



**AGENDA FOR THE REGULAR MEETING OF COUNCIL TO
COMMENCE AT 6:00 PM, IN THE COUNCIL CHAMBER, CITY
HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON
MONDAY, SEPTEMBER 16, 2019**

**MONDAY, SEPTEMBER 16, 2019
COUNCIL MEETING – 6:00 PM**

“Live” Broadcast via City Website www.cnv.org/LiveStreaming
Complete Agenda Package available at www.cnv.org/CouncilMeetings

CALL TO ORDER

**WELCOME – OFFICER IN CHARGE – SUPERINTENDENT GHALIB BHAYANI,
NORTH VANCOUVER RCMP**

APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, September 16, 2019

ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, September 9, 2019

PROCLAMATIONS

Cops for Cancer Day – September 18, 2019
Rail Safety Week – September 23 to 29, 2019
North Shore Culture Days – September 27 to 29, 2019
International Day of Older Persons – October 1, 2019
World Breastfeeding Week – October 1 to 7, 2019

PUBLIC INPUT PERIOD

CONSENT AGENDA

Item *3 is listed in the Consent Agenda for consideration.

REPORTS

- *3. Recommended Museum Deaccessions #14
4. Provincial Engagement on CleanBC Plastics Action Plan
5. Rezoning Application: 1420 Forbes Avenue (M. & R. Ventura / Farzin Yadegari Architect Inc.)



THE CORPORATION OF THE CITY OF NORTH VANCOUVER
Regular Council Meeting Agenda – September 16, 2019

Page 2

BYLAW – FIRST AND SECOND READINGS

6. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714”
(M. & R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue)

PUBLIC MEETING – Lonsdale Energy Corp. Rate Review – 6:30 PM

BYLAWS – THIRD READING

7. “City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2019, No. 8730”
8. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8728”
(Morez Design Inc., 2205 St. Andrews Avenue, RT-1)

Public Hearing waived.

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 – September 16, 2019

Page 3

CALL TO ORDER

WELCOME – OFFICER IN CHARGE – SUPERINTENDENT GHALIB BHAYANI, NORTH VANCOUVER RCMP

APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, September 16, 2019

ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, September 9, 2019

PROCLAMATIONS

Cops for Cancer Day – September 18, 2019

Rail Safety Week – September 23 to 29, 2019

North Shore Culture Days – September 27 to 29, 2019

International Day of Older Persons – October 1, 2019

World Breastfeeding Week – October 1 to 7, 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”.



THE CORPORATION OF THE CITY OF NORTH VANCOUVER
Regular Council Meeting Agenda – September 16, 2019

Page 4

CONSENT AGENDA

Item *3 is listed in the Consent Agenda for consideration.

RECOMMENDATION:

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

START OF CONSENT AGENDA

REPORT

- *3. Recommended Museum Deaccessions #14 – File: 15-7930-01-0001/2019

Report: Director, North Vancouver Museum and Archives, August 26, 2019

RECOMMENDATION:

PURSUANT to the report of the Director, North Vancouver Museum and Archives, dated August 26, 2019, entitled “Recommended Museum Deaccessions #14”:

THAT Council authorize the North Vancouver Museum and Archives (NVMA) Commission to deaccession 116 artifacts owned solely by the City of North Vancouver and one artifact jointly owned by the City and District of North Vancouver;

AND THAT all proceeds from the sale of deaccessioned materials be deposited in a Special Purpose Fund for the Commission’s use in maintaining the Museum and Archives collections and acquiring new items to augment the collections.

END OF CONSENT AGENDA



THE CORPORATION OF THE CITY OF NORTH VANCOUVER
Regular Council Meeting Agenda – September 16, 2019

Page 5

REPORTS

4. Provincial Engagement on CleanBC Plastics Action Plan
– File: 11-5380-01-0001/2019

Report: Environmental Sustainability Specialist, September 3, 2019

RECOMMENDATION:

PURSUANT to the report of the Environmental Sustainability Specialist, dated September 3, 2019, entitled “Provincial Engagement on CleanBC Plastics Action Plan”:

THAT, having considered the provincial government’s September 30, 2019 deadline to provide input into the Province’s engagement process on plastic waste reduction and the information in this report, a letter be provided from the Mayor, on behalf of Council, substantially in the form presented as Attachment #2 of the report.

5. Rezoning Application: 1420 Forbes Avenue (M. & R. Ventura / Farzin Yadegari Architect Inc.) – File: 08-3360-20-0470/1

Report: Planner 2, September 4, 2019

RECOMMENDATION:

PURSUANT to the report of the Planner 2, dated September 4, 2019, entitled “Rezoning Application: 1420 Forbes Avenue (M. & R. Ventura / Farzin Yadegari Architect Inc.)”:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714” (M. & R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue) be considered and the Public Hearing be waived;

THAT Development Variance Permit No. DVP2018-00004 be considered for issuance under Section 498 of the *Local Government Act* and the Public Meeting be waived;

AND THAT notification be circulated in accordance with the *Local Government Act*.

Item 6 refers.



THE CORPORATION OF THE CITY OF NORTH VANCOUVER
Regular Council Meeting Agenda – September 16, 2019

Page 6

BYLAW – FIRST AND SECOND READINGS

6. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714”
(M. & R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714”
(M. & R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue) be given
first and second readings.

PUBLIC MEETING – Lonsdale Energy Corp. Rate Review – 6:30 PM

Lonsdale Energy Corp. (LEC) has applied to its regulator, the City of North Vancouver,
for permission to modify its rates.

AGENDA

Applicant presentation
Representations from the public
Questions and comments from Council
Motion to conclude the Public Meeting

BYLAWS – THIRD READING

7. “City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575,
Amendment Bylaw, 2019, No. 8730”

RECOMMENDATION:

THAT “City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575,
Amendment Bylaw, 2019, No. 8730” be given third reading.

8. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8728”
(Morez Design Inc., 2205 St. Andrews Avenue, RT-1)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8728”
(Morez Design Inc., 2205 St. Andrews Avenue, RT-1) be given third reading.

Public Hearing waived.



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

Regular Council Meeting Agenda – September 16, 2019

Page 7

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

THIS PAGE INTENTIONALLY LEFT BLANK



**MINUTES OF THE REGULAR MEETING OF COUNCIL HELD IN THE
COUNCIL CHAMBER, CITY HALL, 141 WEST 14TH STREET, NORTH
VANCOUVER, BC, ON **MONDAY, SEPTEMBER 9, 2019****

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
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
J. Draper, Deputy Director, Planning and Development
S. Galloway, Manager, Planning
A. Devlin, Manager, Transportation
D. Watson, Transportation Planner
W. Tse, Planner 2
E. Macdonald, Planner 1
R. Skene, Director, Community and Partner Engagement
P. Duffy, Manager, Bylaws
L. Orr, Manager, Business and Community Partnerships
J. Hall, Manager, Public Realm Infrastructure
M. Hunter, Manager, Parks and Environment
T. Huckell, Committee Clerk

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

APPROVAL OF AGENDA

Moved by Councillor Bell, seconded by Councillor Hu

1. Regular Council Meeting Agenda, September 9, 2019

CARRIED UNANIMOUSLY

ADOPTION OF MINUTES

Moved by Councillor Valente, seconded by Councillor Bell

2. Regular Council Meeting Minutes, July 22, 2019

CARRIED UNANIMOUSLY

PROCLAMATION

Mayor Buchanan declared the following proclamation:

Prostate Cancer Awareness Month – September 2019

PUBLIC INPUT PERIOD

- Ron Sostad, 231 East 15th Street, North Vancouver, spoke regarding social housing.
- Alex Schatroph, 348 East 12th Street, North Vancouver, spoke regarding rain gutters knocked off by trucks.
- Lina Povolotsky, 145 East 20th Street, North Vancouver, spoke regarding road safety on St. George's Avenue and East 19th Street.
- Katherine Wright, 1051 St. Andrews Avenue, North Vancouver, spoke regarding traffic safety on St. Andrews Avenue between Keith Road and 13th Street.

CONSENT AGENDA

Moved by Councillor McIlroy, seconded by Councillor Back

THAT the recommendations listed within the "Consent Agenda", be approved.

(CARRIED UNANIMOUSLY)

START OF CONSENT AGENDA

CORRESPONDENCE

- *3. Board in Brief, Metro Vancouver Regional District, July 26, 2019
– File: 01-0400-60-0006/2019

Re: Metro Vancouver – Board in Brief

Moved by Councillor McIlroy, seconded by Councillor Back

THAT the correspondence of Metro Vancouver, dated July 26, 2019, regarding the "Metro Vancouver – Board in Brief", be received and filed.

(CARRIED UNANIMOUSLY)

BYLAWS – ADOPTION

- *4. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8727" (DA Architects + Planners, 230 West Keith Road, CD-558 Text Amendment)

Moved by Councillor McIlroy, seconded by Councillor Back

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8727" (DA Architects + Planners, 230 West Keith Road, CD-558 Text Amendment) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

CONSENT AGENDA – Continued

BYLAWS – ADOPTION – Continued

- *5. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729” (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street)

Moved by Councillor McIlroy, seconded by Councillor Back

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729” (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

- *6. “Air Pollution Control Bylaw, 1971, No. 4303, Repeal Bylaw, 2019, No. 8734”

Moved by Councillor McIlroy, seconded by Councillor Back

THAT “Air Pollution Control Bylaw, 1971, No. 4303, Repeal Bylaw, 2019, No. 8734” be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

END OF CONSENT AGENDA

DELEGATION

Reid Shier, Executive Director, and Jessica Bouchard, Associate Director, The Polygon Gallery

Re: Project Update and Funding Request

Reid Shier, Executive Director, and Jessica Bouchard, Associate Director, The Polygon Gallery, provided a PowerPoint presentation regarding the “Project Update and Funding Request” and responded to questions of Council.

CORRESPONDENCE

7. Reid Shier, Executive Director, The Polygon Gallery, August 30, 2019
– File: 15-7780-20-0002/2019

Re: Project Update and Funding Request

Moved by Councillor Girard, seconded by Mayor Buchanan

THAT the correspondence from Reid Shier, Executive Director, The Polygon Gallery, dated August 30, 2019, regarding the “Project Update and Funding Request” be received;

AND THAT the City consider increasing the Polygon grant by \$125,000 for this year and monitor the need for the following year, and for staff to report back to Council on where the funds could be appropriated from.

CARRIED UNANIMOUSLY

REPORT

8. Joey Restaurant Shipyards Food Primary Liquor Licence Application: #110-125 Victory Ship Way – File: 09-4320-50-0002/2019

Report: Manager, Business and Community Partnerships, August 21, 2019

Moved by Councillor McIlroy, seconded by Councillor Valente

PURSUANT to the report of the Manager, Business and Community Partnerships, dated August 21, 2019, entitled “Joey Restaurant Shipyards Food Primary Liquor Licence Application: #110-125 Victory Ship Way”:

THAT the proposed Food Primary Liquor Licence application with a 1:00 am Friday and Saturday closing time for Joey Restaurant Shipyards be approved subject to the following conditions being placed on the Business Licence and/or the Outdoor Dining Permit:

- Signage be posted in conspicuous locations to advise restaurant patrons to be respectful of neighbours when leaving the premises;
- Outdoor patios be closed at 11:00 pm in accordance with existing policy;
- Music on the patios be turned off at 10:00 pm;
- The restaurant management work with the Manager, Shipyards and Waterfront, to agree on a suitable volume level for patio music; and
- Restaurant staff be trained to mitigate potential impacts of patrons leaving the restaurant later in the evening;

Approval granted on the basis that:

- The impact of noise on the community in the immediate vicinity of the establishment and the community in general is expected to be minimal if managed appropriately;
- The proposed extended liquor serving hours are consistent with the vision for The Shipyards as a vibrant waterfront destination;
- The proposed extended liquor serving hours will not result in the service area being operated in a manner that is contrary to the primary purpose of the business; and
- The results of the public input conducted by City staff and the Joey Restaurant Group found a majority of respondents in favour of the proposed liquor serving hours but with some concerns expressed about potential noise from patrons.

CARRIED UNANIMOUSLY

PRESENTATION

Walk CNV Framework – Deputy Director, Planning and Development, and Transportation Planner

The Deputy Director, Planning and Development, and Transportation Planner provided a PowerPoint presentation regarding the “Walk CNV Framework” and responded to questions of Council.

REPORT

9. Walk CNV – Pedestrian Plan Framework – File: 16-8330-09-0001/1

Report: Transportation Planner, August 26, 2019

Moved by Councillor McIlroy, seconded by Councillor Bell

PURSUANT to the report of the Transportation Planner, dated August 26, 2019, entitled “Walk CNV – Pedestrian Plan Framework”:

THAT the Walk CNV Pedestrian Plan Framework, dated July 2019, be endorsed with minor amendments;

THAT the Walk CNV Vision be carried forward as the pedestrian plan vision within the upcoming Mobility Strategy;

THAT an internal staff committee be formed to ensure the plan is moved forward;

AND THAT staff report back to Council with annual progress updates.

CARRIED UNANIMOUSLY

NOTICE OF MOTION

10. Noise Control Bylaw Update – File: 10-4900-01-0001/2019

Submitted by Councillor Valente

Moved by Councillor Valente, seconded by Councillor McIlroy

WHEREAS the City of North Vancouver and its Council have a goal of being the “healthiest small city in the world”;

WHEREAS the 2018-2022 Council Strategic Plan includes a vision for a Vibrant City where dynamic public spaces and places provide opportunities for connection and enable residents to engage with their community;

WHEREAS research into the health impacts of noise has advanced since 2009, when the World Health Organization Regional Office for Europe, including a Toronto Public Health report entitled “How Loud is too Loud”, identified the permitted level for outdoor noise during the day was insufficient to prevent health impacts, including cognitive impairment, sleep disturbance mental health and cardiovascular effects;

WHEREAS the City of North Vancouver’s Noise Bylaw was last reviewed and updated in 2011;

WHEREAS people operating vehicles under rapid acceleration and deceleration can have direct impacts on public safety while generating peak noise levels;

Continued...

NOTICE OF MOTION – Continued

10. Noise Control Bylaw Update – File: 10-4900-01-0001/2019 – Continued

AND WHEREAS other Canadian municipalities have taken action on noise by successfully enabling enforcement, implementing new technologies and engaging their communities;

THEREFORE BE IT RESOLVED THAT staff investigate and report back to Council with a plan to:

- Review and recommended amendments to the Noise Control Bylaw, 1987, No. 5819;
- Consider and recommend enforcement options for noise related infractions;
- Consider and provide other mitigation strategies to minimize noise in the community; and
- Pilot and utilize crowd-sourcing and other existing technology solutions to monitor noise across our community, such that problem areas can be identified.

CARRIED UNANIMOUSLY

PUBLIC CLARIFICATION PERIOD

Mayor Buchanan declared a recess at 8:10 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 Girard, seconded by Councillor Valente

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

CARRIED UNANIMOUSLY

The meeting recessed to the Committee of the Whole, Closed session, at 8:11 pm and reconvened at 8:21 pm.

REPORT OF THE COMMITTEE OF THE WHOLE (CLOSED SESSION)

REPORTS

11. North Shore Neighbourhood House Space Needs Analysis – Release of Closed Information – File: 13-6410-01-0001/2019

Report: Planner 2, August 23, 2019

Moved by Councillor Bell, seconded by Councillor Hu

PURSUANT to the report of the Planner 2, dated August 23, 2019, entitled “North Shore Neighbourhood House Space Needs Analysis – Release of Closed Information”:

THAT Attachment 1 (North Shore Neighbourhood House Functional Program, Cornerstone Planning Group, April 25, 2016) of the report of the Community Planner and Manager, Facilities and Real Estate, dated July 20, 2016, entitled “North Shore Neighbourhood House Space Needs Analysis”, be released;

THAT the PowerPoint presentation to Council by Cornerstone Planning Group on July 25, 2016, be released;

AND THAT the report of the Planner 2, dated August 23, 2019, entitled “North Shore Neighbourhood House Space Needs Analysis – Release of Closed Information”, remain in the Closed session.

CARRIED UNANIMOUSLY

12. Appointment to the Social Planning Advisory Committee – File: 01-0360-20-0088/2019

Report: City Clerk, August 23, 2019

Moved by Councillor Bell, seconded by Councillor Hu

PURSUANT to the report of the City Clerk, dated August 23, 2019, entitled “Appointment to the Social Planning Advisory Committee”:

THAT Anna Boltenko be appointed to the Social Planning Advisory Committee for a partial term to conclude on January 31, 2021;

AND THAT the report of the City Clerk, dated August 23, 2019, entitled “Appointment to the Social Planning Advisory Committee”, remain in the Closed session.

CARRIED UNANIMOUSLY

ADJOURN

Moved by Councillor Back, seconded by Councillor McIlroy

THAT the meeting adjourn.

CARRIED UNANIMOUSLY

The meeting adjourned at 8:22 pm.

"Certified Correct by the City Clerk"

CITY CLERK



PROCLAMATION

COPS FOR CANCER DAY

- WHEREAS** each fall, during the Canadian Cancer Society Cops for Cancer event, law enforcement and emergency services personnel volunteer to cycle hundreds of kilometres through BC communities for up to two weeks to raise funds for paediatric cancer research and programs that help children and families; and
- WHEREAS** the Canadian Cancer Society Cops for Cancer “Tour de Coast” will be traveling through North Vancouver on September 18, 2019; and
- WHEREAS** the City of North Vancouver welcomes the “Tour de Coast” as they cycle through our community and wishes them every success in raising much-needed funding for children and families who have been affected by cancer;
- NOW THEREFORE** I, Linda Buchanan, Mayor of the City of North Vancouver, do hereby proclaim **September 18, 2019** as **COPS FOR CANCER DAY** in the City of North Vancouver, the traditional territories of the Squamish and Tsleil-Waututh Nations.

So proclaimed on Monday, September 16, 2019

Mayor Linda Buchanan



PROCLAMATION

RAIL SAFETY WEEK

- WHEREAS** raising awareness of public rail safety is an important part of reducing avoidable accidents, injuries and damage caused by collisions at level crossings or incidents involving trains and citizens; and
- WHEREAS** Operation Lifesaver is committed to working with the rail industry, governments, police services, the media and other agencies and the public to raise awareness in an effort to save lives and prevent injuries in communities across Canada, including ours; and
- WHEREAS** the City of North Vancouver supports the goals of Rail Safety Week, an initiative of Operation Lifesaver, which will be held across Canada from September 23 to 29, 2019;
- NOW THEREFORE** I, Linda Buchanan, Mayor of the City of North Vancouver, do hereby proclaim **September 23 to 29, 2019** as **RAIL SAFETY WEEK** in the City of North Vancouver, the traditional territories of the Squamish and Tsleil-Waututh Nations.

So proclaimed on Monday, September 16, 2019

Mayor Linda Buchanan



PROCLAMATION

NORTH SHORE CULTURE DAYS

- WHEREAS** North Shore Culture Days is part of the national Culture Days celebrations, a collaborative volunteer movement that provides Canadians with an opportunity to participate in and appreciate all forms of arts and culture; and
- WHEREAS** North Shore Culture Days is a three-day celebration where artists, arts and cultural organizations and creative groups offer a wide range of free, interactive and behind-the-scenes activities, inviting the public to discover the cultural gems that exist in their own backyard; and
- WHEREAS** with the participation of the municipalities of the City of North Vancouver and the Districts of North Vancouver and West Vancouver, this unique tri-municipal celebration will increase the awareness, accessibility, participation and engagement of North Shore residents in the arts and cultural life of their communities;
- NOW THEREFORE** I, Linda Buchanan, Mayor of the City of North Vancouver, do hereby proclaim **September 27 to 29, 2019** as **NORTH SHORE CULTURE DAYS** in the City of North Vancouver, the traditional territories of the Squamish and Tsleil-Waututh Nations.

So proclaimed on Monday, September 16, 2019

Mayor Linda Buchanan



PROCLAMATION

INTERNATIONAL DAY OF OLDER PERSONS

WHEREAS the United Nations General Assembly adopted a resolution in 1991 which identifies 18 principles for older persons to promote independence, participation, care, self-fulfillment and dignity; and

WHEREAS individuals are reaching an advanced age in greater numbers and in better health than ever before, and scientific research is disproving many stereotypes about inevitable and irreversible declines with age; and

WHEREAS the City of North Vancouver recognizes and appreciates the many contributions that older persons make to our community, and wishes to celebrate this year's theme "The Journey to Age Equality";

NOW THEREFORE I, Linda Buchanan, Mayor of the City of North Vancouver, do hereby proclaim **October 1, 2019** as the **INTERNATIONAL DAY OF OLDER PERSONS** in the City of North Vancouver, the traditional territories of the Squamish and Tsleil-Waututh Nations.

So proclaimed on Monday, September 16, 2019

Mayor Linda Buchanan



PROCLAMATION

WORLD BREASTFEEDING WEEK

WHEREAS

World Breastfeeding Week is a time for global society, in accordance with the World Health Organization's Global Strategy on Infant and Young Child Nutrition, to reassert the importance of informed choices and optimal feeding practices by protecting, promoting and supporting breastfeeding as the ideal nutrition for healthy infants and promoting the health of women; and

WHEREAS

the World Health Organization aims to create supportive environments and communities that protect the human right to breastfeed anywhere, anytime; and

WHEREAS

this year's World Breastfeeding Week theme, "Empower Parents, Enable Breastfeeding", is a time for global society to work together to reassert the importance of protecting, promoting and supporting breastfeeding;

NOW THEREFORE


I, Linda Buchanan, Mayor of the City of North Vancouver, do hereby proclaim **October 1 to 7, 2019** as **WORLD BREASTFEEDING WEEK** in the City of North Vancouver, the traditional territories of the Squamish and Tsleil-Waututh Nations.

So proclaimed on Monday, September 16, 2019

Mayor Linda Buchanan

THIS PAGE INTENTIONALLY LEFT BLANK



		
Dept. Manager	Director	CAO

The Corporation of **THE CITY OF NORTH VANCOUVER**
NORTH VANCOUVER MUSEUM & ARCHIVES

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Wesley Wenhardt, Director, North Vancouver Museum & Archives

SUBJECT: RECOMMENDED MUSEUM DEACCESSIONS #14

Date: August 26, 2019 File No: 15-7930-01-0001/2019

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

RECOMMENDATION:

PURSUANT to the report of the Director, North Vancouver Museum and Archives, dated August 26, 2019 entitled "Recommended Museum Deaccessions #14;

THAT Council authorizes the NVMA Commission to deaccession 116 artifacts owned solely by the City of North Vancouver and one artifact jointly owned by the City and District of North Vancouver;

AND THAT all proceeds from the sale of deaccessioned materials shall be deposited in a Special Purpose Fund for the Commission's use in maintaining the Museum and Archives collections and acquiring new items to augment the collections.

ATTACHMENTS:

1. List of 116 Museum artifacts, owned solely by the City, and one artifact owned jointly by the City and the District of North Vancouver, and recommended for deaccessioning.
2. Deaccession rationale for objects in accession 1995.29.

PURPOSE:

The purpose of this report is to seek Council's approval to deaccession and dispose of 117 accessioned Museum artifacts in the care of the North Vancouver Museum and Archives, and to notify Council of the NVMA Commission's decision to dispose of 84 unaccessioned ("found in inventory") objects.

BACKGROUND:

This is the fourteenth Museum Deaccession Report submitted to Council since 2012 when NVMA began downsizing the collection to prepare for the move to a new museum and a new collection storage facility. Since then, 12,912 objects have been recommended for deaccessioning. The volume of space occupied by the museum collection has been reduced significantly and the Commission has met the target of reducing the size of the collection sufficiently so it can be stored in a new, smaller collection warehouse and in the new museum.

DISCUSSION:

NVMA's Curator has access to a City-owned collection storage warehouse refurbished in 2017 under the direction of staff from the City's Facilities and Real Estate department. Museum-grade compact mobile shelving has been installed. Retained artifacts in the museum collection are currently being photographed, packed, and moved to the new warehouse.

Since the Final Report was submitted to Council last July, many deaccessioned objects have been transferred to other non-profit collecting institutions, including the White Rock Museum, Steveston Museum, BC Forestry Discovery Centre (Duncan), O'Keefe Ranch (Vernon), and the Royal BC Museum in Victoria.

Recommended Deaccessions

The NVMA Commission is the sole custodian of the cultural, archival and museum collections owned by the Corporations of the City of North Vancouver and the District of North Vancouver. The Commission's Collection Policy sets out the methodology for deaccessioning (ie. documenting and removing) materials from the accessioned collection (section B.6.8) and for documenting and disposing of other categories of objects (section B.6.9).

According to section D.15 of the Commission's establishing Bylaws (City of North Vancouver Bylaw No. 6019) and District of North Vancouver Bylaw No. 6789), all items recommended by the NVMA Commission for deaccession will be referred to the owner (City and/or District of North Vancouver) for final approval.

This report seeks Council's permission to deaccession and dispose of all 117 accessioned objects on the attached lists. Per the NVMA Collection Policy (6.8.2.5), lists of unaccessioned ("found in inventory") items approved for disposal by the Commission do not have to be forwarded to their municipal owners.

In the opinion of the NVMA Director, no item on these lists, other than those in accession 1995.29 which are the subject of a separate deaccession rationale (Attachment 3), has a fair market value in excess of \$1,000.

Items on the attached lists were reviewed and approved for deaccessioning by the NVMA Commission at meetings in May and July 2019.

On May 8, 2019:

Moved by Ms. Forbes and seconded by Mr. Ehling, and carried unanimously:

THAT the North Vancouver Museum & Archives Commission approves the deaccessioning and disposal of all 76 accessioned objects and 46 unaccessioned (found in inventory) objects on the attached lists,

AND THAT the Commission recommends to the municipal owner of each accessioned object (City and/or District of North Vancouver as appropriate) that all of these items be deaccessioned and disposed of, according to the provision of the Commission's Collection Policy.

On July 19, 2019:

Moved by Mr. Bell and seconded by Ms. McAlduff, and carried unanimously:

THAT the North Vancouver Museum & Archives Commission approves the deaccessioning and disposal of all 70 accessioned objects and 38 unaccessioned (found in inventory) objects on the attached lists, including the eleven printing press objects from accession 1995.29.

AND THAT the Commission recommends to the municipal owner of each accessioned object (City and/or District of North Vancouver as appropriate) that all of these items be deaccessioned and disposed of, according to the provisions of the Commission's Collection Policy.

INTER-DEPARTMENTAL AND INTER-MUNICIPAL IMPLICATIONS:

A companion report will be prepared for submission to the Mayor and Council of the District of North Vancouver containing lists of objects owned solely by the District and recommended for deaccessioning, as well as objects owned jointly by the City and the District that are recommended for deaccessioning and disposal.

A list of all items formally deaccessioned will be provided by the Commission to the Purchasing Department of the City of North Vancouver so the items can be deleted from their Master list and the necessary adjustments, if any, can be made to insurance coverage for the collections.

RESPECTFULLY SUBMITTED:

A handwritten signature in dark ink, appearing to read 'W. Wenhardt', is written over a horizontal line.

Wesley Wenhardt
Director, North Vancouver Museum
and Archives

Attachment #1 - Objects owned solely by the City of North Vancouver and jointly by the City and District of North Vancouver

QUANTITY	OBJECTID	OBJNAME	DESCRIPTION	OWNERSHIP
1	1972.182.1	Winch	Cast iron and steel winch	CNV
1	1974.54.6a-g	Cookstove	Moffat light yellow electric stove	CNV
1	1974.54.15a-d	Press, Printing	Small, cast iron printing press	CNV
1	1975.16.36	Press, Book	Black, cast iron book press	CNV
1	1975.106.4	Chair, Office	Varnished oak office chair	CNV
2	1977.71.6 1982.42.1	Carriage, Doll	doll carriages in poor condition	CNV
1	1977.110.1a-b	Can, Trash	Expanded wire mesh waste basket	CNV
1	1977.149.3	Table, Side	Three legged wooden table	CNV
1	1978.62.1	Lathe, Metalworking	Large, cast iron and steel metalworking lathe	CNV
1	1979.98.2	Plate, Printing	Engraved plate, mounted on wood block	CNV
1	1980.169.1	Timber	Irregular, wedge-shaped cedar wood timber	CNV
1	1981.57.2 a-b	Recorder, Sound	Black Dictaphone machine	CNV
1	1982.11.2a-c	Icebox	Large cylindrical shape set on casters	CNV
1	1984.36.1	Handcart	Handmade wood and metal hand-cart	CNV
1	1984.44.26	Lamp, Floor	Floor lamp with shade	CNV
1	1984.52.1a-b	Hydrant	Fire hydrant with valve mechanism	CNV
1	1984.55.1	Machine, Tenoning	Large, double-head tenoning machine	CNV
1	1984.55.2	Machine, Mortising	Large chain mortising machine	CNV
1	1985.11.1	Carriage, Baby	Child's folding carriage in poor condition	CNV
1	1985.25.1	Stand, Plant	Wooden plant stand	CNV
1	1985.79.1	Lectern	wooden tabletop lectern	CNV
1	1986.38.1a-b	unknown	large circular metal object of unknown use	CNV
1	1986.40.1	Sluice	wooden and metal sluice rocker box	CNV
1	1988.20.1a-b	Washtub	metal washtub	CNV

Attachment #1 - Objects owned solely by the City of North Vancouver and jointly by the City and District of North Vancouver

QUANTITY	OBJECTID	OBJNAME	DESCRIPTION	OWNERSHIP
1	1988.22.1	Door	One very heavy oak door with a 5 bar window	CNV
1	1988.24.1	Gate	Two leaves of a pole and spear picket fence-style metal gate	CNV
1	1988.24.3	Cart	wood and metal cart with handle	CNV
1	1989.19.1	Locker	Single tier three locker unit	CNV
1	1989.34.8 a-b	Chair, Examining	Metal examination chair, painted white	CNV
1	1989.35.12 a-e	Table	Round solid wood table with imitation oak finish	CNV
1	1989.35.13	Washstand	Oak wash stand	CNV
1	1989.38.1 a-r	Lathe, Woodworking	Woodworking lathe on a large wooden bench	CNV
1	1990.29.1	Dryer, Hair	Rilling electric hair dryer	CNV
1	1991.49.8	Dryer, Clothes	Shallow galvanised steel drum with spinning wire basket	CNV
1	1991.53.115a-e	Rack	A wooden pamphlet rack	CNV
1	1991.53.131	Board, Bulletin	Large wooden notice board	CNV
1	1991.53.141	Board, Writing	black painted wooden board	CNV
1	1992.40.3a-e	Press, Drill	Green upright drill press	CNV
1	1992.40.8a-b	Machine, Addressing	addressing machine housed in a grey-coated steel case	CNV
1	1992.40.26a-e	Panel	Test panel with components	CNV
1	1992.40.27	Stand	Rectilinear steel stand, painted black	CNV
1	1992.40.173	Chest	Large steel chest with 2-hinge lid	CNV
1	1992.40.219	Stepladder	Double-sided, four-step stepladder	CNV
1	1992.40.222a-e	Turnstile	Chrome-plated steel turnstile	CNV
1	1992.40.233	Remover, Light Bulb	Wood and wire light bulb remover	CNV
1	1992.40.279	Stencil, Paint	Large rectangular galvanized steel stencil	CNV
1	1992.40.528a-d	Stanchion	Red painted metal stanchions	CNV

Attachment #1 - Objects owned solely by the City of North Vancouver and jointly by the City and District of North Vancouver

QUANTITY	OBJECTID	OBJNAME	DESCRIPTION	OWNERSHIP
1	1992.40.722	Cart, Utility	Four wheeled, handmade wooden cart	CNV
1	1992.40.723	Dolly	Four wheeled wooden warehouse dolly	CNV
	1992.40.729			
2	1992.40.730	Tool, Metalworking	Heavy, wooden stand	CNV
	1992.40.1030			
	1992.40.1031			
	1992.40.1032			
	1992.40.1033			
	1992.40.1034			
5	1992.40.1035	List	Panel for list of ships	CNV
1	1995.29.1	Press, Printing	Cast iron printing press	CNV
1	1995.29.4	Cabinet, Type Case	Small, wooden, six drawer cabinet	CNV
	1995.29.2			
	1995.29.3			
	1995.29.5			
	1995.29.6			
	1995.29.7			
	1995.29.8			
7	1995.29.11	Type	Assortment of typesetting materials	CNV
1	1995.29.13	Galley	Rectangular wooden typesetter's galley	CNV
1	1995.29.16	Case, Type	Wooden type case tray	CNV

Attachment #1 - Objects owned solely by the City of North Vancouver and jointly by the City and District of North Vancouver

QUANTITY	OBJECTID	OBJNAME	DESCRIPTION	OWNERSHIP
20	1972.59.49 1972.106.2 1972.116.1 1975.48.15 1975.93.5 1976.13.4 1976.20.3 1980.48.1 1980.143.1 1981.3.7 1982.64.9 1983.12.2 1983.12.3 1983.12.8 1983.12.9 1983.12.10 1983.12.11 1983.12.12 1983.12.13 1983.12.14	Trophy	Many of these trophies are from North Vancouver High School. They are either highly redundant, damaged, or illegible in some way. Others are miscellaneous trophies of unknown significance.	CNV
6	1996.27.1 1997.24.6 2004.28.2 2004.28.3 2004.28.7 2004.28.9	Trophy	Broken, fragmented, damaged, or redundant trophies	CNV

Attachment #1 - Objects owned solely by the City of North Vancouver and jointly by the City and District of North Vancouver

QUANTITY	OBJECTID	OBJNAME	DESCRIPTION	OWNERSHIP
	1983.12.15			
	1983.12.16			
	1983.12.17			
	1983.12.19			
	1983.12.20			
	1983.12.24			
	1983.12.25			
	1983.12.28			
	1983.12.29			
	1983.12.30			
	1983.12.31			
	1983.12.36			
	1983.12.39			
	1983.33.1 1984.56.1			
	1985.61.1 1988.12.2			
	1988.12.3			
	1992.35.32			
20	1992.40.339	Trophy	Many of these trophies are from North Vancouver High School. They are either highly redundant, damaged, or illegible in some way.	CNV
1	1991.34.3	Streetcar controller	Controller handle for streetcar	CNV
1	1981.32.2b	farebox	farebox from streetcar	CNV
116	Total			

1	1998.37.1	Trophy	Broken 5th place finish basketball trophy	CNV & DNV
1	Total object			

**ATTACHMENT 2 – Deaccession Rationale for Objects in
Accession #1995.29 from the Museum Collection**

July 19, 2019

Nancy Kirkpatrick, Director, NVMA

BACKGROUND

This report outlines the rationale for an NVMA staff recommendation to deaccession eleven objects from accession #1995.29 which were acquired through donation. The objects include a manual printing press, type, and printing accessories.

The reason for this report is that the NVMA's Collections Policy (revised August 2014) directs that potential deaccessions with an estimated value of \$1,000 or more must be "thoroughly investigated," that "a record of the circumstances and conditions of the deaccession [must] be made and retained" as a part of NVMA's collection records, and that formal approval from the NVMA Commission must be obtained for permission to proceed with the deaccession.

