000	75,000	375,000	600,000
Community & School Active Travel Planning	175,000		168,000	100,000	93,000	479,000	1,015,000
Mobility Plan	100,000	-	-	-	-	-	100,000
Great Streets - Corridor Studies						-	-
Bicycle Master Plan Update & Bicycle Route Conceptual Design	90,000	-	-	-	-	-	90,000
<b>Block</b>							
Land Use Studies - OCP Review	-	-	-	-	50,000	900,000	950,000
Special Study, Site Planning and Development	-	-	100,000	100,000	-	-	200,000
Environmental Strategy Implementation						-	-
Review of Human Resources Policy Manual	120,000	-	-	-	-	-	120,000
Economic Development Strategy	70,000	-	-	-	-	-	70,000
City Plaza Programming	25,000		25,000	-	-	-	50,000
Library Services for Lower Lonsdale	-		-	-	-	-	-
Child Minding for Council Meetings	25,000		25,000	25,000	25,000	125,000	225,000
Child Care Strategy Implementation Projects	40,000	-	-	-	-	-	40,000
Electric Vehicle Strategy Implementation						-	-
E-Bike and Micromobility Coordinator	75,000		25,000	25,000	-	-	125,000
Lonsdale Energy Corporation Renewable Energy Strategy	100,000	-	-	-	-	-	100,000
Where Matters 2.0 - Measuring Health Impacts of Built Environment and Policy	25,000	-	-	-	-	-	25,000
CleanBC Better Homes and Home Renovation Rebate Program - Municipal Top-Up Rebates	25,000	-	-	-	-	-	25,000
<b>Total expended</b>	<b>\$ 5,328,639</b>	<b>\$ 1,129,475</b>	<b>\$ 3,231,722</b>	<b>\$ 5,394,851</b>	<b>\$ 2,626,400</b>	<b>\$ 25,628,983</b>	<b>\$ 43,340,071</b>
<b>Closing Balance</b>	<b>\$ 104,868</b>	<b>\$ (0)</b>	<b>\$ 165,877</b>	<b>\$ -</b>	<b>\$ 2,825,435</b>	<b>\$ 25,818,034</b>	<b>\$ 25,818,034</b>



**city**  
**of north**  
**vancouver**

141 West 14<sup>th</sup> Street  
North Vancouver, BC  
V7M 1H9

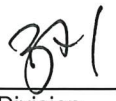


T. 604.985.7761  
F. 604.985.9417

[cnv.org](http://cnv.org)  
[info@cnv.org](mailto:info@cnv.org)



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 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Kliment Kuzmanovski, Section Manager – Traffic Engineering

Subject: NEW PEDESTRIAN CROSSING FACILITIES – FUNDING  
APPROPRIATION

Date: November 20, 2019 File No: 11-5460-01-0001/2019

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*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager – Traffic Engineering, dated November 20, 2019, entitled “New Pedestrian Crossing Facilities – Funding Appropriation”;

THAT (Funding Appropriation #1980) an amount of \$110,000 be appropriated from the Civic Amenity Reserve for the purpose of funding the Lonsdale Avenue and 5<sup>th</sup> Street safety improvements construction work;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Civic Amenity Reserve.

**DISCUSSION:**

Roadway safety is a primary goal of the City’s traffic projects and programs. Intersections are the locations where the highest number of motor vehicle collisions and collisions involving vulnerable road users (pedestrian and cyclists) occur. Implementation of new pedestrian crossing facilities is expected to significantly reduce collisions. One of the strategies for improving pedestrian safety is to reduce crossing distance through design and construction of corner bulges. Lonsdale Avenue and 5<sup>th</sup> Street is one of the few remaining Lonsdale intersections with outdated pedestrian crossing letdowns and lack of corner bulges. Engineering design has been completed and the City received a cost-sharing grant from TransLink to fund the construction.

The project will include construction of new civil infrastructure including new corner bulges, letdowns, and wider sidewalks meeting current standards. The project completion will result in improved sightlines and reduced crossing distances for pedestrians through the modification of intersection geometry.

#### **FINANCIAL IMPLICATIONS:**

The endorsed 2020-2029 Preliminary Project Plan includes \$300,000 for New Pedestrian Crossing Facilities in the year 2020 and the proposed appropriation of \$110,000 falls within this amount. This amount will allow construction of Lonsdale Avenue at 5<sup>th</sup> Street intersection bulges to be completed by May 2020. The remaining improvements are proposed to be funded in 2020 at \$190,000.

#### **INTER-DEPARTMENTAL IMPLICATIONS:**

This report was prepared with input from the Finance Department.

#### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

This project is consistent with the City's Official Community Plan Goals:

1.3.10: Encourage active, healthy lifestyles and the opportunity for more social connections through planning and active design principles that encourage physical activity and contribute to enhanced walkability and active streets, sidewalks and public spaces;

2.1.3 Invest in public realm improvements and locate public art in public places, trails and greenways to enhance the character of the walking environment.

#### **STRATEGIC PLAN IMPLICATIONS:**

This project supports a Connected City, provides active and sustainable ways for people to move to, from and within the City safely and efficiently and results in safe accessibility, improved walking and active transportation mode split.




RESPECTFULLY SUBMITTED:



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Kliment Kuzmanovski  
Section Manager – Traffic Engineering



 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Kliment Kuzmanovski, Section Manager – Traffic Engineering

Subject: NEW TRAFFIC SIGNALS – FUNDING APPROPRIATION

Date: November 20, 2019 File No: 11-5460-01-0001/2019

*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager – Traffic Engineering, dated November 20, 2019, entitled “New Traffic Signals – Funding Appropriation”:

THAT (Funding Appropriation #1981) an amount of \$900,000 be appropriated from the Civic Amenity Reserve for the purpose of funding the construction of New Traffic Signals project;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Civic Amenity Reserve Fund.

**DISCUSSION:**

Roadway safety is a primary goal of the City’s traffic projects and programs. Intersections are the locations where the highest number of motor vehicle collisions and collisions involving vulnerable road users (pedestrian and cyclists) occur. Installation of new traffic signals at intersections where most warranted is necessary to enhance safe pedestrian and cyclist movement through these intersections. A lack of signals makes crossing at main streets very difficult for pedestrians and cyclists.

Engineering design has been completed and funding appropriation in the amount of \$900,000 will be used for construction of pedestrian traffic signals on Keith Road and Hendry Avenue, Westview Drive at West 21<sup>st</sup> Street, and a special crosswalk with activated flashers on Larson Crescent at Larson Road.



The project completion will result with improved pedestrian and cyclist safety at three intersections.

### **FINANCIAL IMPLICATIONS:**

The endorsed 2020-2029 Preliminary Project Plan includes \$995,000 for New Traffic Signals in 2020 and the proposed appropriation of \$900,000 falls within this amount. Appropriation of this amount will allow initiating the construction tendering process in December 2019 and traffic signal construction completion by end of 2020. The remaining improvements are proposed to be funded in 2020 and later.

### **INTER-DEPARTMENTAL IMPLICATIONS:**

This report was prepared with input from the Finance Department.

### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

This project is consistent with the City's Official Community Plan Goals:

1.3.10: Encourage active, healthy lifestyles and the opportunity for more social connections through planning and active design principles that encourage physical activity and contribute to enhanced walkability and active streets, sidewalks and public spaces;

2.1.3 Invest in public realm improvements and locate public art in public places, trails and greenways to enhance the character of the walking environment.

### **STRATEGIC PLAN IMPLICATIONS:**

This project supports a Connected City, provides active and sustainable ways for people to move to, from and within the City safely and efficiently and results in safe accessibility, improved walking and active transportation mode split.

RESPECTFULLY SUBMITTED:



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Kliment Kuzmanovski  
Section Manager – Traffic Engineering



 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Kliment Kuzmanovski, Section Manager – Traffic Engineering

Subject: TRAFFIC SIGNS AND PAVEMENT MARKINGS – FUNDING  
APPROPRIATION

Date: November 20, 2019 File No: 11-5460-01-0001/2019

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*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager – Traffic Engineering, dated November 20, 2019, entitled “Traffic Signs and Pavement Markings – Funding Appropriation”:

THAT (Funding Appropriation #1982) an amount of \$100,000 be appropriated from the Tax Sale Land Interest Reserve for the purpose of funding the installation of new and updated traffic signs and pavement markings;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Tax Sale Land Interest Reserve.