DISCUSSION

The printing press, type, and accessories were donated to the North Vancouver Museum and Archives in 1995. At the time of the donation the entire accession was valued at \$950.00 and a tax receipt was issued to the donor in that amount.

The printing press and accessories have little direct connection to North Vancouver and will not be exhibited in the new museum core exhibits or any planned feature exhibit in the foreseeable future. Furthermore, the size and weight of the objects make them difficult to store in the museum collections storage facilities.

Deaccession Rationale for Accession #1995.29

Accession Nos. 1995.29.1, 1995.29.2, 1995.29.3, 1995.29.4, 1995.29.5, 1995.29.6, 1995.29.7, 1995.29.8, 1995.29.11, 1995.29.13, 1995.29.16.

Date of Acquisition: 28 July 1995

Donor: Beverly Smith

Location: Warehouse

Municipal Owner: City of North Vancouver

Reason for Deaccession: Size and irrelevance

Accession Description: "Golding" printing press; cases of type of various sizes and fonts; ink and other printing accessories.

Accession dimensions: 25 square feet, estimated weight 400 lbs.

Accession History and Provenance: Printing press and accessories were donated to the NVMA in 1995 by donor Beverly Smith of Nevada. According to notes in the accession file, the printing press was used by the father of the donor who lived in a trailer park in West Vancouver. It does not appear that the printing press or any of its components have ever been exhibited by the NVMA, and the accession has been in storage since it was donated in 1995.

Security of Title: Secure. An unrestricted signed donation form is on file, signed by the donor Beverly Smith on 28 July 1995.

Rationale for deaccession recommendation:

- *Size:* The entire accession takes up 25 square feet of storage space, and many of the components are very heavy and unwieldy.
- *Storage:* The printing press is too large to be stored on compact shelving, and there is very limited storage space available for floor standing objects.
- *Future Use:* There is no anticipated future exhibition use for this accession. It is not particularly relevant to the history of North Vancouver.

Possible disposition following deaccessioning:




- Offer to transfer to another public, non-profit exhibit/collecting institution
- Sell it at public auction.

PROPOSED MOTION

THAT the North Vancouver Museum & Archives Commission approves the deaccessioning and disposal of eleven objects from accession #1995.29 according to the provisions of the Commission's Collections Policy and recommends to the City of North Vancouver that these objects be deaccessioned and disposed of.

THIS PAGE INTENTIONALLY LEFT BLANK



 Division Manager	 Director	 CAO
--	---	--

The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Larisa Lensink, Environmental Sustainability Specialist

Subject: PROVINCIAL ENGAGEMENT ON CLEANBC PLASTICS ACTION PLAN

Date: September 3, 2019 File No: 11-5380-01-0001/2019

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

RECOMMENDATION:

PURSUANT to the report of the Environmental Sustainability Specialist, dated September 3, 2019, entitled "Provincial Engagement on CleanBC Plastics Action Plan":

THAT the City appreciates the opportunity to provide feedback on an issue that will have a significant impact on local communities;

AND THAT having considered the Provincial Government's September 30, 2019 deadline to provide input into the Province's engagement process on plastic waste reduction and the information in this report, a letter be provided from the Mayor on behalf of Council, substantially in the form presented as Attachment #2 of the report.

ATTACHMENTS:

1. BC Ministry of Environment and Climate Change Strategy's "CleanBC Plastics Action Plan Policy Consultation Paper". (Document [#1821115](#))
2. Proposed submission to the CleanBC Plastics Action Plan engagement process. (Document [#1822053](#))

PURPOSE

The purpose of this report is to provide an update to Council on the Province of British Columbia's development of a Plastics Action Plan, and to seek Council's direction with respect to providing input to the engagement process concluding on September 30, 2019.

BACKGROUND

Context

As plastic waste and its negative impacts on the environment become increasingly well-documented, governments at all levels have been challenged to take action. In Canada, the federal government announced in June 2019 its intention to develop a Canada-wide Action Plan on Zero Plastic Waste, including the consideration of bans on single-use items such as plastic bags to be implemented as early as 2021.

On July 25, 2019 the Province of British Columbia released its CleanBC Plastics Action Plan Policy Consultation Paper, proposing new policy opportunities and amendments to the existing *Recycling Regulation* of the *Environmental Management Act* to address plastic waste. With the recent release of the Policy Consultation Paper (Attachment #1), the Ministry of Environment and Climate Change Strategy indicated a commitment to take action on reducing plastic waste and launched a period of public and stakeholder engagement on the topic. The Policy Consultation Paper outlines the following key policy areas where feedback is requested:

1. Bans on Single-Use Packaging
2. More Recycling Options: Expanding Producer Responsibility for Packaging-Like Products and Single-Use Items
3. Expanded Plastic Bottle and Beverage Container Returns
4. Reducing Plastics Overall: Development of National Recycled Content Performance Standards

At the municipal level, several BC local governments have been investigating the introduction of single-use item regulations, including bylaws to ban the use of plastic checkout bags by businesses. However, a recent decision by BC's Court of Appeal in the case between the Canadian Plastic Bag Association and the City of Victoria determined that local governments do not have the authority to restrict the use of single-use plastics without approval from the Province.

The court ruled that the intent of the plastic bag ban bylaw was to protect the environment, not to regulate business practices, and is therefore outside the jurisdiction of local governments. The BC Community Charter provides the statutory framework for all municipalities in BC (except the City of Vancouver which is governed by the Vancouver Charter). Protection of the natural environment is considered a sphere of concurrent authority and thus the court ruled that approval from the Province was required.

Recycling of Plastic Packaging in British Columbia: Success of EPR

BC is a North American leader in developing robust and sustainable recycling programs. Plastic packaging waste is managed through an Extended Producer Responsibility (EPR) program in which producers are responsible for the end of life of products, ensuring appropriate recycling programs are in place and creating an incentive for recyclability to be considered in product design. Through the packaging and printed paper (PPP) EPR program, municipalities and other collectors receive funds from industry for the blue box residential recycling collection program.

BC's unique ability to successfully avoid being impacted by the recent waste crisis as a result of China's ban on imported plastics recycling is a testament to the strength of BC's EPR system. With robust processing facilities and sustainable markets for plastics recycling located in BC, shipping plastic recyclables to China is not necessary.

DISCUSSION

The following is a brief discussion of each policy area with related staff recommendations.

1. Bans on Single-Use Packaging

The Province is considering implementing bans on select plastic packaging items by prohibiting, regulating or restricting their sale, use or disposal. The Plastics Action Plan engagement aims to measure support for potential bans and gain feedback on the type of bans to be considered and the materials to be included in bans.

Type of Plastic Packaging Ban

Bans on single-use items are an effective policy tool to prevent plastic waste and the use of plastics that are not recyclable or difficult to manage, and have been pursued in many jurisdictions across the world including the European Union and locally, several BC municipalities. Since the challenges associated with plastic waste extend well beyond municipal jurisdiction, consistent policy at a broad geographical scale is needed to help transition industry and businesses and to promote widespread behavior change. Staff recommend support for bans at the provincial level with the responsibility of implementing and monitoring such bans being borne by the Ministry of Environment and Climate Change Strategy, and that the Province support the development of plastic packaging bans at the federal level.

A ban on the sale or use of plastic packaging items would prevent the selected materials from entering the marketplace and potentially the environment as litter. In contrast, when a ban on disposal is applied (which is currently the case for most recyclable and compostable materials at Metro Vancouver facilities), materials are in circulation and are diverted to recycling streams by prohibiting their disposal as garbage. Staff recommend that a ban on the sale or use be considered instead of a ban on disposal in order to address the problem of single use items entering the environment.

Plastic Packaging Products to be Included

The purpose of plastic packaging bans is to protect the environment. Therefore, staff recommend that the selection of individual items be based on scientific evidence of their potential contribution to litter and marine pollution, and that lifecycle greenhouse gas emissions be considered. Items such as polystyrene foam (Styrofoam™), plastic bags and plastic straws, stir sticks and cutlery, which are significant contributors to litter and have viable reusable, recyclable or compostable alternatives, should be considered for regulation.

As was confirmed through the City of Vancouver's public consultation on the topic of single-use item regulation, bans on specific items such as straws have unintended adverse impacts on accessibility. Further consideration and consultation with health care professionals is required in order to promote inclusion through exemptions for health care facilities and provision of items by request.

2. More Recycling Options: Expanding Producer Responsibility for Packaging-Like Products and Single-Use Items

The Province is proposing to expand the existing packaging and printed paper EPR program to include packaging-like and single-use items. Packaging-like items are materials sold as a product but used as packaging, such as freezer and sandwich bags, re-usable plastic containers (Tupperware™) and glass canning jars. Included in the single-use items category are materials that are not used as packaging but serve a one-time purpose, including plastic straws, stir sticks and cutlery. Plastic plates, bowls and cups that are sold in multiples and commonly used at parties are also considered single-use items that are excluded from the existing EPR program.

Staff recommend supporting the expansion of the EPR program to include packaging-like and single-use products providing the specific items meeting the following criteria:

- Products that would not be appropriate candidates to be managed by a ban due to a lack of viable alternatives or otherwise
- Products that are similar to items already included in the existing EPR program, such that their inclusion would simplify residential recycling for the public
- Products that would be well-suited for collection and processing in the curbside or depot recycling program

With these criteria in mind, products like freezer and sandwich bags, re-usable plastic containers, canning jars, wrapping paper, moving boxes and disposable party plates, bowls and cups, should be included in the EPR program for plastic packaging. However, some single-use items like plastic straws, stir sticks and cutlery do not meet the above criteria, as they would be good candidates to be managed by a ban, are dissimilar from items already included in the EPR program and would be difficult to manage in the curbside collection program due to their size. Staff therefore recommend that these items not be included in the packaging and printed paper EPR program.

The existing EPR program for packaging applies to material generated at residential properties and streetscape spaces province-wide. Staff recommend that this program be expanded to include plastic packaging generated at Industrial, Commercial and Institutional properties to strengthen the impact of the EPR program in diverting waste from landfill and holding producers responsible for the end of life of their products.

3. Expanded Plastic Bottle and Beverage Container Returns

The current EPR deposit-refund program for beverage containers includes all containers for ready-to-serve drinks (juices, beer, wine, etc.) but excludes milk, milk substitutes, rice milk, soya milk or milk-based beverages. The Province is proposing to expand the program to include milk and milk substitutes so that deposits would also be applied to these beverages. Staff recommend supporting this EPR program expansion to include all beverage containers to simplify messaging and to increase recycling rates. In BC, recycling rates for deposit containers are 10% higher than for containers without deposits.

The Province is also proposing to modernize the beverage container deposit-refund system by allowing refunds to be paid electronically. Currently, all refunds for returning beverage containers are paid in cash and enabling electronic refunds would increase ease and efficiency for consumers. Cash refunds would be maintained an option, which is an essential for individuals and communities who depend on these cash refunds as an immediate source of income.

The Province is also proposing creating a uniform 10 cent deposit-refund. Under the existing beverage container EPR system, deposit-refunds range from 5 cents to 20 cents depending on the type and size of container. Staff recommend supporting the Province's proposal to create a uniform deposit-refund in order to increase system efficiencies. However, staff recommend that the Province consider a uniform deposit-refund of a higher value than the proposed 10 cents. Jurisdictional scans reveal that increasing deposit-refund rates result in higher return rates as evidenced by the high beverage container recycling rates in Alberta which surpassed those in BC over the past five years when the deposit-refund rate was raised in Alberta. The current deposit-refund rates of 5 to 20 cents have been in place since the introduction of the *Beverage Container Stewardship Program Regulation* in 1997. The Province should consider a minimum uniform deposit-refund of 25 cents to reflect inflation and promote increased return rates.

4. Reducing Plastics Overall: Development of National Recycled Content Performance Standards

The Province is involved in developing the Canada-wide Action Plan on Zero Plastic Waste, which includes the development of national recycled content performance standards. These standards can require a minimum content of recycling plastic in new packaging and products which creates a demand for recycled plastic materials, encourages producers to consider the recyclability of their products, and reduces the need to produce more plastic from virgin materials and fossil fuels. The Province is seeking input into considerations to include in the development of these national standards.

Staff recommend that the Province consider advocating for a national labelling system for recyclable materials in the development of national standards so that all recyclable plastics are easily identifiable. Staff also recommend that the lifecycle greenhouse gas emissions of materials be considered in the development of national standards to prioritize higher minimum content standards for materials that would have the greatest emissions reduction potential. Finally, staff recommend that BC consider leading by example with provincial recycled content standards to set a precedent for national standards to follow and realize the positive environmental impacts of recycled content standards sooner rather than later.

FINANCIAL IMPLICATIONS

Significant solid waste disposal cost savings can be realized through the implementation of more effective recycling programs, whether through raising the minimum deposit-refund or including additional materials in current recycling programs.

To avoid a patchwork of municipal regulations and monitoring and enforcement costs incurred by a single-use plastics ban implemented at the municipal level, staff recommend that the introduction and enforcement of such regulations be led by provincial and federal governments.

INTER-DEPARTMENTAL IMPLICATIONS

This report and submission letter (Attachment #2) was circulated to the Leadership Team for feedback on September 4, 2019.

RESPECTFULLY SUBMITTED:



Larisa Lensink, MREM
Environmental Sustainability Specialist

Plastics Action Plan

POLICY CONSULTATION PAPER



The ministry is seeking feedback on new policy opportunities and proposed amendments to the Recycling Regulation of the Environmental Management Act by September 18, 2019 to address plastic waste.

Instructions on how to provide comments are provided on the last page of this consultation paper.



Introduction

British Columbians want action on plastic waste. Too often plastic packaging and single use items end up as litter in our communities, waste in landfills or debris in lakes, rivers and oceans. Plastic pollution hurts wildlife and harms ecosystems, and it is increasing year after year. The Ministry of Environment and Climate Change Strategy recognizes that new steps are needed and is proposing action in four connected areas.

1 BANS ON SINGLE-USE PACKAGING



Determining which types of plastic packaging to phase out altogether, as well as any necessary exemptions, such as those for health, safety and accessibility to keep products available for the people that need them.

2 DRAMATICALLY REDUCE SINGLE-USE PLASTIC IN LANDFILLS & WATERWAYS



Requiring producers to take responsibility for more plastic products, ensuring more single-use items like sandwich bags, straws and cutlery get recycled.

3 PLASTIC BOTTLE AND BEVERAGE CONTAINER RETURNS



Expanding the deposit-refund system to cover all beverage containers — including milk and milk-substitutes — with a 10-cent refundable deposit, keeping millions more containers out of landfills and waterways.

4 REDUCING PLASTICS OVERALL



Supporting effective ways to prevent plastic waste in the first place and ensuring recycled plastic is re-used effectively.

Through the release of this consultation paper, B.C. is engaging on the development of new policy options and seeking feedback on proposed amendments to improve existing programs.

B.C. has been actively involved in the development of a Canada-wide Strategy and Action Plan on Zero Plastic Waste ([Strategy](#) and [Action Plan](#)), and will continue to support and align with longer-term proposed federal initiatives to ban harmful single-use plastics.

Dramatically Reducing Plastic Use

DEVELOPING A PATH FORWARD WITH NEW POLICY OPTIONS

The Ministry of Environment and Climate Change Strategy (the ministry) recognizes that waste prevention is the highest priority. Plastic bans have been adopted in different forms in different jurisdictions to address the growing problem of plastic pollution — for British Columbia, it's critical that we solicit public input on what forms potential bans on plastic packaging could take. For instance, there may be items of interest to British Columbians which are not covered by the proposed federal ban and that are within B.C.'s jurisdictional authority, or that are a priority due to B.C.'s coastal and remote geography.

There are also actions being taken by local governments in B.C. that could be supported by a provincial harmonized approach. B.C. proposes to collaborate with all levels of government both to avoid duplicating regulatory initiatives, and to progress actions that would have an immediate impact and protect B.C.'s environment. In addition, B.C. proposes to work with the federal government to develop national recycled content standards to ensure that in the longer term any new plastics and packaging produced contain recycled plastic.

NEW POLICY OPTIONS

- » Consider provincial bans for plastic packaging under the *Environmental Management Act*.
- » Support the development of recycled content performance standards being led by the federal government.



More than 40% of plastic is used only once. We can do our part to change this, and we want your thoughts and ideas on how to do it best.

Expanding Recycling and Recovery

AMENDMENTS TO THE RECYCLING REGULATION

By expanding recycling and recovery of plastics that are in use, we can significantly reduce the waste that accumulates in landfills and waterways. By doing this as efficiently as possible, we can improve the supply of clean recycled plastics for re-manufacturing. When this strategy is combined with higher recycled content standards for products, it can reduce the need for new plastics to be created.

Both expanding producer responsibility and expanding B.C.'s beverage container return system can be achieved through changes in existing regulations. B.C. currently regulates Extended Producer Responsibility (EPR) for many products, requiring producers (manufacturers, distributors and retailers) of designated products to take responsibility for the life cycle of their products, including collection and recycling. This shifts the responsibility from taxpayers, local government or Indigenous communities to the producers and consumers of a product.

By requiring producers to be accountable, EPR programs reduce waste by incentivizing producers to design products that are recyclable and durable in order that they can be recovered for future use instead of going to disposal. This further supports a circular economy approach to waste management where resources are continually conserved and reused as raw materials.

B.C. proposes to expand existing EPR by including single-use items and packaging-like products under the [Recycling Regulation](#)¹ to ensure that these items are being managed responsibly through EPR programs prior to any potential federal bans coming into force (estimated for 2021 and beyond).

B.C. is able to move quickly in this regard as the North American leader with more than twenty-two EPR programs already in place. Expanding EPR to cover these items enables B.C. to capture any items that are beyond the scope or exempted from any federal ban.

¹ <https://bit.ly/2Oaqi5n>

The proposed amendments also include an update to the beverage container deposit system that would reduce the prevalence of littered single-use bottles in the environment and landfills by an estimated 50 million bottles per year.

As these actions would result in an increase in plastic items to be recycled, the Province would work with the federal government to develop national recycled content standards — ensuring that new single-use plastics and packaging-like products are produced using recycled plastic content.

PROPOSED AMENDMENTS TO THE RECYCLING REGULATION

- » Add 'packaging-like products' and 'single-use items' as obligated products to the Recycling Regulation to be recovered and recycled by producers.
- » Add all single-use beverage containers to the deposit-refund system.
- » Amend the refundable deposit amount to 10 cents for all beverage containers.
- » Allow electronic refund options for beverage containers in addition to cash.

Too often plastic packaging and single use items end up as litter in our communities, waste in landfills or debris in lakes, rivers and oceans. Plastic pollution hurts wildlife and harms ecosystems, and it is increasing year after year.



We Want Your Input

HERE ARE SOME SOLUTIONS WE ARE CONSIDERING

1 BANS ON SINGLE-USE PACKAGING



Determining which types of plastic packaging to phase out altogether, as well as any necessary exemptions, such as those for health, safety and accessibility to keep products available for the people that need them.

The *Environmental Management Act*² (EMA) governs the management of waste in British Columbia, to protect public health and the environment. The EMA allows for the banning of packaging by prohibiting, regulating or restricting the use or sale of packaging materials. British Columbia is considering bans as a policy option for plastic packaging and would like input on viable approaches.

Bans can be an effective policy tool to prevent plastic waste from occurring in the first place and help reduce the use of plastics that are commonly found in the environment and littered in our communities. Bans can also be used to divert recyclable plastics away from landfills to recycling facilities. They are also used to stop the use of plastics that are not recyclable or are considered difficult to recycle and manage.

Plastic packaging includes items such as plastic films (e.g., plastic bags, pouches or wraps) and containers (e.g., bottles, cups, tubs, and other hard plastics) that are used to package food and beverage products, consumer goods, cosmetics and personal care items.

Recent studies have shown that plastic packaging accounts for approximately 47% of all plastic waste discarded, and the majority of single-use plastics are used as packaging³.

² <https://bit.ly/1FETB2d>

³ <https://bit.ly/32OHPTJ>

EXAMPLES OF BANS

- » The European Union will ban single-use plastic products (plastic cotton swabs, cutlery, plates, straws, drink stirrers and sticks for balloons), as well as cups, food and beverage containers made of polystyrene foam and all products made from oxo-degradable plastics by 2021.
- » Many US states such as Maine, Vermont, California, and New York have enacted bans on plastic packaging including plastic bags and polystyrene foam.

B.C. Local Governments:

- » The City of Vancouver single-use item reduction strategy includes bans for plastic straws, foam cups and foam take-out containers beginning in 2020.
- » More than 23 communities in B.C. have been actively working on developing bans for single-use plastic items such as bags and straws.

Plastic packaging bans are typically implemented through the following approaches:

- » **Bans to regulate the sale or use:** regulate the supply of certain plastic packaging into the marketplace or prevent or restrict the use of certain plastic packaging — e.g., a ban on the use of polystyrene foam in packaging and takeout containers and cups, or a ban on an identified type of packaging, such as a ban on plastic bags to contain or transport goods at the point of sale.
- » **Disposal bans:** prohibit the disposal of plastics that instead can be readily recycled. These bans are typically implemented at the disposal site located within the jurisdiction applying the ban — e.g., an energy-from-waste facility or landfill — and at transfer facilities where wastes are aggregated for transport to a final disposal facility. Bans on the disposal of materials, such as plastics, are implemented after systems are in place to collect and recycle the banned materials (such as those created under EPR programs).

Globally there are a number of new regulations banning plastics. Bans on the sale of plastic bags have been introduced in 65 countries, as well as many regional and local jurisdictions. The federal government recently announced their intention to ban harmful single-use plastics as early as 2021 to reduce pollution from single-use plastic products and packaging, such as shopping bags, straws, cutlery, plates, and stir sticks.

British Columbia communities have also taken significant steps to implement strategies, including bans, levies or fees on plastic bags. Beyond plastic bags, many B.C. communities are pursuing single-use plastic bans on items including plastic bags and straws, polystyrene foam, disposable cups and takeout food containers.

The City of Victoria was the first municipality in B.C. to ban plastic bags in July 2018 through a business licensing bylaw. Municipalities may regulate in relation to a number of areas under the *Community Charter*. On July 11, 2019 the B.C. Court of Appeal ruled, however, that the intent of the bylaw was for the *protection of the natural environment* and therefore under the *Community Charter*, municipalities wishing to exercise their regulatory authority for protection of the natural environment are required to obtain Provincial approval. The Province is currently reviewing all aspects of the decision and recognizes that local governments need clarity on what their authorities are and the process for acting on those authorities should they so desire. Feedback from this engagement process will inform actions and processes moving forward.

Recent studies have shown that plastic packaging accounts for approximately 47% of all plastic waste discarded, and the majority of single-use plastics are used as packaging.



When policy tools, such as a ban, are evaluated, it is important to consider all impacts and to ensure that viable alternatives are available. For example, research has shown that switching from single-use plastic bags to single-use paper bags results in simply trading one set of environmental costs for another. A single-use paper bag can require up to four times as much energy to manufacture and produces two times the greenhouse gas emissions when compared to a single-use plastic bag; however, they are bio-degradable and do not persist in the environment like plastic bags do. Successful policies have included the use of bans, generally in combination with levies and fees to decrease unnecessary single-use consumption and to encourage the reuse of bags and other sustainable alternatives. It is critical to find the right policy approach that results in the fewest unintended consequences.

In addition, exemptions to the ban are often required where no viable alternative is found, or to ensure that the essential safety, health, and wellness of all individuals is maintained. For the remaining plastic packaging and single-use plastics, EPR programs are necessary to ensure these materials can be collected and recycled back into new packaging and products.

- » **Do you think bans on plastic packaging should be implemented in B.C.? What plastic packaging products are a priority for B.C. to ban?**
- » **What types of bans should be considered (examples include bans on sale of a certain type of packaging or ban on use of a certain type, or bans on disposal)?**
- » **If a ban was applied, how should exemptions be considered?**
- » **Bans can be implemented in some form by all levels of government due to the different regulatory powers in place. Are there bans best suited for implementation at the federal, provincial or local government level? Should local governments be given the authority to ban problematic plastic items in their community? What types of bans should be considered?**

2 MORE RECYCLING OPTIONS



Dramatically reduce single-use plastic in landfills and waterways: requiring producers to take responsibility for more plastic products, ensuring more single-use items like sandwich bags, straws and cutlery get recycled.

EXPANDING PRODUCER RESPONSIBILITY FOR PACKAGING-LIKE PRODUCTS AND SINGLE-USE ITEMS

British Columbia is a national leader in recycling with the widest range of regulated items collected — its existing province-wide Extended Producer Responsibility (EPR) program regulates recycling of packaging and paper products. The inclusion of packaging-like products and single-use items in the Recycling Regulation would expand the type of plastic products that producers are required to collect for recycling from sectors that may include, but are not limited to, residential and municipal properties province-wide.

Packaging-like products are materials that are sold as a product but are in turn used as packaging. This includes re-usable plastic containers, freezer/sandwich bags, canning jars, wrapping paper, and moving boxes. Single-use items are materials that are not necessarily packaging but similarly serve a one-time purpose. This includes plastic straws, stir sticks, cutlery and 'disposable' items purchased in multiples, such as plates, bowls, cups, and party supplies that could be easily diverted in a manner similar to packaging and packaging-like products. This change would require an amendment to the Recycling Regulation.

- » **Do you have comments or suggestions regarding the ministry's proposal to include packaging-like products in the Recycling Regulation? Are there any packaging-like products you believe should be exempt from the Recycling Regulation?**
- » **Do you have comments or suggestions regarding the ministry's proposal to add single-use items to the Recycling Regulation? Are there any single-use items you feel should be exempt from the Recycling Regulation?**

3

EXPANDING PLASTIC BOTTLE AND BEVERAGE CONTAINER RETURNS



Improving the deposit-refund system to cover all beverage containers — including milk and milk-substitutes — with a 10-cent refundable deposit, keeping millions more containers out of landfills and waterways.

EXPANDING RECOVERY AND RECYCLING OF BEVERAGE CONTAINERS

Expanding the EPR deposit-refund system to cover all beverage containers and standardizing the refundable deposit to 10 cents, as well as modernizing the system, would capture and recycle millions more single-use containers, while reducing consumer and retailer confusion over what is and is not covered under a deposit-refund program.

Beverage containers that are currently excluded from the deposit-refund system would now be included, such as milk and milk substitutes (e.g., rice milk, soya milk, flavoured milk, and the array of milk-like products including energy drinks and caffeinated milk beverages). Milk and related products are currently under the residential packaging and paper products schedule of the Recycling Regulation. Obligating these products under the beverage container deposit-refund schedule would provide the needed incentive for greater returns from residents and would capture all containers from commercial generators (e.g., restaurants, schools, offices) that are currently exempted from the Recycling Regulation.

This change would require an amendment to the Recycling Regulation, which currently has a range of deposit-refund amounts from 5 to 20 cents depending on the container type. Creating a uniform 10 cent deposit-refund for all beverage containers translates into an estimated additional 50 million beverage containers diverted from landfills and our environment. Most plastic beverage containers sold today have a 5 cent deposit and are frequently discarded, yet beverage containers with a 10 cent deposit, such as beer cans/bottles, are returned more often by consumers.

The Recycling Regulation currently requires all refunds for returning beverage containers to be paid in cash. Modernizing the Recycling Regulation to also allow refunds to be electronic and paid in an alternative form of cash (e-transfer, cheque, in-store credit, charitable donation, or similar alternatives), would increase ease and efficiency for the consumer. An example includes convenience options such as drop-and-go systems where customers set up an account, tag their mixed bag of containers and drop it in an automated receiving system. Bags are later picked up and sorted, and credit is applied to the customer's account. The existing depot network and cash refunds would still be maintained as an option to ensure those individuals and communities depending on cash refunds continue to have access to this immediate source of income.

Other jurisdictions have seen success with raising deposit-refund rates, expanding to more products and modernizing return systems. Oregon's recovery rate was stagnant at 65% in 2016 until a doubling of deposit-refunds from 5 to 10 cents (for all beverage containers), coupled with enhanced return options such as drop-and-go bags, resulted in an overall return rate of 90% in 2018. In 2008, Alberta increased deposit-refunds to a minimum 10 cents and expanded the program to include milk and related products, resulting in total recovery rates since increasing from 75% to 85%.

In two years' time, B.C would review the impact of the deposit rate changes to determine if further increases to the beverage container deposit rate are required to improve the recovery rate.

- » **Do you have comments or suggestions on the ministry's proposal to include milk and milk substitutes in the beverage container deposit-refund schedule?**
- » **Do you have comments or suggestions on the ministry's proposal to create a uniform 10 cent deposit-refund for all beverage containers?**
- » **Do you have comments or suggestions on the ministry's proposal to allow refunds to be electronic and paid in an alternative form of cash (e-transfer, cheque, in-store credit, charitable donation, or similar alternatives)?**

4

REDUCING PLASTICS OVERALL



Supporting effective ways to prevent plastic waste in the first place and ensuring recycled plastic is re-used effectively.

DEVELOPMENT OF NATIONAL RECYCLED CONTENT PERFORMANCE STANDARDS

Recycled content performance standards (standards) go hand in hand with extended producer responsibility programs. EPR programs collect and recycle the materials, turning them into recycled plastic commodities. Standards create the demand for recycled plastic materials by requiring a minimum content of recycled plastic in new packaging and products.

Standards help producers of plastic products to design products with recyclability in mind, which helps to eliminate products that are hard to recycle. Having a common national standard provides clarity and avoids a patchwork approach across provinces and territories for producers. National standards also incentivize and complement government procurement policies and targets requiring purchased plastic products to contain recycled plastic. Procurement policies at all levels of government can stimulate and support market development in this area.

Increasing the levels of recycled plastic content in products can also result in greenhouse gas emissions reductions to help meet the goals set out in [CleanBC⁴](#), the Government's plan to reduce carbon pollution. The production and manufacturing of packaging and products, including the increasing use of plastics, generates greenhouse gas emissions. These emissions can be substantially mitigated by ensuring that packaging and products are reused and, once they reach the end of their life, are collected to be recycled back into new packaging and products. This reduces the need to produce more plastic from virgin materials and fossil fuels.

Recycling plastic beverage containers, for example, has been shown to reduce greenhouse gas emissions by almost 70% compared to producing plastic from virgin resources⁵.

As noted earlier, B.C. has been actively involved in developing the Canada-wide Action Plan on Zero Plastic Waste⁶ which identifies the federal government as leading the development of national performance requirements and standards for plastics. British Columbia has a significant opportunity to collaborate and influence the development of these standards, in particular with the proposed recycled content standard.

- » **What should B.C. consider in the development of a national standard on recycled content and any associated targets?**
- » **Do you have comments or suggestions on any related provincial policies or actions?**

Recycling plastic beverage containers, for example, has been shown to reduce greenhouse gas emissions by almost 70% compared to producing plastic from virgin resources.



⁴ <https://cleanbc.gov.bc.ca/>

⁵ <https://bit.ly/30UDrkd>

⁶ <https://bit.ly/2Q0QVtP> and <https://bit.ly/2XbqmAx>

Implementation

The actions proposed in this consultation paper will further advance the reduction, diversion and recyclability of plastics and other single-use items in B.C.

Feedback received will help B.C. determine other potential actions that should be developed or further consulted upon at the provincial level. Your input is welcomed regarding other potential products for inclusion in the Recycling Regulation, or other policy initiatives to minimize plastic waste.

All comments received through webinars, meetings, mail or email by 18 September 2019 will be compiled for review by ministry staff before final drafting of the regulatory amendments. This is expected to be completed in 2019.

By expanding recycling and recovery of plastics that are in use, we can significantly reduce the waste that accumulates in landfills and waterways.



Additional Information Sessions

The ministry will conduct a series of webinars on the proposed revisions. The webinars will review the information contained in this consultation paper and provide an opportunity to ask questions and provide comments.

If you are interested in participating in a webinar, please contact the email below:

Email: Plastics@gov.bc.ca

Providing Feedback

The ministry welcomes comments on the information and proposals outlined in this consultation paper, and has provided the following opportunities for feedback:

- 1. Complete the public survey at:**
<https://cleanbc.gov.bc.ca/plastics>
- 2. Send a formal submission to: Plastics@gov.bc.ca**
Read the guidelines for formal submissions at:
<https://cleanbc.gov.bc.ca/plastics>
- 3. Email your comments to: Plastics@gov.bc.ca**
- 4. Mail your comments to:**
*Ministry of Environment and Climate Change Strategy –
Recycling Regulation Amendments
PO Box 9341 Stn Prov Govt
Victoria, BC V8W 9M1*

All comments received through the public survey, formal submission, webinars, mail or email by September 18, 2019 will be compiled for review by ministry staff before final drafting of the amendments to the Recycling Regulation or other policy changes. This is expected to be completed in 2019.

Please note that each organization's submission with opinions and identifiers could be made public either through a decision by the Ministry or if a Freedom of Information request is made under the *Freedom of Information and Protection of Privacy Act*.

Thank you for your time and comments.

September 17, 2019

Honourable George Heyman
Ministry of Environment and Climate Change Strategy
Recycling Regulation Amendments
PO Box 9341 Stn Prov Govt
Victoria, BC V8W 9M1

Via Email: plastics@gov.bc.ca

Dear Minister Heyman:

RE: CleanBC Plastics Action Plan

Please accept this letter, attached Council Resolution and related report as feedback from the City of North Vancouver on the CleanBC Plastics Action Plan Engagement.

Council appreciates the opportunity to provide feedback on an issue that will have a significant impact on local communities. The City of North Vancouver is pleased to provide the following feedback on new policy opportunities and proposed amendments to the Recycling Regulation to address plastic waste as outlined in the Plastics Action Plan Policy Consultation Paper:

1. Bans on Single-Use Packaging

The City is supportive of provincial bans of plastic packaging as a policy option to prevent plastic waste and encourages the Province to:

- Move quickly to implement appropriate province-wide bans to avoid a patchwork of regulations at the municipal level;
- Bear the responsibility for monitoring and enforcing these bans;
- Select plastic packaging products for bans based on scientific evidence of their potential contribution to litter and marine pollution, and lifecycle greenhouse gas emissions, and where viable reusable, recyclable or compostable alternatives exist including but not limited to:
 - Foam cups and containers;
 - Plastic straws, stir sticks and cutlery; and
 - Plastic bags
- Implement bans on the sale and distribution of plastic packaging materials, not on disposal;
- Include exemptions for accessibility and inclusion purposes as determined from consultation with health care professionals; and
- Participate in the development of plastic packaging bans at the federal government level.

2. More Recycling Options

The City is very supportive of expanding the province-wide Extended Producer Responsibility (EPR) program for packaging and printed paper products and encourages the Province to:

- Include materials generated at Industrial, Commercial and Institutional (ICI) properties
- Include packaging-like and single-use products that are almost indistinguishable from materials currently regulated under the Recycling Regulation to simplify recycling for consumers including, but not limited to:
 - Freezer/sandwich bags;
 - Re-usable rigid plastic containers;
 - Canning jars;
 - Wrapping paper;
 - Moving boxes;
 - Disposable party plates, bowls and cups; and
- Emphasize reduction and reuse of materials included in the EPR program and set quantitative reduction targets for materials over time.

The City is not supportive of the Province's proposal to include in the Recycling Regulation single-use items that would be more effectively reduced through bans at the point of sale or distribution, lead to increased confusion among the public, and be difficult to manage for collection and processing such as plastic straws, stir sticks and cutlery.

3. Plastic Bottle and Beverage Container Returns

The City is supportive of the Province's proposal to include milk and milk substitutes in the beverage container deposit-refund schedule and modernize the Recycling Regulation to allow refunds to be electronic. The City is also supportive of the Province's proposal to create a uniform deposit-refund for all beverage containers. The City strongly recommends that the Province implement a higher deposit-refund value to reflect inflation and to promote increased return rates, such as a 25 cent deposit-refund.

4. Reducing Plastics Overall

The City is supportive of the Province's involvement in the development of a national standard on recycled content and encourages the Province to consider:

- A national labelling system to easily identify recyclable materials;
- Prioritizing recycled content standards for materials with greatest greenhouse gas; emissions reduction potential; and
- Leading the way with provincial recycled content standards

Thank you for the opportunity to provide comments on this important initiative. We look forward to continued collaborative work to achieve shared environmental protection and greenhouse gas reduction objectives.



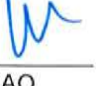
Yours sincerely,

Linda Buchanan
Mayor

Cc: Honourable Bowinn Ma, MLA, North Vancouver-Lonsdale
North Vancouver City Council

THIS PAGE INTENTIONALLY LEFT BLANK



 Division Manager	 Director	 CAO
--	---	--

The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Wendy Tse, Planner 2

Subject: REZONING APPLICATION: 1420 FORBES AVENUE
(M. & R. VENTURA / FARZIN YADEGARI ARCHITECT INC.)

Date: September 4, 2019 File No: 08-3360-20-0470/1

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

RECOMMENDATION:

PURSUANT to the report of the Planner 2, dated September 4, 2019, entitled "Rezoning Application: 1420 Forbes Avenue (M. & R. Ventura / Farzin Yadegari Architect Inc.):

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714" (M. & R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue) be considered and the Public Hearing be waived;

THAT Development Variance Permit No. DVP2018-00004 be considered for issuance under Section 498 of the *Local Government Act* and the Public Meeting be waived;

AND THAT notification be circulated in accordance with the *Local Government Act*.

ATTACHMENTS:

1. Context Map (Doc#[1820757](#))
2. Architectural and Landscape Plans (East Lot), dated August 2019 (Doc#[1821073](#))
3. Architectural and Landscape Plans (West Lot), dated August 2019 (Doc#[1821071](#))
4. Public Consultation Summary (Doc#[1820718](#))
5. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714" (Doc#[1820429](#))
6. Development Variance Permit 2018-00004 (Doc#[1820438](#))

PROJECT DESCRIPTION

The development proposes the subdivision of 1420 Forbes Avenue into two lots, each with a frontage of 9.9 metres (32.5 feet) and an overall size of approximately 424.6 square metres (4,570 square feet). A new single-family dwelling with secondary suite is proposed on each of the new lots. Each lot will also have a detached garage for two vehicles, accessed from the lane.

The requested zone change and variances to the Zoning Bylaw to permit the proposed development are identified in Table #1. The proposed development complies with the majority of requirements in the One-Unit Residential 2 (RS-2) Zone and the requested variances are minor in nature.

Table #1. Requested Changes to the Zoning By-law

East Lot

	Current Designation/Regulation	Proposed Designation/Regulation
Zoning	RS-1	RS-2
Lot Frontage	Minimum 10 metres (32.8 feet)	9.9 metres (32.5 feet)
Rear Lot Line	Minimum 14.9 metres (49 feet) (0.35 times the lot depth)	14 metres (46 feet) (0.33 times the lot depth)

West Lot

	Current Designation/Regulation	Proposed Designation/Regulation
Zoning	RS-1	RS-2
Lot Frontage	Minimum 10 metres (32.8 feet)	9.9 metres (32.6 feet)
Exterior Side Lot Line	Minimum 1.9 metres (6.3 feet) (0.2 times the Lot width)	1.2 metres (4 feet) (0.12 times the Lot width)
Accessory Structure	A trellis or a gazebo with no waterproof roof, up to 2.4 metres (8 feet) in height, may be sited anywhere on the lot	One entry trellis, up to 3.7 metres (12 feet) in height, may be sited in the exterior setback.

POLICY FRAMEWORK

The subject site is designated Residential Level 1 in the Official Community Plan (OCP). This designation allows for ground-oriented housing in the form of detached single family dwellings with non-strata accessory uses, including secondary suites and Coach Houses.

Metro Vancouver Regional Growth Strategy (Metro 2040)	
Goal 1 <i>Create a Compact Urban Area</i>	The proposal presents a form of intensification that is appropriately scaled to the surrounding neighbourhood and contributes to a compact urban area.
Goal 2 <i>Support a Sustainable Economy</i>	Proposed secondary suites provide rental housing options that can support a diversity of income levels, including individuals who work in the community.
Goal 4 <i>Develop Complete Communities</i>	The proposed development adds to the diversity of housing forms in the City to promote the ability for people to age-in-place and stay in their neighbourhood through all stages of life.
Goal 5 <i>Support Sustainable Transportation Choices</i>	The site is well serviced by transit, bicycle and pedestrian infrastructure, including the 240 bus to Vancouver City Centre and the Green Necklace (bicycle and pedestrian facility) on Jones Avenue and West Keith Road.

Official Community Plan	
Policy 1.1.2 <i>Align growth with the development community amenities and infrastructure</i>	Intensification of the site supports the use of existing amenities, including the Green Necklace and Mahon Park.
Policy 1.3.1 <i>Ensure that new development is compatible with the established urban form of the City, reflecting the primacy of the Lonsdale Regional City Centre and the transition through mid- and low-rise buildings to lower-density residential neighbourhoods</i>	The proposed development on the site is appropriately scaled to the neighbourhood and supports the primacy of the Lonsdale Regional City Centre.
Policy 1.3.5 <i>Encourage design excellence in developments through carefully considered, high quality architecture and landscaping, with varied designs which are interesting, sensitive and reflective of their surroundings</i>	The surrounding neighbourhood does not have a consistent character. The site to the east, 458 West 14 th Street, is a 'B' ranked heritage building ("the Smellie Residence") in the City's 2013 Heritage Register. The proposed development complements the heritage character of the adjacent building and is appropriate for a Residential Level 1 neighbourhood.
Policy 1.3.6 <i>Encourage architecture that responds to the unique context of the City in a sensitive, sustainable, and aesthetically compatible manner</i>	Design and materials are consistent with those found in the local context. Landscaping utilizes native plant species.

Policy 1.5.1 <i>Provide opportunities for a range of housing densities, diversified in type, size and location</i>	The proposed development creates two modest size single family homes, each with a rental suite, promoting smaller and more affordable housing forms.
Housing Action Plan	
Action #5 <i>To increase rental options in lower density areas to support renters and provide homeowners with additional rental income, while retaining neighbourhood scale and character</i>	The proposed development includes rental suites. The suites can provide owners with rental income, in addition to increasing the supply of rental units available in a lower density area that is walkable and well-served by transit.
Sustainable Development Guidelines	
Natural Systems <i>The ability of natural systems, both global and local, to support life. Parks and green spaces help regulate the climate, clean and filter water and air, and provide recreational and aesthetic benefits. Maintaining healthy natural systems will reduce strain on municipal infrastructure, support local wildlife and enhance quality of life for community members</i>	The proposed landscaping is primarily permeable, with permeable pavers used for outdoor areas and walkways. All plants included in the landscape plan are native species.

PLANNING ANALYSIS

Site Context and Surrounding Use

The site is located on the northeast corner of Forbes Avenue and West 14th Street, in close proximity to Mahon Park to the north and West Keith Road to the south (Attachment #1). The subject site is on a block with all single family dwellings. The area transitions to slightly higher densities to the north, east, and south with the allowance for duplexes, triplexes, and multi-unit apartments. The buildings and uses immediately surrounding the subject site are outlined in Table #2.

Table #2. Surrounding Uses

Direction	Address	Description	Zoning
North	465 West 15 th Street	Single family dwelling	RS-1
South	1348 Forbes Avenue	Single family dwelling	RS-1
East	458 West 14 th Street	Single family dwelling ('B' ranked heritage building)	RS-1
West	502 West 14 th Street	Single family dwelling	RS-1
	1409 Forbes Avenue	Single family dwelling	RS-1
	1417 Forbes Avenue	Single family dwelling	RS-1
	1429 Forbes Avenue	Single family dwelling	RS-1
Southwest	1345 Forbes Avenue	Single family dwelling with suite	RS-2
	505 West 14 th Street	Single family dwelling with suite	RS-2

Use

The policy framework applicable to the subject site supports the proposed development. The site is located in close proximity to transit, recreation facilities, commercial areas and schools. Additionally, the units will support affordable homeownership through the inclusion of rental suites, which will also benefit the overall rental housing stock.

Intensity

The proposed rezoning would allow for the subdivision of the existing lot, creating two new lots of 9.9 metres (32.5 feet) in width, slightly below the minimum lot width requirement of 10 metres (32.8 feet) for One-Unit Residential Use 1 (RS-1) zoned lots. Architectural and landscape plans for the proposed developments are provided in Attachments #2 and #3. The design shows that the future lots can accommodate the proposed principal dwellings and suites with required parking. The proposed density is consistent with the Official Community Plan at 0.5 Floor Space Ratio (FSR) and is similar to surrounding properties.

Form

The proposed form of the development complies with most of the RS-2 Zone requirements and is appropriate in character for the low-density residential context, particularly with existing smaller lots across the streets on Forbes Avenue and West 14th Street. The minor zoning variances requested are outlined in Zoning Amendment Bylaw No. 8714 (Attachment #5) and Development Variance Permit No. DVP2018-00004 (Attachment #6).

COMMUNITY CONSULTATION

A Developer's Information Session was held on September 13, 2018 and was attended by 11 individuals. A total of 18 comment forms were received, of which one expressed concern about the project, primarily in relation to traffic in the area and pedestrian safety. A summary of the public consultation, as prepared by the applicant, is available in Attachment #4.

Given the limited concerns identified from the surrounding neighbourhood, staff is recommending that the Public Hearing be waived. Should Council wish to refer the application to a Public Hearing, the first active clause in the resolution should be amended to read:

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714" (M. and R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue) be considered and referred to a Public Hearing;

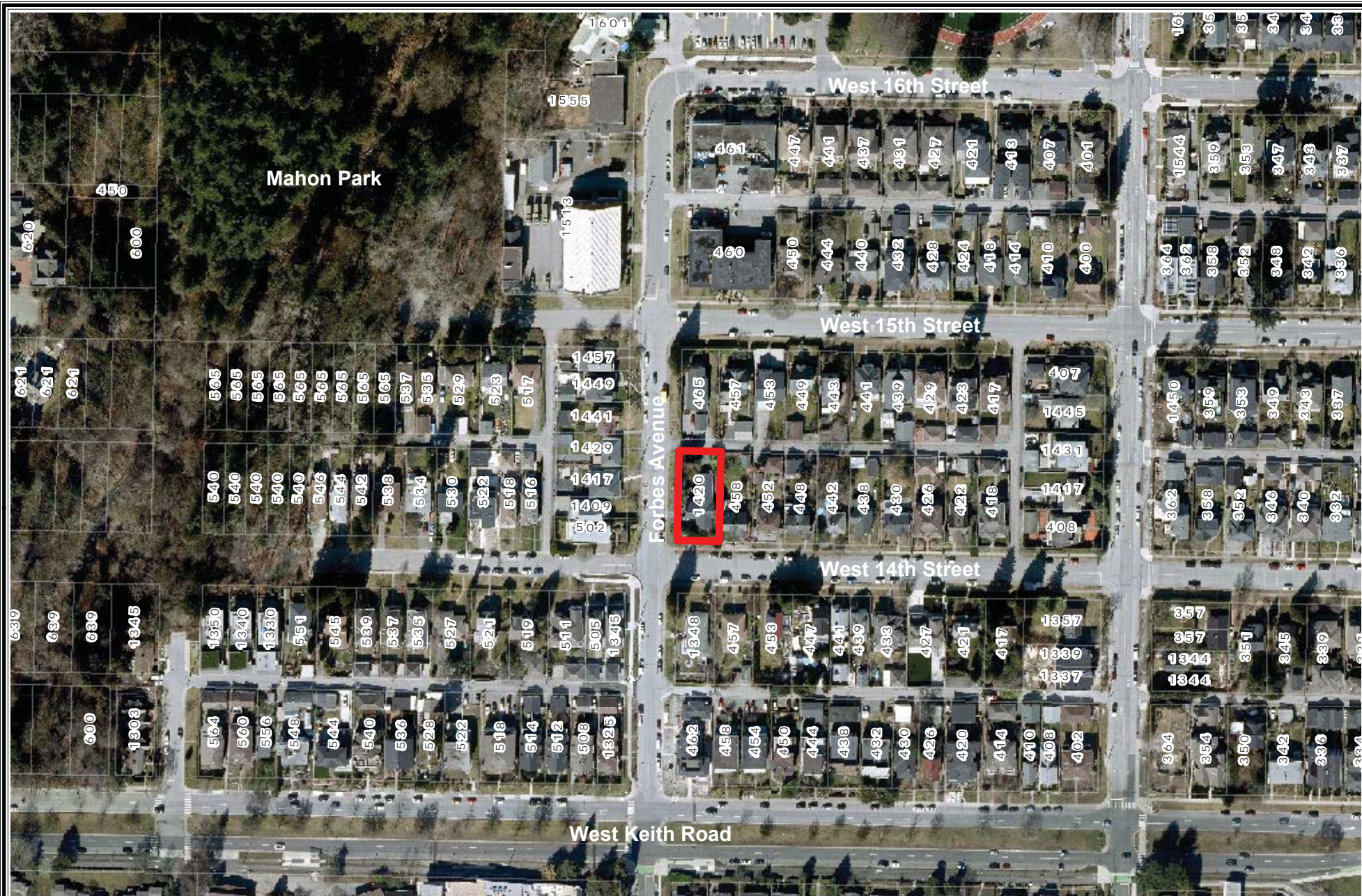
CONCLUSION

This proposal represents good planning. The subject site's proximity to existing recreational infrastructure, commercial areas, and transit and active transportation facilities make it an appropriate site for densification. The project would result in a net increase of one principal unit and two accessory suites, while maintaining the development form of the surrounding properties as single-family dwellings. The proposed parking is one space per unit, as per the Zoning Bylaw, which is adequate given the proximity to transit along Jones Avenue and West Keith Road. Policy and planning analysis supports the proposed rezoning.

RESPECTFULLY SUBMITTED:

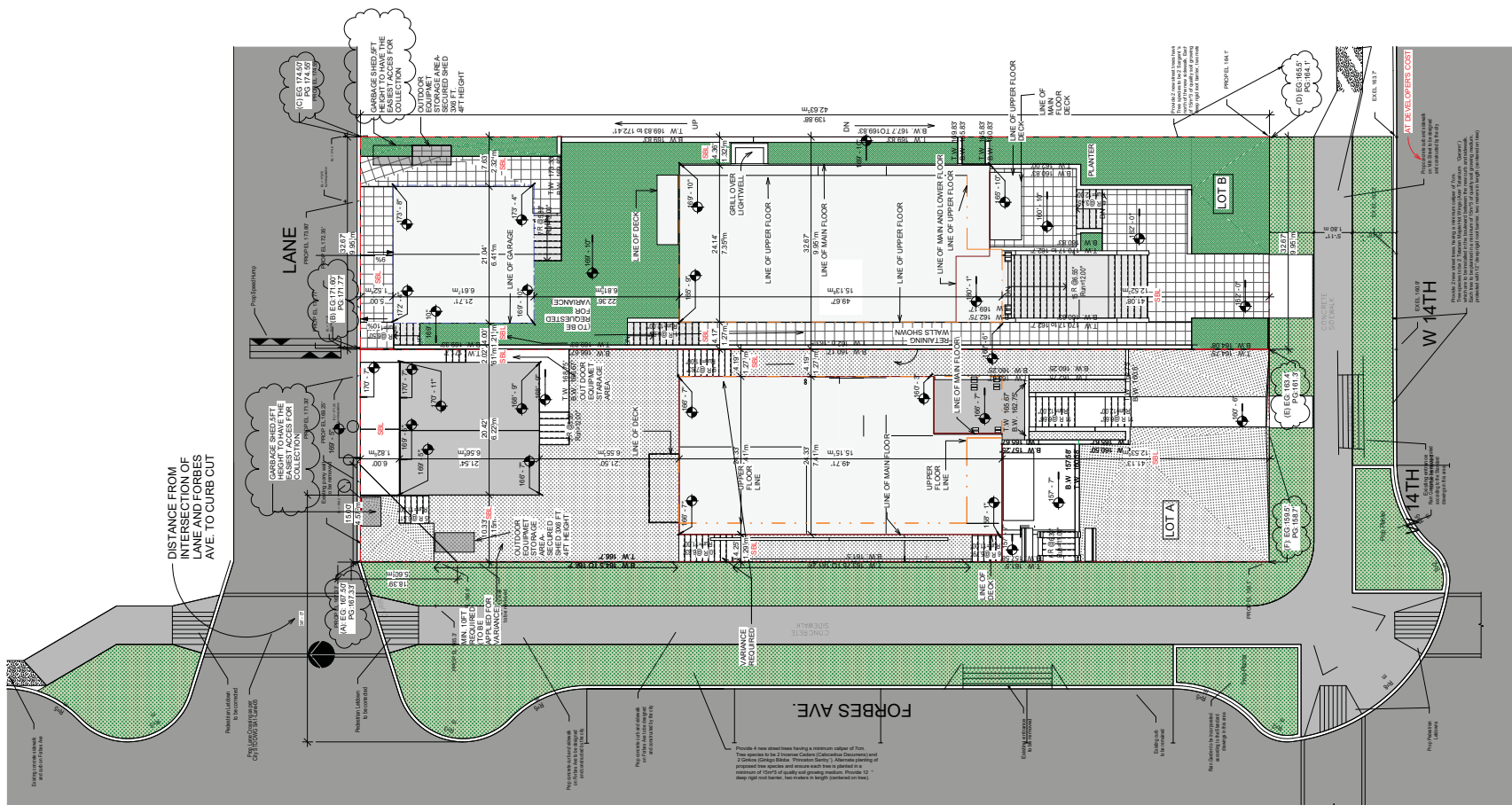


Wendy Tse
Planner 2

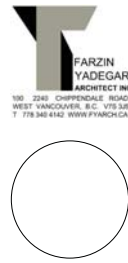


1420 FORBES - (LOT B) EAST LOT





① SITE $\frac{1}{8"} = 1'.0"$

[illegible]

PROJECT:

1420
FORBES-LOT B
AND LOT A

DRAWN BY: F.Y.-A.A.

CHECKED BY:	Checker
-------------	---------

SCALE: $1/8" = 1'-0"$

DATE: 2018-06-01

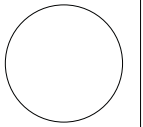
TITLE:	
--------	--

SITEPLAN

SHEET NO:

A-1.1

NOTE: THIS DRAWING IS FOR COORDINATION AND/OR REVIEW ONLY AND NOT FOR CONSTRUCTION UNLESS THE DRAWING IS SEALED AND SIGNED.
ALL RIGHTS RESERVED: THIS DRAWING AND ALL THE DESIGN THEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF THE ARCHITECT AT ALL TIMES AND MAY NOT BE USED OR REPRODUCED WITHOUT PRIOR WRITTEN CONSENT OF THE ARCHITECT. ARCH D

[illegible]

PROJECT:

1420
FORBES-LOT B

DRAWN BY: <div style="text-align: right; font-size: 1.2em;">F.Y.-A.A.</div>	CONSTRUCTION
DATE:	

CHECKED BY:	F.Y
-------------	-----

SCALE: $1/4" = 1'-0"$

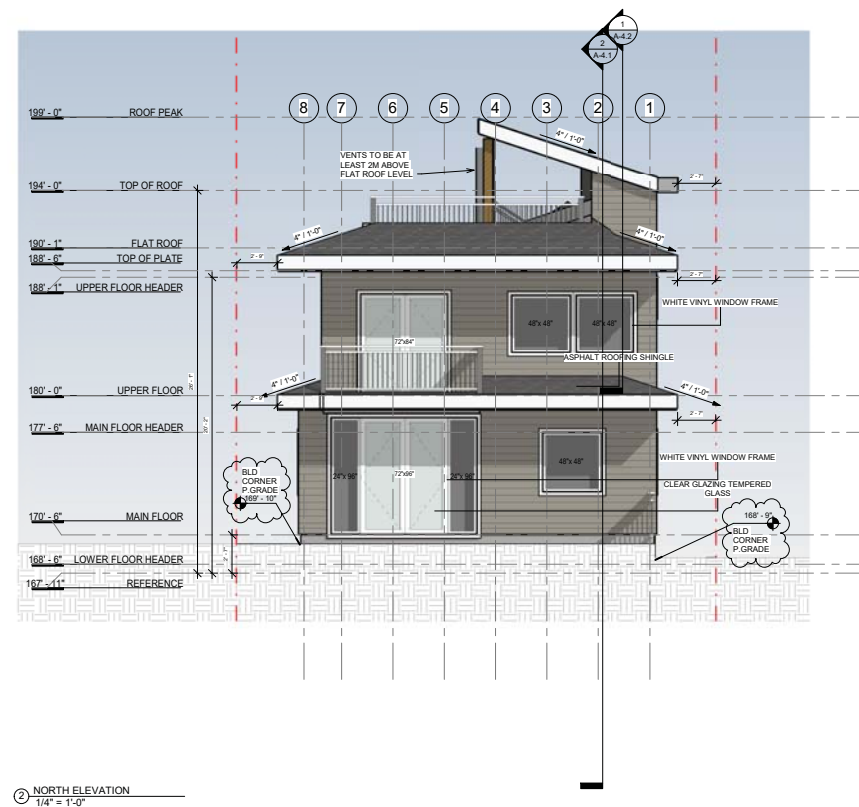
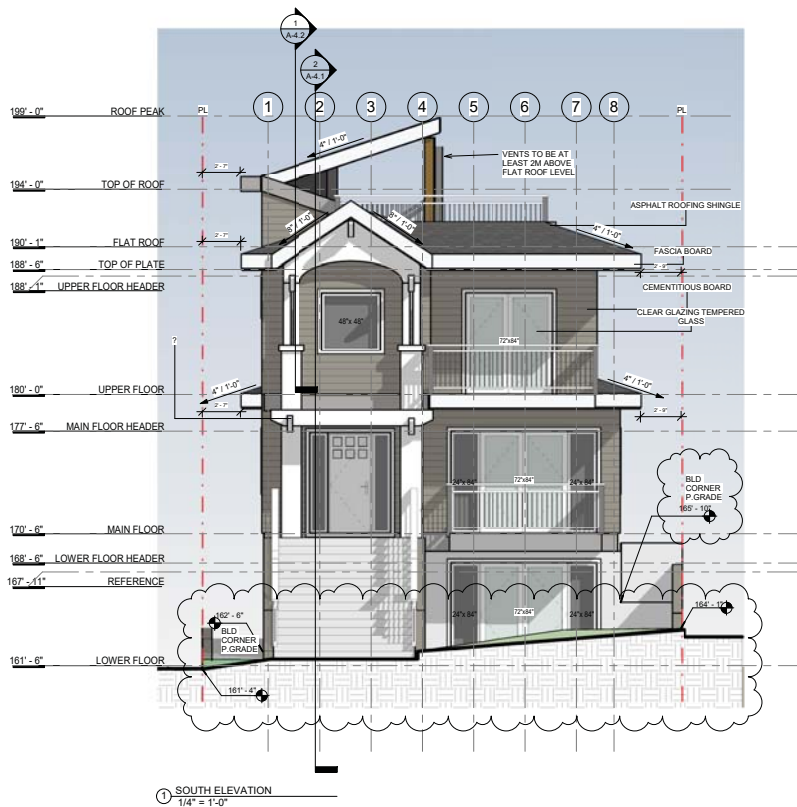
DATE: 2018-06-01

TITLE:	VID
--------	-----

SOUTH &
NORTH
ELEVATIONS

SHEET NO:

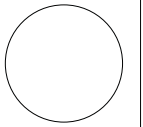
A-3.1



NOTE: THIS DRAWING IS FOR COORDINATION/REVIEW ONLY AND NOT FOR CONSTRUCTION UNLESS THE DRAWING IS SEALED AND SIGNED.
THIS DRAWING AND ALL THE DESIGN THEREIN ARE THE SOLE AND EXCLUSIVE PROPERTY OF THE ARCHITECT AT ALL TIMES AND MAY NOT BE USED OR REPRODUCED WITHOUT PRIOR WRITTEN CONSENT OF THE ARCHITECT. ARCH.D

1420 FORBES - (LOT A) WEST LOT



[illegible]

PROJECT:

1420
FORBES-LOT A

DRAWN BY: F.Y.-AA

CHECKED BY:	Checker
-------------	---------

SCALE: $1/4" = 1'-0"$

DATE: 2018-06-01

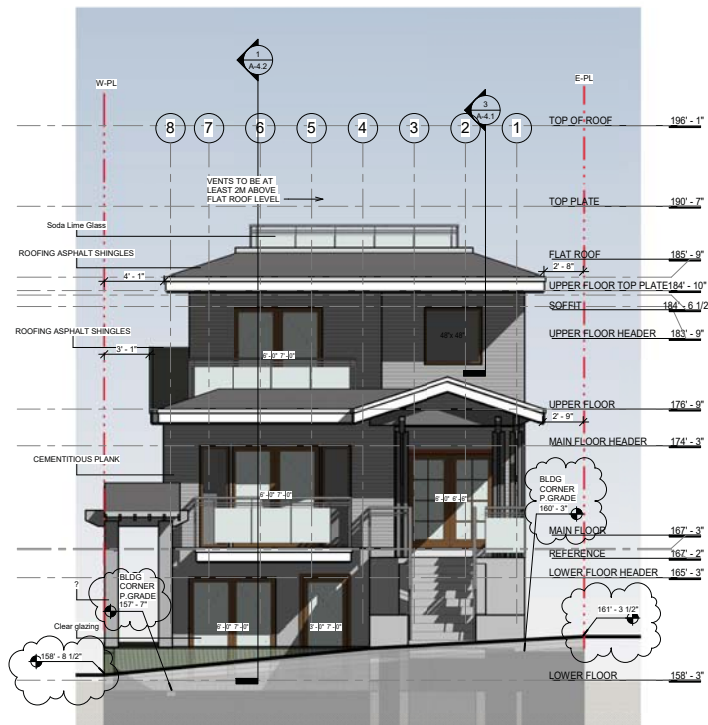
TITLE:	REVISION:
--------	-----------

SOUTH &
NORTH
ELEVATIONS

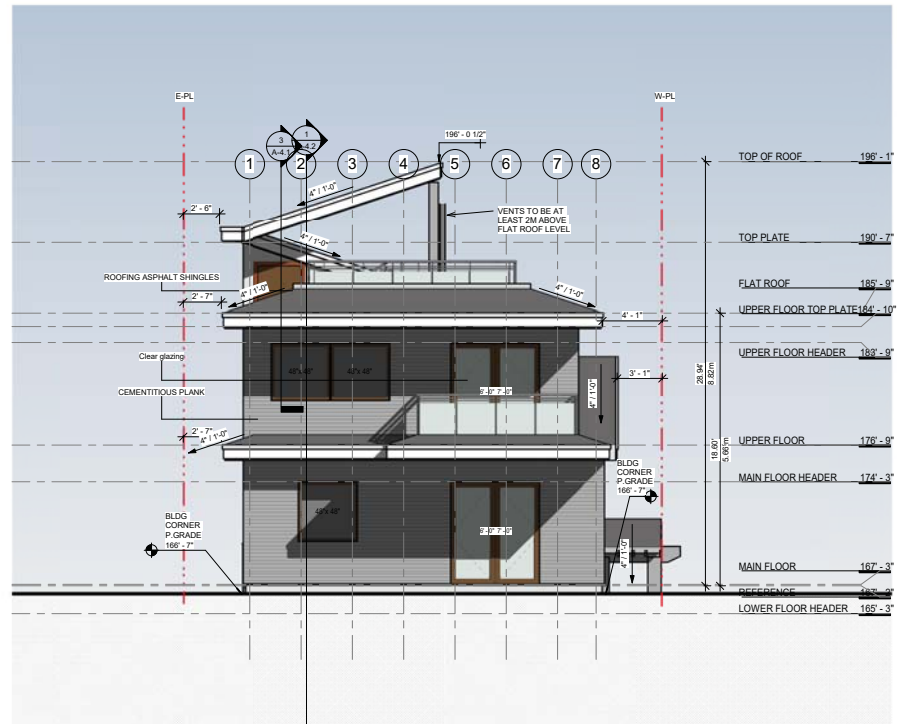
SHEET NO:

A-3.1

NOTE: THIS DRAWING IS FOR COORDINATION/REVIEW ONLY AND NOT FOR CONSTRUCTION UNLESS THE DRAWING IS SEALED AND SIGNED.
THIS DRAWING AND ALL THE DESIGN THERE IN ANY MEDIA FORMAT ARE THE SOLE AND EXCLUSIVE PROPERTY OF THE ARCHITECT AT ALL TIMES AND MAY NOT BE USED OR REPRODUCED WITHOUT PRIOR WRITTEN CONSENT OF THE ARCHITECT. ARCH D



① SOUTH ELEVATION
1/4" = 1'-0"



② NORTH ELEVATION
1/4" = 1'-0"



Seraj Construction Inc.

1345 Forbes Ave. North Vancouver, V7M 2X9

604-719-2921

nobari_r@yahoo.com

Open House Report Summary for 1420 Forbes Avenue

Date:

The open house was held on Thursday September 13th, 2018

Report:

8 people attended the open house, and 4 full set of drawings were available for reviewing. The drawings were not review by anyone, and discussion were mainly regarding the sidewalk of another project in the neighbourhood. This sidewalk is yet to be done by the city, and is out of the control of the residents. I explained how there is a schedule set in place by the city operation group to do concrete work for the sidewalk, and that neither I nor anyone else has the ability to move the date forward.

One neighbour asked for the possibility of keeping in place an existing small retaining wall, since he liked it. The applicant explained how there are numerous reasons why it is not possible to keep a wall of this size during construction, such as safety concerns during excavation.

Reason for subdivision were discussed, and the applicant explained that this property is one of the largest properties in lower and central Lonsdale, and how it would not be proper use of the land, and not in the benefit of the public, if there were only to be a single-family home built on this large property. The applicant also wishes to give their children, who are married with children, the possibility of residing in this neighbourhood and close to home.

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8714

A Bylaw to amend “Zoning Bylaw, 1995, No. 6700”

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 “**Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714**” (M. & R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue).
2. Division VI: Zoning Map of Document “A” of “Zoning Bylaw, 1995, No. 6700” is hereby amended by reclassifying the following lots as henceforth being transferred, added to and forming part of RS-2 (One-Unit Residential 2) Zone:

Lot	Block	D.L.	Plan	
25	46	271	1062	from RS-1

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.

MAYOR

CITY CLERK



THE CORPORATION OF THE CITY OF NORTH VANCOUVER
DEVELOPMENT VARIANCE PERMIT

Permit No. DVP2018-00004

File: 08-3090-20-0242/1

Issued to owner(s): **Mario D. Ventura and Remedios G. Ventura**

Respecting the lands located at **1420 Forbes Avenue**, North Vancouver, BC, legally described as:

LOT 25 BLOCK 46 DL 271 PLAN 1062 PID: 008-225-893

(the “**Lands**”)

List of Attachments:

Schedule “A”: List of Plans

Authority to Issue:

1. This Development Variance Permit is issued pursuant to Section 498 of the *Local Government Act*.
-

Bylaws Supplemented or Varied:

2. The provisions of the City of North Vancouver “Zoning Bylaw, 1995, No. 6700” are hereby varied as follows:
 - A. Section 412(2)(f) shall be varied so that, notwithstanding the regulations under Subsections 412(2)(b) and (c), one entry trellis, up to 3.7 metres (12 feet), may be sited in the exterior setback on the West Lot;
 - B. Section 509(5)(d) shall be varied so that the Principal Building on the West Lot shall not be sited less than 1.2 metres (4 feet) from the Exterior Side Lot Line; and,
 - C. Section 509(5)(b) shall be varied so that the Principal Building on the East Lot shall not be sited less than 14 metres (46 feet) from the Rear Lot Line.

Special Terms and Conditions of Use:

3. The Buildings and Structures shall be developed in accordance with the plans dated and listed on the attached Schedule A "List of Plans" and filed in the offices of the City, approved by Council, and in compliance with the regulations and conditions listed hereunder including:
 - A. Building Permits shall be obtained for the construction of all buildings and structures.
 4. No variances other than those specifically set out in this permit are implied or to be construed.
 5. All plans attached to this Permit and specifications referred to above are subject to any changes required by the Building Inspector or other officials of the City where such plans and specifications do not comply with any bylaw or statute, and such non-compliance is not specifically permitted by this Development Variance Permit. The Lands may be subject to additional regulations, restrictive covenants and agreements which may affect their use, development and amenities, if any section or lesser portion of this Development Variance Permit is held invalid for any reason the invalid portion shall be severed from this Development Variance Permit and the validity of the remainder of the Development Variance Permit shall not be affected.
-

General Terms and Conditions:

6. Pursuant to Section 504 of the *Local Government Act*, this Permit lapses if the work authorized herein is not commenced within 24 months following issuance of this Development Variance Permit. In the event the Owner is delayed or interrupted or prevented from commencing or continuing the construction on or about the subdivision by reason of any Act of God, labour unrest (including strike and lockouts), weather conditions or any similar cause reasonably beyond the control of the Owner, the time for the completion of the works shall be extended for a period equal to the duration of the contingency that occasioned the delay, interruption or prevention, provided that the commercial or financial circumstances of the Owner shall not be viewed as a cause beyond the control of the Owner.
7. This Development Variance Permit shall not vary the permitted uses or densities of land use in the applicable zoning bylaw nor a flood plain specification designated under Section 524(3) of the *Local Government Act*.
8. Nothing in this Permit shall in any way relieve Land Owner/Developers obligation to ensure that the development proposal complies in every way with the statutes, regulations, requirements, covenants and licences applicable to the undertaking.