**DISCUSSION:**

Roadway safety is a primary goal of the City’s traffic projects and programs. Installing new and modified traffic signs and pavement markings directly contributes towards improved roadway safety. The funding appropriation will allow implementing new and modified traffic signs and pavement markings based on needs for traffic management, traffic enforcement, parking enforcement, as well as in response to resident and business concerns and requests.



### **FINANCIAL IMPLICATIONS:**

The endorsed 2020-2029 Preliminary Project Plan includes \$100,000 for Traffic Signs and Pavement Markings in the year 2020.

### **INTER-DEPARTMENTAL IMPLICATIONS:**

This report was prepared with input from the Finance Department.

### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

This project is consistent with the City's Official Community Plan Goals:

- 1.3.10 Encourage active, healthy lifestyles and the opportunity for more social connections through planning and active design principles that encourage physical activity and contribute to enhanced walkability and active streets, sidewalks and public spaces.

### **STRATEGIC PLAN IMPLICATIONS:**

This project supports a Connected City, provides active and sustainable ways for people to move to, from and within the City safely and efficiently and results in safe accessibility, improved walking and active transportation mode split.




RESPECTFULLY SUBMITTED:



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Kliment Kuzmanovski  
Section Manager – Traffic Engineering



 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Adam Vasilevich, Parks and Greenways Planner

Subject: SUTHERLAND FIELD ARTIFICIAL TURF REPLACEMENT – FUNDING APPROPRIATION

Date: November 20, 2019 File No: 12-6240-20-0061/1

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*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Parks and Greenways Planner dated November 20, 2019, entitled, "Sutherland Field Artificial Turf Replacement – Funding Appropriation";

THAT (Funding Appropriation #1983) an amount of \$1,600,000 be appropriated from the Annual Budget –Transfer to General Fund for the purpose of funding the Sutherland Field Artificial Turf Replacement project;

AND THAT should any of the amount remain unexpended after December 31, 2022, the unexpended balances shall be returned to the credit of the said Fund.

**PURPOSE:**

This report seeks early appropriation of capital funding in the Preliminary 2020-2029 Project Plan for replacement of the artificial turf playing surface, as well as drainage and track repairs at Sutherland Field. The funds are requested for early appropriation in order to secure a turf supplier and civil contractor in January 2020 to ensure that construction can be completed during July and August when Sutherland Secondary School is closed for the summer.

## DISCUSSION:

Sutherland Artificial Turf Field was constructed by the City in 2008 and at the time of installation the playing surface had an expected life of 10 years. The turf has exceeded its expected life but now requires replacement. In addition, the asphalt running track requires surface repairs to mitigate damage from tree roots.

Artificial turf fields have proven to be a cost-effective means of responding to increasing demand for field time and access. Sutherland Field provides year-round recreational opportunities to the community, offering access for sports such as soccer and field hockey, as well as acting as the home field for Sutherland Secondary School. The paved track surrounding the field is also a popular shared-use community amenity.

The field was constructed by the City on the North Vancouver School District's (NVSD) property and operates under a 25-year joint-use agreement. The school has exclusive use of the field from 8:00AM to 5:00PM on school days with community use on weekday evenings, weekends and any other days that school is not in session. In addition to providing the land for the field, NVSD also provides public access to washrooms and change-rooms to support community use of the field. Under the terms of the agreement the City is responsible for the capital replacement and maintenance of the field, while the costs of the track maintenance are a shared responsibility between the City and NVSD.

Community sports groups pay the City an hourly rate for the use of the field and the resulting revenue helps off-set a portion of the City's annual parks maintenance costs. In 2020 the City will be working with the District of North Vancouver and the North Vancouver Recreation and Culture Commission on a review of the community sports field booking system as well as the overall fee structure.

To date, Sutherland Field has performed well, but its condition is deteriorating and the artificial turf playing surface now requires replacement. To ensure that construction can occur early in the summer of 2020 while the school is closed, a consultant was retained in 2018 to assess the facility and complete the design and tender package. Early appropriation of the requested construction budget will allow the project to be tendered in December 2019 in order to secure competitive pricing and have a contractor in place well in advance of the two-month summer work window. Dry weather is required for the installation of the turf, and the July to August construction schedule also minimises disruption to both the school and community sports groups.

A total of \$1,600,000 is requested to fund the supply and installation of the new playing surface and repair root damage to the running track. This estimate includes a contingency to fund improvements to the field's base and drainage system if necessary. The condition of the base, which is a critical component of the field's overall drainage system, cannot be accurately assessed until the old turf is removed.



### **FINANCIAL IMPLICATIONS:**

The 2020-2029 Preliminary Project Plan includes \$1,600,000 for the project in the first year of the plan. In addition, NVSD will contribute \$40,000 which is 50% of the estimated costs of the running track repairs.

### **INTER-DEPARTMENTAL IMPLICATIONS:**

The project will require coordination with NVSD and the community sports organizations through North Vancouver Recreation and Culture.

### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

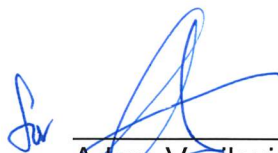
This project would support a broad number of goals and objectives expressed in the City's Official Community Plan:

- 5.1.2 Ensure access to a range of outdoor recreational pursuits and facilities for community members of all ages and abilities;
- 5.1.4 Undertake maintenance and improvements to parks, greenways, open spaces and outdoor recreation facilities to reflect the community's needs and expectations;
- 5.2 Support, enhance and maintain recreation as a vital aspect of a healthy community; and,
- 5.2.2 Continue to work with the North Vancouver Recreation and Culture Commission to meet the changing indoor and outdoor recreation needs of the community based on shifting demographics, growth patterns and trends.

### **STRATEGIC PLAN IMPLICATIONS:**

The renovation of Sutherland Field supports Council's vision to be the "healthiest small city in the world" and some of the priorities articulated in the 2018-2022 Council Strategic Plan. The renovated facility will be safe and accessible, supports health and well-being and provision of access to open space for recreation, with strong connections to transit, bike and pedestrian infrastructure.

RESPECTFULLY SUBMITTED:






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Adam Vasilevich  
Parks and Greenways Planner

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 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**PLANNING AND DEVELOPMENT DEPARTMENT**

**REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Lisa Stirling, Office Coordinator - Administration

Subject: PERMITS CLERK – FUNDING APPROPRIATION

Date: November 19, 2019 File No: 13-6970-01-0001/2019

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*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Office Coordinator – Administration, dated November 19, 2019, entitled “Permits Clerk – Funding Appropriation”:

THAT (Funding Appropriation #1984) an amount of \$65,000 be appropriated from the Annual Budget – Transfer to General Reserve Fund for the purpose of funding a temporary dedicated Permits Clerk.

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Annual Budget – Transfer to General Reserve Fund.

**DISCUSSION**

The City has recently upgraded its applications, permits and licensing software and capabilities (CityPal) and is integrating this new software with CityServe, a new portal for accessing City services online. This request would provide for a temporary staff position to support the expedited transition to and development of these new systems. The position will ensure that a high level of customer service is maintained while departmental resources are allocated to ensuring the new systems are functioning to their potential.



## **FINANCIAL IMPLICATIONS**

The endorsed 2020-2029 Preliminary Project Plan includes \$65,000 funding for a temporary Permits Clerk position in the first year of the plan.

## **INTER-DEPARTMENTAL IMPLICATIONS**

This report was prepared with input from the Finance Department.

## **CORPORATE PLAN AND/OR POLICY IMPLICATIONS**

This project is consistent with the City's Official Community Plan Goal to:

Deliver thoughtful and efficient, responsive services to residents, businesses and stakeholders.




## **STRATEGIC PLAN IMPLICATIONS**

Relates to prosperous City goal of improving services to residents.