9. Nothing in this Permit shall in any way relieve the Land Owner/Developers obligation to comply with all setback regulations for construction of structures or provision of on-site services pursuant to the *Health Act*, the *Fire Services Act*, the *Electrical Energy Inspection Act*, and any other provincial statutes.
-

Authorized by Council: _____
Year / Month / Day

Linda C. Buchanan, Mayor

Karla Graham, City Clerk

Date Signed: _____
Year / Month / Day

Note: As required by Section 503 of the *Local Government Act*, the City of North Vancouver shall file a notice of this permit in the Land Title Office stating that the land described in this Permit is subject to Development Variance Permit No. DVP2018-00004.

Notice filed the _____ day of _____, 20_____.

THIS IS NOT A BUILDING PERMIT

Schedule A
List of Plans – 1420 Forbes Avenue

Designer	Project Name	Sheet Description	Sheet No.	Sheet Date	CityDocs File Number
Farzin Yadegari Architect Inc.	1420 Forbes – Lot A	Site Plan	A-1.1	2018-06-01	#1820900
Farzin Yadegari Architect Inc.	1420 Forbes – Lot A	South and North Elevations	A-3.1	2018-06-01	#1820900
Farzin Yadegari Architect Inc.	1420 Forbes – Lot A	West and East Elevation	A-3.2	2018-06-01	#1820900
Farzin Yadegari Architect Inc.	1420 Forbes – Lot A	Landscape	L-1.1	2018-06-01	#1820900
Farzin Yadegari Architect Inc.	1420 Forbes – Lot B	Site Plan	A-1.1	2018-06-01	#1820896
Farzin Yadegari Architect Inc.	1420 Forbes – Lot B	South and North Elevations	A-3.1	2018-06-01	#1820896
Farzin Yadegari Architect Inc.	1420 Forbes – Lot B	East and West Elevation	A-3.2	2018-06-01	#1820896
Farzin Yadegari Architect Inc.	1420 Forbes – Lot B	Landscape	L-1.1	2018-06-01	#1820896

THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8714

A Bylaw to amend “Zoning Bylaw, 1995, No. 6700”

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 “**Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714**” (M. & R. Ventura / Farzin Yadegari Architect Inc., 1420 Forbes Avenue).
2. Division VI: Zoning Map of Document “A” of “Zoning Bylaw, 1995, No. 6700” is hereby amended by reclassifying the following lots as henceforth being transferred, added to and forming part of RS-2 (One-Unit Residential 2) Zone:

Lot	Block	D.L.	Plan	
25	46	271	1062	from RS-1

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.

MAYOR

CITY CLERK

THIS PAGE INTENTIONALLY LEFT BLANK



T 604.983.7305 F 604.985.1573 E info@cnv.org
141 West 14th Street, North Vancouver BC V7M 1H9

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Ben Themens, Director, LEC

SUBJECT: 2019 RATE REVIEW AND BYLAW AMENDMENT

Date: July 9, 2019

RECOMMENDATION

PURSUANT to the report of the Director of Lonsdale Energy Corp., dated July 9, 2019 entitled "2019 Rate Review and Bylaw Amendment":

THAT this report and proposed "City of North Vancouver Hydronic Heat Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2019, No. 8730" be forwarded to LEC customers for information and comment;

AND THAT "City of North Vancouver Hydronic Heat Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2019, No. 8730" be considered and referred to a Public Meeting on September 16, 2019, to receive input from LEC customers and the public.

ATTACHMENTS

1. City of North Vancouver Hydronic Heat Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2019, No. 8730
2. Report from the Director of LEC entitled "Heat Recovery from the New North Shore Wastewater Treatment Plant", dated July 19, 2017
3. Summary of LEC revenue and expenses 2004 – 2018
4. City of North Vancouver Consolidated Hydronic Heat Energy Service Bylaw, 2004, No. 7575

PURPOSE

This report provides an overview of past rate setting and the rationale for proposed rate adjustments to the Meter and Capacity Charges. Lonsdale Energy Corp. (LEC) recommends adjusting both the Meter and Capacity charges by the Consumer Price Index (CPI) rate of inflation to account for general increases in purchasing costs. LEC's Commodity Charge continues to be adjusted based on the cost of natural gas and therefore is not adjusted for inflation.

LEC is also recommending a 5% increase to the Capacity Charge after adjusting for the rate of inflation. In the report "Heat Recovery from the New North Shore Wastewater Treatment Plant", reviewed at the July 24, 2017, Council meeting (Attachment 2), staff indicated that LEC would file for additional annual increases of 5% to the Capacity Charge as part of a 5 year plan to fund LEC's costs for the recovery of heat from the North Shore Wastewater Treatment Plant (NSWWTP). The planned five-year increase provides LEC with the capital to cover the additional costs outlined in the agreement signed between LEC and the Greater Vancouver Sewerage and Drainage District (GVS&DD) on October 5, 2017, as well as allows for the timely reimbursement of LEC's loans from the City of North Vancouver (the City). Given that the increase is only applied to the Capacity Charge, the net increase of the total amount invoiced is expected to be approximately 3% per year, or cumulatively approximately 15% above the rate of inflation over a 5 year period. LEC's proposed rate adjustment for 2019 consists of the following:

Rate Schedule 1 (Consumption up to approximately 300 MWh per year)

Charge	Current Rate	CPI Rate of Inflation	Rate Adj. for Inflation	5% Increase to Capacity	2019 Rates
Meter Charge (per month)	\$ 30.88	2.2%	\$ 31.56	n/a	\$ 31.56
Capacity Charge (per kW)	\$ 4.0329	2.2%	\$ 4.1216	5.0%	\$ 4.3277
Commodity Charge (per kW.h)	\$ 0.04201	n/a	\$ 0.04201	n/a	\$ 0.04201

Rate Schedule 2 (Consumption over approximately 300 MWh per year)

Charge	Current Rate	CPI Rate of Inflation	Rate Adj. for Inflation	5% Increase to Capacity	2019 Rates
Meter Charge (per month)	\$ 166.27	2.2%	\$ 169.93	n/a	\$ 169.93
Capacity Charge (per kW)	\$ 4.0329	2.2%	\$ 4.1216	5.0%	\$ 4.3277
Commodity Charge (per kW.h)	\$ 0.03549	n/a	\$ 0.03549	n/a	\$ 0.03549

Finally, this report compares the pricing of various Lower Mainland utilities.

BACKGROUND

LEC has been in operation since 2004 following the enactment of Bylaw No. 7575, creating the energy service. LEC currently provides heating and cooling services to 79 buildings, totaling more than 5.85 million square feet of building area. This includes approximately 5,000 residential units, a 106 room hotel, numerous offices, commercial outlets, a school, hospital buildings, and various municipal buildings. LEC operates in four separate service areas (Lower Lonsdale, Central Lonsdale, Harbourside / Marine Drive, and Moodyville), which are being interconnected this year. Interconnection allows LEC to transfer energy from its various plants and alternative energy sources throughout the entirety of its distribution network.

LEC is continuously exploring new ways to innovate and increase the sustainability of its district energy system. Currently, LEC is producing thermal energy from the following alternative energy sources: a hydronic solar thermal panel array on the roof of the Library, a geo-exchange field under and around the School District 44 head office, as well as recovery of rejected heat from the cooling process for LEC's cooling customer buildings. These sources are used in priority and directly offset energy that would otherwise be provided by using natural gas fired boilers in LEC's system.

In addition to these sources, on October 5, 2017, LEC entered into an agreement with GVS&DD to purchase thermal energy by recovering heat from the treated sewage at NSWWTP. The plant is currently under construction at Pemberton Avenue and West 1st Street and heat delivery is expected to commence in 2021. Based on the agreement, GVS&DD will install heat pumps inside the NSWWTP to capture the heat and deliver it to LEC's district energy system at a temperature compatible with the system's requirements. LEC is to design and build the distribution system connecting the NSWWTP to LEC's network. GVS&DD has estimated that greenhouse gas (GHG) emissions will be reduced by 7,200 tonnes per year, greatly reducing GHG emissions within the City.

Finally, LEC received a grant from FortisBC to cover a significant portion of the hiring cost of a Senior Energy Specialist to complete a Hydrogen Injection Study that could displace some, if not all, the natural gas currently consumed by LEC. The study was completed in March 2019 and the results are being reviewed by LEC and FortisBC.

Historical Customer Rate Reviews

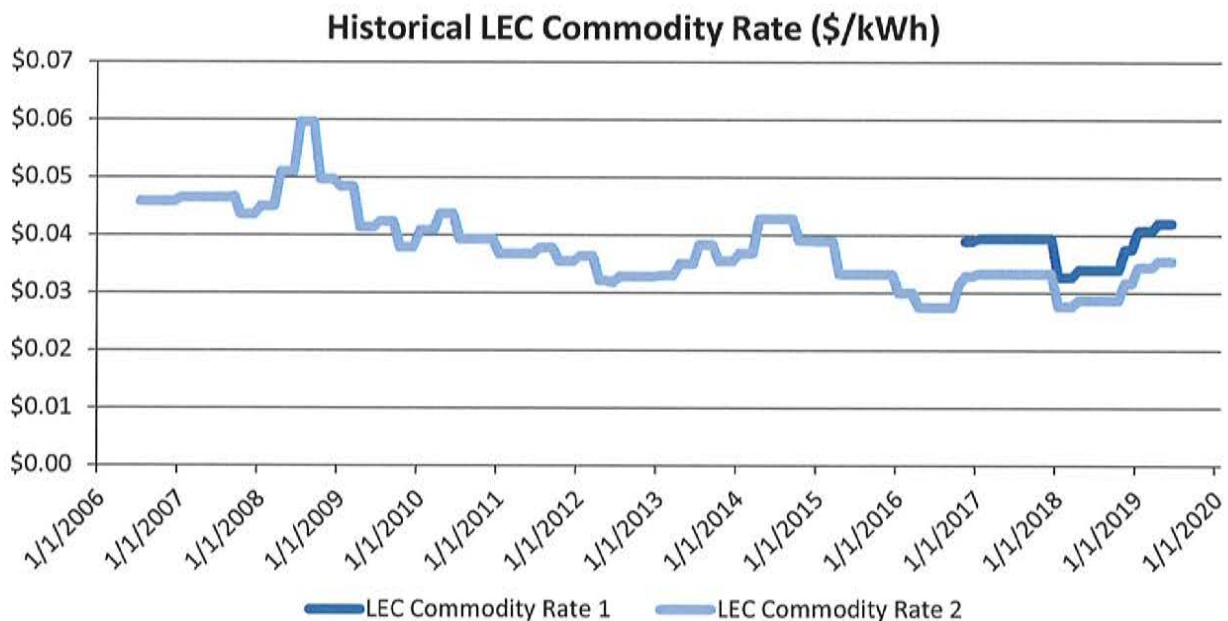
Since the start of its operations, LEC has always aimed to provide competitive rates to its customers. In November of 2016, LEC introduced a new rate structure with two separate rate schedules providing customers with more flexibility based on their annual energy consumption. The new structure allows for smaller customer buildings with lower energy consumption to have a reduced fixed cost (Meter Charge), while increasing the rate for the variable cost based on consumption (Commodity Charge).

LEC adjusts its rates on an annual basis on November 1st of each year. The 2018 rate adjustment implemented a rate increase of 1.5% to the Meter and Capacity Charges based on the past year's CPI rate of inflation, as well as a 5% increase in the Capacity Charge. This was the second Capacity Charge rate increases outlined in LEC's five year plan to fund capital and operating costs for heat recovery at the NSWWTP.

The proposed current adjustment is to be implemented on November 1, 2019, and is based on a rate of inflation of 2.2% for the preceding 12 months. An early approval is requested so that Property Managers may consider the information for building operating cost budget preparation.

Commodity Charge

The Commodity Charge recovers the cost of energy used to generate the heat delivered to customers and the rate is regularly adjusted to follow FortisBC's Rate 3 natural gas pricing fluctuations. As it reacts directly to the cost of purchasing gas, the Commodity Charge is not adjusted for inflation and is instead adjusted when the Fortis Rate 3 changes.



The increase in cost of purchasing natural gas since the end of 2018 is due to the rupture of an Enbridge pipeline on October 9, 2018 outside of Prince Rupert, BC and the subsequent market reaction. Recent reports suggest that the pipeline will return to 100% service in the fall and prices will stabilize.

DISCUSSION

Rationale for the proposed rate increases

CPI Rate of Inflation

The Meter Charge aims to recover the capital cost of the meters and heat exchangers, as well as the operating costs related to meter readings, maintenance, and invoicing. The Capacity Charge is intended to recover the capital and operating costs of the generation facilities (e.g. boiler plants) and distribution system. Over time the expenses for these services increase and LEC's rates are adjusted at the CPI rate of inflation to allow the company to protect its purchasing power. Also, part of the revenue generated by the Meter and Capacity Charges are used to reimburse LEC's debt. The proposed

increase is based on an estimate of the annual change in the CPI as reported by Statistics Canada.

Capacity Charge Increase of 5%

LEC's capital cost commitment to connect to NSWWTP is estimated at \$3.6 million, the majority of which is to construct 1 km of distribution piping from NSWWTP to LEC's Mini-Plant 7 at the intersection of Fell Avenue and 2nd Street. In addition to the capital cost, LEC will be required to reimburse GVS&DD for the operation and maintenance of the heat recovery facility. These operating and maintenance costs will significantly increase LEC's annual expenses and without the annual increases to the Capacity Charge, LEC could begin to incur significant losses in 2021 when NSWWTP is expected to commence heat delivery. LEC will also be responsible for the cost of electricity related to the heat recovery. It is assumed that the savings in natural gas purchases will offset the variable cost of the electricity; however, the savings will be insufficient to cover fixed costs.

An annual Capacity Charge increase of 5% above the rate of inflation from 2018 to 2022 has been recommended to:

- fund the \$3.6 million in capital costs;
- increase revenues to mitigate the future increase in annual expenses resulting from the operation of the heat recovery system; and
- provide cash flow to continue reimbursing amounts owed to the City.

As previously mentioned this increase would increase the total cost of LEC's energy by approximately 15% above the rate of inflation over 5 years. The first increase of 5% was approved by Council on November 20, 2017 and implemented on January 1, 2018 and the second was approved June 11, 2018 and implemented on November 1, 2018. It is expected that by taking a proactive approach and spreading the rate increase over 5 years, the impact of the NSWWTP project on LEC's financial results will be minimized.

The recovery of heat from NSWWTP is a substantial alternative energy source and an opportunity for clean energy that is unique in size and scope. By displacing the use of natural gas in the LEC system, GVS&DD estimates a reduction in GHG emissions of 7,200 tonnes per year. By 2021, NSWWTP is expected to deliver 20,000 to 30,000 MWh of energy to LEC per year. In 2018, LEC delivered 53,100 MWh of heat to its customers, the heat recoverable from NSWWTP could have provided approximately half of LEC's heat from a low-carbon energy source, aligning with both LEC and the City's visions of climate action, reducing GHG emissions and improving sustainability. Without this project, LEC would continue using natural gas boilers to generate the majority of its heat supply and the useable heat processed by the NSWWTP would be discharged into the Burrard Inlet.

Cost of Service – LEC's Competitiveness

The following table provides a comparison of the cost of services of other Lower Mainland district energy providers with LEC, as well as an estimate of the equivalent cost of natural gas and electricity used for heating purposes.

Comparison of LEC rate with other Energy Providers as at May 31, 2019

Energy Provider	Type of Service	Year of rate	Rate (\$ / MWh)	Difference with LEC
LEC	Hot Water	2019	\$81	-
BC Hydro	Electricity	2019	\$118	46%
Fortis BC	Stand-alone NG Boiler	2018	\$89	10%
River District Energy (East Fraserlands)	Hot Water	2018	\$96	19%
South East False Creek (SEFC/NEU)	Hot Water	2019	\$113	40%
SFU UniverCity Energy	Hot Water	2019	\$121	49%
Richmond Oval Village District Energy	Hot Water	2019	\$94	16%
Surrey City Energy	Hot Water	2019	\$115	42%

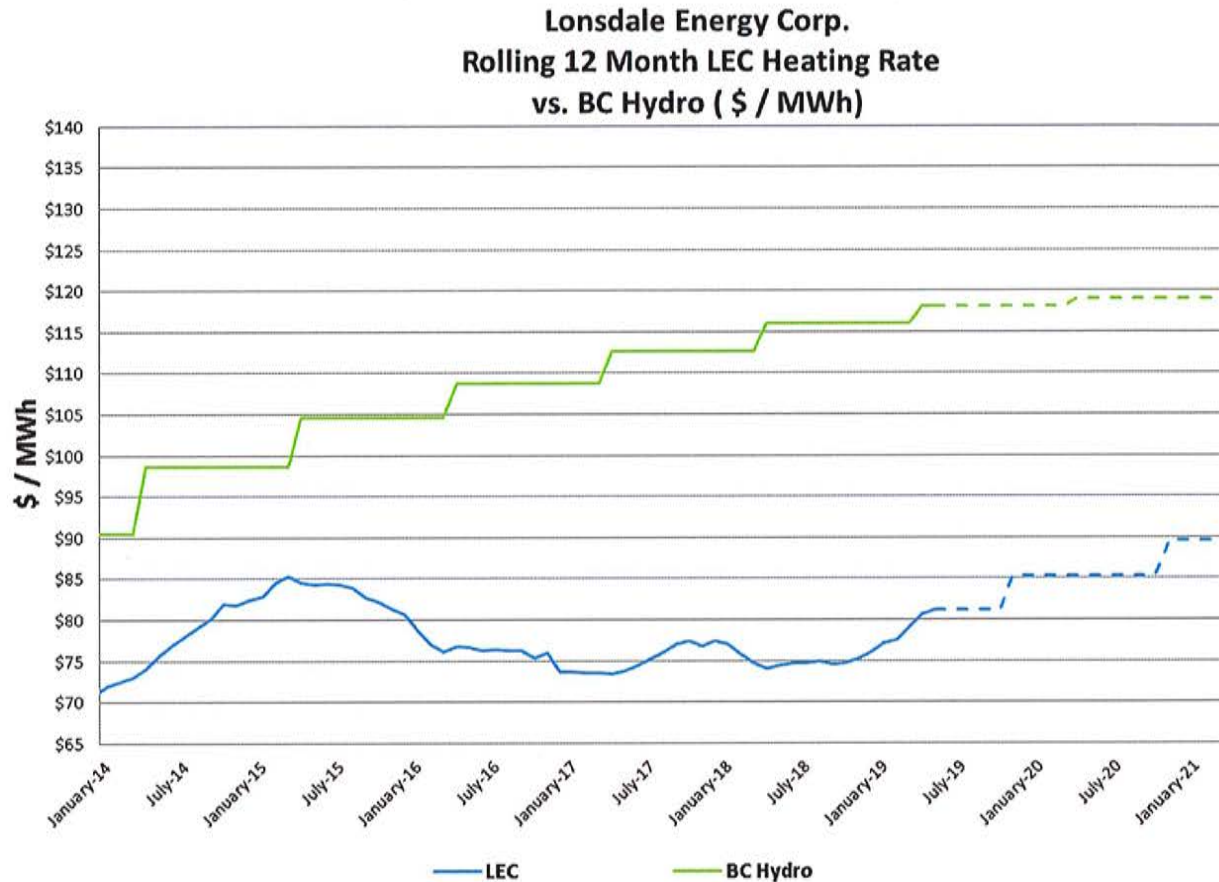
Notes:

- LEC rate is based on revenue and heat delivered for the 12 months ended May 31, 2019.
- BC Hydro cost based on purchase of 50% residential step 1 and 50% residential step 2 electricity price as of April 1, 2019 and a 0% rate rider. Based on these assumptions the 2019 electric cost would be \$118 / MWh.
- Cost of FortisBC, River District Energy, SEFC, SFU UniverCity, Richmond Oval and Surrey City Energy taken from City of Vancouver report dated November 20, 2018.
- Creative Energy Ltd. and UBC Neighbourhood DEU have been omitted, as their systems have historically been steam based.

From June 1, 2018 to May 31, 2019 LEC delivered 54,896,109 kWh of heat and invoiced \$4,458,715 for heating services. This translates into an average energy cost of \$81 / MWh. The above table shows LEC as the lowest price provider of hot water based district energy in the Lower Mainland per megawatt hour. Also, LEC rates are significantly more economical (46%) than using baseboard electric heat (BC Hydro). With the proposed increase in LEC's Capacity Charge, LEC will still provide customers with thermal energy below the price of electricity.

To provide further context, the chart below compares LEC's average annual rate with that of BC Hydro assuming 2,700 kWh of consumption at 50% step 1 and 50% step 2 residential rates. In February of 2019, BC Hydro filed its Revenue Requirement Application for fiscal 2020 and 2021 with the British Columbia Utilities Commission (BCUC). The application proposes net rate increases of 1.76% on April 1, 2019 and 0.72% for April 1, 2020. The BCUC approved the interim rate increase for April 1, 2019. These smaller rate increases represent a change in strategic direction from the past five years, which saw a range of increases by BC Hydro from 3-9% annually. A large portion of this reduced increase in rates is due to the elimination of the Deferral Account Rate Rider (DARR) from 5% to 0%. Amounts received from this fee were used to recover additional and unpredictable energy costs, such as low water inflows or unexpected high market prices. The net rate increase is made up of an increase of 6.85% for energy services less the reduction of the DARR, which results in a net increase of 1.76%.

As seen in the chart below, assuming fixed natural gas costs and the same energy consumption for customers on the LEC network, the proposed net increase would result in an energy cost of just under \$90 / MWh in 2021. This figure assumes an annual increase of 3% above an average inflation rate of 2% over the next two years. The average energy cost is still well below the current cost of electric baseboard heating, \$118 / MWh, and remains below other district energy providers. The historical lows in natural gas prices from 2016-2018 should also be considered as contributors to the low prices LEC has been able to provide customers. The rupture of the Enbridge pipe caused these natural gas prices to rise from late 2018 to early 2019 and LEC prices rose concurrently.



Since its inception, it was envisioned that LEC would aim at providing heat at a rate that would not exceed the cost of electricity by more than 15%. Electric baseboard heating is one of the cheapest alternatives in terms of construction costs and is often preferred by developers. Based on the proposed increases of BC Hydro's rates, the cost of electricity in 2021 will be approximately \$119 / MWh and an additional 15% above this cost of electricity would create a rate ceiling of \$137 / MWh for LEC. LEC's forecasted cost of \$90 / MWh in 2021 remains significantly lower than the cost of electricity and LEC's initial target.

LEC's management and business practices have allowed it to be a low rate provider of district energy and provided opportunities to fund the implementation of carbon neutral

sources of energy, while maintaining costs of service below industry benchmarks and below its goal of less than the cost of electricity plus 15%. LEC endeavors to have rates that are fair to both LEC users as well as municipal residents considering the City has invested in LEC and is funding some of its capital costs.

Other Bylaw Adjustments

Proposed Bylaw No. 8730 makes the following additional adjustments.

The bylaw proposes to increase the one-time service Connection Fee paid by builders or developers by the CPI rate of inflation previously mentioned. This translates into increasing the current Connection Fee from \$81.05 per kilowatt to \$82.83 per kilowatt. LEC believes that this cost is reasonable when considered in the context of the savings provided to developers who do not have to build a boiler/mechanical system to generate hydronic energy.

The fee for "Meter Reading and Invoicing Fee" of additional meters in a premise is to also increase from \$30.88 per month to \$31.56 to account for inflation.

Customer Input

LEC will inform customers of the proposed rate increase by letter inviting them to attend a September 16, 2019, Public Meeting. LEC will also include information on its website and include advertisement in the North Shore News.

Financial Forecasting

The current rate structure seems sufficiently fair, reasonable, and accurate to support adjusting the Meter and Capacity Charges as recommended, assuming that LEC continues providing heating service predominantly using natural gas boiler technology and introducing heat recovery from the NSWWTP in 2021.

The recommendation to increase the above noted rates are based on:

- Maintaining LEC's purchasing power in respect to inflation
- LEC's needs to generate more revenue to fund and operate the substantial alternative energy source at the NSWWTP
- Enabling timely reimbursement of outstanding loans due to the City
- LEC's past success in achieving lower than industry standard rates provides latitude for the proposed rate increase

Staff suggests that planning and decision-making be based on comparing alternatives and opportunities with the business-as-usual scenario that considers current BC Hydro rates and heat generation using natural gas boiler technology. At this time, given the uncertainty concerning the future rate of real estate development in the City, as well as the rate of implementation and cost of alternative energy generation technology, it is challenging to generate a reliable detailed long-term (e.g. 20-year) financial forecast/model.

SUMMARY

LEC aims to be cost neutral to both system users and city residents, and to achieve an appropriate balance of environmental, social, and economically sustainable benefits to the City. Since the start of its operations, LEC has tried to compare its rates with those of BC Hydro to ensure that the amount paid by its customers would not exceed the cost of using electric baseboard by more than 15%. It also must be considered that if rates were significantly lower than the cost of using other technologies including electric baseboards, LEC customers would be benefiting at the expense of the community. The income generated by LEC should be used to provide the City with a return on investment and/or to further diversify LEC's heating sources to include alternative energy which will benefit the whole community.

On that basis and considering the fact that LEC continues to successfully implement alternative energy sources, LEC staff considers that the proposed rate increase, primarily for the funding of the heat recovery from NSWWTP, is fair and reasonable to both LEC customers and the City's residents.

FINANCIAL IMPLICATIONS

The financial implications are addressed throughout the report.

RESPECTFULLY SUBMITTED BY:



Ben Themens, MBA, P.Eng., CGA
Director, LEC

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8730

**A Bylaw to amend the City of North Vancouver
“Hydronic Energy Service Bylaw, 2004, No. 7575”**

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 **“City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2019, No. 8730”**.
2. The “Service Connection Fee” in the “Standard Fees and Charges Schedule” attached to “Hydronic Energy Service Bylaw, 2004, No. 7575” is amended by deleting “\$81.05 per kilowatt” and replacing it with the following: “\$82.83 per kilowatt”.
3. The “Meter Reading and Invoicing Fee” in the “Standard Fees and Charges Schedule” attached to “Hydronic Energy Service Bylaw, 2004, No. 7575” is amended by deleting “\$30.88 per month” and replacing it with “\$31.56 per month”.
4. Deleting Schedule “C” attached to “Hydronic Energy Service Bylaw, 2004, No. 7575” and replacing it with the Schedule “C” attached to this bylaw.
5. This Bylaw shall be effective as of the 1st day of November, 2019.

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.

MAYOR

CITY CLERK

SCHEDULE “C”
FEES, RATES AND CHARGES
BYLAW 8730

The rates, fees and charges payable in respect of the Service defined in “Hydronic Energy Service Bylaw, 2004, No. 7575” are as set out below.

Except as otherwise stated, capitalized terms in this Schedule “C” shall have the meaning defined in the General Terms and Conditions of “Hydronic Energy Service Bylaw, 2004, No. 7575” attached as Schedule “B”.

Provision of Heating to Premises:

The rates payable for the provision of Hydronic Energy Heating Service to Premises are a combination of the meter charge, capacity charge and commodity charge.

RESIDENTIAL SERVICE

RATE SCHEDULE 1

- (a) **Meter Charge** – A monthly charge of \$31.56 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.03398 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

RATE SCHEDULE 2

- (a) **Meter Charge** – A monthly charge of \$169.93 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.02871 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

COMMERCIAL SERVICE

RATE SCHEDULE 1

- (a) **Meter Charge** – A monthly charge of \$31.56 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.03398 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

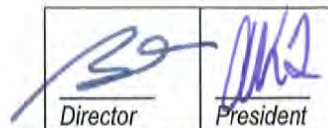
RATE SCHEDULE 2

- (a) **Meter Charge** – A monthly charge of \$169.93 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.02871 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

Provision of Cooling to Premises:

The rates payable for the provision of Hydronic Energy Cooling Service to Premises shall be determined by Council for each Premises which connects to and uses the Hydronic Energy Cooling Service.

In addition to the foregoing rates the fees and charges set out in the Standard Fees and Charges attached as a schedule to the General Terms and Conditions will apply to the provision of the Service.



T 604.983.7305 F 604.985.1573 E info@cnv.org
141 West 14th Street, North Vancouver BC V7M 1H9

REPORT

To: Mayor Darrell Mussatto and Members of Council

From: Ben Themens, Director, LEC

SUBJECT: HEAT RECOVERY FROM THE NEW NORTH SHORE WASTEWATER TREATMENT PLANT

Date: July 19, 2017

RECOMMENDATION:

PURSUANT to the report of the Director of Lonsdale Energy Corp., dated July 19, 2017, entitled, "Heat Recovery from the new North Shore Wastewater Treatment Plant":

THAT pending successful negotiations with the Greater Vancouver Sewerage and Drainage District, Lonsdale Energy Corp. be authorized to enter into a Thermal Energy Sale and Purchase Agreement with the Greater Vancouver Sewerage and Drainage District;

THAT a provision of \$3,600,000 be included in Lonsdale Energy Corp. future borrowing request to provide for the City portion of the cost of the heat recovery project;

AND THAT Lonsdale Energy Corp. submit a rate increase application in Fall 2017 that will provide a rate increase schedule to fund the heat recovery project and the reimbursement of City loans.

ATTACHMENT:

1. Report to GVRD Utilities Committee entitled "Effluent Heat Recovery at North Shore Wastewater Treatment Plant", prepared by Jeff Carmichael, Division Manager, Utility Research and Innovation, Liquid Waste Services, dated July 6, 2017

PURPOSE:

Since 2014, the Greater Vancouver Sewerage and Drainage District (GVS&DD) and Lonsdale Energy Corp. (LEC) have been reviewing the opportunity to recover heat from the new North Shore Wastewater Treatment Plant (NSWWTP). This report provides an overview of the status of the project. Furthermore, since the Agreement has implications for debt and LEC rates, LEC seeks Council's authorization prior to entering into an Agreement with GVS&DD.

This authorization is sought while an Agreement has yet to have been finalized with GVS&DD. The Agreement is between GVS&DD and LEC and under this recommendation Council would confirm its support while deferring to the LEC Board the authority to finalize an Agreement that aligns with the conditions described in this report and with the interests of both the City and LEC. Early approval is being sought in recognition of the fact that the current project approval schedule requires LEC to finalize an Agreement with GVS&DD in late August, while Council is not scheduled to meet until September 11th, 2017.

BACKGROUND:

Since starting operations in 2003, Lonsdale Energy Corp. (LEC) has implemented several alternative energy sources. During the heating season, natural gas boiler technology still supplies a substantial amount of the energy consumed by LEC. However, the following sources provide an increasingly significant amount of energy for heating, particularly during the summer when space heating demand is low but domestic hot water consumption becomes relatively high:

- 120 solar thermal panels on the roof of the Library;
- geexchange field owned and operated by LEC at the site of the School District 44 (SD44) at West 22nd Street and Lonsdale Avenue;
- provision of cooling service at the above-mentioned SD44 site through the use of heat pumps that allows the recovery of rejected heat for use in the Central Lonsdale LEC network;
- provision of cooling service at various Shipyards buildings through the use of heat pumps that allows the recovery of rejected heat for use in the Lower Lonsdale LEC network. Those heat pumps will also be used to recover heat during ice making of a planned skating rink at the waterfront and potentially in a similar way at the Harry Jerome once renovated.

DISCUSSION:

LEC has been working on the opportunity of recovering heat from NSWWTP. In 2014, Metro Vancouver issued a Request for Qualifications and Interest to determine potential heat purchasers in the surrounding area of the NSWWTP. LEC is considered the nearest large customer and was the only respondent to the request.

Since then, LEC has worked in collaboration with Metro Vancouver staff on establishing the requirements of a Heat Pump Energy Centre that is to be located at the NSWWTP site. Those requirements were included in an Appendix of a Design-Build-Finance agreement recently awarded by GVS&DD for the construction of the NSWWTP.

At its Regular Meeting of July 13, 2017, the GVRD Utilities Committee considered a report (Attachment 1) concerning effluent heat recovery.

The Utilities Committee unanimously adopted the following resolution:

That the GVS&DD Board:

- a) direct staff to enter into contract negotiations with Lonsdale Energy Corporation for the sale of effluent heat; and
- b) authorize ADaPT Consortium to proceed with the effluent heat recovery portion of the NSWWTP project, subject to award of a contract with Lonsdale Energy Corporation for effluent heat sale.

The resolution is expected to be included in the agenda of the July 28, 2017 GVS&DD Board meeting for further consideration.

For the past few months, staffs of both Metro Vancouver and LEC have been investigating technical and economic considerations of entering into a potential Agreement for sale of effluent heat. The target is to have a draft Agreement substantially completed in the coming weeks to allow GVS&DD approval by September. Metro Vancouver has until October 5, 2017 to exercise the option to proceed with effluent heat recovery as part of the NSWWTP design and construction contract already awarded to ADaPT Consortium.

Project Scope

The project aims to recover some of the heat contained in the NSWWTP effluent. GVS&DD is to install heat pumps inside the NSWWTP to capture the heat and deliver it at a temperature that meets LEC requirements. LEC is to design and build the distribution system from the NSWWTP property line to LEC's existing distribution system which includes a section within District of North Vancouver (DNV) with bridge access requirements over Mackay Creek. It is worth noting that DNV has yet to provide its approval, which must be obtained before ratifying an Agreement, to minimize project risks.

Greenhouse Gas Reduction

Without this project, the heat contained in the effluent will be discharged into Burrard Inlet and LEC will continue to use natural gas boilers to generate a substantial portion of the heat that it supplies, particularly during the winter.

GVS&DD has estimated that by displacing the use of natural gas in LEC's district energy system, the effluent heat recovery project will reduce GHG emissions by over 7,000 tonnes per year. GHG reductions are proposed to be allocated in proportion of respective contributions to capital project costs. As indicated in the table below, this would translate in annual GHG reductions of 1,200 tonnes being allocated to LEC.

Estimated Capital Cost Allocation and GHG Allocation

	Capital commitment	GHG allocation	Annual GHG reduction credits
GVS&DD	\$16,926,000	79%	5,700 tonnes CO2e/yr
LEC	\$3,543,000	16%	1,200 tonnes CO2e/yr
BC Hydro (Grant)	\$1,000,000	5%	300 tonnes CO2e/yr

While a significant portion of the GHG reduction credits will be allocated to GVS&DD, the fact remains that the total GHG reduction will allow LEC to supply substantially cleaner energy to its customers. To better understand the implications of this project, LEC delivered 37,800 MWh of heat to its customers in 2016. The effluent heat recovery project is anticipated to deliver between 20,000 and 30,000 MWh of energy to LEC by 2021. This translates into one-half to two-thirds of the energy supplied to LEC's customers would be considered green. Existing alternative energy sources and natural gas boiler plants would be generating the remaining energy.

FINANCIAL IMPLICATIONS:

From a capital cost perspective, LEC's Commitment estimated at \$3.6 million is principally to cover the cost of the distribution pipe from the existing LEC plant near the intersection of Fell Avenue and First Street to the location of the NSWWTP near the intersection of Pemberton Avenue and First Street.

In addition to this amount, while GVS&DD is to be responsible for the operation and maintenance of the heat recovery facility, LEC is to reimburse the cost incurred by GVS&DD for this work. The amount is currently under review by both organizations. LEC will also be responsible to compensate GVS&DD for the cost of electricity to run the heat pumps. While it is assumed that the variable cost of the electricity would be offset by natural gas savings, those savings would be insufficient to cover fixed electricity-related costs such as BC Hydro's Demand Charge.

Staff have reviewed the financial implications of the additional debt charge and ongoing fixed costs on LEC's rates. The fixed costs would significantly increase LEC's annual expenses, reducing liquidity and delaying City loans reimbursement. If LEC rates were to remain unchanged, LEC would incur significant losses starting in 2021, the year when the NSWWTP is expected to start delivering heat.

While some of the cost increase will be recovered from growth, rates will also need to be substantially increased. Fortunately, due to a combination of low natural gas prices and good cost controls, LEC's rates have been lower than BC Hydro rates as well as those of several other Lower Mainland district energy utilities. As a consequence, LEC considers that it has some latitude to increase rates in the coming years.

Fixed costs such as those described above have typically been recovered through LEC's Capacity Charge. The Capacity Charge approximately makes up between 50% and 60% of LEC's total revenue. Consequently, a 25% increase of the Capacity Charge would translate in an increase of approximately 15% of the total amount invoiced by LEC.

To allow for the recovery of heat from the NSWWTP, LEC is contemplating annual Capacity Charge increases of 5% above the rate of inflation from 2018 to 2022. This would increase the total cost of LEC's energy by approximately 15% above the rate of inflation over a period of 5 years. Assuming natural gas and electricity prices fluctuating with inflation, such an increase would still provide LEC's customers with energy below the price of electricity.

By smoothing the rate increase and pre-emptively increasing its rates, a basic modeling of the proposed rate increase and other financial implications indicates that LEC would suffer relatively modest losses in 2021 and 2022, when the NSWWTP would come online and fixed costs would increase significantly. Furthermore, the planned repayment of current City loans, which would need to provide an additional \$3.6 million for the project, would be delayed from 2032 (as per June 6th, 2017 report) to 2035.

Staff will review in greater details the cost implications of the project if/once an Agreement with GVS&DD has been finalized. LEC will submit to City Council a formal rate increase application including the details of the Agreement's financial implications in the fall of 2017.

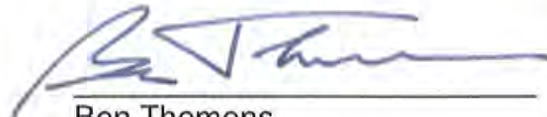
OPTION:

As an alternative, if Council does not support this project, Council could receive and file the report or request that staff investigate other purchasing arrangements for the heat. This being said, LEC is facing a tight and firm deadline to satisfy GVS&DD approval requirements and enter into an agreement as well as to meet the contractually stated date of October 5, 2017 to exercise the option to proceed with effluent heat recovery as part of the NSWWTP design and construction contract.

The project is a cost-effective opportunity of substantial size. Staff has yet to identify an opportunity that would provide GHG emission savings of this magnitude. This opportunity is the result of a combination of convergent factors including the stated GVS&DD goal of reducing GHG emissions and the proximity of the LEC network to NSWWTP. Such circumstances are unlikely to be replicated in the near future. Both GVS&DD and LEC will benefit from the efficiencies of coordinating construction of the heat recovery facility with the plant.

In summary, staff is of the opinion that this provides an exceptional opportunity for both organizations.

RESPECTFULLY SUBMITTED BY:

A handwritten signature in blue ink, appearing to read 'Ben Themens', is written over a horizontal line.

Ben Themens
Director, LEC



To: Utilities Committee

From: Jeff Carmichael, Division Manager, Utility Research and Innovation, Liquid Waste Services

Date: July 6, 2017 Meeting Date: July 13, 2017

Subject: **Effluent Heat Recovery at North Shore Wastewater Treatment Plant**

RECOMMENDATION

That the GVS&DD Board:

- a) direct staff to enter into contract negotiations with Lonsdale Energy Corporation for the sale of effluent heat; and
 - b) authorize ADaPT Consortium to proceed with the effluent heat recovery portion of the NSWWTP project, subject to award of a contract with Lonsdale Energy Corporation for effluent heat sale.
-

PURPOSE

The purpose of this report is to seek GVS&DD Board authorization to proceed with effluent heat recovery as part of the North Shore Wastewater Treatment Plant (NSWWTP) project and to seek authorization to negotiate a contract with Lonsdale Energy Corporation for the sale of effluent heat from the NSWWTP that acquires enough greenhouse gas (GHG) reduction credits to make the Liquid Waste utility carbon neutral.

BACKGROUND

In April 2017, the Design-Build-Finance contract for the NSWWTP was awarded to ADaPT Consortium for \$525 million. Effluent heat recovery was included in the Design-Build-Finance contract as an optional item. GVS&DD has until October 5, 2017 to exercise the optional item and direct ADaPT Consortium to design and construct the effluent heat recovery system. The NSWWTP has the potential to be a net producer of energy by implementing effluent heat recovery. The GVS&DD's Liquid Waste utility has the opportunity to reduce its carbon footprint to zero if GVS&DD commits to effluent heat recovery at NSWWTP.

This report brings forward for Board consideration approval of the NSWWTP optional project to design and build an effluent heat recovery system, which would proceed once a contract with the Lonsdale Energy Corporation has been approved by the Board.

BUSINESS CASE

Effluent heat recovery has the potential to contribute to the goals of the *Integrated Liquid Waste and Resource Management Plan*, which directs Metro Vancouver to use liquid waste as a resource and to evaluate opportunities for energy recovery from major wastewater treatment plant projects. Effluent heat recovery contributes to the goals of the NSWWTP project and has been highlighted in the descriptions of the plant that resulted in the federal and provincial governments committing significant funding towards the NSWWTP.

For effluent heat recovery to be financially viable, a nearby customer must be willing to purchase the energy. Lonsdale Energy Corporation (LEC), a district energy provider wholly owned by the City of North Vancouver, was the only respondent to a Request for Qualifications and Interest in 2014. Metro Vancouver staff and LEC staff have subsequently been investigating technical and commercial considerations of providing effluent heat from the NSWWTP to LEC's district energy system.

Cost Estimates

ADApT Consortium provided a guaranteed cost of \$13,245,668 to build the effluent heat recovery system within the NSWWTP and a monthly cost of \$223,320 for up to 12 months during the performance period, for a total rounded cost of \$15,926,000. If the project proceeds, an additional \$2,000,000 will be required for BC Hydro infrastructure, for a total GVS&DD investment of \$17,926,000. LEC would be required to spend an estimated \$3,543,000 to install distribution piping from the NSWWTP to the LEC district energy system to be able to receive the effluent heat. In total, the cost for the project is \$21,469,000. Operating costs over the project life would be recovered from LEC.

Greenhouse Gas Emission Reductions

It is projected that the effluent heat recovery project will reduce GHG emissions by over 7,000 tonnes per year on average over the 25-year project life. These reductions will be achieved by displacing the use of natural gas in LEC's district energy system.

Following the guidelines in the *Liquid Waste Heat Recovery Policy* (Attachment 1), GHG reductions are proposed to be allocated in proportion to respective contributions to project costs, as indicated in Table 1. An estimated 16 per cent of GHG reductions will be allocated to LEC based on their capital expenditure. BC Hydro has indicated intent to contribute up to \$1,000,000 to the effluent heat project in return for GHG emission reduction credits, which amounts to 5 per cent of the GHG reductions. Confirmation of BC Hydro funding is expected by September 2017. The remaining 79 per cent of GHG reductions, approximately 5,700 tonnes per year, will be allocated to GVS&DD based on its net capital contribution of \$16,926,000.

Table 1. Estimated GHG allocation based on contributions to project cost

	Capital commitment	GHG allocation	Average annual GHG reduction credits
GVS&DD	\$16,926,000	79%	5,700 tonnes CO ₂ e/yr
LEC	\$3,543,000	16%	1,200 tonnes CO ₂ e/yr
BC Hydro	\$1,000,000	5%	300 tonnes CO ₂ e/yr

Carbon Neutral Commitments

In the 2010 *Corporate Climate Action Plan*, Metro Vancouver committed to becoming carbon neutral by reducing corporate emissions, providing renewable energy to other parties to avoid emissions in the region, sequestering carbon, and as a last resort, purchasing or creating offset credits. The anticipated reduction in GHG emissions from Metro Vancouver's existing portfolio of projects is not sufficient to achieve corporate carbon neutrality. New sources of GHG reductions are required.

Effluent heat recovery at NSWWTP is the first major GHG reduction project within Metro Vancouver's operations that is ready to be implemented and is cost-effective due to efficiencies of coordination with the construction of the NSWWTP and its proximity to LEC's district energy system.

Metro Vancouver's corporate carbon footprint for all energy and transportation related emissions is approximately 20,000 tonnes CO₂e per year, of which 5,000 tonnes are from the Liquid Waste utility. These emissions are projected to increase after the secondary upgrades of the North Shore and Iona Island Wastewater Treatment Plants.

GVS&DD would receive GHG reductions of over 5,000 tonnes per year as soon as the NSWWTP is commissioned by investing in the effluent heat project. This would make the Liquid Waste utility carbon neutral starting in 2021. The cost of investing in these GHG reductions is \$120/tonne. This cost is lower than the price of \$150/tonne established in the *Carbon Price Policy* (Attachment 2), showing that this is a cost-effective GHG reduction project.

Based on the business case analysis, including opportunities to reduce overall GHG emissions in the region, the following alternatives are presented for consideration.

ALTERNATIVES

1. That the GVS&DD Board:
 - a) direct staff to enter into contract negotiations with Lonsdale Energy Corporation for the sale of effluent heat; and
 - b) authorize ADAPt Consortium to proceed with the effluent heat recovery portion of the NSWWTP project, subject to award of a contract with Lonsdale Energy Corporation for effluent heat sale.
2. That the GVS&DD Board authorize ADAPt Consortium to proceed with the effluent heat recovery portion of the NSWWTP project.
3. That the GVS&DD Board receive for information the report dated July 6, 2017, titled "Effluent Heat Recovery at North Shore Wastewater Treatment Plant" and provide alternate direction.

FINANCIAL IMPLICATIONS

If the Board approves Alternative 1, GVS&DD would commit \$17,926,000 for the effluent heat recovery project. Of that, \$15,926,000 would be to the ADAPt Consortium to build and commission the effluent heat recovery facility, and \$2,000,000 for associated BC Hydro infrastructure. These costs would be partially offset by grant contributions from BC Hydro of up to \$1,000,000 toward the project. GVS&DD would also acquire associated GHG reduction credits. All operating costs for effluent heat recovery over the life of the project would be recovered from LEC.

The NSWWTP project has a total budget of \$700 million including contingency and committed funding from the federal and provincial governments of \$405 million. The effluent heat recovery project is an optional item that will be added to the NSWWTP project, in addition to the \$700 million. However, it is possible that some or all of the cost of the optional effluent heat recovery project may be accommodated within the \$700 million NSWWTP budget depending on final outcome on expenditures from the project contingency. If required to support the project, additional funds of up to \$17,926,000 will be included within the 2018-2022 Financial Plan.

The capital expenditure will be contingent on successful negotiation of a contract with Lonsdale Energy Corporation for the sale of effluent heat. The contract would allocate the GHG reduction credits based on respective contributions to project costs. If the recommendation is supported by the Board, the proposed contract with LEC will be presented to the Board for approval at the September Board meeting. The contract must be executed before the October 5, 2017 deadline to exercise the

optional item for ADaPT Consortium to proceed with design and construction of the effluent heat recovery system.

If the Board approves Alternative 2, GVS&DD would make a commitment of \$17,926,000, less any grant contributions from BC Hydro, to build and commission the effluent heat recovery project without requiring a contract for sale of effluent heat to be in place. The risk exists that no effluent heat contract would be awarded, and consequently that the equipment would never be beneficially used and is not recommended.

SUMMARY / CONCLUSION

In April 2017, the Design-Build-Finance contract for the NSWWTP was awarded to ADaPT Consortium for \$525 million. Effluent heat recovery was included in the Design-Build-Finance contract as an optional item. GVS&DD has until October 5, 2017 to exercise the optional item and direct ADaPT Consortium to design and construct the effluent heat recovery system. The NSWWTP has the potential to be a net producer of energy by implementing effluent heat recovery. The GVS&DD's Liquid Waste utility has the opportunity to reduce its carbon footprint to zero if the GVS&DD invests in effluent heat recovery at NSWWTP.

Metro Vancouver's corporate carbon footprint is approximately 20,000 tonnes per year, of which 5,000 tonnes are from the Liquid Waste utility. Metro Vancouver has committed to becoming carbon neutral and needs new sources of GHG reductions to achieve this commitment. Implementing effluent heat recovery at NSWWTP would result in GHG emission reductions of more than 7,000 tonnes annually. GHG reduction credits from the project will be allocated in proportion to respective contributions to project costs.

GVS&DD can achieve carbon neutrality for the Liquid Waste utility starting in 2021 by investing in the NSWWTP effluent heat recovery project. The investment would acquire an annual average of 5,700 tonnes of GHG reductions. The cost of achieving the GHG reductions is \$120/tonne which is considered cost-effective. Staff recommend Alternative 1.

Attachments

1. Liquid Waste Heat Recovery Policy
2. Carbon Price Policy

21990261

BOARD POLICY**LIQUID WASTE HEAT RECOVERY**

Effective Date: June 23, 2017

Approved By: GVS&DD Board

PURPOSE

To enable beneficial use of waste heat and associated greenhouse gas emission reductions from Metro Vancouver's liquid waste system by external parties.

DEFINITIONS

"**Waste heat**" is excess heat that is available from GVS&DD operations, including but not limited to heat from untreated sewage, treated effluent, equipment or processes.

"**Heat user**" is a third party interested in accessing excess heat from GVS&DD's liquid waste system. A heat user may be a member municipality or other entity.

POLICY

Metro Vancouver is committed to pursuing strategies and actions that mitigate climate change. Waste heat recovery projects that displace the use of fossil fuels result in a reduction in regional greenhouse gas emissions. Recovering waste heat from the liquid waste system contributes to GVS&DD's *Integrated Liquid Waste and Resource Management Plan* goal of using waste as a resource.

This policy enables expedient access to waste heat where technically and financially feasible while ensuring that GVS&DD is able to convey and treat wastewater and meet all service objectives. This policy applies to situations where external parties request waste heat from GVS&DD's liquid waste system and to situations where GVS&DD offers waste heat to interested external parties.

COLLECTION SYSTEM PROJECTS**Allocation of Waste Heat**

GVS&DD will allocate access to untreated sewage for heat recovery on a first-come first-served basis in response to requests by interested heat users, provided the proposed heat recovery project will not adversely impact GVS&DD services or other established heat recovery projects, as determined by GVS&DD review. If an established heat recovery project that is already in place or approved for development by GVS&DD could be impacted by a proposed new heat recovery project, the established project's heating and/or cooling requirements will have priority. Private entities requesting access to waste heat must provide a letter of support from the host municipality demonstrating support and cooperation including allowance for works within municipal rights of way. Projects that access heat from municipal sewers do not require GVS&DD approval.

Ownership and Responsibilities

GVS&DD owns a sewerage system and is responsible for sewage in its liquid waste system, including any associated resources such as heat. The boundaries of responsibility for heat recovery equipment and infrastructure are primarily tied to property ownership and will be defined in a contract between

GVS&DD and the heat user. GVS&DD will own and be responsible for the portion of the tie-in up to and including a shut-off valve on both the diversion and return lines. GVS&DD will consider an in-line heat recovery system built directly in a GVS&DD sewer if the system will not impair GVS&DD operations.

Cost Recovery

GVS&DD will charge the heat user for all costs incurred to establish and maintain access to sewage. The value of sewage will be assessed using business case processes, including consideration of nominal value of sewage, and incorporated into sewage access contracts.

Environmental Attributes

Benefits associated with greenhouse gas reductions (such as carbon offset credits) and the costs of administering those benefits will be allocated on a case-by-case basis, in accordance with the costs and risks incurred by the parties involved in developing the heat recovery project.

TREATMENT PLANT AND OUTFALL PROJECTS

Allocation of Waste Heat

When GVS&DD identifies waste heat opportunities in wastewater treatment plants and effluent outfalls, GVS&DD will follow competitive processes in offering available waste heat to potential heat users, to ensure fairness and transparency.

Ownership and Responsibilities

The boundaries of responsibility for heat recovery equipment and infrastructure are primarily tied to property ownership and will be defined in a contract between GVS&DD and the heat user. GVS&DD will own and be responsible for waste heat recovery equipment and related infrastructure installed within its wastewater treatment plants and effluent outfalls, except in cases where ownership by an external party is deemed preferable to the GVS&DD.

Cost Recovery

Heat recovery projects within wastewater treatment plants and effluent outfalls will require capital investment by GVS&DD and will require ongoing operations and maintenance by GVS&DD. GVS&DD will recover the costs incurred in providing waste heat to external parties over the life of the project. GVS&DD does not seek to profit from the provision of heat. GVS&DD staff will evaluate heat recovery projects using established life cycle cost analysis and options analysis frameworks and will consider each project on a case by case basis. Benefits will include the value of avoided greenhouse gas emissions. A contract with the heat user will be established for each project that assigns the costs and benefits between GVS&DD, the heat user and other funding sources.

Environmental Attributes

Benefits associated with greenhouse gas reductions (such as carbon offset credits) and the costs of administering those benefits will be allocated on a case-by-case basis, in accordance with the costs and risks incurred by the parties involved in developing the heat recovery project.

CARBON PRICE

Effective Date: June 23, 2017

Approved By: MVRD Board

PURPOSE

To establish a price on Applicable Greenhouse Gas (GHG) Emissions, and to enable the value of those GHG emissions to be incorporated into Life Cycle Cost Analyses for Metro Vancouver projects or initiatives.

The objectives of the *Carbon Price Policy* are to:

- Incorporate consideration of climate change mitigation (i.e., GHG emissions reduction) into options analyses for all Metro Vancouver projects or initiatives; and
- Provide a mechanism to reduce financial risk of increased operating costs associated with rising external carbon taxes over the lifetime of a Metro Vancouver project or initiative.

DEFINITIONS

"Applicable Greenhouse Gas (GHG) Emissions" are GHG emissions associated with Metro Vancouver projects or initiatives, in particular GHG emissions related to energy use and utility processes, and GHG emissions reductions (or avoided GHG emissions) related to ecological carbon storage/sequestration.

"Carbon dioxide equivalent (CO₂e)" is the common metric used to quantify and compare different types of GHG emissions, and is expressed in tonnes.

"Carbon Price" is the total dollar value (including any provincial and federal carbon taxes) assigned by Metro Vancouver to one tonne of CO₂e.

"Life Cycle Cost Analysis" is the process to establish the net present value of all costs and revenues associated with a Metro Vancouver project or initiative over its expected life.

POLICY

When undertaking options analysis for a Metro Vancouver project or initiative, the Carbon Price will be used to calculate the value (expressed as a cost) of Applicable GHG Emissions associated with each option. This value will be included in the Life Cycle Cost Analysis for each option.

Carbon Price

Metro Vancouver will use a total Carbon Price (inclusive of any applicable external carbon taxes) of \$150 per tonne of CO₂e in Life Cycle Cost Analyses.

Financial Services, in coordination with the Air Quality and Climate Change Division, will develop and annually review a *Carbon Price Schedule*. This *Carbon Price Schedule* will provide the incremental cost per unit of purchased energy (e.g., litres of gasoline, GJ of natural gas), as well as the cost per unit of other Applicable GHGs (e.g., tonne of fugitive methane). The carbon price will be adjusted to account for any changes to provincial and federal carbon taxes, to ensure that the total carbon price per tonne of Applicable GHGs is constant at \$150 per tonne of CO₂e.

Application

This policy applies to all options analyses that use Life Cycle Cost Analysis for Metro Vancouver projects or initiatives, including (but not limited to):

- Planning, design, procurement, construction, operation, maintenance, and decommissioning (where applicable) of facilities, vehicles, and equipment owned or operated by Metro Vancouver or by third parties on Metro Vancouver's behalf;
- Acquisition of park land, where protection of the land by Metro Vancouver results in quantifiable GHG emissions reductions compared to business as usual; and
- Management of process emissions from Metro Vancouver facilities.

The Carbon Price will be used to calculate the value of Applicable GHG Emissions associated with:

- Energy purchased by Metro Vancouver or by third parties on Metro Vancouver's behalf for the operation of utilities, fleet, and facilities (including natural gas, liquid petroleum products, propane, and electricity);
- Fugitive methane and nitrous oxide emissions released from wastewater treatment processes and municipal solid waste management processes;
- Avoided GHG emissions due to the displacement of fossil fuels with energy recovered from Metro Vancouver facilities;
- Avoided GHG emissions attributable to the protection and/or restoration of park land such as forests and bogs; and
- Other sources related to Metro Vancouver's activities.

Related Document:

Carbon Price Schedule (22496514)

Historical Data for 2004 - 2018 Years of Operations

Income Statement line description	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Revenue	\$ 176,707	\$ 409,108	\$ 415,741	\$ 630,088	\$ 1,016,118	\$ 1,158,110	\$ 1,434,108	\$ 1,562,007	\$ 1,693,413	\$ 2,038,134	\$ 2,594,229	\$ 2,647,001	\$ 2,838,793	\$ 3,900,077	\$ 4,132,957
Cost of Sales	\$ 66,777	\$ 187,089	\$ 245,839	\$ 299,299	\$ 479,519	\$ 469,707	\$ 722,351	\$ 752,254	\$ 747,330	\$ 965,876	\$ 1,261,027	\$ 1,175,841	\$ 1,196,282	\$ 1,538,595	\$ 1,678,140
Gross profit	\$ 109,930	\$ 222,019	\$ 169,902	\$ 330,789	\$ 536,599	\$ 688,403	\$ 711,757	\$ 809,753	\$ 946,083	\$ 1,072,258	\$ 1,333,202	\$ 1,471,160	\$ 1,642,511	\$ 2,361,482	\$ 2,454,817
Plant Operation and Maintenance	\$ 19,087	\$ 91,585	\$ 95,244	\$ 98,149	\$ 114,689	\$ 138,289	\$ 143,305	\$ 191,350	\$ 212,842	\$ 289,346	\$ 310,795	\$ 289,127	\$ 225,115	\$ 134,380	\$ 218,812
Depreciation	\$ 68,531	\$ 114,823	\$ 127,777	\$ 146,220	\$ 212,246	\$ 293,444	\$ 273,586	\$ 309,667	\$ 430,542	\$ 564,686	\$ 693,517	\$ 795,568	\$ 886,925	\$ 1,064,736	\$ 1,206,818
General and Administrative	\$ 98,268	\$ 145,543	\$ 172,968	\$ 140,987	\$ 173,957	\$ 146,916	\$ 185,574	\$ 188,783	\$ 309,926	\$ 445,511	\$ 361,409	\$ 348,892	\$ 497,248	\$ 405,632	\$ 587,399
Total - Operating Expenses	\$ 185,886	\$ 351,951	\$ 395,989	\$ 385,356	\$ 500,892	\$ 578,649	\$ 602,465	\$ 689,800	\$ 953,310	\$ 1,299,543	\$ 1,365,721	\$ 1,433,587	\$ 1,609,288	\$ 1,604,748	\$ 2,013,029
Income (loss) before other expenses	\$ (75,956)	\$ (129,932)	\$ (226,087)	\$ (54,567)	\$ 35,707	\$ 109,754	\$ 109,292	\$ 119,953	\$ (7,227)	\$ (227,285)	\$ (32,519)	\$ 37,573	\$ 33,223	\$ 756,734	\$ 441,788
Contributions	\$ 60,136	\$ 259,458	\$ 38,804	\$ 63,416	\$ 117,389	\$ 120,875	\$ 146,532	\$ 174,480	\$ 211,010	\$ 225,615	\$ 232,648	\$ 260,629	\$ 357,676	\$ 571,832	\$ 571,832
Finance income	\$ 23,432	\$ 22,037	\$ 24,530	\$ 17,321	\$ 5,111	\$ 11,171	\$ 15,742	\$ 25,121	\$ 32,071	\$ 34,429	\$ 27,172	\$ 27,691	\$ 42,975	\$ 65,425	\$ 65,425
Finance costs	\$ (111,951)	\$ (207,481)	\$ (194,850)	\$ (34,141)	\$ (123,277)	\$ (125,421)	\$ (128,876)	\$ (131,322)	\$ (139,585)	\$ (157,986)	\$ (214,870)	\$ (253,282)	\$ (302,870)	\$ (357,790)	\$ (498,448)
Subtotal	\$ (111,951)	\$ (123,913)	\$ 86,645	\$ 29,193	\$ (42,540)	\$ (2,921)	\$ 3,170	\$ 30,952	\$ 60,016	\$ 85,095	\$ 45,174	\$ 6,538	\$ (14,550)	\$ 42,861	\$ 138,809
Income before non-recurring expenses	\$ (187,907)	\$ (253,845)	\$ (139,442)	\$ (25,374)	\$ (6,833)	\$ 106,833	\$ 112,462	\$ 150,905	\$ 52,789	\$ (142,190)	\$ 12,655	\$ 44,111	\$ 18,673	\$ 799,595	\$ 580,597
Non-recurring expenses												\$ (1,030,721)			
Net Income and Comprehensive Income	\$ (187,907)	\$ (253,845)	\$ (139,442)	\$ (25,374)	\$ (6,833)	\$ 106,833	\$ 112,462	\$ 150,905	\$ 52,789	\$ (142,190)	\$ 12,655	\$ (986,610)	\$ 18,673	\$ 799,595	\$ 580,597
Total Net Accumulated Surplus (loss)	\$ (277,787)	\$ (531,632)	\$ (671,074)	\$ (696,448)	\$ (703,281)	\$ (596,449)	\$ (483,987)	\$ (333,082)	\$ (280,293)	\$ (422,483)	\$ (409,828)	\$ (1,396,438)	\$ (1,377,765)	\$ (578,170)	\$ 2,427
Sales (kW.hr)	1,175,900	3,630,109	4,981,300	6,828,400	11,063,030	14,120,569	18,737,975	22,847,087	23,945,719	27,921,503	31,254,231	32,401,971	37,787,274	49,502,564	49,502,564



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

**“City Of North Vancouver
Hydronic Energy Service Bylaw, 2004, No. 7575”**

CONSOLIDATED FOR CONVENIENCE – JULY 16, 2018

Amendment Bylaw, 2007, No. 7843	Schedule A, Schedule B and Schedule C
Amendment Bylaw, 2007, No. 7865	Section 4 and Schedule A
Amendment Bylaw, 2007, No. 7891	Section 15, Schedule B and Schedule C
Amendment Bylaw, 2008, No. 7954	Service Connection Fee
Amendment Bylaw, 2009, No. 8059	Schedule C, Fees Rates and Charges Schedule
Amendment Bylaw, 2010, No. 8086	Schedule C and Housekeeping
Amendment Bylaw, 2010, No. 8123	Schedule C - Meter Charge
Amendment Bylaw , 2010, No. 8187	Schedule C – Service Connection Fee
Amendment Bylaw, 2013, No. 8321	Standard Fees and Charges Schedule & Capacity Charge
Amendment Bylaw, 2016, No. 8497	Schedule B, Standard Fees and Charges Schedule, Schedule C
Amendment Bylaw, 2017, No. 8545	Standard Fees and Charges Schedule
Amendment Bylaw, 2017, No. 8561	Standard Fees and Charges Schedule
Amendment Bylaw, 2017, No. 8596	Schedule C
Amendment Bylaw, 2018, No. 8660	Addition of Section 14.10
Amendment Bylaw, 2018, No. 8656	Schedule C

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 7575

A Bylaw to Create a Hydronic Energy Service

WHEREAS the *Community Charter* empowers the municipality to provide any service that the Council considers necessary or desirable.

WHEREAS the City of North Vancouver ("City") wishes to establish a service for the purpose of providing hydronic heat energy for space heating and domestic hot water to multi-family, residential, commercial, institutional and industrial buildings.

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 "**City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575**".
2. The service of providing hydronic heat energy for space heating and domestic hot water ("Heating Service") and the service of providing hydronic cooling energy for space cooling ("Cooling Service") to properties with multi-family residential, commercial, institutional and industrial buildings thereon (collectively the "Service") is hereby established.
3. The Service may be provided to properties with multi-family residential, commercial, industrial or institutional buildings thereon in the City of North Vancouver ("Service Area").
4. There shall be three classes of property within the Service Area:
 - Class 1 – properties described in Schedule "A";
 - Class 2 – properties, other than Class 1 properties, on which it is proposed to construct or renovate (to an extent that requires substantial occupancy postponement) multi-family residential, commercial, industrial and institutional buildings having a combined floor area of greater than 1000 square metres; and *[Bylaw 8596, December 11, 2017]*
 - Class 3 – properties other than Class 1 properties and Class 2 properties.
5. Multi-family residential, commercial, industrial and institutional buildings:
 - (a) on Class 1 properties, are required to apply for, be connected to and use the Heating Service and may apply for, be connected to and use the Cooling Service unless the City's Director of Finance considers that the cost of providing the Cooling Service to the property and buildings would be excessive to the City;
 - (b) on Class 2 properties, are required to apply for, be connected to and use the Heating Service and may apply for, be connected to and use the Cooling Service unless the City's Director of Finance considers that the cost of providing the

Heating Service or the Cooling Service as the case may be to the property and buildings would be excessive to the City; and

- (c) on Class 3 properties, may apply for, be connected to and use the Heating Service and the Cooling Service unless the City's Director of Finance considers that the cost of providing the Heating Service or the Cooling Service as the case may be to the property and the buildings would be excessive to the City.
- 6. The Service shall be provided and used in accordance with the terms and conditions described in Schedule "B" ("General Terms and Conditions").
 - 7. The fees payable in respect of the Service shall be those described in Schedule "C" which shall be based on the cost of providing, maintaining and expanding the Service and may be different for different properties and buildings based upon the use, capacity and consumption of those properties and buildings
 - 8. The City may operate the Service directly or through another organization (the "Service Provider").
 - 9. The City authorizes its officers and employees and the officers, employees, agents, servants, contractors and subcontractors of the Service Provider to enter onto any property or into any building applying for, connecting or connected to or using the Service or required to apply for connect to and use the Service to connect or disconnect the Service and to inspect and determine whether all regulations, prohibitions and requirements contained in this Bylaw and the General Terms and Conditions are being met.
 - 100. The City authorizes its officers and employees and the officers and employees of the Service Provider to require persons applying for, connecting or connected to or using the Service to provide security with respect to the Service in an amount determined by the City or the Service Provider.
 - 11. Except as provided in the General Terms and Conditions and Sections 12, 13 and 14 of this Bylaw no building situated on a Class 3 property which is connected to and using the Service may be disconnected from the Service unless the City Engineer is satisfied, in his sole discretion, that the building will be adequately supplied with an alternate form of energy capable of heating the building and no building situated on a Class 1 or Class 2 property which is connected to and using the Service may be disconnected from the Service.
 - 12. The City or the Service Provider may discontinue providing the Service to a person or property because of:
 - (a) unpaid fees or taxes in relation to the Service; or
 - (b) non-compliance with the General Terms and Conditions or the provisions of this Bylaw.
 - 13. The City or the Service Provider may discontinue providing the Service to a person or property upon providing not less than 48 (forty-eight) hours written notice outlining the reasons for the discontinuance.

14. A person whose Service is discontinued for non-compliance with the General Terms and Conditions or the provisions of this Bylaw other than a failure to pay fees or taxes payable in respect of the Service may appeal such discontinuance to the Council of the City by delivering to the City, within 10 (ten) days of the date of the written notice of discontinuance, written notice of their intention to appeal stating in a concise fashion the grounds upon which the appeal is based. If, upon receipt of a written notice of intention to appeal, the Service has not yet been discontinued then the decision of the City or the Service Provider to discontinue the Service shall be stayed until the appeal has been considered by the Council unless the Service is to be discontinued for reasons which the City or the Service Provider reasonably believe will endanger persons or property, including the property of the City or the Service Provider, in which case the decision will not be stayed and the Service will be discontinued in accordance with the notice of discontinuance.

READ a first time by the Council on the 23rd day of February, 2004.

READ a second time by the Council on the 23rd day of February, 2004.

READ a third time and passed by the Council on the 23rd day of February, 2004.

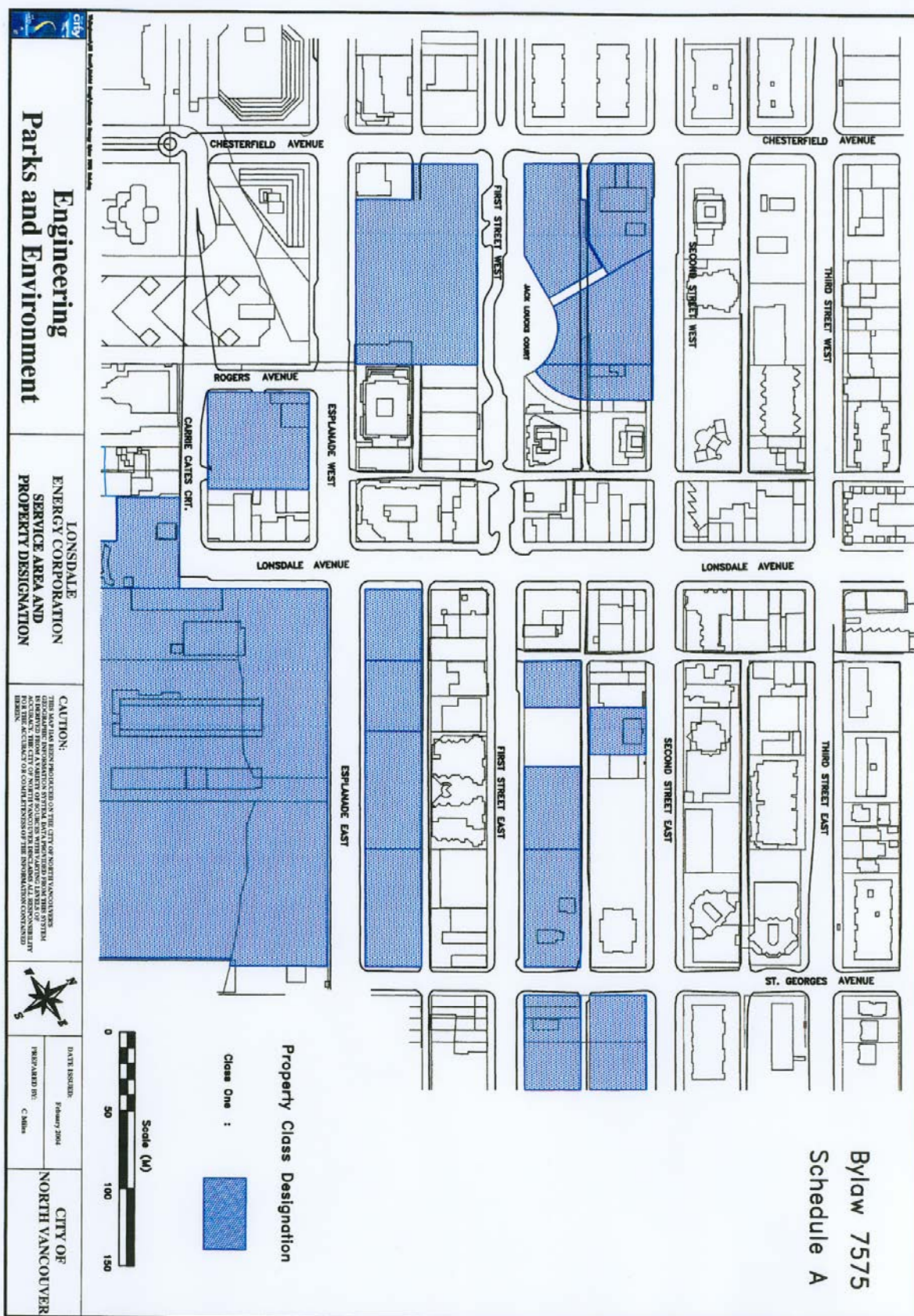
RECONSIDERED and finally adopted by the Council, signed by the Mayor and City Clerk and sealed with the Corporate Seal on the 1st day of March, 2004.