RESPECTFULLY SUBMITTED:

  
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Lisa Stirling  
Office Coordinator - Administration



 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Justin Hall, Manager of Public Realm Infrastructure

Subject: PEDESTRIAN SCALE LIGHTING – GREEN NECKLACE – FUNDING APPROPRIATION

Date: November 20, 2019 File No: 12-6240-20-0047/1

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*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Manager of Public Realm Infrastructure, dated November 20, 2019, entitled "Pedestrian Scale Lighting – Green Necklace – Funding Appropriation":

THAT (Funding Appropriation #1985) an amount of \$250,000, be appropriated from the Civic Amenity Reserve for the purpose of funding the Pedestrian Scale Lighting – Grand Boulevard Park Project;

AND THAT should any of the amount remain unexpended as of December 31, 2022, the unexpended balance shall be returned to the credit of the Civic Amenity Reserve.

**PURPOSE:**

The purpose of this report is to request the early appropriation of capital funding in the Preliminary 2020-2029 Project Plan for the implementation of pedestrian scale lighting along the central pedestrian pathway in Grand Boulevard Park. The funds requested will allow the early tendering of the project.

**DISCUSSION:**

This project will address resident concerns about the lack of lighting in the Grand Boulevard Park section of the Green Necklace. Pedestrian scale lighting will improve the comfort and safety of pathway users in the evening hours and in inclement weather,

creating options for a healthy and active lifestyle for all. During consultation with the public, staff heard a desire to reflect the heritage of Grand Boulevard Park with the proposed lighting fixtures. With the endorsement of the City's Heritage Advisory Committee, staff selected a historically referenced lighting fixture that will enhance the character of the park and neighbourhood.

#### **FINANCIAL IMPLICATIONS:**

In 2019, \$750,000 was appropriated for the consultation, design and construction of the Grand Boulevard Park Lighting project. Through the design process the project cost estimate has been refined. Due to higher costs associated with the procurement and installation of the heritage light fixtures and the current volatility in the construction market, additional funding is required to complete the project. The \$250,000 requested will enable the construction of the project in 2020. Any remaining funds will be used to complete the Jones Street Pedestrian Scale Lighting project – the last remaining unlit section of the Green Necklace.

#### **INTER-DEPARTMENTAL IMPLICATIONS:**

Engineering, Parks and Environment has been coordinating internally to ensure construction avoids or minimizes impacts on the park and trees within. This report was prepared with input from the Finance Department.

#### **CORPORATE PLAN AND/OR POLICY IMPLICATIONS:**

The development of the City's greenway system is consistent with the goals and objectives in the City's Official Community Plan, specifically Chapters 2, 3, and 5 (Transportation, Mobility and Access; Community Well-being; and Parks, Recreation, and Open Space). Specific objectives include:

- Objective 2.1: Prioritize walking, cycling, transit and goods movement over single-occupancy vehicles;
- Objective 2.2.2: Strategically manage on and off-street transportation facilities to prioritize more sustainable forms of transportation by providing measures such as pedestrian-level lighting;
- Objective 3.1: Enhance well-being and quality of life for all community members;
- Objective 5.2: Support, enhance and maintain recreation as a vital aspect of a healthy community.

#### **STRATEGIC PLAN IMPLICATIONS:**


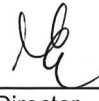

This project supports a connected City.

RESPECTFULLY SUBMITTED:

  
Justin Hall  
Manager of Public Realm Infrastructure





 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**PLANNING AND DEVELOPMENT DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Caroline Jackson, Manager, Environmental Sustainability

Subject: ENVIRONMENT STRATEGY – FUNDING APPROPRIATION

Date: November 20, 2019 File No: 11-5280-01-0001/2019

*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Environmental Sustainability, dated November 20, 2019, entitled "Environment Strategy – Funding Appropriation":

THAT (Funding Appropriation #1986) an amount of \$125,000 be appropriated from the Annual Budget – Transfer to General Reserve Fund for the purpose of funding the Environmental Sustainability Strategy;

AND THAT should any of the amount remain unexpended as at December 31, 2022, the unexpended balance shall be returned to the credit of the Annual Budget – Transfer to General Reserve Fund.

**DISCUSSION**

Council's 2018-2022 Strategic Plan envisions that the City leads the way in climate action and acts as a steward of the environment for future generations. Council has also adopted new greenhouse gas emissions targets of 80% below 2007 levels by 2040 and zero emissions by 2050. Development and implementation of the City's Environment Strategy will provide the roadmap required to achieve these goals.

The Environment Strategy will determine priority actions in the following areas: low emission buildings and vehicles, decarbonization of energy sources, zero waste, ecosystem health, green infrastructure, urban agriculture, and leadership in corporate practices.

## **FINANCIAL IMPLICATIONS**

Funding of \$225,000 has been requested in the 2020 Project Plan to cover the cost of consulting services and staff to coordinate the development and implementation of the Environment Strategy.

Appropriation of \$125,000 in 2019 will allow staff to begin developing the Environment Strategy and will also support the new Climate and Environment Task Force.

## **INTER-DEPARTMENTAL IMPLICATIONS**

This report was prepared in collaboration with the Finance Department.

## **STRATEGIC PLAN IMPLICATIONS**

This project supports the Liveable City priority under Council's Strategic Plan: that the City leads the way in climate action and acts as a steward of the environment for future generations.



RESPECTFULLY SUBMITTED:



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Caroline Jackson  
Manager, Environmental Sustainability



 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**STRATEGIC & CORPORATE SERVICES DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Joel Roy, Manager, Civic Facilities

Subject: CIVIC CENTRE IMPROVEMENTS – APPROPRIATION

Date: November 20, 2019 File No: 02-0890-20-0008/1

*The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Civic Facilities, dated November 20, 2019, entitled "Civic Centre Improvements – Appropriation":

THAT (Funding Appropriation #1987) an amount of \$331,700 be appropriated from the General Reserve Fund for the purpose of funding design and implementation of improvements to the Civic Centre (Clerks / CAO area);

AND THAT should any of the above amount remain unexpended at December 31, 2022, the unexpended balance shall be returned to the credit of the said Reserve Fund.

**DISCUSSION:**

Space improvements are required to meet the operational requirements of the Clerk / CAO area within City Hall. These funds will be utilized to undertake design and implementation of required changes.

**FINANCIAL IMPLICATIONS:**

The endorsed 2020-2029 Preliminary Project Plan includes \$331,700 for Civic Centre Improvements in the first year of the plan and the proposed funding appropriation of \$331,700 falls within the budgeted amount and will enable the improvements to be undertaken in early 2020



Funding is to be provided from the General Reserve Fund

**INTER-DEPARTMENTAL IMPLICATIONS:**

The Facilities group will work with the Clerks / CAO department to integrate requirements.

**STRATEGIC PLAN IMPLICATIONS:**

Ensuring appropriate work environment reinforces Council's priority of being a City for People.




RESPECTFULLY SUBMITTED:



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Joel Roy  
Manager, Civic Facilities



 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**STRATEGIC & CORPORATE SERVICES DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Joel Roy, Manager, Civic Facilities

Subject: NORTH SHORE NEIGHBOURHOOD HOUSE FEASIBILITY STUDY –  
APPROPRIATION

Date: November 20, 2019 File No: 02-0800-30-0022/1

*The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Manager, Civic Facilities, dated November 20, 2019, entitled “North Shore Neighbourhood House Feasibility Study – Appropriation”:

THAT (Funding Appropriation #1988) an amount of \$115,000 be appropriated from the General Reserve Fund for the purpose of funding the feasibility study;

AND THAT should any of the above amount remain unexpended at December 31, 2022, the unexpended balance shall be returned to the credit of the said Reserve Fund.

**DISCUSSION:**

A site feasibility and massing study is being undertaken for replacement of the North Shore Neighbourhood House in conjunction with non-market housing and community uses. The requested funding will allow the City to advance the feasibility study and related components such as site survey, transportation study, geotechnical and environmental reviews.

**FINANCIAL IMPLICATIONS:**

The endorsed 2020-2029 Preliminary Project Plan includes \$115,000 for North Shore Neighbourhood House feasibility study in the first year of the plan and the proposed funding appropriation of \$115,000 falls within the budgeted amount.