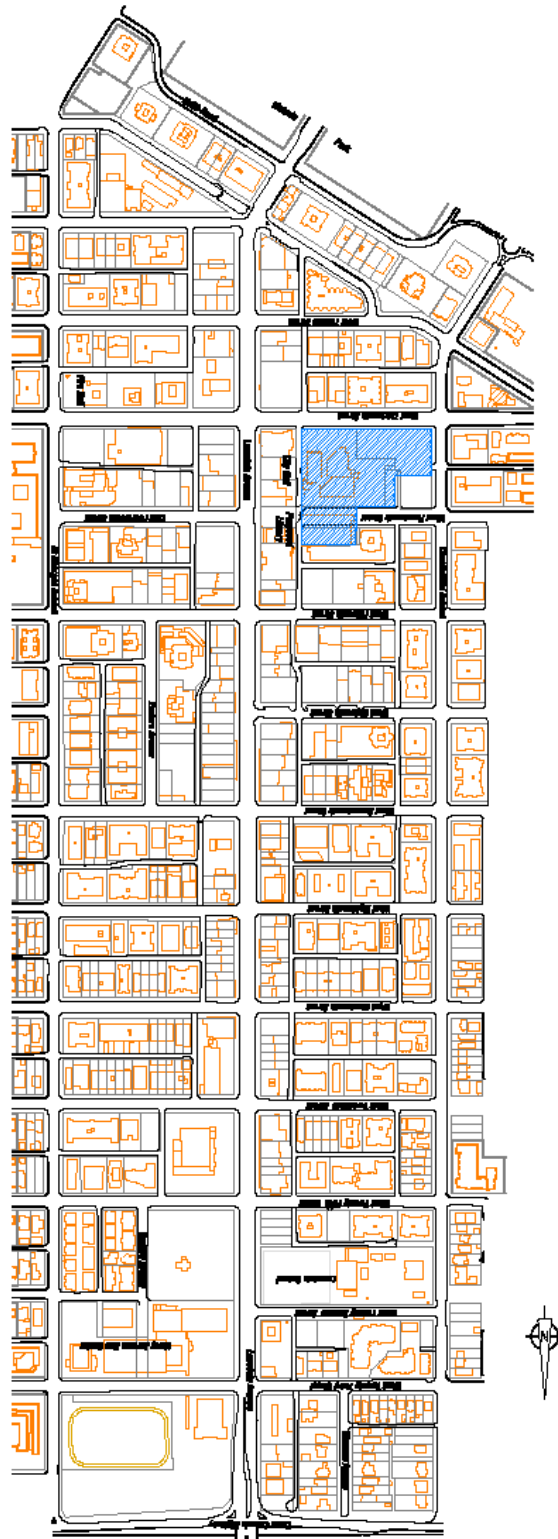
"Barbara A. Sharp"

MAYOR

"Bruce A. Hawkshaw"

CITY CLERK





Priority Class Designation
Class 1



Lonsdale Energy Corporation
Service Area And Property Designation

Map No. 2004

Last Revised : May 2007

SCHEDULE “B”

GENERAL TERMS AND CONDITIONS

INDEX

Section Description	Page No.
Definitions	8
SERVICE AREAS	10
1. Application Requirements	11
2. Agreement to Provide Service.....	11
3. Conditions on Use of Service	12
4. Rate Classification	12
5. Application and Service Connection Installation Fees and Charges.....	13
6. Security For Payment of Bills	14
7. Term of Service Agreement	15
8. Termination of Service Agreement.....	15
9. Service Connections	16
10. Heat Exchangers, Meter Sets & Metering.....	18
11. Hydronic Energy System Extensions.....	19
12. Interruption Of Service.....	20
14. Billing	21
15. Back-Billing	23
16. Equal Payment Plan	24
17. Late Payment Charge.....	25
18. Returned Cheque Charge	26
19. Discontinuance of Service and Refusal of Service.....	26
20. Limitations on Liability	28
21. Miscellaneous Provisions	29
RATE SCHEDULE – RESIDENTIAL SERVICE	31
RATE SCHEDULE – COMMERCIAL SERVICE.....	31

DEFINITIONS

Unless the context indicates otherwise, in these General Terms and Conditions and in the rate schedules referred to herein the following words have the following meanings:

Class 1 Properties means the properties within the Service Area described in the schedule attached to and forming part of the General Terms and Conditions.

Class 2 Properties means properties within the Service Area, other than Class 1 Properties, on which it is proposed to construct multi-family residential, commercial, industrial and institutional buildings having a combined floor area of greater than 1000 square meters.”;

Class 3 Properties means properties within the Service Area other than Class 1 Properties and Class 2 Properties

Commercial Service means the provision of Hydronic Energy Service to commercial, institutional and industrial Premises.

Commodity means the fuel used by the Service Provider in the Hydronic Energy System to create the Hydronic Energy.

Conversion Factor means a factor, or combination of factors, which converts Hydronic Energy meter data to kilowatts or cubic metres for billing purposes.

Cooling means the energy transferred for the purpose of lowering the ambient air temperature in a Premise including all energy transferred at a temperature of 21 degree C or less.

Customer means a Person who is being provided Service or who has filed an application for Service with the Service Provider that has been approved by the Service Provider.

Day means any period of 24 consecutive Hours beginning and ending at 7:00 a.m. Pacific Standard Time or as otherwise specified in the Service Agreement.

Delivery Point means the outlet of the Heat Exchanger unless otherwise specified in the Service Agreement.

Delivery Temperature and replacing it by the following “Delivery Temperature means the Hydronic Energy transfer temperature as determined by the Service Provider available to the Customer at the Delivery Point.”

Distribution System means the system of water pipes, fittings and ancillary components used for distributing water for the purposes of providing Hydronic Energy to Premises in the Service Area including all additions thereto and replacements thereof and the system of water pipes connecting the Distribution System to the Service Connection including all additions thereto and replacements thereof.

General Terms & Conditions means these general terms and conditions as amended from time to time by the Council of the City of North Vancouver.

Heating means the energy transferred for the purpose of raising the ambient air or domestic hot water temperature in a Premise including all energy transferred at a temperature exceeding 21 degree C.

Heat Exchanger means the equipment including ventilation systems installed at the Customer's Premises to transfer Hydronic Energy from the Hydronic Energy System to the Customer's Premises.

Hour means any consecutive 60 minute period.

Hydronic Energy Hydronic Energy means heated water and cooled water.

Hydronic Energy Service means the delivery of Hydronic Energy through the Hydronic Energy System to a Delivery Point and through a Meter Set for use in multi-family residential, commercial, institutional and industrial Premises.

Hydronic Energy System means the Hydronic Energy generation system including the Distribution System and water boilers, heat pumps and solar panels used for the purpose of heating or cooling the water that flows through the Distribution System and the Service Connections and all equipment including the pressure vessels, conduits, pipes, valves, lines, pumps, Heat Exchangers and Meter Sets together with all ancillary appliances and fittings necessary to provide Hydronic Energy to Premises in the Service Area and all additions thereto and replacements thereof as such system is expanded, reduced or modified from time to time.

Hydronic Energy System Extension means an extension or expansion of the Hydronic Energy System including the upgrading of existing pipes, and ancillary equipment on private property, but does not include the installation of Service Connections, Heat Exchangers or Meter Sets.

LEC means Lonsdale Energy Corporation, a body corporate incorporated pursuant to the laws of the Province of British Columbia.

Meter Set means an assembly of metering and ancillary equipment, including Heat Exchangers, that measure the amount of Hydronic Energy consumed by a Customer.

Month means a period of time, for billing purposes, of 27 to 34 consecutive Days.

Other Service means the provision of service other than Hydronic Energy Service.

Other Service Charges means charges for damages, alterations and repairs, financing, insurance, and late payment charges, Social Service Tax, Goods and Services Tax or other taxes related to these charges.

Person means a natural person, partnership, corporation, society, unincorporated entity or body politic.

Premises means a building, a separate unit of a building, or machinery together with the surrounding land.

Rate Schedule means a schedule attached to and forming part of the General Terms and Conditions, which sets out the charges for Service and certain other related terms and conditions for a class of Service.

Residential Service means the provision of Hydronic Energy Service to multi-family residential Premises.

Return Temperature means the temperature, as determined by the Service Provider and measured at the Heat Exchanger, at which water from the Customer's Premises may be returned to the Hydronic Energy System.

Service means the provision of Hydronic Energy Service and Other Service by the Service Provider.

Service Agreement means an agreement between the Service Provider and a Customer for the provision of Service.

Service Area means that portion of the City of North Vancouver designated by the Council of the City of North Vancouver for the provision of Hydronic Energy Service.

Service Connection means that portion of the Hydronic Energy System extending from the Distribution System to the Delivery Point.

Service Provider means the Person who provides Service to Customers in accordance with the General Terms and Conditions including without limitation LEC and its successors, assigns, officers, employees, servants, agents and contractors;

Service Related Charges include, but are not limited to, application fees, Service Connection installation fees, disconnection fees and late payment charges, plus Social Services Tax, Goods and Service Tax, or other taxes related to these charges.

Standard Fees & Charges Schedule means the schedule attached to and forming part of the General Terms and Conditions which lists the various fees and charges relating to Service provided by the Service Provider as approved from time to time by the Council of the City of North Vancouver.

Utility Services means the hydro-electric, water, sewer and other utility services required by the Service Provider to provide the Hydronic Energy Service.

Year means a period of 12 consecutive Months.

SERVICE AREAS

These General Terms and Conditions refer to the provision of Hydronic Energy Service in the City of North Vancouver or such portions thereof as may be designated by the Council of the City of North Vancouver and such other areas as may be added from time to time by the Council of the City of North Vancouver.

1. APPLICATION REQUIREMENTS

1.1 Requesting Services - A Person requesting the Service Provider to provide Service, including

- (a) providing Hydronic Energy Services,
- (b) providing a Service Connection,
- (c) re-activating existing Service Connections,
- (d) transferring an existing account,
- (e) changing the type of Service provided, or
- (f) making alterations to existing Service Connections, Heat Exchangers or Meter Sets,

must apply to the Service Provider in person, by mail, by telephone, by facsimile or by other electronic means.

1.2 Required Documents - An applicant for Service may be required to sign an application and a Service Agreement provided by the Service Provider.

1.3 Separate Premises / Businesses - If an applicant is requesting Service from the Service Provider at more than one Premises, or for more than one separately operated business, then the applicant will be considered a separate Customer for each of the Premises and businesses. For the purposes of this provision, the Service Provider will determine whether any building contains one or more Premises or any business is separately operated.

1.4 Required References – The Service Provider may require an applicant for Service to provide reference information and identification acceptable to the Service Provider.

1.5 Refusal of Application – The Service Provider may refuse to accept an application for Service for any of the reasons listed in Section 19 (Discontinuance of Service and Refusal of Service).

2. AGREEMENT TO PROVIDE SERVICE

2.1 Service Agreement - The agreement for Service between a Customer and the Service Provider will be:

- (a) the oral or written application of the Customer that has been approved by the Service Provider and that is deemed to include the General Terms and Conditions, or
- (b) a Service Agreement signed by the Customer.

2.2 Customer Status - A Person becomes a Customer of the Service Provider when the Service Provider

- (a) approves the Person's application for Service, or
- (b) provides Service to the Person.

2.3 Service Connections

Subject to the following, the Service Provider will serve each parcel of land with one Service Connection. Additional Service Connections may be provided at the sole discretion of the Service Provider. In the case of buildings which have been subdivided by way of strata plan all strata lots and common property will be served by one Service Connection and the Customer will be the Strata Corporation.

2.4 No Assignment/Transfer – A Customer may not transfer or assign a Service Agreement without the written consent of the Service Provider.

3. CONDITIONS ON USE OF SERVICE

3.1 Return Temperature – A Customer will ensure that the temperature of the water returning from the Customer's Premises to the Distribution System complies with the requirements of the Service Provider.

3.2 Unauthorized Sale / Supply / Use - Unless authorized in writing by the Service Provider, a Customer will not sell or supply Hydronic Energy supplied to it by the Service Provider to other Persons or use Hydronic Energy supplied to it by the Service Provider for any purpose other than as specified in the Service Agreement and the General Terms and Conditions.

4. RATE CLASSIFICATION

4.1 Rate Classification - Customers may be served under any Rate Schedule for which they meet the applicability criteria as set out in the appropriate Rate Schedule.

4.2 Rate Selection – The Service Provider will endeavour to provide the Customer with information and advice on all rates available to the Customer from time to time, but in every case the selection of the appropriate Rate Schedule will be the sole responsibility of the Customer.

In the absence of instructions from the Customer, the Service Provider will select a Rate Schedule on behalf of the Customer on the basis of information available at the time of selection. If the Customer wishes to be on a specific Rate Schedule, then the Customer must inform the Service Provider in writing prior to November 1 of their Rate Schedule selection. The selected Rate Schedule will remain in effect for one (1) year, starting November 1. *[Bylaw 8497, October 17, 2016]*

4.3 Periodic Review – the Service Provider may

- (a) conduct periodic reviews of the quantity of Hydronic Energy and the rate of delivery of Hydronic Energy to a Customer to determine which Rate Schedule applies to the Customer, and
- (b) change the Customer's charge to the appropriate charge, or
- (c) change the Customer to the appropriate Rate Schedule.

5. APPLICATION AND SERVICE CONNECTION INSTALLATION FEES AND CHARGES

5.1 Application and Service Connection Installation Fees - An applicant for Service must pay the applicable application and installation fees set out in the Standard Fees and Charges Schedule.

5.2 Waiver of Application Fee - The application fee will be waived by the Service Provider if Service to a Customer is reactivated after it was discontinued for any of the reasons described in Section 12.2 (Right to Restrict).

5.3 Reactivation Charges – If Service is terminated

(a) for any of the reasons described in Section 19 (Discontinuance of Service and Refusal of Service), or

(b) to permit Customers to make alterations to their Premises,

and the same Customer or the spouse, employee, contractor, agent or partner of the same Customer requests reactivation of Service to the Premises within one Year, then the applicant for reactivation must pay the greater of

(c) the costs the Service Provider incurs in de-activating and re-activating the Service, or

(d) the sum of the minimum charges set out in the applicable Rate Schedule which would have been paid by the Customer between the time of termination and the time of reactivation of Service.

5.4 Identifying Load or Premises Served by Meter Sets - If a Customer requests the Service Provider to identify the Meter Set that serves the Premises and/or load after the Meter Set was installed, then the Customer will pay the cost the Service Provider incurs in re-identifying the Meter Set where

(a) the Meter Set is found to be properly identified, or

(b) the Meter Set is found to be improperly identified as a result of Customer activity, including

(i) a change in the legal civic address of the Premises,

(ii) renovating or partitioning the Premises, or

(iii) rerouting Hydronic Energy lines after the Delivery Point.

6. SECURITY FOR PAYMENT OF BILLS

6.1 Security for Payment of Bills - If a Customer or applicant cannot establish or maintain credit to the satisfaction of the Service Provider, then the Customer or applicant may be required to provide a security deposit in the form of cash or an equivalent form of security acceptable to the Service Provider. As security for payment of bills, all Customers who have not established or maintained credit to the satisfaction of the Service Provider, may be required to provide a security deposit or equivalent form of security, the amount of which may not

- (a) be less than \$50, and
- (b) exceed an amount equal to the estimate of the total bill for the two highest consecutive Months consumption of Hydronic Energy by the Customer or applicant.

6.2 Interest – The Service Provider will pay interest to a Customer on a security deposit at the rate and at the times specified in the Standard Fees and Charges Schedule. Subject to Section 6.5, if a security deposit in whole or in part is returned to the Customer for any reason, the Service Provider will credit any accrued interest to the Customer's account at that time.

No interest is payable

- (a) on any unclaimed deposit left with the Service Provider after the account for which is security is closed, and
- (b) on a deposit held by the Service Provider in a form other than cash.

6.3 Refund of Deposit - When the Customer pays the final bill, the Service Provider will refund any remaining security deposit plus any accrued interest or cancel the equivalent form of security.

6.4 Unclaimed Refund - If the Service Provider is unable to locate the Customer to whom a security deposit is payable, the Service Provider will take reasonable steps to trace the Customer; but if the security deposit remains unclaimed 10 Years after the date on which it first became refundable, the deposit, together with any interest accrued thereon, becomes the absolute property of the Service Provider.

6.5 Application of Deposit - If a Customer's bill is not paid when due, then the Service Provider may apply all or any part of the Customer's security deposit or equivalent form of security and any accrued interest toward payment of the bill. Even if the Service Provider applies the security deposit or calls on the equivalent form of security, the Service Provider may, under Section 19 (Discontinuance of Service and Refusal of Service), discontinue Service to the Customer for failure to pay for Service on time.

6.6 Replenish Security Deposit - If a Customer's security deposit or equivalent form of security is called upon by the Service Provider towards paying an unpaid bill, then the Customer must re-establish the security deposit or equivalent form of security before the Service Provider will reconnect or continue Service to the Customer.

6.7 Failure to Pay - Failure to pay a security deposit or to provide an equivalent form of security acceptable to the Service Provider may, in the Service Provider's discretion, result in discontinuance or refusal of Service as set out in Section 19 (Discontinuance of Service and Refusal of Service).

7. TERM OF SERVICE AGREEMENT

7.1 Term for Residential and Commercial Service to Class 1 and Class 2 Properties If a Customer is being provided Residential Service or Commercial Service at a Class 1 or Class 2 Property then the term of the Service Agreement will be until the Service Agreement is terminated in accordance with the General Terms and Conditions.

7.2 Initial Term for Residential and Commercial Service - If a Customer is being provided Residential Service or Commercial Service at a Class 3 Property, the initial term of the Service Agreement

- (a) when a new Service Connection is required will be one Year, or
- (b) when a Hydronic Energy System Extension is required will be for a period of time fixed by the Service Provider.

7.3 Renewal of Initial Term of Agreement for Residential and Commercial Service to a Class 3 Property – Unless

- (a) the Service Agreement or the applicable Rate Schedule specifies otherwise, or
- (b) the Service Agreement is terminated under Section 8 (Termination of Service Agreement),

the Service Agreement described in Section 7.2 will be automatically renewed at the end of its initial Term from Month to Month for Residential or Commercial Service,

8. TERMINATION OF SERVICE AGREEMENT

8.1 Termination by Customer – Subject to applicable federal, provincial and local government laws, statutes, regulations, bylaws, orders and policies, unless the Service Agreement or applicable Rate Schedule specifies otherwise, a Customer whose Premises are located at a Class 3 Property only may terminate the Service Agreement after the end of the initial term by giving the Service Provider at least 48 Hours notice and paying the applicable disconnection fees set out in the Standard Fees and Charges Schedule.

- 8.2 Continuing Obligation** - The Customer is responsible for, and must pay for, all Hydronic Energy delivered to the Premises and is responsible for all damages to and loss of Heat Exchangers, Meter Sets or other equipment of the Service Provider on the Premises until the Service Agreement is terminated.
- 8.3 Effect of Termination** - The Customer is not released from any previously existing obligations to the Service Provider under a Service Agreement by the termination of the agreement.
- 8.4 Sealing Service Connection** - After the termination of Hydronic Energy Service to a Premises and after a reasonable period of time during which a new Customer has not applied for Hydronic Energy Service at the Premises, the Service Provider may seal off the Service Connection to the Premises.
- 8.5 Termination by the Service Provider** - Subject to applicable federal, provincial and local government laws, statutes, regulations, bylaws, orders and policies, unless the Service Agreement or applicable Rate Schedule specifies otherwise, the Service Provider may terminate a Service Agreement for Premises at Class 1, 2 and 3 Properties by giving the Customer at least 48 Hours written notice if Service is discontinued under Section 19 (Discontinuance of Service and Refusal of Service).

9. SERVICE CONNECTIONS

- 9.1 Provided Installation** - If the Hydronic Energy System is adjacent to the Customer's Premises, then the Service Provider
- (a) will designate the location of the Heat Exchanger, Meter Set and Service Connections on the Customer's Premises and determine the amount of space that must be left unobstructed around them,
 - (b) will install the Heat Exchanger and Meter Set upon payment of the applicable installation fees set out in the Standard Fees and Charges Schedule; and
 - (c) will install the Service Connection from the Hydronic Energy System to the Delivery Point on the Customer's Premises at no additional cost to the Customer provided the Service Connection follows the route which is the most suitable to the Service Provider.
- 9.2 Customer Requested Routing – If:**
- (a) the Hydronic Energy System is adjacent to the Customer's Premises,
 - (b) the Customer requests that its piping or Service Connection enter its Premises at a different point of entry or follow a different route from the point or route designated by the Service Provider, and
 - (c) the Customer requests that the Heat Exchanger or Meter Set be installed at a different location from the location designated by the Service Provider,

then the Service Provider may charge the Customer for all additional costs as determined by the Service Provider to install the Heat Exchanger, Meter Set and Service Connection in accordance with the Customer's request.

- 9.3 Additional Connections** - If a Customer requests more than one Service Connection to the Premises, on the same Rate Schedule, then the Service Provider may install the additional Service Connection and may charge the Customer the Application Fee set out in the Standard Fees and Charges Schedule, as well as the full cost (including overhead costs) for the Service Connection installation in lieu of the Service Connection Installation Fee set out in the Standard Fees and Charges Schedule. The Service Provider will bill the additional Service Connection from a separate meter and account. If the additional Service Connection is requested by a, contractor, employee, agent or partner of the existing Customer, then the same charges will apply.
- 9.4 Easement Required** - If an intervening property is located between the Customer's Premises and the Hydronic Energy System, then the Customer is responsible for the costs of obtaining an easement in favour of the Service Provider and in a form specified by the Service Provider, for the installation, operation and maintenance on the intervening property of all necessary facilities for supplying Hydronic Energy to the Customer.
- 9.5 Ownership** – The Customer does not own any part of the Service Connection from the Hydronic Energy System up to and including the Heat Exchanger and Meter Set, whether it is located inside or outside the Customer's Premises.
- 9.6 Maintenance** – The Service Provider will maintain the Heat Exchanger, Meter Set and Service Connection.
- 9.7 Supply Cut Off** - If the supply of Hydronic Energy to a Customer's Premises is cutoff for any reason then, the Service Provider may, but is not required to, remove the Heat Exchanger, Meter Set or Service Connection from the Customer's property or Premises.
- 9.8 Damage Notice** - The Customer must advise the Service Provider immediately of any damage occurring to the Heat Exchanger, Meter Set or Service Connection.
- 9.9 Prohibition** - A Customer must not construct any permanent structure which, in the opinion of the Service Provider, obstructs access to a Service Connection, Heat Exchanger or Meter Set.
- 9.10 No Unauthorized Changes** - No changes, extensions, connections to or replacement of, or disconnection from the Distribution System or Service Connections, will be made except by the Service Provider's authorized employees, contractors or agents or by other Persons authorized in writing by the Service Provider. Any change in the location of an existing Service Connection
- (a) must be approved in writing by the Service Provider, and
 - (b) will be made at the expense of the Customer if the change is requested by the Customer or necessitated by the actions of the Customer.

9.11 Site Preparation - The Customer will be responsible for all necessary site preparation including but not limited to clearing building materials, construction waste, equipment, soil and gravel piles over the proposed service line route to the standards established by the Service Provider. The Service Provider may recover any additional costs associated with delays or site visits necessitated by inadequate or substandard site preparation by the Customer.

10. HEAT EXCHANGERS, METER SETS & METERING

10.1 Installation – In order to provide Hydronic Energy and bill the Customer for Hydronic Energy delivered, the Service Provider will install one or more Heat Exchangers and Meter Sets on the Customer's Premises. The technical specifications of all Heat Exchangers and Meter Sets will be determined by the Service Provider. Unless approved by the Service Provider, all Heat Exchangers and Meter Sets will be located at locations designated by the Service Provider.

10.2 Measurement - The quantity of Hydronic Energy delivered to the Premises will be metered using apparatus approved by the City of North Vancouver. The amount of Hydronic Energy registered by the Meter Set during each billing period will be converted to kilowatts and rounded to the nearest one-tenth of a kilowatt.

10.3 Testing Meters - If a Customer applies for the testing of a Meter Set and

- (a) the Meter Set is found to be recording incorrectly, then the cost of removing, replacing and testing the meter will be borne by the Service Provider subject to Section 20.4 (Responsibility for Heat Exchanger and Meter Set), and
- (b) if the testing indicates that the Meter Set is recording correctly, then the Customer must pay the Service Provider for the cost of removing, replacing and testing the Meter Set as set out in the Standard Fees and Charges Schedule.

10.4 Defective Meter Set - If a Meter Set ceases to register, then the Service Provider will estimate the volume of Hydronic Energy delivered to the Customer according to the procedures set out in Section 14.6 (Incorrect Register).

10.5 Protection of Equipment - The Customer must take reasonable care of and protect all Heat Exchangers, Meter Sets and related equipment on the Customer's Premises. The Customer's responsibility for expense, risk and liability with respect to all Heat Exchangers, Meter Sets and related equipment is set out in Section 20.4 (Responsibility for Heat Exchanger and Meter Set).

10.6 No Unauthorized Changes - No Heat Exchangers, Meter Sets or related equipment will be installed, connected, moved or disconnected except by the Service Provider's authorized employees, contractors or agents or by other Persons with the Service Provider's written permission.

- 10.7 Removal of Service** - At the termination of a Service Agreement, the Service Provider may disable, disconnect or remove a Heat Exchanger and Meter Set on or from the Premises if a new Customer is not expected to apply for Service for the Premises within a reasonable time.
- 10.8 Customer Requested Heat Exchanger and Meter Relocation or Modifications** - Any change in the location of a Heat Exchanger, Meter Set or related equipment, or any modifications to the Heat Exchanger or Meter Set, including automatic and/or remote meter reading
- (a) must be approved by the Service Provider in writing, and
 - (b) will be made at the expense of the Customer if the change or modification is requested by the Customer or necessitated by the actions of the Customer. If any of the changes to the Heat Exchanger, Meter Set or related equipment require the Service Provider to incur ongoing incremental operating and maintenance costs, the Service Provider may recover these costs from the Customer through a Monthly charge.
- 10.9 Meter Set Consolidations** - A Customer who has more than one Meter Set at the same Premises or adjacent Premises may apply to the Service Provider to consolidate its Meter Sets. If the Service Provider approves the Customer's application, then the Customer will be charged the value for all portions of the Hydronic Energy System abandoned except for Meter Sets that are removed to facilitate Meter Set consolidations. In addition, the Customer will be charged the Service Provider's full costs, including overheads, for any abandonment, Meter Set removal and alteration downstream of the new Meter Set. If a new Service Connection is required, then the Service Provider will charge the Customer the Service Connection Installation Fee and the Application Fee. In addition, the Customer will be required to sign a release waiving the Service Provider's liability for any damages should the Customer decide to re-use the abandoned plant downstream of the new Meter Set.
- 11. HYDRONIC ENERGY SYSTEM EXTENSIONS**
- 11.1 System Extension and Expansion** – The Service Provider will make extensions and expansions of its Hydronic Energy System in accordance with system development requirements.
- 11.2 Ownership** - All extensions and expansions of the Hydronic Energy System will remain the property of the Service Provider as between the Service Provider and the Customer.
- 11.3 Contribution** - If the proposed provision of Hydronic Energy Service to Premises will require the Service Provider to extend or expand the Hydronic Energy System and the recovery of the cost of that extension or expansion could result in an increase in the rates paid by existing Customers, then the Customer requiring the extension or expansion will be required to contribute to the cost of the extension or expansion.

12. INTERRUPTION OF SERVICE

12.1 Regular Supply – The Service Provider will use its best efforts to provide the constant delivery of Hydronic Energy and the maintenance of unvaried temperatures.

12.2 Right to Restrict – The Service Provider may require any of its Customers, at all times or between specified Hours, to discontinue, interrupt or reduce to a specified degree or quantity, the delivery of Hydronic Energy for any of the following purposes or reasons:

- (a) in the event of a temporary or permanent shortage of Hydronic Energy, whether actual or perceived by the Service Provider,
- (b) in the event of a breakdown or failure of the supply of Commodity or Utility Service to the Hydronic Energy System,
- (c) to comply with any legal requirements,
- (d) to make repairs or improvements to any part of the Hydronic Energy System, or
- (e) in the event of fire, flood, explosion or other emergency to safeguard Persons or property against the possibility of injury or damage.

12.3 Notice – The Service Provider will, to the extent practicable, give notice of its requirements and removal of its requirements under Section 12.2 (Right to Restrict) to its Customers by

- (a) newspaper, radio or television announcement, or
- (b) notice in writing that is
 - (i) sent through the mail to the Customer's billing address,
 - (ii) left at the Premises where Hydronic Energy is delivered,
 - (iii) served personally on a Customer, or
 - (iv) sent by facsimile or other electronic means to the Customer, or
- (c) oral communication.

12.4 Failure to Comply - If, in the opinion of the Service Provider, a Customer has failed to comply with any requirement under Section 12.2 (Right to Restrict), then the Service Provider may, after providing notice to the Customer in the manner specified in Section 12.3 (Notice), discontinue Service to the Customer.

13. Access to Premises and Equipment

13.1 Access to Premises – The Service Provider has a right of entry to the Customer's Premises. The Customer must provide free access to its Premises at all times to the Service Provider's authorized employees, contractors and agents for the purpose of reading, testing, repairing or removing Service Connections, Meter Sets, Heat Exchangers and ancillary equipment, turning Hydronic Energy on or off, completing system leakage surveys, stopping leaks, examining pipes, connections, fittings and

appliances and reviewing the use made of Hydronic Energy delivered to the Customer, or for any other related purpose which the Service Provider requires.

- 13.2 Access to Equipment** - The Customer must provide clear access to the Service Provider's equipment including the equipment described in section 13.1. The equipment installed by the Service Provider on the Customer's Premises will remain the property of the Service Provider as between the Service Provider and the Customer and may be removed by the Service Provider upon termination of Service.

14. BILLING

- 14.1 Basis for Billing** – The Service Provider will bill the Customer in accordance with the Customer's Service Agreement, the Rate Schedule under which the Customer is provided Service, and the fees and charges contained in the General Terms and Conditions.
- 14.2 Meter Measurement** – The Service Provider will measure the quantity of Hydronic Energy delivered to a Customer using a Meter Set and the starting point for measuring delivered quantities during each billing period will be the finishing point of the preceding billing period.
- 14.3 Multiple Meters** - Hydronic Energy Service to each Meter Set will be billed separately for Customers who have more than one Meter Set on their Premises.
- 14.4 Estimates** - For billing purposes, the Service Provider may estimate the Customer's meter readings if, for any reason, the Service Provider does not obtain a meter reading.
- 14.5 Estimated Final Reading** - If a Service Agreement is terminated then the Service Provider may estimate the final meter reading for final billing.
- 14.6 Incorrect Register** - If any Meter Set has failed to measure the delivered quantity of Hydronic Energy correctly, then the Service Provider may estimate the meter reading for billing purposes, subject to Section 15 (Back-Billing).
- 14.7 Bills Issued** – The Service Provider may bill a Customer as often as the Service Provider considers necessary but generally will bill on a Monthly basis.
- 14.8 Bill Due Dates** -The Customer must pay the Service Provider's bill for Service on or before the due date shown on the bill which will be
- (a) the first business Day after the twenty-first calendar Day following the billing date, or
 - (b) such other period as may be agreed upon by the Customer and the Service Provider.
- 14.9 Historical Billing Information** - Customers who request historical billing information may be charged the cost of processing and providing the information.

14.10 Sub-Metering and allocation of Hydronic Energy Fees - Customers may allocate to a Person, fees billed by the Service Provider on the following basis:

- (a) Unless a fee set out in Schedule “B” and “C” of this Bylaw is recovered in compliance with section 99(2) of the *Strata Property Act*, every strata corporation that wishes to collect the fee from a strata lot owner must do so only in compliance with paragraph (c).
- (b) Unless a fee set out in Schedule “B” and “C” of this Bylaw is included in the lump sum regular monthly rent payments stipulated in a rental agreement between the rental property owner and renter, every rental property owner who wishes to collect the fee from a rental unit renter or other occupier must do so only in compliance with paragraph (c).
- (c) Every strata corporation or rental property owner referred to in paragraphs (a) and (b) must collect a fee set out in Schedule “B” and “C” of this Bylaw only on the following basis:
 - (i) a flat fee, including Meter Charge and Capacity Charge, must be recovered on a flat fee basis with the invoice clearly showing:
 - A. the flat fee set out in Schedule “B” and “C” of this Bylaw, and
 - B. the calculation of the amount owing;
 - (ii) a metered fee, including Commodity Charge, must be recovered on a metered fee basis with the invoice clearly showing:
 - A. the metered fee set out in Schedule “B” of this Bylaw,
 - B. the quantity of metered hydronic energy in kilowatt hours, and
 - C. the calculation of the amount owing;
 - (iii) a mark-up above the fee must:
 - A. be provided on a separate line on the invoice,
 - B. identify the purpose of the mark-up, and
 - C. specify that the amount of the mark-up is not regulated by the City of North Vancouver;
 - (iv) for a metered fee under this Bylaw, the quantity of metered Hydronic Energy in respect of the amount of the fee due and owing must be metered. No person may issue an invoice for a fee or otherwise collect a fee based on an estimate of usage or through the use of a device other than a thermal metering device that measures flow and temperature differential at point of delivery.

[Bylaw 8660, July 9, 2018]

15. BACK-BILLING

- 15.1 When Required** – The Service Provider may, in the circumstances specified herein, charge, demand, collect or receive from its Customers for a regulated Service rendered thereunder a greater or lesser compensation than that specified in the subsisting schedules applicable to that Service.

In the case of a minor adjustment to a Customer's bill, such as an estimated bill or an equal payment plan billing, such adjustments do not require back-billing treatment to be applied.

- 15.2 Definition** - Back-billing means the rebilling by the Service Provider for Services rendered to a Customer because the original billings are discovered to be either too high (overbilled) or too low (under-billed). The discovery may be made by either the Customer or the Service Provider. The cause of the billing error may include any of the following non-exhaustive reasons or combination thereof:

- (a) stopped meter
- (b) metering equipment failure
- (c) missing meter now found
- (d) switched meters
- (e) double metering
- (f) incorrect meter connections
- (g) incorrect use of any prescribed apparatus respecting the registration of a meter
- (h) incorrect meter multiplier
- (i) the application of an incorrect rate
- (j) incorrect reading of meters or data processing
- (k) tampering, fraud, theft or any other criminal act.

- 15.3 Billing Basis** - Where metering or billing errors occur, the consumption and demand will be based upon the records of the Service Provider for the Customer, or the Customer's own records to the extent they are available and accurate, or if not available, reasonable and fair estimates may be made by the Service Provider. Such estimates will be on a consistent basis within each Customer class or according to a contract with the Customer, if applicable.

- 15.4 Tampering/Fraud** - If there are reasonable grounds to believe that the Customer has tampered with or otherwise used the Service Provider's Service in an unauthorized way, or there is evidence of fraud, theft or other criminal acts, or if a reasonable Customer should have known of the under-billing and failed to promptly bring it to the attention of the Service Provider, then the extent of back-billing will be for the duration of the unauthorized use, subject to the applicable limitation period provided by law, and the provisions of Sections 15.7 (Under-Billing) to 15.10 (Changes in Occupancy), below, do not apply.

In addition, the Customer is liable for the direct (unburdened) administrative costs incurred by the Service Provider in the investigation of any incident of tampering, including the direct costs of repair, or replacement of equipment.

Under-billing resulting from circumstances described above will bear interest at the rate normally charged by the Service Provider on unpaid accounts from the date of the original under-billed invoice until the amount under-billed is paid in full.

- 15.5 Remediating Problem** - In every case of under-billing or over-billing, the cause of the error will be remedied without delay, and the Customer will be promptly notified of the error and of the effect upon the Customer's ongoing bill.
- 15.6 Over-billing** - In every case of over-billing, the Service Provider will refund to the Customer all money incorrectly collected for the duration of the error, subject to the applicable limitation period provided by law. Simple interest, computed at the short-term bank loan rate applicable to the Service Provider on a Monthly basis, will be paid to the Customer.
- 15.7 Under-billing** - Subject to Section 15.4 (Tampering/Fraud), above, in every case of under-billing, the Service Provider will back-bill the Customer for the shorter of
- (a) the duration of the error; or
 - (b) six Months for Residential or Commercial Service; and
 - (c) one Year for all other Customers or as set out in a special or individually negotiated contract with the Service Provider.
- 15.8 Terms of Repayment** - Subject to Section 15.4 (Tampering/Fraud), above, in all cases of under-billing, the Service Provider will offer the Customer reasonable terms of repayment. If requested by the Customer, the repayment term will be equivalent in length to the back-billing period. The repayment will be interest free and in equal instalments corresponding to the normal billing cycle. However, delinquency in payment of such instalments will be subject to the usual late payment charges.
- 15.9 Disputed Back-bills** - Subject to Section 15.4 (Tampering/Fraud), above, if a Customer disputes a portion of a back-billing due to under-billing based upon either consumption, demand or duration of the error, then the Service Provider will not threaten or cause the discontinuance of Service for the Customer's failure to pay that portion of the back-billing, unless there are no reasonable grounds for the Customer to dispute that portion of the back-billing. The undisputed portion of the bill will be paid by the Customer and the Service Provider may threaten or cause the discontinuance of Service if such undisputed portion of the bill is not paid.
- 15.10 Changes in Occupancy** - Subject to Section 15.4 (Tampering/Fraud), above, back-billing in all instances where changes of occupancy have occurred, the Service Provider will make a reasonable attempt to locate the former Customer. If, after a period of one year, such Customer cannot be located, then the applicable over or under billing will be cancelled.

16. EQUAL PAYMENT PLAN

- 16.1** The Service Provider may, at its discretion, create and administer an Equal Payment Plan in which case Sections 16.2 to 16.7 apply.

- 16.2 Definitions** - In this Section 16, "**equal payment plan**" means a plan created and administered by the Service Provider whereby Customers may average their Hydronic Energy costs over a specified period of time and "**equal payment plan period**" means a period of twelve consecutive Months commencing with a normal meter reading date at the Customer's Premises.
- 16.3 Application for Plan** - A Customer may apply to the Service Provider by mail, by telephone, by facsimile or by other electronic means to pay fixed Monthly instalments for Hydronic Energy delivered to the Customer during the equal payment plan period. Acceptance of the application will be subject to the Service Provider finding the Customer's credit to be satisfactory.
- 16.4 Monthly Instalments** – The Service Provider will fix Monthly instalments for a Customer so that the total sum of all the instalments to be paid during the equal payment plan period will equal the total amount payable for the Hydronic Energy which the Service Provider estimates the Customer will consume during the equal payment plan period.
- 16.5 Changes in Instalments** – The Service Provider may, at any time, increase or decrease the amount of Monthly instalments payable by a Customer in light of new consumption information or changes to the Rate Schedules or the General Terms and Conditions.
- 16.6 End of Plan** – Participation in the equal payment plan may be ended at any time
- (a) by the Customer giving 5 Days' notice to the Service Provider,
 - (b) by the Service Provider, without notice, if the Customer has not paid the Monthly instalments as required; or
 - (c) by the Service Provider if the Service Provider terminates the Equal Payment Plan.
- 16.7 Payment Adjustment** - At the earlier of the end of the equal payment plan period for a Customer or the end of the Customer's participation in the plan under Section 16.6 (End of Plan), the Service Provider will
- (a) compare the amount which is payable by the Customer to the Service Provider for Hydronic Energy actually consumed on the Customer's Premises from the beginning of the equal payment plan period to the sum of the Monthly instalments billed to the Customer from the beginning of the equal payment plan period, and
 - (b) pay to the Customer or credit to the Customer's account any excess amount or bill the Customer for any deficit amount payable.
- 17. LATE PAYMENT CHARGE**
- 17.1 Late Payment Charge** - If the amount due for Service or Service related Charges on any bill has not been received in full by the Service Provider or by an agent acting on behalf of the Service Provider on or before the due date specified on the bill, and the unpaid balance is \$15 or more, then the Service Provider may include in the next bill to

the Customer the late payment charge specified in the Standard Fees and Charges Schedule.

- 17.2 Equal Payment Plan** - If the Monthly instalment, Service Related Charges and payment adjustment as defined under Section 16.7 (Payment Adjustments) due from a Customer billed under the equal payment plan set out in Section 16 have not been received by the Service Provider or by an agent acting on behalf of the Service Provider on or before the due date specified on the bill, then the Service Provider may include in the next bill to the Customer the late payment charge in accordance with Section 17.1 (Late Payment Charge) on the amount due.

18. RETURNED CHEQUE CHARGE

- 18.1 Dishonoured Cheque Charge** - If a cheque received by the Service Provider from a Customer in payment of a bill is not honoured by the Customer's financial institution for any reason other than clerical error, then the Service Provider may include a charge specified in the Standard Fees and Charges Schedule in the next bill to the Customer for processing the returned cheque whether or not the Service has been disconnected.

19. DISCONTINUANCE OF SERVICE AND REFUSAL OF SERVICE

- 19.1 Discontinuance With Notice and Refusal Without Notice** – Subject to applicable federal, provincial, and local government laws, statutes, regulations, bylaws, orders and policies the Service Provider may discontinue Service to a Customer with at least 48 Hours written notice to the Customer or Customer's Premises, or may refuse Service for any of the following reasons:
- (a) the Customer has not fully paid the Service Provider's bill with respect to Services on or before the due date,
 - (b) the Customer or applicant has failed to pay any required security deposit, equivalent form of security, or post a guarantee or required increase in it by the specified date,
 - (c) the Customer or applicant has failed to pay the Service Provider's bill in respect of another Premises on or before the due date,
 - (d) the Customer or applicant occupies the Premises with another occupant who has failed to pay the Service Provider's bill, security deposit, or required increase in the security deposit in respect of another Premises which was occupied by that occupant and the Customer at the same time,
 - (e) the Customer or applicant is in receivership or bankruptcy, or operating under the protection of any insolvency legislation and has failed to pay any outstanding bills to the Service Provider,
 - (f) the Customer has failed to apply for Service, or
 - (g) the land or portion thereof on which the Service Provider's facilities are, or are proposed to be, located contains contamination which the Service Provider, acting reasonably, determines has adversely affected or has the potential to

adversely effect the Service Provider's facilities, or the health or safety of its workers or which may cause the Service Provider to assume liability for clean up and other costs associated with the contamination. If the Service Provider, acting reasonably, determines that contamination is present it is the obligation of the occupant of the land to satisfy the Service Provider that the contamination does not have the potential to adversely affect the Service Provider or its workers. For the purposes of this Section, "contamination" means the presence in the soil, sediment or groundwater of special waste or another substance in quantities or concentrations exceeding criteria, standards or conditions established by the British Columbia Ministry of Water, Land and Air Protection or as prescribed by present and future laws, rules, regulations and orders of any other legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over the environment.

19.2 Discontinuance or Refusal Without Notice – Subject to applicable federal, provincial and local government laws, statutes, regulations, bylaws, orders and policies the Service Provider may discontinue without notice or refuse the supply of Hydronic Energy or Service to a Customer for any of the following reasons:

- (a) the Customer or applicant has failed to provide reference information and identification acceptable to the Service Provider, when applying for Service or at any subsequent time on request by the Service Provider,
- (b) the Customer has defective pipe, appliances, or Hydronic Energy fittings in the Premises,
- (c) the Customer uses Hydronic Energy in such a manner as in the Service Provider's opinion:
 - (i) may lead to a dangerous situation, or
 - (ii) may cause undue or abnormal fluctuations in the temperature of Hydronic Energy in the Hydronic Energy System,
- (d) the Customer fails to make modifications or additions to the Customer's equipment which have been required by the Service Provider to prevent the danger or to control the undue or abnormal fluctuations described under paragraph (c),
- (e) the Customer breaches any of the terms and conditions upon which Service is provided to the Customer by the Service Provider,
- (f) the Customer fraudulently misrepresents to the Service Provider its use of Hydronic Energy or the volume delivered,
- (g) the Customer vacates the Premises,
- (h) the Customer's Service Agreement is terminated for any reason,
- (i) the Customer stops consuming Hydronic Energy on the Premises, or

- (j) the Customer fails to ensure that the temperature of the water returning from the Customer's Premises to the Hydronic Energy System complies with the requirements of the Service Provider.

20. LIMITATIONS ON LIABILITY

20.1 Responsibility for Delivery of Hydronic Energy – The Service Provider, its employees, contractors or agents are not responsible or liable for any loss, damage, costs or injury (including death) incurred by any Customer or any Person claiming by or through the Customer caused by or resulting from, directly or indirectly, any discontinuance, suspension or interruption of, or failure or defect in the supply or delivery or transportation of, or refusal to supply, deliver or transport Hydronic Energy, or provide Service, unless the loss, damage, costs or injury (including death) is directly attributable to the gross negligence or wilful misconduct of the Service Provider, its employees, contractors or agents provided, however that the Service Provider, its employees, contractors and agents are not responsible or liable for any loss of profit, loss of revenues, or other economic loss even if the loss is directly attributable to the gross negligence or wilful misconduct of the Service Provider, its employees, contractors or agents.

20.2 Responsibility Before Delivery Point - The Customer is responsible for all expense, risk and liability for:

- (a) the use or presence of Hydronic Energy before it passes the Delivery Point in the Customer's Premises, and
- (b) the Service Provider-owned facilities serving the Customer's Premises

if any loss or damage caused by or resulting from failure to meet that responsibility is caused, or contributed to, by the act or omission of the Customer or a Person for whom the Customer is responsible.

20.3 Responsibility After Delivery Point - The Customer is responsible for all expense, risk and liability with respect to the use or presence of Hydronic Energy after it passes the Delivery Point.

20.4 Responsibility for Heat Exchanger and Meter Set - The Customer is responsible for all expense, risk and liability with respect to all Heat Exchangers, Meter Sets or related equipment at the Customer's Premises unless any loss or damage is

- (a) directly attributable to the negligence of the Service Provider, its employees, contractors or agents, or
- (b) caused by or resulting from a defect in the equipment. The Customer must prove that negligence or defect.

For greater certainty and without limiting the generality of the foregoing, the Customer is responsible for all expense, risk and liability arising from any measures required to be taken by the Service Provider to ensure that the Heat Exchangers, Meter Sets or related equipment on the Customer's Premises are adequately protected, as well as any updates or alterations to the Service Connection(s) on the Customer's Premises

necessitated by changes to the grading or elevation of the Customer's Premises or obstructions placed on such Service Connection(s).

- 20.5 Customer Indemnification** - The Customer will indemnify and hold harmless the Service Provider, its employees, contractors and agents from all claims, loss, damage, costs or injury (including death) suffered by the Customer or any Person claiming by or through the Customer or any third party caused by or resulting from the use of Hydronic Energy by the Customer or the presence of Hydronic Energy in the Customer's Premises, or from the Customer or Customer's employees, contractors or agents damaging the Service Provider's facilities.

21. MISCELLANEOUS PROVISIONS

- 21.1 Taxes** - The rates and charges specified in the applicable Rate Schedules do not include any local, provincial or federal taxes, assessments or levies imposed by any competent taxing authorities which the Service Provider may be lawfully authorized or required to add to its normal rates and charges or to collect from or charge to the Customer.
- 21.2 Conflicting Terms and Conditions** - Where anything in these General Terms and Conditions conflicts with the provisions of a bylaw adopted by the City of North Vancouver or conflicts with special terms or conditions specified under an applicable Rate Schedule or Service Agreement, then the terms or conditions specified under the bylaw or the Rate Schedule or Service Agreement govern.
- 21.3 Authority of Agents of the Service Provider** - No employee, contractor or agent of the Service Provider has authority to make any promise, agreement or representation not incorporated in these General Terms and Conditions or in a Service Agreement, and any such unauthorized promise, agreement or representation is not binding on the Service Provider.
- 21.4 Additions, Alterations and Amendments** - The General Terms and Conditions, fees and charges, and Rate Schedules may be added to, cancelled, altered or amended by the Council of the City of North Vancouver from time to time.
- 21.5 Headings** - The headings of the Sections set forth in the General Terms and Conditions are for convenience of reference only and will not be considered in any interpretation of the General Terms and Conditions.

STANDARD FEES AND CHARGES SCHEDULE

Application Fee

When the Service Provider is involved in the process of building permit issuance or is required to perform an inspection or inspections in order to determine compliance with an issued building permit, the Service Provider shall charge a fee in an amount equal to 0.15% of the construction value of the work associated with the building permit. Such fee will be due and payable at the time of building permit issuance. For the purposes of this section, “value of the work” means the construction values as determined by Construction Regulation Bylaw. *[Bylaw 8545, March 6, 2017]*

Service Connection Fee

\$81.05 per kilowatt
[Bylaw 8656, July 16, 2018]

Multiplied by the energy capacity of the Premises as determined for the purpose of calculating the monthly Capacity Charge except those areas of existing buildings applying for connection that received an occupancy permit at least five years prior to the date of connection *[Bylaw 8561, June 19, 2017]* which shall be multiplied by 50% of the energy capacity of such areas. This charge will be assessed on the basis of the fee in place as of the date of the Service Agreement. *[Bylaw 8497, October 17, 2016]*

Service Disconnection Fee

At cost

Whereas provision of the service of the Hydronic Energy System requires the construction of capacity for each Customer connecting to the system, and whereas rates are established for each Customer based, in part, on recovery of such capacity costs, therefore, where a Customer is permitted to disconnect from the Hydronic Energy System, and where the Service Provider determines that such disconnection will result in additional costs to the remaining customers on the Hydronic Energy System in respect of capacity constructed for the disconnecting Customer, the Service Provider may require the disconnecting Customer to pay such costs as determined by the Service Provider.

Disputed Meter Testing Fees

If a Customer requests that a meter be tested for accuracy, the Customer shall be required to provide a deposit of \$500 to the Service Provider, which will be returned to the Customer if the meter proves inaccurate, as determined by the Service Provider. If the meter proves accurate, the Customer requesting the testing of the meter shall reimburse the Service Provider for the full cost of the testing procedure.

Meter Reading and Invoicing Fee

\$30.88 per month
[Bylaw 8656, July 16, 2018]

In cases where the Service Provider reads and invoices a Customer on the basis of more than one meter on the Premises; and provided that the secondary meter or Meter Set has been fully paid and maintained by the Customer, the Customer shall be invoiced a Meter Reading and Invoicing Fee for each secondary meter or Meter Set. *[Bylaw 8321, October 7, 2013]*

Administrative Charges

Dishonoured Cheque Charge \$15

Interest on Cash Security Deposits

The Service Provider will pay interest on cash security deposits at the Service Provider's prime interest rate minus 2%. The Service Provider's prime interest rate is defined as the floating annual rate of interest which is equal to the rate of interest declared from time to time by the Service Provider's lead bank as its "prime rate" for loans in Canadian dollars.

Late Payment Charge

The late payment charge is to be 1.5% per month (19.56% per annum). The charge is to be calculated from the date that the invoiced amount was due until payment is received. *[Bylaw 8497, October 17, 2016]*

RATE SCHEDULE – RESIDENTIAL SERVICE

The rate payable for Residential Service is a combination of a meter charge, capacity charge and a commodity charge, more particularly described in Schedule 'C' attached to "City of North Vancouver Bylaw, 2004, No. 7575", as amended from time to time.

RATE SCHEDULE – COMMERCIAL SERVICE

The rate payable for Residential Service is a combination of a meter charge, capacity charge and a commodity charge, more particularly described in Schedule 'C' attached to "City of North Vancouver Bylaw, 2004, No. 7575", as amended from time to time.

SCHEDULE “C”

FEES, RATES AND CHARGES

The rates, fees and charges payable in respect of the Service defined in “Hydronic Energy Service Bylaw, 2004, No. 7575” are as set out below.

Except as otherwise stated, capitalized terms in this Schedule “C” shall have the meaning defined in the General Terms and Conditions of “Hydronic Energy Service Bylaw, 2004, No. 7575” attached as Schedule “B”.

Provision of Heating to Premises:

The rates payable for the provision of Hydronic Energy Heating Service to Premises are a combination of the meter charge, capacity charge and commodity charge.

RESIDENTIAL SERVICE

RATE SCHEDULE 1

- (a) **Meter Charge** – A monthly charge of \$30.88 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.0329 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.03398 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

RATE SCHEDULE 2

- (a) **Meter Charge** – A monthly charge of \$166.27 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.0329 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.02871 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

COMMERCIAL SERVICE

RATE SCHEDULE 1

- (a) **Meter Charge** – A monthly charge of \$30.88 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.0329 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.03398 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

RATE SCHEDULE 2

- (a) **Meter Charge** – A monthly charge of \$166.27 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.0329 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.02871 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

Provision of Cooling to Premises:

The rates payable for the provision of Hydronic Energy Cooling Service to Premises shall be determined by Council for each Premises which connects to and uses the Hydronic Energy Cooling Service.

In addition to the foregoing rates, the fees and charges set out in the Standard Fees and Charges attached as a schedule to the General Terms and Conditions will apply to the provision of the Service.

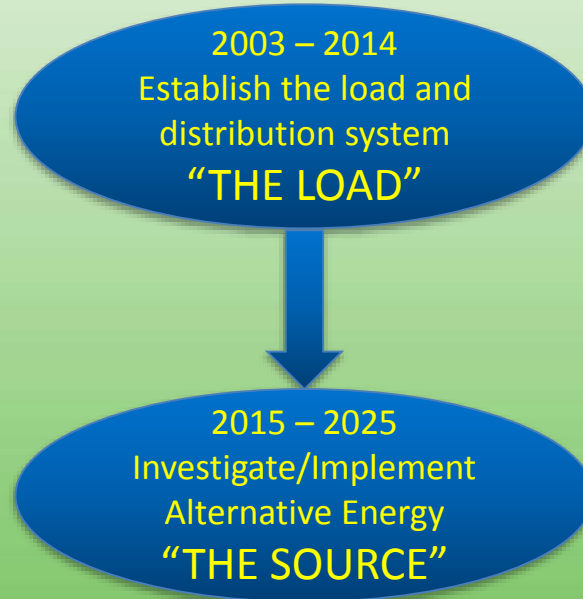
[Bylaw 8656, July 16, 2018]

2019 Rate Adjustment Application

September 16, 2019

Progress to date and long-term goals

Past, Present & Future



- Stop the use of electric baseboards
- Standardize & combine energy needs of the community
- Maximize the use of the distribution system's flexibility
- Diversify & use the most appropriate source of energy at all times

LEC 2003 – 2019

- 84 buildings connected totaling 6.36 million sq. ft. and 5,327 residential suites
- 4 heat sources: natural gas, solar, geo-exchange, heat recovery
- 4 service areas: Lower Lonsdale, Central Lonsdale, Marine Drive / Harbourside, Moodyville
- Interconnection of service areas achieved in 2019
- Approximately 11.6 km (trench pipe) of distribution system

Cooling Cycle Heat Recovery Projects

- School District 44 - 2011
- Tap and Barrel - 2016
- Polygon Gallery - 2017
- Pipe Shop Building - 2019
- Lot 5, including future ice rink - 2019

Future Energy Source Opportunities

- Metro Vancouver wastewater treatment plant in 2021
- Hydrogen injection study
- Waste energy recovery
- Biomass
- Synergies and waste energy from businesses (ICBC, Lions Gate Hospital)

Current and 2020 Major Projects

- Heat Recovery from Ice Rink Chiller at Shipyards Commons
- Completion of Network Transfer Stations
- Booster Pump Station to serve Moodyville Service Area
- East 15th Street & St. Georges Avenue Distribution System Extension
- Mini-Plant 2 Heating Capacity Expansion
- Chesterfield Avenue Distribution System Extension
 - Lower Lonsdale – Keith Road to 6th Street
 - Central Lonsdale – 16th to 17th Street

Financial Position

2018 Financial Results

- 2018 Net income: \$580,598
- 2018 Interest paid to City: \$492,448
- Last rate increase: November 1, 2018
- 2018 debt reimbursement to the City: \$601,552
 - Includes a delayed payment made in March 2019 due to natural gas pipe rupture
- Debt reimbursement targeted for 2037

Loans from the City of North Vancouver
as at August 31, 2019

Date Authorized by Council	Loan Purpose	Amt Authorized by Council	Amt Disbursed to LEC	Loan Balance Available	Amt Reimbursed	Loan Amt Outstanding (Due to City)
6/19/2012	FCM Grant - Loan through the City	\$ 2,000,000	\$ 2,000,000	\$ -	\$ (1,271,515)	\$ 728,485
12/16/2013	Distribution System Construction & Working Capital	12,000,000	\$ 11,999,960	40	(998,880)	11,001,080
6/13/2015	Corix Agreement Expiration Settlement	2,000,000	\$ 2,000,000	-	-	2,000,000
11/2/2015	Corix Agreement Expiration Settlement	611,966	\$ 611,966	-	-	611,966
1/25/2016	Construction of Mini-Plant 8	1,600,000	\$ 1,205,000	395,000	-	1,205,000
9/12/2016	W Keith Road Financing & NTS1 & BPS1	3,250,000	\$ 3,175,000	75,000	-	3,175,000
6/12/2017	2017-18 Construction Financing - E 18th St - Lonsdale to 154 E 18th	360,000	\$ 345,000	15,000	-	345,000
6/12/2017	2017-18 Construction Financing - Chesterfield Ave - 15th to 1549 Chesterfield	220,000	\$ 220,000	-	-	220,000
6/12/2017	2017-18 Construction Financing - Chesterfield Ave - 1549 to 1730 Chesterfield	400,000	\$ -	400,000	-	-
6/12/2017	2017-18 Construction Financing - E 15th St - Lonsdale to 1441 & 1549 St Georges	620,000	\$ 100,000	520,000	-	100,000
6/12/2017	2017-18 Construction Financing - Mahon Ave - Ext. to 63 Mahon (Alcuin College)	75,000	\$ -	75,000	-	-
6/12/2017	2017-18 Construction Financing - Controls Replacement & Upgrade: MP4,6, & 7	325,000	\$ 290,000	35,000	-	290,000
6/12/2017	2017-18 Construction Financing - MP5 Capacity Increase	100,000	\$ 100,000	-	-	100,000
6/12/2017	2017-18 Construction Financing - Carrie Cates Court - Cost Overrun	200,000	\$ 200,000	-	-	200,000
4/4/2016	Connection of 160 E 6th	600,000	\$ 600,000	-	-	600,000
4/4/2016	Connection of Moodyville	2,300,000	\$ 2,300,000	-	-	2,300,000
9/18/2017	Cooling Services at Lot 5	1,200,000	\$ 1,150,000	50,000	-	1,150,000
7/24/2017	Heat Recovery from the NSWWTP	3,600,000	\$ -	3,600,000	-	-
7/16/2018	St. Georges Ave - 160 E 6th Street to E 3rd Street & NTS2	1,600,000	\$ 1,425,000	175,000	-	1,425,000
7/16/2018	Construction of MP9 at Harbourside Concert Properties	1,200,000	\$ -	1,200,000	-	-
7/16/2018	E 15th Street - St. Georges Ave to 250 E 15th Street & LGH	450,000	\$ -	450,000	-	-
7/16/2018	Chesterfield Ave - W Keith Road to W 3rd Street	950,000	\$ -	950,000	-	-
7/15/2019	Bewicke Ave - 14th Street to 715 W 15th St. (HE220)	130,000	\$ 100,000	30,000	-	100,000
7/15/2019	Ridgeway Ave - 3rd to 1st St. (Trails phased connections)	375,000	\$ 300,000	75,000	-	300,000
7/15/2019	MP2 Boiler Addition	286,000	\$ -	286,000	-	-
7/15/2019	E 8th St. - St. Georges Ave. to 128 E 8th St. (HE133)	150,000	\$ -	150,000	-	-
7/15/2019	Booster Pump Station 2 at 366 E 3rd Street	100,000	\$ 50,000	50,000	-	50,000
7/15/2019	E 17th St. - Lonsdale to 143 E 17th St. (HE135)	260,000	\$ -	260,000	-	-
7/15/2019	E 12th St. - St. Georges Ave. to 127 E 12th St. (HE136)	230,000	\$ -	230,000	-	-
7/15/2019	E 20th St. - Lonsdale Ave. to 125 E 20th St. (HE137)	150,000	\$ -	150,000	-	-
			\$ -	-	-	-
TOTAL		\$37,342,966	\$28,171,926	\$ 9,171,040	\$ (2,270,395)	\$ 25,901,531

Rate Adjustment

Rate Adjustment Rationale

- Proposed increase is based on 12 month inflation
- The NSWWTP agreement with Metro Vancouver offers an alternative energy source unique in size and scope
 - Capital costs of connection to the NSWWTP
 - Operating Costs of the NSWWTP
- Equipment, construction and maintenance costs are increasing
- Timely loan reimbursements to the City

Rate Adjustment Rationale (cont'd)

- Commodity Charge follows FortisBC gas prices => No adjustment
- Meter and Capacity Charges => follow inflation
- Capacity Charge => additional increase of 5% due to higher cost of alternative energy sources
- Translates into an average increase of 3.7% on the total cost after inflation

Proposed Rate Adjustment

Rate Schedule 1 (Consumption up to 300 MWh per year)

Charge	Current Rate	CPI Rate of Inflation	Rate Adj. for Inflation	5% Increase to Capacity	2019 Rates
Meter Charge (per month)	\$ 30.88	2.2%	\$ 31.56	n/a	\$ 31.56
Capacity Charge (per kW)	\$ 4.0329	2.2%	\$ 4.1216	5.0%	\$ 4.3277
Commodity Charge (per kW.h)	\$ 0.04201	n/a	\$ 0.04201	n/a	\$ 0.04201

Proposed Rate Adjustment

Rate Schedule 2 (Consumption over 300 MWh per year)

Charge	Current Rate	CPI Rate of Inflation	Rate Adj. for Inflation	5% Increase to Capacity	2019 Rates
Meter Charge (per month)	\$ 166.27	2.2%	\$ 169.93	n/a	\$ 169.93
Capacity Charge (per kW)	\$ 4.0329	2.2%	\$ 4.1216	5.0%	\$ 4.3277
Commodity Charge (per kW.h)	\$ 0.03549	n/a	\$ 0.03549	n/a	\$ 0.03549

Charges to Developers

- Connection fee of \$82.83 per kW of nominated capacity (proposed increase from \$81.05/kW)
- Aims at encouraging building efficiency
- Builders are saving the cost of boilers and room

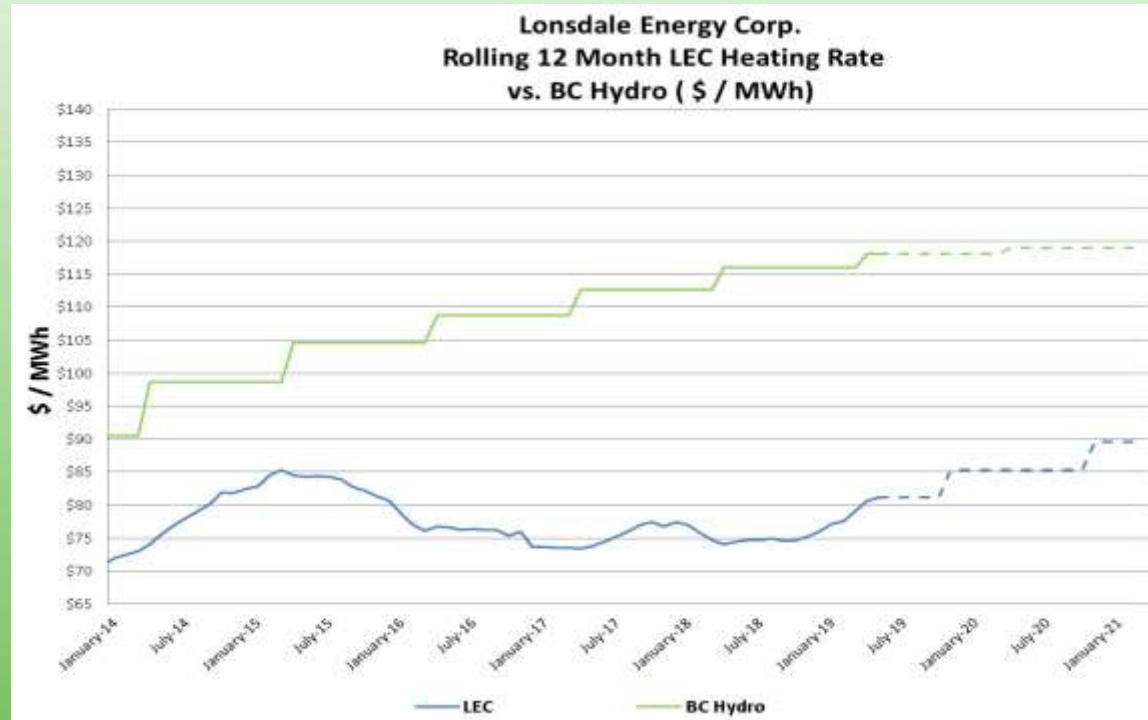
Competitiveness of LEC

Comparison of LEC rate with other Energy Providers
as at May 31, 2019

Energy Provider	Type of Service	Year of rate	Rate (\$ / MWh)	Difference with LEC
LEC	Hot Water	2019	\$81	-
BC Hydro	Electricity	2019	\$118	46%
Fortis BC	Stand-alone NG Boiler	2018	\$89	10%
River District Energy (East Fraserlands)	Hot Water	2018	\$96	19%
South East False Creek (SEFC/NEU)	Hot Water	2019	\$113	40%
SFU UniverCity Energy	Hot Water	2019	\$121	49%
Richmond Oval Village District Energy	Hot Water	2019	\$94	16%
Surrey City Energy	Hot Water	2019	\$115	42%

Notes:

- LEC rate is based on revenue and heat delivered for the 12 months ended May 31, 2019.
- BC Hydro cost based on purchase of 50% residential step 1 and 50% residential step 2 electricity price as of April 1, 2019 and a 0% rate rider. Based on these assumptions the 2019 electric cost would be \$118 / MWh.
- Cost of FortisBC, River District Energy, SEFC, SFU UniverCity, Richmond Oval and Surrey City Energy taken from City of Vancouver report dated November 20, 2018.
- Creative Energy Ltd. and UBC Neighbourhood DEU have been omitted, as their systems have historically been steam based.



Thank you





PUBLIC MEETING



WHO: City of North Vancouver

WHAT: Hydronic Energy Service Bylaw, 2004,
No. 7575, Amendment Bylaw, 2019,
No. 8730

WHEN: Monday, September 16, 2019 at 6:30 pm
Council Chamber, City Hall
141 West 14th Street, North Vancouver

Lonsdale Energy Corp. (LEC) has applied to its regulator, the City of North Vancouver, for permission to modify its rates. Detailed information regarding the application is available in the section "Latest News & Updates" at www.LonsdaleEnergy.ca. The LEC Rate Review and proposed Amendment Bylaw are available for viewing at City Hall between 8:30 am and 5:00 pm, Monday to Friday, except Statutory Holidays, and online at www.cnv.org/publicmeetings.

All persons who believe they may be affected by the LEC rate adjustment will be afforded an opportunity to be heard in person and/or by written submission. Email or written submissions must include your name and address and should be sent to the City Clerk at input@cnv.org, or by mail or delivered to City Hall. Submissions must be received no later than 4:00 pm, Monday, September 16, 2019, to ensure their availability to Council at the Public Meeting.

Please direct inquiries to **Ben Themens**, Director, Lonsdale Energy Corp., at bthemens@lonsdaleenergy.ca or **604-983-7312**.

141 WEST 14TH STREET / NORTH VANCOUVER / BC / V7M 1H9
T 604 985 7761 / F 604 985 9417 / CNV.ORG



THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8730

**A Bylaw to amend the City of North Vancouver
“Hydronic Energy Service Bylaw, 2004, No. 7575”**

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 **“City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2019, No. 8730”**.
2. The “Service Connection Fee” in the “Standard Fees and Charges Schedule” attached to “Hydronic Energy Service Bylaw, 2004, No. 7575” is amended by deleting “\$81.05 per kilowatt” and replacing it with the following: “\$82.83 per kilowatt”.
3. The “Meter Reading and Invoicing Fee” in the “Standard Fees and Charges Schedule” attached to “Hydronic Energy Service Bylaw, 2004, No. 7575” is amended by deleting “\$30.88 per month” and replacing it with “\$31.56 per month”.
4. Deleting Schedule “C” attached to “Hydronic Energy Service Bylaw, 2004, No. 7575” and replacing it with the Schedule “C” attached to this bylaw.
5. This Bylaw shall be effective as of the 1st day of November, 2019.