Funding is to be provided from the General Reserve Fund.

**INTER-DEPARTMENTAL IMPLICATIONS:**

The North Shore Neighbourhood Feasibility study is jointly being undertaken by the Planning & Development and Strategic & Corporate Services departments

**STRATEGIC PLAN IMPLICATIONS:**

North Shore Neighbourhood House, and its future replacement, contributes to the creation of a Vibrant City where dynamic public space and places provide opportunities for connection and enable residents to engage with their community and celebrate their culture and history.




RESPECTFULLY SUBMITTED:



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Joel Roy  
Manager, Civic Facilities



 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**COMMUNITY & PARTNER ENGAGEMENT DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Lino Siracusa, Manager Shipyards and Waterfront

Subject: SHIPYARDS AND WATERFRONT – FUNDING APPROPRIATION

Date: November 26, 2019 File No: 13-6740-20-0003/1

*The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report from the Manager Shipyards and Waterfront, dated November 26, 2019, entitled "Shipyards and Central Waterfront - Funding Appropriation":

THAT (Funding Appropriation #1989) an amount of \$2,020,000 be appropriated from the General Reserve Fund for the purpose of funding the programming, operations and maintenance of Shipyards and Central Waterfront;

AND THAT should any of the above remain unexpended at December 31, 2022, the unexpended balance shall be returned to the credit of said Reserve Fund.

**PURPOSE:**

The purpose of this report is to secure funding to support the programming, maintenance and operations of the Shipyards and Central Waterfront as a whole. A funding appropriation of \$2,020,000 will be required from the General Reserve Fund. It is anticipated that this funding will be partially offset by revenues of about \$1,000,000.

**DISCUSSION:**

The Shipyards and Central Waterfront area, extends from Chesterfield Place to St. George's Ave., south of Esplanade. With the imminent completion of the Shipyard Commons, the Shipyards and Central Waterfront public spaces will be fully complete. All City facilities including buildings, open spaces, walkways and Piers and docks are



open and available for public enjoyment. During the 2020 calendar year, Shipyard Commons will be used intensively as envisioned, for a Water Spray Park in the summer and an Ice Skating Plaza in the winter, complemented by year round programming that will occur in the Shipyards and Central Waterfront.

In early 2020, Capilano University and Joeys Restaurant and other retail offerings will open in Shipyard Commons. These amenities, along with regular programming will attract more people to the Shipyards, placing additional demand on the City for the provision of services.

Staff has been hired to deliver regular programming, operations and maintenance of these facilities. With a dedicated team now in place, additional events and programming will be brought to the Shipyards and Central Waterfront for the enjoyment of the community.

### **FINANCIAL IMPLICATIONS:**

In keeping with the practice of funding the first year of operations of new infrastructure through the Project Plan, the 2020-2029 Preliminary Project Plan includes funding for the Shipyards and Central Waterfront public realm in the amount of \$2,020,000.

This includes funding for staffing, vehicles and equipment cost. Funds for staffing will cover the cost of the Manager of the Shipyards and Waterfront, which costs were previously included in another project, and five additional regular full time (RFT) employees, plus temporary and auxiliary staff to support on-going and seasonal programming, maintenance, and operations. As operations are further developed and more precisely determined, staff may seek Council approval for the hiring of additional RFT positions if and when required.

The funding also covers the cost of regular programming for events and operations of facilities and equipment and basic maintenance.

Expenses will be partially offset by \$1,000,000 in Shipyards Central Waterfront related revenues. The revenue will be generated through commercial leases, common area expense fees, rental of spaces and equipment, parking and filming. Revenues for future years are anticipated to grow from this base. As revenue are received from the Shipyards Central Waterfront in 2020, it will be directed to offset operating costs. In this way, it is expected that the Shipyard Central Waterfront will move towards becoming self-funding over time.

Once the actual revenues and costs of programming, operations and maintenance are confirmed for the Shipyards Central Waterfront, the budget will be reassessed in 2020/21.

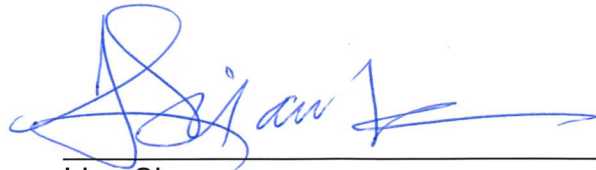
### **INTER-DEPARTMENTAL IMPLICATIONS:**

This report has been prepared in consultation with Finance and the Leadership team.

**STRATEGIC PLAN IMPLICATIONS:**

This Shipyards and Central Waterfront project supports Council's Strategic Plan, particularly "The Vibrant City" strategies.

RESPECTFULLY SUBMITTED:



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
Lino Siracusa  
Manager Shipyards and Waterfront



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 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**PLANNING & DEVELOPMENT DEPARTMENT**

**REPORT**

To: Mayor Linda Buchanan and Members of Council

From: Heather Evans, Community Planner

Subject: CHILD MINDING FOR COUNCIL MEETINGS PILOT PROGRAM –  
FUNDING APPROPRIATION

Date: November 26, 2019 File No: 10-4750-20-0033/1

*The following is a suggested recommendation only. Refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Community Planner, dated November 26, 2019 entitled “Child Minding for Council Meetings Pilot Program – Funding Appropriation”:

THAT (Funding Appropriation #1990) an amount of \$15,300 be appropriated from the General Reserve Fund for the purpose of funding the Child Minding for Council Meetings Pilot Program project;

AND THAT should any of the amount remain unexpended as of December 31, 2022, the unexpended balances shall be returned to the credit of the said Fund.

**PURPOSE**

This report seeks early appropriation of capital funding in the 2020-2029 Preliminary Project Plan for the child minding pilot program. The funds are requested for early appropriation in order to start the 6-month pilot program close to the beginning of the 2020 calendar year. On October 7, 2019 Council provided direction “THAT staff submit this project within the early appropriation package for the 2020 budget.”

## DISCUSSION

A six month pilot program for child minding during council meetings was directed by Council on October 7, 2019. The pilot program includes two components: free child minding at city hall during council meetings, and subsidy of child care costs to parents/caregivers for time spent attending Council meetings. Each of the two components is outlined below.

### Child Minding at City Hall

The total cost of this component of the six month pilot program is \$10,500.

Child minding services at City Hall during Council meeting times will enable children to be in the same building as their parent/caregiver attending a Council meeting. This type of child minding service is exempt from requirement for a VCH child care licence. However, provincial regulations impose some restrictions on the service that can be offered: maximum of two hours of care to children, and a parent must remain in the building and be available if needed.

The child minding service will be made available for children 18 months to 12 years old. There will be no cost to residents. The location of the child minding service will be in the Atrium / Community Meeting Room on the upper level at City Hall. The child minding service can be accessed by parent/caregiver residents of the City of North Vancouver that are attending the Council meeting. The service is not intended for employees and members of Council.

The capacity will be for 12 children (capacity could potentially be increased if need is evident). Registration in advance would be offered, and drop-in as space is available, for up to 12 children. Children that need additional support must be registered in advance to ensure proper staffing. If there is demonstrated additional demand for the service, it could be expanded with additional staffing.

The child minding service will be offered for three hours of Council meetings, between 5:45pm and 8:45pm. Each child may only stay in child minding for maximum two hours, in order to meet the provincial regulatory requirements. If a parent/guardian is speaking at a public hearing (usually beginning at 7pm) they may wish to drop off their child when the public hearing begins, to ensure that they maximize available time. The provincial regulation requires that parents must be available and in the building at all times (i.e. cell phone on vibrate mode) in case of need or an emergency arises.

Operation of the service will be contracted by the City to a non-profit organization that provides child minding staffing and sets up the processes, protocols, and programming for child minding service (including security, sign in and sign out, protocols, etc.). Required equipment and suitable multi-age toys would be purchased, and then stored and cleaned for exclusive use for the childminding service.

Communication and promotion to the community will be done in advance and during the six month pilot program.

### Subsidy of Child Care Costs to Parents/Caregivers

The total cost of this component of the pilot program is \$4,800.

A subsidy to parents/caregivers for child care costs will enable children to stay at their home while their parents / caregivers attend Council meetings. This is anticipated be convenient for some parents and caregivers, and to meet the needs of some parent/caregivers who want to attend Council but prefer not to bring their children to City Hall for a variety of reasons and circumstances. This option could be particularly helpful to parents of very young children (under 18 months) who would not be served by a child minding service at City Hall (the City Hall child minding would be for children aged 18 months to 12 years).

A subsidy form (to be completed and submitted by parents attending Council) and process for payments will be created and implemented by City staff. A subsidy of up to \$40 per meeting will be offered. The City's subsidy may, or may not, cover the resident's entire child care cost depending on their circumstance. (The cost of private child care varies by providers with varied experience, the number of children to be cared for, parent/caregiver needs and expectations, etc.) This option does place an onus on parents/guardians to arrange their own care for children, but it also allows them to select a preferred caregiver.

Communication and promotion to the community will be done in advance and during the six month pilot program.

### **FINANCIAL IMPLICATIONS**

Staff have included a project sheet for the 2020 Budget for \$25,000, which would cover the cost of an entire year of the program, should Council decide to extend the program beyond a six-month trial period.

The early appropriation request is for the cost of a six month trial program only. Staff will bring a summary of the pilot program to Council once it is complete, and Council can determine at that time whether they wish to continue.

### **INTER-DEPARTMENTAL IMPLICATIONS**

Staff from Planning and Development, Strategic and Corporate Services, Community and Partner Engagement and Finance Departments will be working together on implementing this trial program.

## STRATEGIC PLAN IMPLICATIONS

Council's Strategic Plan includes a commitment to listen to and involve all residents, and engage them in civic life. The provision of child minding and reimbursement of child care costs during Council meetings contributes to this commitment by helping to support parents and caregivers to attend Council meetings.

## POLICY IMPLICATIONS

Childminding during Council meetings furthers the following policies in the Official Community Plan:

3.1.1 – Promote an inclusive environment, reduce barriers and support the growth and development of young people to be active, self-reliant and empowered members of the community; and




1.3.4 – Support the pursuit of individual well-being and shared community needs, values and aspirations by community members from all ethno-cultural backgrounds, ages and abilities through equal access to City services and resources and by fostering inclusion.

RESPECTFULLY SUBMITTED:

  
Heather Evans  
Community Planner





 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**  
**ENGINEERING, PARKS AND ENVIRONMENT DEPARTMENT**

**REPORT**

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To: Mayor Linda Buchanan and Members of Council

From: Derek Priestley, Section Manager, Park Operations

SUBJECT: NORTH VANCOUVER CEMETERY BYLAW UPDATE

Date: November 20, 2019 File No: 12-5810-01-0001/2019

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*The following is a suggested recommendation only. Please refer to Council Minutes for adopted resolution.*

**RECOMMENDATION:**

PURSUANT to the report of the Section Manager, Park Operations, dated November 20, 2019, entitled "North Vancouver Cemetery Bylaw update":

THAT "North Vancouver Cemetery Bylaw, 2011, No. 8109, Amendment Bylaw, 2019, No. 8721" (Fee Schedule and Memorial Regulations) be considered.

**ATTACHMENTS:**

1. North Vancouver Cemetery Bylaw 2011, No 8109, Amendment Bylaw, 2019 No. 8721 (Fee Schedule and Memorial Regulations) ([CD#1848216](#))

**PURPOSE:**

This report seeks Council's endorsement of proposed amendments to North Vancouver Cemetery Bylaw, 2011, No. 8109 (Attachment #1) to update the cemetery fees and also update the bylaw wording to increase clarity and maintain service delivery.

**BACKGROUND:**

The North Vancouver Cemetery was established in 1893 and since 1907 has been operated by the City on a 9-hectare site at 1700 Lillooet Road, in the District of North Vancouver. Since that time, the intent has been for the cemetery to serve the residents



of both the City and District of North Vancouver without drawing from either municipalities' tax base. As a result, the cemetery is to be self-funded, relying on interment fee revenue to support the administration and maintenance of the facility. In 1925, City Council approved Cemetery Bylaw, No. 629, which established a perpetual cemetery maintenance fund to support the ongoing maintenance of the site. As a result, a portion of the fees collected from interments was set aside in a reserve, which is now referred to as the Cemetery Care Fund.

A new Cemetery Bylaw (No. 8109) was adopted in 2011 to provide direction for the operation and management of the North Vancouver Cemetery and to ensure compliance with the Cremation, Interment and Funeral Services Act (CIFS). The bylaw includes a schedule for fees and a schedule with memorial regulations, which are the subject of the proposed amendments (Attachment #1).

Schedule A provides an itemized list of fees for services and products offered. These are important as they help provide direction to customers and staff on the options available. The regular raising of rates is necessary in order to keep up with inflation. Fees received allow staff to maintain the grounds, provide current cemetery services, and continue building the Cemetery Care Fund.

Schedule B provides details on cemetery marker regulations, columbaria niche door engraving and consolidated memorial information. These help clarify rules and regulations and provide specifications for both staff, customers, and the various companies that prepare the different types of markers.

The CIFS includes a requirement that a minimum of 25% of all revenue be set aside in the Cemetery Care Fund to provide for the ongoing maintenance of the grounds. The interest from the Care Fund can then be used to support the shortfall between the annual revenue from interments and the total annual costs of operating the cemetery.

As part of the 2011 bylaw, the City committed to establishing a fee structure that dedicated at least 30% of all new revenues from fees to the Cemetery Care Fund. The goal was to build a reserve of \$4.5 million which would eventually generate sufficient interest to fund all of the ongoing cemetery maintenance costs. At that point, revenue from fees would only need to cover the cost of interments and the resulting annual surplus could then be transferred to the Cemetery Development Fund, which is a dedicated reserve for capital improvements to the facility. The current balance of the Cemetery Care Fund is \$2.9 million and assuming revenues remain consistent, at least another 15 years of contributions would be required to reach the \$4.5 million goal.

The Cemetery Development Fund has a balance of \$1.13 million, the majority of which is the result of a 2004 contribution of \$950,000 from Metro Vancouver provided as compensation for the expanded right-of-way from the construction of the Seymour water main. This reserve funds capital improvements such as road repaving, cemetery expansion (such as constructing columbaria), and the proposed cemetery site office and washroom building, included in the 2020 Project Plan.

## DISCUSSION:

City staff are in the process of reviewing cemetery operations, industry trends, opportunities for new services and long term infrastructure needs. The results will be used to develop a new Cemetery Master Plan that will be presented for Council's consideration in 2020. In the interim, however, there is a need to increase the fees in Schedule A of the Cemetery Bylaw to ensure that they continue to provide sufficient revenue to cover the costs of providing service, while also building the Cemetery Care Fund. Minor amendments to Schedule B are also proposed, which provide additional clarity for the public and marker companies choosing and installing markers in the Cemetery.

The overall pricing structure (Figure 1) has been amended to reflect the increasing costs of providing interment services, the general increase in maintenance costs, and to continue to build the Cemetery Care Fund. As the North Vancouver Cemetery's primary purpose is to provide service to the residents of the City and the District, and given the limited space currently available for expansion, the schedule of services and fees continues to provide different prices for residents and non-residents. This is a common approach in public cemeteries and the fee structure is similar to that of the District of West Vancouver's Capilano View Cemetery. The proposed amendment also includes a refined definition of "resident" that is more consistent with industry practice, requiring current residency within the City and District for a minimum of one year.

Figure 1. Summary of proposed North Vancouver Cemetery fees changes

		Current Fee	Proposed Fee
<b>Resident</b>	Adult Single Depth	\$5,100	\$5,600
	Adult Single Depth Crypt	\$5,800	\$6,400
	Adult Double Depth Crypt	\$7,900	\$8,700
	Cremation Lot	\$2,450	\$2,950
<b>Non-resident</b>	Adult Single Depth	\$10,150	\$10,700
	Adult Single Depth Crypt	\$11,500	\$11,600
	Adult Double Depth Crypt	\$15,800	\$16,600
	Cremation Lot	\$4,850	\$5,000
<b>Other Fees</b>	Administration Fee	\$65	\$75
	In-ground vase	\$75	\$90
	Cremation urn vault - single	\$90	\$100
	Preparation & Placement - Casket	\$1,400	\$1,600
	Concrete Liner	\$550	\$700
	Disinterment of Adult Casket-Single Depth	\$1,975	\$2,100
	After Hours Surcharge for Adult Casket	\$1,400	\$1,600

### **FINANCIAL IMPLICATIONS:**

The proposed fee increases in the bylaw amendment support the principal of the North Vancouver Cemetery remaining self funded, providing service to City and District residents without relying either municipality's tax base. The updated fees will also ensure that the Cemetery Care Fund continues to grow, providing sufficient funding for the long-term maintenance of the site and eventually generating a surplus to help fund the Cemetery Development Fund.

### **INTER-DEPARTMENTAL IMPLICATIONS:**

These proposed fee increases have been reviewed with the City's Finance Department.

### **STRATEGIC PLAN IMPLICATIONS:**

The recommended amendments to the Bylaw are in alignment with the City's Official Community Plan, Chapter 8: Municipal Service and Infrastructure and the goals related to the provision and proactive maintenance of public infrastructure.

The current Cemetery Master Plan was adopted by Council in 1999. Engineering, Parks and Environment staff plan to develop a new Cemetery Master Plan in 2020. Included in this Master Plan will be a review of cemetery operations, which includes investigation of new and more sustainable services as part of a strategic business plan. Staff plan to report back to Council in 2020 on existing and new business strategies for delivering cemetery services.

RESPECTFULLY SUBMITTED:



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Derek Priestley  
Section Manager, Park Operations

# THE CORPORATION OF THE CITY OF NORTH VANCOUVER

## BYLAW NO. 8721

### A Bylaw to amend “North Vancouver Cemetery Bylaw, 2011, No. 8109”

The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

1. This Bylaw shall be known and cited for all purposes as “**North Vancouver Cemetery Bylaw, 2011, No. 8109, Amendment Bylaw, 2019, No. 8721**” (Fee Schedule and Memorial Regulations).
2. “North Vancouver Cemetery Bylaw, 2011, No. 8109” is amended as follows:
  - A. Delete **Part 1.3 Definition of ‘RESIDENT’** in its entirety and replace with the following:

**RESIDENT** refers to the residency of the deceased person or person for whom the lot is being purchased. Proof of residence shall be produced to the satisfaction of the City at the time of purchase. Resident means a person who was:

    - a) A registered owner of a property in the City or District of North Vancouver for a minimum of twelve (12) months immediately preceding the date of death; or
    - b) A tenant or occupier of real property within the City or District of North Vancouver for a minimum of twelve (12) months immediately preceding the date of death.
  - B. Delete **Part 8.2** in its entirety and replace with the following:

**8.2 Proof of Residency**  
For the purpose of defining resident and non-resident, proof of residence shall be produced to the satisfaction of the City at the time of purchase.
  - C. Delete **Part 11.5 b)** in its entirety and replace with the following:

11.5 b) Only dogs on leash will be admitted within the Cemetery. Dogs and horses must be kept on the roadway. They are not allowed on the turf areas of the Cemetery.
  - D. Delete **Schedule A** in its entirety and replace with “Schedule A – North Vancouver Cemetery Fees”, as attached to this Bylaw.

- E. Delete **Schedule B** in its entirety and replace with “Schedule B – North Vancouver Cemetery Fees Memorials”, as attached to this Bylaw.

READ a first time on the <> day of <>, 2019.

READ a second time on the <> day of <>, 2019.

READ a third time on the <> day of <>, 2019.

ADOPTED on the <> day of <>, 2019.

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MAYOR

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CITY CLERK

**NORTH VANCOUVER CEMETERY****Schedule A – North Vancouver Cemetery Fees**

North Vancouver Cemetery Bylaw, 2011, No. 8109,  
Amendment Bylaw, 2019, No. 8721 – Effective January 1, 2020

City of North Vancouver  
141 West 14<sup>th</sup> Street  
North Vancouver, BC V7M 1H9

T 604 983 7351  
F 604 985 9417  
[cemetery@cnv.org](mailto:cemetery@cnv.org)

<b>In-ground Interments Resident Fees</b>	<b>Lot</b>	<b>Care Fund</b>	<b>Right of Interment</b>	<b>Preparation / Placement</b>	<b>Liner</b>	<b>Total</b>
Adult Casket-Single Depth	(\$3,600 + \$2,000) =		\$5,600	\$1,600	\$700	<b>\$7,900</b>
Adult Casket-Single Depth Crypt	(\$4,400 + \$2,000) =		\$6,400	\$1,600		<b>\$8,000</b>
Adult Casket-Double Depth Crypt ♦ 1 <sup>st</sup> Casket at Lower Level	(\$6,200 + \$2,500) =		\$8,700	\$1,600		<b>\$10,300</b>
Adult Casket-Double Depth Crypt ♦ 2 <sup>nd</sup> Casket at Upper Level		\$800		\$1,600		<b>\$2,400</b>
Infant/Child Casket (0-12 years)	(\$1,040 + \$1,000) =		\$2,040	\$860		<b>\$2,900</b>
Cremation Lot with 1 <sup>st</sup> Interment	(\$2,000 + \$950) =		\$2,950	\$350		<b>\$3,300</b>
Cremated Remains in Occupied Lot		\$500		\$350		<b>\$850</b>
<b>In-ground Interments Non-resident Fees</b>	<b>Lot</b>	<b>Care Fund</b>	<b>Right of Interment</b>	<b>Preparation / Placement</b>	<b>Liner</b>	<b>Total</b>
Adult Casket-Single Depth	(\$6,700 + \$4,000) =		\$10,700	\$1,600	\$700	<b>\$13,000</b>
Adult Casket-Single Depth Crypt	(\$7,600 + \$4,000) =		\$11,600	\$1,600		<b>\$13,200</b>
Adult Casket-Double Depth Crypt ♦ 1 <sup>st</sup> Casket at Lower Level	(\$11,600 + \$5,000) =		\$16,600	\$1,600		<b>\$18,200</b>
Adult Casket-Double Depth Crypt ♦ 2 <sup>nd</sup> Casket at Upper Level		\$800		\$1,600		<b>\$2,400</b>
Infant/Child Casket (0-12 years)	(\$2,080 + \$2,000) =		\$4,080	\$860		<b>\$4,940</b>
Cremation Lot with 1 <sup>st</sup> Interment	(\$3,200 + \$1,800) =		\$5,000	\$350		<b>\$5,350</b>
Cremated Remains in Occupied Lot		\$500		\$350		<b>\$850</b>
<b>Columbarium Niche Resident Fees</b>	<b>Lot</b>	<b>Care Fund</b>	<b>Right of Interment</b>	<b>Preparation / Placement</b>		<b>Total</b>
Niche with 1 <sup>st</sup> Interment (top 2 rows)	(\$2,200 + \$1,000) =		\$3,200	\$250		<b>\$3,450</b>
Niche with 1 <sup>st</sup> Interment (mid 2 rows)	(\$1,600 + \$1,000) =		\$2,600	\$250		<b>\$2,850</b>
Niche with 1 <sup>st</sup> Interment (bottom row)	(\$1,100 + \$1,000) =		\$2,100	\$250		<b>\$2,350</b>
2 <sup>nd</sup> Interment in niche		\$200		\$250		<b>\$450</b>



**NORTH VANCOUVER CEMETERY****Schedule A – North Vancouver Cemetery Fees**

North Vancouver Cemetery Bylaw, 2011, No. 8109,  
Amendment Bylaw, 2019, No. 8721 – Effective January 1, 2020

City of North Vancouver  
141 West 14<sup>th</sup> Street  
North Vancouver, BC V7M 1H9

T 604 983 7351  
F 604 985 9417  
[cemetery@cnv.org](mailto:cemetery@cnv.org)

<b>Columbarium Niche Non-resident Fees</b>	<b>Lot</b>	<b>Care Fund</b>	<b>Right of Interment</b>	<b>Preparation / Placement</b>	<b>Total</b>
Niche with 1 <sup>st</sup> Interment (top 2 rows)	(\$2,860 + \$1,300) =		\$4,160	\$250	<b>\$4,410</b>
Niche with 1 <sup>st</sup> Interment (mid 2 rows)	(\$2,080 + \$1,300) =		\$3,380	\$250	<b>\$3,630</b>
Niche with 1 <sup>st</sup> Interment (bottom row)	(\$1,430 + \$1,300) =		\$2,730	\$250	<b>\$2,980</b>
2 <sup>nd</sup> Interment in niche		\$200		\$250	<b>\$450</b>

<b>Memorial Fees</b>	<b>Care Fund</b>	<b>Permit</b>	<b>Total</b>
Memorial Permit	\$100	\$120	<b>\$220</b>
Memorial Resetting		\$120	<b>\$120</b>
City Concrete Foundation			<b>\$800</b>
Memorial Tablet Levelling			<b>\$150</b>

<b>Lot Adornment Fees</b>	<b>Total</b>
Installation of Small Family Care Garden 36" x 16"	<b>\$240</b>
Installation of Medium Family Care Garden 36" x 32"	<b>\$360</b>
Installation of Large Family Care Garden 36" x 48"	<b>\$480</b>
Installation of City Care Garden 36" x 16"	<b>\$240</b>
Annual City Care Garden Planting & Maintenance	<b>\$590</b>
In-ground Vase (includes installation)	<b>\$90</b>

**NORTH VANCOUVER CEMETERY****Schedule A – North Vancouver Cemetery Fees**

North Vancouver Cemetery Bylaw, 2011, No. 8109,  
Amendment Bylaw, 2019, No. 8721 – Effective January 1, 2020

City of North Vancouver  
141 West 14<sup>th</sup> Street  
North Vancouver, BC V7M 1H9

T 604 983 7351  
F 604 985 9417  
[cemetery@cnv.org](mailto:cemetery@cnv.org)

<b>Disinterment &amp; Exhumation Fees</b>	<b>Total</b>
Adult Casket-Single Depth	<b>\$2,100</b>
Adult Casket-Lower Level of Double Depth Lot	<b>\$2,600</b>
Infant/Child Casket	<b>\$1,200</b>
Cremated Remains (in-ground)	<b>\$450</b>
Cremated Remains (in-ground) with re-interment	<b>\$620</b>
Cremated Remains (niche)	<b>\$220</b>
<b>Additional Fees</b>	<b>Total</b>
A surcharge is applicable for interments on weekends and after regular interment hours on weekdays. See 6.2 of this Bylaw.	
After Hours Surcharge for Adult Casket Burial	<b>\$1,600</b>
After Hours Surcharge for Infant/child Casket Burial	<b>\$520</b>
After Hours Surcharge for In-ground Cremation Interment	<b>\$300</b>
After Hours Surcharge for Niche Interment	<b>\$200</b>
Cremation Urn Vault – Single	<b>\$100</b>
Administration Fee	<b>\$75</b>
<b>Lot Surrender Refund For Lots Purchased on or before June 18, 2006</b>	<b>Total</b>
See 'Cancellation of Right of Interment' for complete details.	
Adult Single Depth Lot	<b>\$1,163</b>
Adult Double Depth Lot	<b>\$1,845</b>
Infant/Child Lot	<b>\$608</b>
Cremation Lot	<b>\$405</b>
Niche in Upper Two Rows	<b>\$1,200</b>
Niche in Lower Two Rows	<b>\$885</b>

## **NORTH VANCOUVER CEMETERY**

### **Schedule A – North Vancouver Cemetery Fees**

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**RESIDENT** refers to the residency of the deceased person or person for whom the lot is being purchased. Proof of residence shall be produced to the satisfaction of the City at the time of purchase.

Resident means a person who was:

- a) A registered owner of a property in the City or District of North Vancouver for a minimum of twelve (12) months immediately preceding the date of death, or
- b) A tenant or occupier of real property within the City or District of North Vancouver for a minimum of twelve (12) months immediately preceding the date of death.

**NON-RESIDENT** refers to a person who does not qualify as a resident.

### **CANCELLATION OF RIGHT OF INTERMENT**

The right holder must give written notice to the City for intent to cancel the right of interment for an unoccupied lot. The person requesting the refund is required to produce the original license or right of interment and proof satisfactory to the City of their right to claim a refund. A right of interment can only be surrendered back to the City. It cannot be sold privately. No refund shall be made for the right of interment for a columbaria niche where the niche door has been engraved.

If the purchaser cancels the right of interment within 30 days of entering into an interment right contract, they will be refunded the full amount paid less the cost of specially ordered goods or services rendered.

After 30 days from the date of entering into an interment right contract no refund shall be made of any care fund contribution collected. Fees associated with the removal of any memorial on the lot, must be paid before a refund is issued.

The refund is calculated as follows:

- a) If the lot was purchased on or before June 18, 2006:  
The amount refunded will equal 75% of the fees set out in North Vancouver Cemetery Bylaw No. 7667 for the resident lot fee (lot license) and less the administration fee as specified in Schedule 'A' of North Vancouver Cemetery Bylaw, 2011, No. 8109, as amended from time to time.
- b) If the lot was purchased on or after June 19, 2006:  
The amount refunded will equal the amount paid for the lot fee (lot license) less the administration fee as specified in Schedule "A" of North Vancouver Cemetery Bylaw, 2011, No. 8109, as amended from time to time.

**All fees shall be paid at the time of application and are subject to applicable taxes.**

**General Memorial Information**

- a) Memorials may only be installed, removed or modified in the Cemetery after a memorial permit has been issued by the City. The memorial permit fee as specified in Schedule 'A' must be paid before the permit is issued.
- b) Before obtaining a memorial permit, the right holder or authorized representative, or a person authorized by the City shall submit complete details of the proposed memorial and obtain approval from the City.
- c) All memorials shall conform to the specifications set out in Schedule "B". The City may refuse to issue a memorial permit to the applicant if the applicant has failed to comply with the requirements of this Bylaw and Schedule "B".
- d) A permit for a memorial marker to be placed on an in-ground lot for a deceased person, who is not to be interred in the Cemetery, will be issued with the understanding that the memorial must indicate 'in memoriam' within the inscription. In memoriam inscriptions placed on a memorial marker count towards the total number of allowable interments in such lot. See Part 6.3 of this Bylaw.
- e) The City reserves the right to reject any memorial marker which, in their opinion, is not in keeping with the dignity of the Cemetery.
- f) The name of the deceased on the memorial marker must be in the English alphabet to ensure accurate record keeping by the City. The name of the deceased may be duplicated in a second language within the inscription.
- g) The memorial shall be placed on a lot in the location designated by the City.
- h) All memorial markers shall be constructed of granite or bronze. The use of marble is prohibited.
- i) The design and lettering on granite memorials must be level with the surface of the marker.
- j) The design and lettering on bronze memorials may be raised to a maximum of 0.5" above the surface of the concrete or granite support.
- k) The City shall not be liable for any damage done to any memorial marker or tablet during the course of setting the same, or for damage resulting from any person, other than City staff, having interfered with the memorial marker or tablet after it has been installed.
- l) The City shall not be held liable for, or be obliged to repair, any breakage or damage to any memorial in the Cemetery, except as shall arise as the result of the negligence of the caretaker.
- m) All memorials are the property of the purchaser and required care or repair is the responsibility of the purchaser.
- n) Installation of memorials shall occur during the Cemetery's hours of staff operation.

**Columbaria Niche Door Engraving**

- a) Columbaria niche door inscriptions must be approved by the City with the engraving carried out by a company authorized by the City. To ensure readability and aesthetics, the City adheres to a professional engraving standard.
- b) Niche door engraving for a deceased person who is not to be interred in the niche shall count towards the total number of allowable interments in the lot. The niche door inscription does not have to indicate 'in memoriam'.

### **Memorial Definitions**

- a) **Tablet Memorial** means a flat rectangular granite or bronze memorial.
- b) **Pillow Memorial** means a slightly sloping memorial with a low profile. These memorials sit above the ground and are installed on a foundation.
- c) **Upright Memorial** means a memorial that sits upright above the ground. These memorials are installed on a foundation. They do not include pillow or tablet markers.
- d) **Die** means the upper portion of an upright memorial usually placed above the base.
- e) **Base** means the lowest portion of a memorial set on a foundation.
- f) **Foundation** means a concrete or granite slab, set at grade to support a memorial.
- g) **Height** means the dimension as measured from the top to the bottom of the memorial, die, or base as applicable.
- h) **Depth** means the dimension as measured from the front edge to the back edge of the memorial, die, or base, as applicable.
- i) **Width** means the dimension as measured from the left edge to the right edge of the memorial, die, or base, as applicable.

### **Memorials for Cremation Lots**

Upright memorials are not permitted in this section.

All memorial tablets shall be set level and flush with the surface of the surrounding ground.

- a) Main tablet memorial - 8" x 12", 12" x 20" or 16" x 28" where lot size allows
- b) Secondary tablet memorial - 8" x 12", 12" x 20" or 16" x 28" where lot size allows
- c) Secondary tablet memorial shall not be larger than the main tablet memorial

### **Memorials for Infant/Child Lots**

Upright memorials are not permitted in this section.

All memorial tablets shall be set level and flush with the surface of the surrounding ground.

- a) Main tablet memorial - 12" x 20" or 16" x 28"
- b) Secondary tablet memorial – 8" x 12", 12" x 20" or 16" x 28"
- c) Secondary tablet memorial shall not be larger than the main tablet memorial

### **Memorials for Veteran Section**

Upright memorials are not permitted in this section. A lot in the Veteran Section may contain only one memorial for the member or veteran interred in the lot and it shall meet the requirements of the Commonwealth War Graves Commission or Veterans Affairs Canada. One additional 12" x 20" flat tablet memorial shall be allowed to commemorate all other interments in the lot.

### **Memorials for Adult Size Lots in the Heritage Section**

Blocks 1 to 118 and Blocks A, B, C and D

Permits for new upright memorials will not be issued for the Heritage Section.

The replacement and/or restoration of existing damaged memorials in the Heritage Section shall be at the discretion of the City.

- a) Main memorial:
  - i. Tablet memorial - 12" x 20" or 16" x 28" set flush to the ground or on a foundation which allows for a minimum 2" border of exposed foundation; or
  - ii. Pillow memorial - 12" x 20" x 6/4" or 16" x 28" x 6/4" set on a foundation which allows for a minimum 2" border of exposed foundation; or

## **NORTH VANCOUVER CEMETERY**

### **Schedule B – North Vancouver Cemetery Memorials**

North Vancouver Cemetery Bylaw, 2011, No. 8109,  
Amendment Bylaw, 2019, No. 8721 – Effective January 1, 2020

City of North Vancouver  
141 West 14<sup>th</sup> Street  
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- iii. Tablet memorial – 18" x 30" centered between adjacent side by side lots set flush to the ground or on a foundation which allows for a minimum 2" border of exposed foundation; or
- iv. Pillow memorial - 18" x 30" x 6/4" centered between adjacent side by side lots and set on a foundation which allows for a minimum 2" border of exposed foundation.
- b) Secondary memorial shall be a tablet memorial – 8" x 12", 12" x 20" or 16" x 28" set flush to the ground and shall not be larger than the main memorial.

#### **Memorials for Adult Size Lots in Blocks 643 to 647 and Blocks 730 to 743**

Upright memorials are not permitted in these areas.

All memorial tablets shall be set level and flush with the surface of the surrounding ground.

- a) Main tablet memorial - 12" x 20" or 16" x 28"; or
- b) Main tablet memorial centered between adjacent side by side lots - 18" x 30".
- c) Secondary tablet memorial – 8" x 12", 12" x 20" or 16" x 28" and shall not be larger than the main tablet memorial.

#### **Memorials for Adult Size Lots (in areas not indicated above)**

Upright memorials are permitted as the main marker in these sections.

- a) Main memorial:
  - i. Upright memorial to a maximum height of 36"; or
  - ii. Tablet memorial - 12" x 20" or 16" x 28" set flush to the ground or on a foundation which allows for a minimum 2" border of exposed foundation; or
  - iii. Pillow memorial - 12" x 20" x 6/4" or 16" x 28" x 6/4" set on a foundation which allows for a minimum 2" border of exposed foundation; or
  - iv. Tablet memorial – 18" x 30" centered between adjacent side by side lots set flush to the ground or on a foundation which allows for a minimum 2" border of exposed foundation; or
  - v. Pillow memorial - 18" x 30" x 6/4" centered between adjacent side by side lots and set on a foundation which allows for a minimum 2" border of exposed foundation.
- b) Secondary memorial shall be a tablet memorial – 8" x 12", 12" x 20" or 16" x 28" set flush to the ground and shall not be larger than the main tablet memorial.

#### **Tablet Memorial Specifications**

- a) Granite tablet memorials shall have a minimum thickness of 3".
- b) All tablet memorials shall have sides and edges cut true and perpendicular with the top surface.
- c) The tablet shall not be pinned or affixed in any way to a foundation.
- d) All bronze plaques shall be securely affixed to a concrete or granite support of a uniform thickness between 3" and 5". The bronze plaque shall not extend beyond the edges of the support.
- e) Bronze memorials with loose plates shall only be used on adult size lots for the main memorial and will require a foundation. This type of memorial shall only be installed in areas where foundations are permitted.
- f) No person shall attach any fixture or other thing to any memorial installed flush with the ground.



### **Pillow Memorial Specifications**

- a) The standard height of a granite pillow memorial is 6" at the back sloping to 4" at the front.
- b) These memorials sit above the ground and are installed on a foundation.
- c) The pillow shall not be pinned or affixed in any way to the foundation.
- d) No inscription or lettering shall be placed on the back or any side of a pillow marker.

### **Upright Memorial Specifications**

- a) The maximum total allowable height is 36".
- b) All upright memorials shall be placed on a foundation as specified and shall allow for a minimum 2" border of exposed foundation.
- c) The casket interment must precede the placement of an upright memorial.
- d) Only one upright memorial is permitted on any lot or portion thereof, and it must be placed at the head of the lot as designated by the City.
- e) Upright memorials may include the addition of a granite vase or statue. These pieces shall be affixed to the granite base and not extend beyond the edges of the base.
- f) A Base:
  - i. must be placed on a foundation;
  - ii. shall have sides and edges cut true and perpendicular with the top surface;
  - iii. must have rock pitch finished sides (excluding the top and bottom);
  - iv. must have a height that is between 3" and 8"; and
  - v. must allow for a minimum 2" border of exposed foundation.
- g) A Die:
  - i. must have a minimum depth of 6" at the bottom;
  - ii. must be of a single piece;
  - iii. must not exceed the width and depth dimensions of the base; and
  - iv. must be securely attached to a base or foundation to the satisfaction of the City.

### **Memorial Foundation Specifications**

- a) Shall support a maximum total memorial height of 36"
- b) Shall only be installed after the ground has had sufficient time to settle
- c) Shall have sides and edges cut true and perpendicular with the top surface
- d) Shall have a minimum 3" thickness
- e) A City Installed Concrete Foundation:
  - i. shall be 28" x 48"; and
  - ii. the location and elevation of the concrete foundation will be at the City's discretion.
- f) A Granite Foundation:
  - i. Shall be installed by the memorial company;
  - ii. Shall have a maximum width of 48" and maximum depth of 28"; and
  - iii. Shall be installed flush to the surrounding ground.
- g) A Pre-Cast Concrete Foundation:
  - i. shall be installed by a memorial company;
  - ii. shall support a maximum total memorial height of 20";
  - iii. depth shall be between 16" and 22";
  - iv. width shall be between 24" and 36";
  - v. shall be installed flush to the surrounding ground; and
  - vi. shall not have a tablet marker or pillow marker pinned or affixed to it.