READ a first time on the 15th day of July, 2019.

READ a second time on the 15th day of July,
2019.

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

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

MAYOR

CITY CLERK

SCHEDULE “C”
FEES, RATES AND CHARGES
BYLAW 8730

The rates, fees and charges payable in respect of the Service defined in “Hydronic Energy Service Bylaw, 2004, No. 7575” are as set out below.

Except as otherwise stated, capitalized terms in this Schedule “C” shall have the meaning defined in the General Terms and Conditions of “Hydronic Energy Service Bylaw, 2004, No. 7575” attached as Schedule “B”.

Provision of Heating to Premises:

The rates payable for the provision of Hydronic Energy Heating Service to Premises are a combination of the meter charge, capacity charge and commodity charge.

RESIDENTIAL SERVICE

RATE SCHEDULE 1

- (a) **Meter Charge** – A monthly charge of \$31.56 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.03398 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

RATE SCHEDULE 2

- (a) **Meter Charge** – A monthly charge of \$169.93 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.02871 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

COMMERCIAL SERVICE

RATE SCHEDULE 1

- (a) **Meter Charge** – A monthly charge of \$31.56 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.03398 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.

RATE SCHEDULE 2

- (a) **Meter Charge** – A monthly charge of \$169.93 for each Service Connection serving the Premises.
- (b) **Capacity Charge** – A monthly charge of \$4.3277 per kilowatt multiplied by the energy capacity of the Premises, as determined by a professional engineer qualified for such purposes and described in kilowatts.
- (c) **Commodity Charge** – A charge per kilowatt hour of Hydronic Energy provided to the Premises calculated by multiplying \$0.02871 by the percentage increase or decrease in the price of 1,000 GJ/month under FortisBC rate schedule 3 from the price established as of July 1, 2016.




Provision of Cooling to Premises:

The rates payable for the provision of Hydronic Energy Cooling Service to Premises shall be determined by Council for each Premises which connects to and uses the Hydronic Energy Cooling Service.

In addition to the foregoing rates the fees and charges set out in the Standard Fees and Charges attached as a schedule to the General Terms and Conditions will apply to the provision of the Service.

THIS PAGE INTENTIONALLY LEFT BLANK



 Division Manager	 Director	 CAO
---	---	--

The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Mike Friesen, Planner I

Subject: REZONING APPLICATION: 2205 ST. ANDREWS AVENUE (MOREZ
DESIGN INC., RT-1)

Date: July 10, 2019 File No: 08-3360-20-0446/1

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

RECOMMENDATION:

PURSUANT to the report of the Planner I, dated July 10, 2019, entitled
"Rezoning Application: 2205 St. Andrews Avenue (Morez Design Inc., RT-1)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8728"
(Morez Design Inc., 2205 St. Andrews Avenue, RT-1) be considered and the
Public Hearing be waived;

AND THAT notification be circulated in accordance with the *Local Government
Act*.

ATTACHMENTS:

1. Context Map ([Doc #1801267](#))
2. Architectural and Landscape Plans, dated January 15, 2019 ([Doc #1758419](#))
3. Public Consultation Summary ([Doc #1800987](#))
4. Zoning Amendment Bylaw No. 8728 ([Doc #1801310](#))

PROJECT DESCRIPTION

The project, located at 2205 St. Andrews Avenue, consists of one two storey, duplex building that includes two primary dwelling units and two accessory dwelling units. The subject site currently hosts a single family dwelling, constructed in 1948, that will be demolished. The requested changes to the zoning bylaw to permit this development are identified in Table 1 below. Additionally, Attachment #4 has the amending bylaw with the proposed changes.

Table 1. Requested Changes to the Zoning By-law

	Current Designation/Regulation	Proposed Designation/Regulation
Zone	RS-1	RT-1

POLICY FRAMEWORK

The subject site is designated Residential Level 2 (R-2) within the Official Community Plan. This designation permits a range of ground-oriented housing in areas located between detached residential and more intensive residential or mixed-use areas. Duplexes with secondary suites, triplexes, and row homes are permitted in this designation.

Metro 2040	
Goal 1 Create a Compact Urban Area	Intensifying this site with infill that is consistent and scaled to the surrounding neighbourhood, ensure the highest and best use of the land promoting a compact urban area.
Goal 2 Support a Sustainable Economy	Infill on this site promotes housing forms that can support a diversity of income levels and ensure people live close to where they work.
Goal 4 Develop Complete Communities	The proposed development ensures the neighbourhood will have a diversity of housing stock that will promote the ability to age-in-place allowing people to stay in their neighbourhood throughout all of their lifecycles.
Goal 5 Support Sustainable Transportation Choices	Intensification of this site will support future transit investments along Lonsdale Avenue. The site is proximate to community and commercial amenities and is well situated to provide the occupants with a variety of transportation choices across the North Shore and the greater region.

Official Community Plan	
<p><i>Policy 1.1.2</i> Align growth with the development community amenities and infrastructure</p>	<p>Intensification of the site supports the Upper Lonsdale Area and future rapid transit infrastructure and community amenity investment.</p>
<p><i>Policy 1.3.1</i> Ensure that new development is compatible with the established urban form of the City, reflecting the primacy of the Lonsdale Regional City Centre and the transition through mid- and low-rise buildings to lower-density residential neighbourhoods</p>	<p>The proposed development on the site is appropriately scaled to the neighbourhood and supports the primacy of the Lonsdale Regional City Centre.</p>
<p><i>Policy 1.3.5</i> Encourage design excellence in developments through carefully considered, high quality architecture and landscaping, with varied designs which are interesting, sensitive and reflective of their surroundings</p>	<p>The proposed building activates the corner of St. Andrews Avenue and East 22nd Street by locating primary entrances on both frontages. The materiality and scale of the new dwelling is consistent with the surrounding neighbourhood.</p>
<p><i>Policy 1.3.6</i> Encourage architecture that responds to the unique context of the City in a sensitive, sustainable, and aesthetically compatible manner</p>	<p>The proposed architecture of the new dwelling is consistent with the surrounding urban form and the chosen materials are consistent with new development found in the local context.</p>
<p><i>Policy 1.3.9</i> Explore ways to activate laneways in the City including opportunities for varied uses, pedestrian and cycling activity as well as storm water management and urban agriculture.</p>	<p>The development presents an attractive landscape element along the rear lane while accommodating required parking. Connection to the street and the feeling of openness promote natural surveillance and will support future activation of the laneway.</p>
<p><i>Policy 1.5.1</i> Provide opportunities for a range of housing densities, diversified in type, size and location.</p>	<p>The proposed infill development provides a smaller housing form that assists in promoting aging-in-place. Additionally, this form will help to provide more diverse housing in a neighbourhood that is accessible to the City's Lonsdale core area.</p>

Housing Action Plan	
Action #5 To increase rental options in lower density areas to support renters and provide homeowners with additional rental income, while retaining neighbourhood scale and character.	The proposed duplex development creates two ground oriented units that has the potential to supplement the rental supply through accessory dwelling units. This increase in supply is located in proximity to transit and community amenities.
Sustainable Development Guidelines	
Natural Systems The ability of natural systems, both global and local, to support life. Parks and green spaces help regulate the climate, clean and filter water and air, and provide recreational and aesthetic benefits. Maintaining healthy natural systems will reduce strain on municipal infrastructure, support local wildlife and enhance quality of life for community members.	The project is providing low-impact development and landscape features to ensure storm water runoff is filtered and can be managed on site to mitigate impact on local water courses and the Burrard Inlet.

PLANNING ANALYSIS

Site Context

The surrounding land uses are identified in Table 2 below.

Table 2. Surrounding Uses

Direction	Address	Description	Zoning
North (across the lane)	259, 265 E 23 rd Street	Single family dwellings	RS-1
South	259 E 22 nd Street and 2145 St Andrews Ave	Single family dwellings	RS-1
East	2208 St Andrews Ave	Single family dwelling	RS-1
West	258-260 E 22 nd Street	Duplex dwelling	RT-1

Generally, the surrounding neighbourhood is made up of single family homes on large lots. Directly adjacent to the west, however, there is a newly built duplex development. St. Andrews Avenue marks a border between OCP land use designations, with the subject site and everything west of St. Andrews Avenue designated R2, and properties to the east designated Residential Level 1 (R1). The neighbourhood has begun its transition to greater density, with several other sites along the 200-block of East 22nd Street (including 258-260 East 22nd Street, the adjacent site) having been rezoned for duplex development over the past several years.

Use

The policy framework applicable to the subject site supports the proposed two dwellings as residential use. The site is located in close proximity to transit and Central Lonsdale commercial and social amenities. Additionally, the units will provide a diversity of housing stock in the area, supporting aging-in-place and housing flexibility.

Intensity

The proposed intensification on the site is appropriate for the neighbourhood given the surrounding density and the land use designation. The site and the proposal provide a transition between the more intense building types to the west of the site, to the lower density to the east. The proposal provides four parking spaces on-site, which will serve the two principal dwelling units and two potential accessory dwelling units. Storm water will be addressed through the on-site infiltration as well as retention tanks to mitigate significant storm events.

Form

The urban form proposed for the site satisfies the policy intent of ensuring new development is consistent with the character of the surrounding neighbourhood. The overall massing of the proposed development is sympathetic to the existing urban form while allowing for the development's own architectural character. The proposed building uses the orientation of entrances, glazing, and landscape architecture to activate the street frontages along both East 22nd Street and St. Andrews Avenue. By addressing both streets, it provides passive surveillance of public areas and private open space for the primary and accessory dwelling units. The proposed project conforms to setbacks and heights stipulated by the Two-Unit Residential 1 (RT-1) zone. The site's four parking spaces are accessed via the lane.

COMMUNITY CONSULTATION

A Developer Information Session (DIS) was held March 1, 2018 at the Memorial Community Recreation Centre (Lynn Room) which is located one block west of the proposed development location. The event was attended by one member of the public. At the DIS, no comment forms were received.

A summary of the applicant's public consultation process is included as Attachment #3. Staff has received no comments from the community regarding the project. Based on the lack of concern indicated by the public to this point, staff recommend waiving the Public Hearing. Should Council wish to hold a public hearing, staff recommends the following resolution:

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8728" (Morez Design Inc., 2205 St. Andrews Avenue, RT-1) be considered and referred to a Public Hearing;

CONCLUSION

The proposed application represents an appropriate development for the land use designation and a design that is responsive to the site's context. Gentle intensification – including accessory dwelling units – adjacent to the Lonsdale Core will support transportation infrastructure improvements and enhanced amenities in the area. The requested zoning change and development proposal are consistent with the Region and the City's planning policies. Overall, the application looks to implement a development that fits the surrounding neighbourhood character and provides increased density in an appropriate location.

RESPECTFULLY SUBMITTED:




Mike Friesen
Planner I

MF/eb



City of North Vancouver

Legend

 Subject Site

0 5 10 20
Meters
1:1,500

DISCLAIMER

This map was produced on the City of North Vancouver's Geographic Information System. Data provided herein is derived from sources with varying levels of accuracy and detail. The City of North Vancouver disclaims all responsibility for the accuracy or completeness of information contained herein.

GIS Division, Information Technology,
City of North Vancouver

PLATTED: 2009/01
SOURCE: AERIAL
COORDINATE SYSTEM: NAD 83 UTM 18N UTM 18N

city
of north
vancouver

PROPOSED DUPLEX WITH SECONDARY SUITES
(TWO-UNIT RESIDENTIAL)

2205 ST. ANDREWS AVE, NORTH VANCOUVER, BC

EXISTING DATA:

CIVIC ADDRESS: 2205 ST. Andrews Ave North Vancouver, BC
LEGAL DESCRIPTION: LOT:14 Block: 208 DL: 546 Plan: 5481
PID : 011-144-831
NEIGHBORHOOD : Central Lonsdale
ZONE: RT-1A
OCP : R2
LOT AREA: 640 SQ.M / 6,888.5 SQ.FT
LOT COVERAGE : % 35 X 6,888.5 SQ.FT. = 2,411 SQ.FT.
F.S.R : 0.35 of Lot Area + 1,000 SQ.FT. = 3,411 SQ.FT.

PROPOSED DATA:

F.S.R :
MAIN FLOOR : 1,747 SQ.FT. (Duplex A : 866 + Duplex B : 881)
UPPER FLOOR : 1,661 SQ.FT. (Duplex A : 805 + Duplex B : 856)
BASEMENT : 1,747 SQ.FT. (Duplex A : 866 + Duplex B : 881) Exempted
TOTAL F.S.R : 3,408 SQ.FT.
TOTAL LIVABLE: 5,155 SQ.FT.

LOT COVERAGE:

MAIN BLDG (1836 sq.ft.) +
GARAGE & STORAGE (574 sq.ft.)
TOTAL COVERAGE : 2410 SQ.FT.

PORCHES / DECKS :

ENTRANCE PORCHES (40 SQ.FT.) +
UPPER FLOOR DECKS (128 SQ.FT.) =
TOTAL : 168 SQ.FT.

REFERENCE GRADE:

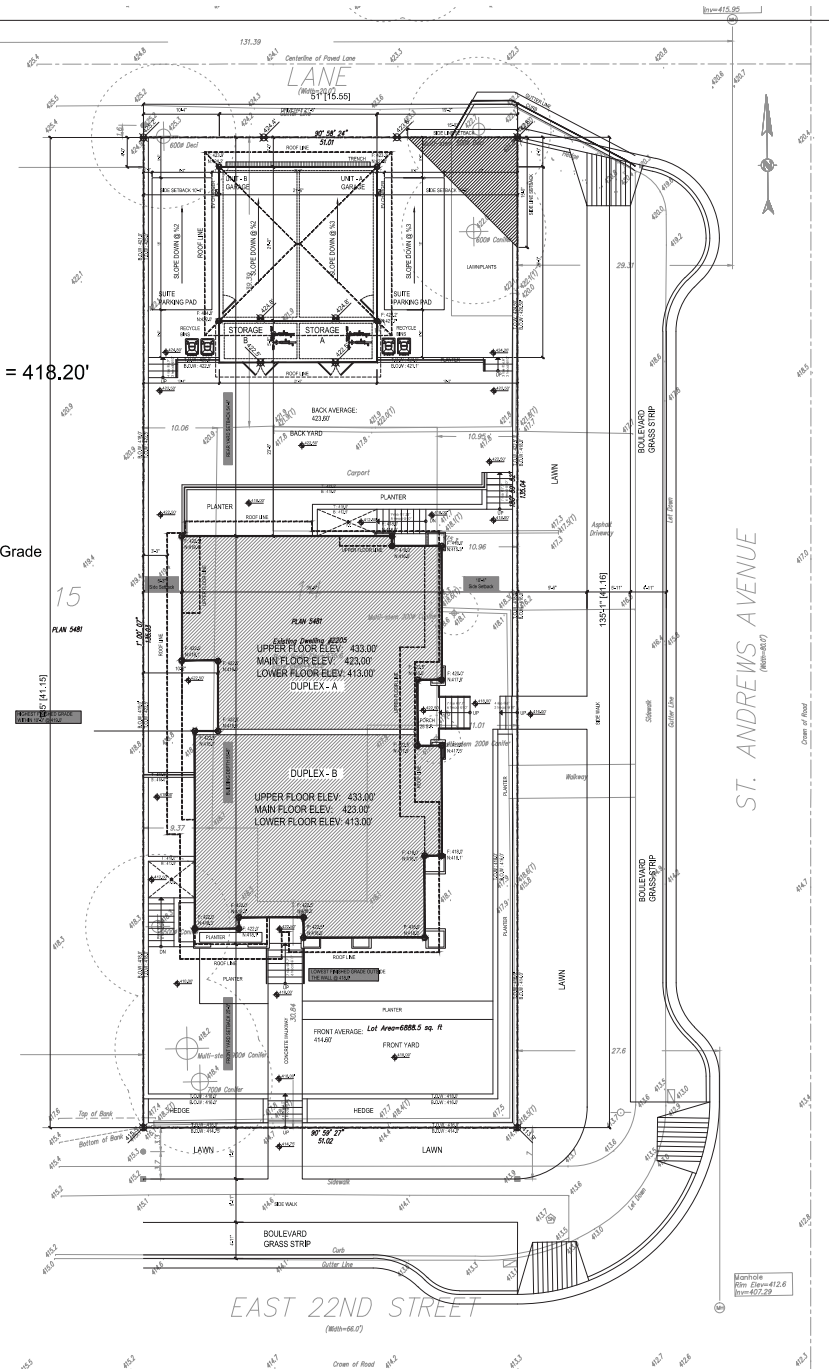
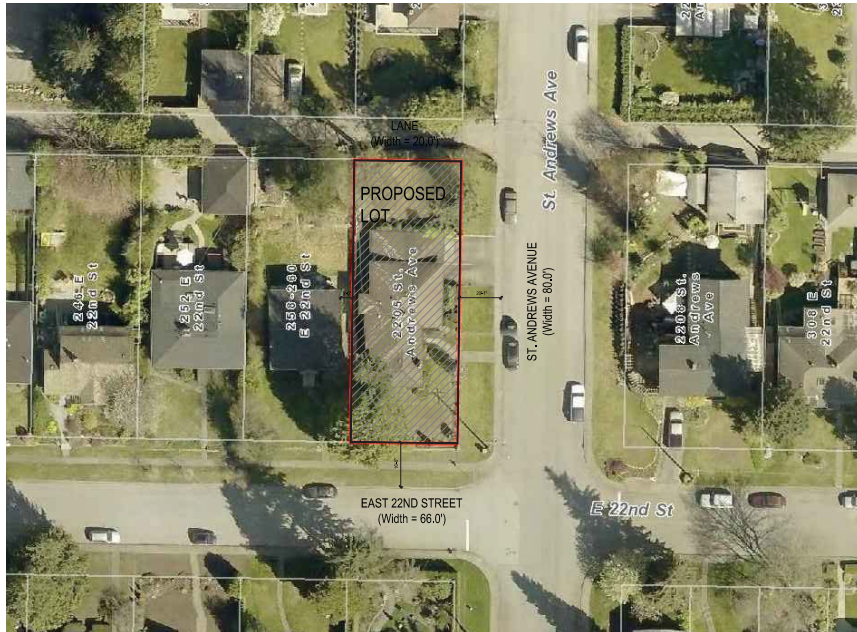
FRONT AVERAGE = 414.60'
REAR AVERAGE = 423.60'
REFERENCE: $414.60' + (423.60' - 414.60') \times 0.4 = 418.20'$
MAX TOP PLATE: $418.20' + 26.20' = 444.40'$
MAX ROOF RIDGE: $418.20' + 33' = 451.20'$



AVERAGE GRADE:

HIGHEST FINISHED GROUND LVL. = 422.5' +
LOWEST FINISHED GROUND LVL. = 418.0'
Total = $840.5' / 2 = 420.5'$ (Average Grade) - 5' = 415.5' Max Grade
Proposed Basement Grade : 413.0'

PARKING PROVIDED :

TWO (2) COVERED PARKING: 20'-0" X 10'-0"
TWO (2) CARPORT : 18'-0" X 8'-6" EACH



 312 - 850 Harbourside Dr North Vancouver, BC V7P 0A3 morez@morezdesign.ca C: 604-727-2584 T: 778-319-6480	
NOTES:	
PROJECT:	PROPOSED DUPLEX (TWO-UNIT RESIDENTIAL)
CIVIC ADDRESS:	2205 ST. ANDREWS AVE. NORTH VANCOUVER, BC
LEGAL DESCRIPTION:	LOT: 14, BLOCK: 208 DL: 546, PLAN: 5481
TITLE:	SITE PLAN
CLIENT:	NORTH PACIFIC DEVELOPMENT LTD.
NORTH ARROW	
CAD FILE:	2205 St.Andrews Ave - Rezone.dwg
DESIGN BY:	MOREZ
DATE:	Nov. 2017
REV: 01:	3rd July 2018
REV: 02:	15th January 2019
SCALE:	DWG NO.
1/8" = 1'-0"	A - 1.0

NOTES:

NOTES:

PROJECT:

**PROPOSED DUPLEX
(TWO-UNIT RESIDENTIAL)**

CIVIC ADDRESS:

**2205 ST. ANDREWS AVE.
NORTH VANCOUVER, BC**

LEGAL DESCRIPTION:

**LOT: 14, BLOCK: 208
DL: 546, PLAN: 5481**

TITLE:

LANDSCAPE PLAN

CLIENT:

**NORTH PACIFIC
DEVELOPMENT LTD.**

NORTH ARROW



CAD FILE:

2205 St.Andrews Ave - Rezone.dwg

DESIGN BY:

MOREZ

DATE:

06/11/2017

REV- 01: 3rd July 2018

REV- 02: 15th January 2019

SCALE:

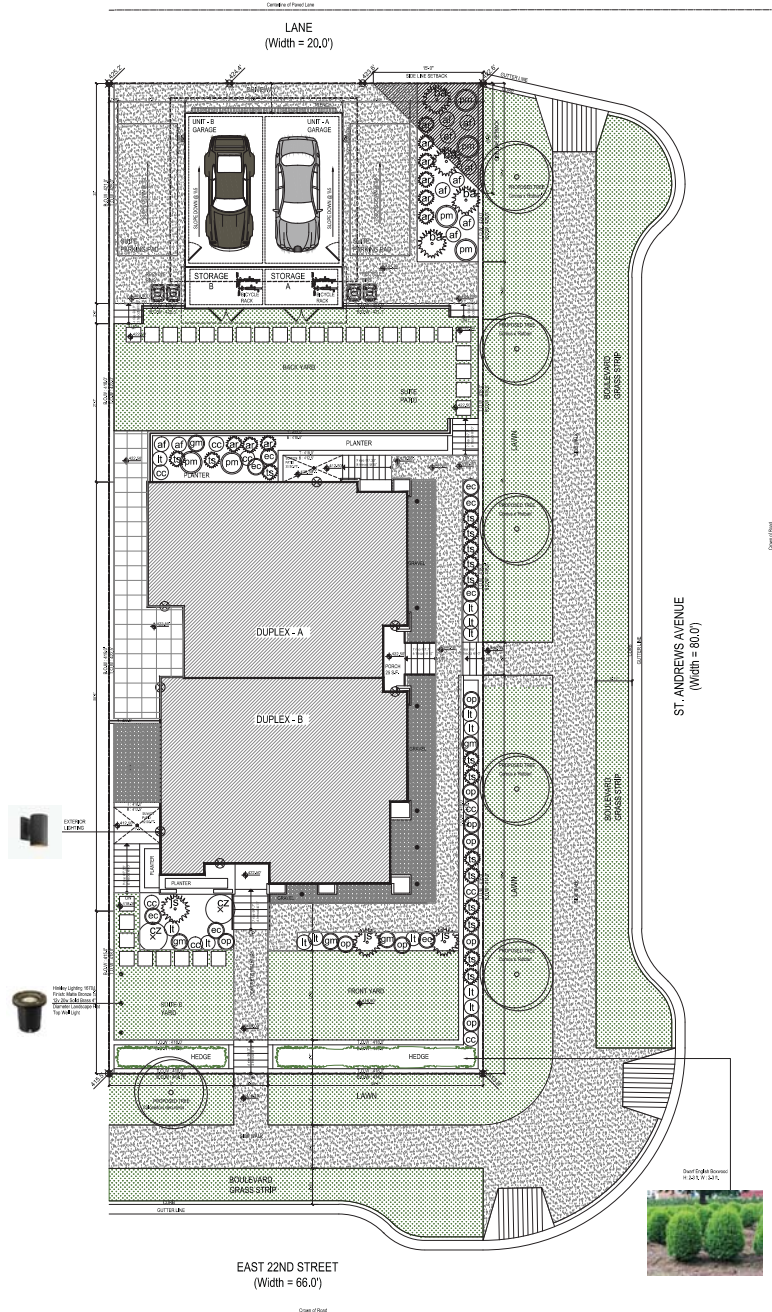
1/8" = 1'-0"

DWG NO.

A - 1.1

CODE	QTY	BOTANICAL	COMMON	SIZE	SPACING	TYPE	NATIVE
cc	6	Caryopteris x clandonensis	Caryopteris Blue Mist	#2 pot	as shown	shrub	nonnative
cz	2	Cistus x purpureus	Purple rock rose	#2 pot	as shown	shrub	nonnative
js	4	Juniperus sabina 'Calgary Carpet'	Juniper	#2 pot	as shown	shrub	nonnative
lt	12	Lavandula angustifolia 'Twinkle Purple'	English Lavender	#2 pot	as shown	shrub	nonnative
ts	16	Thuja occidentalis 'Smaragd'	Emerald cedar	1.2 m	as shown	shrub	native
gm	5	Geranium macrorrhizum	Hardy geranium	# 1 pot	as shown	perennial	nonnative
op	9	Osteospermum 'Purple Mountain'	African daisy	# 1 pot	as shown	perennial	nonnative
ec	5	Erica carnea	Winter heath	# 2 pot	as shown	ground cover	nonnative
pm	6	Polystichum munitum	Western sword fern	# 1 pot	as shown	fern	native
ar	9	Arctostaphylos uva-ursi	Kinnikinnick	0.2 m	as shown	ground cover	native
ba	4	Berberis aquifolium	Tall oregon grape	1 m	as shown	shrub	native
af	8	Aquilegia formosa	Western Columbine	0.6 m	as shown	shrub	native

TYPICAL PLANT LIST



NOTES:

PROJECT:

PROPOSED DUPLEX
(TWO-UNIT RESIDENTIAL)

CLIENT ADDRESS:

2205 ST. ANDREWS AVE.
NORTH VANCOUVER, BC

LEGAL DESCRIPTION:

LOT: 14, BLOCK: 208
DL: 546, PLAN: 5481

TITLE:

MAIN & LOWER FLOOR PLANS

CLIENT:

NORTH PACIFIC
DEVELOPMENT LTD.

NORTH ARROW



CAD FILE:

2205 St Andrews Ave - Rzone.dwg

DESIGN BY:

MOREZ

DATE:

Nov. 2017

REV-01: 3rd July 2018

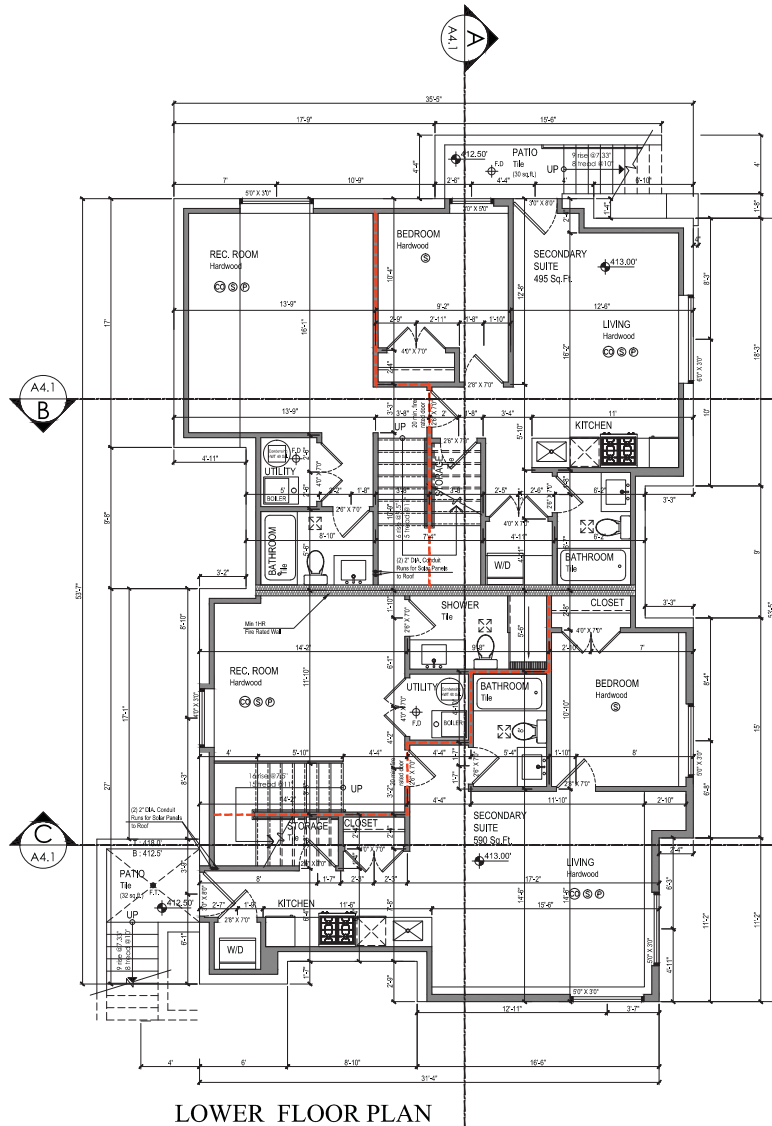
REV-02: 15th January 2019

SCALE:

1/4" = 1'-0"

DWG NO.

A - 2.1



LOWER FLOOR PLAN

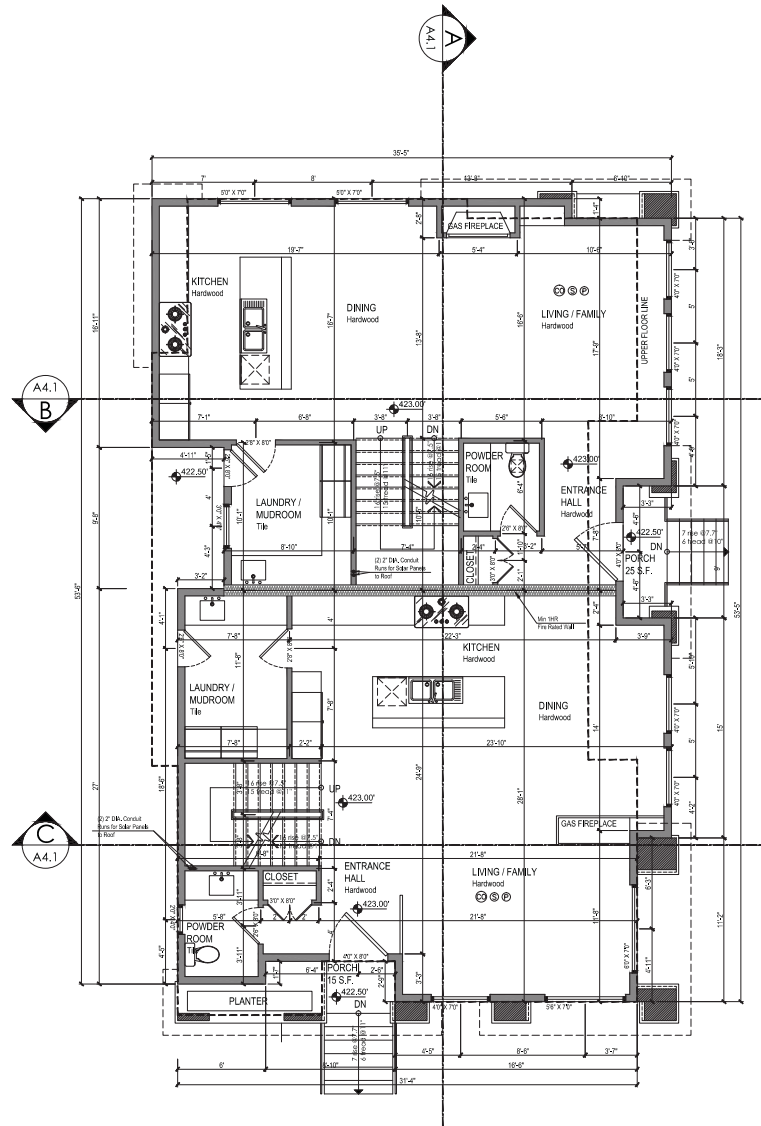
North Unit: 866 S.F.

South Unit: 881 S.F.

TOTAL AREA: 1,747 S.F.

NOTE:

- These drawings comply with BC B.C. 2012 9.36
- The house meets compliance using the performance path (Refer to Energy Report)
- The principal dwelling unit will comply with 9.32.3.4.(2) ducted forced air heating system. Secondary suite 9.32.3.4.(6) Principal fan and passive outlets.



MAIN FLOOR PLAN

North Unit: 866 S.F.

South Unit: 881 S.F.

TOTAL AREA: 1,747 S.F.

☼ SMOKE ALARM

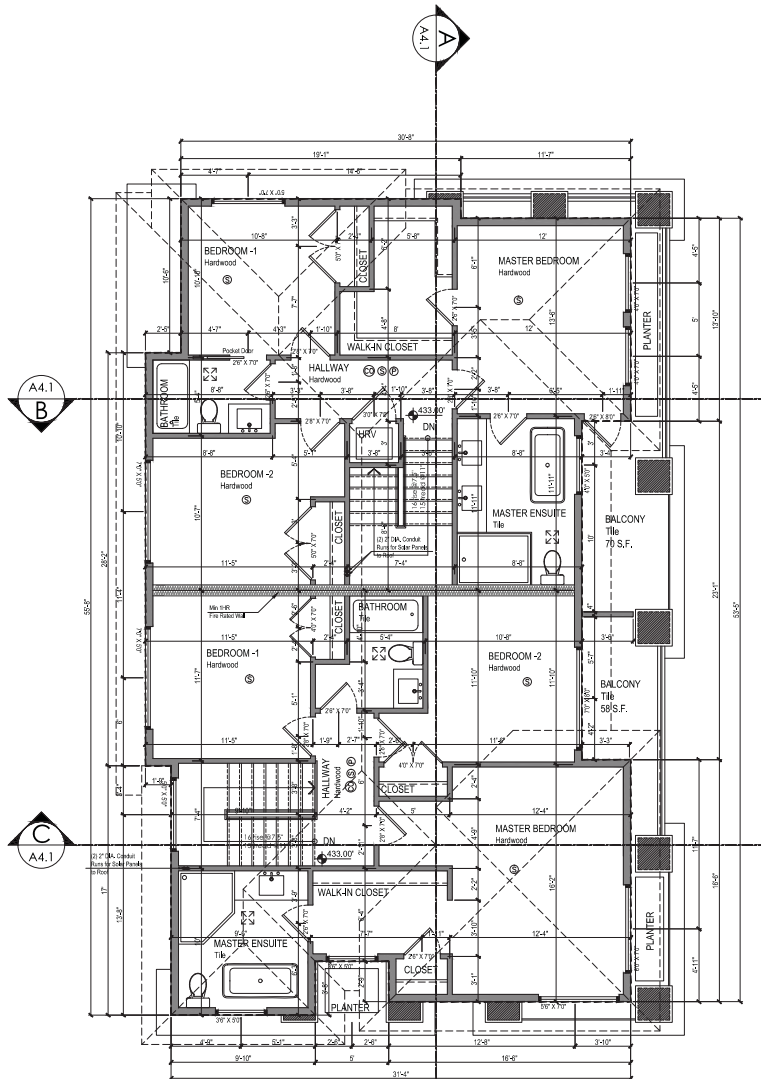
☼ PHOTO ELECTRIC ALARM

☼ CO DETECTOR

☼ BATHROOM EXHAUST FAN

NOTE:

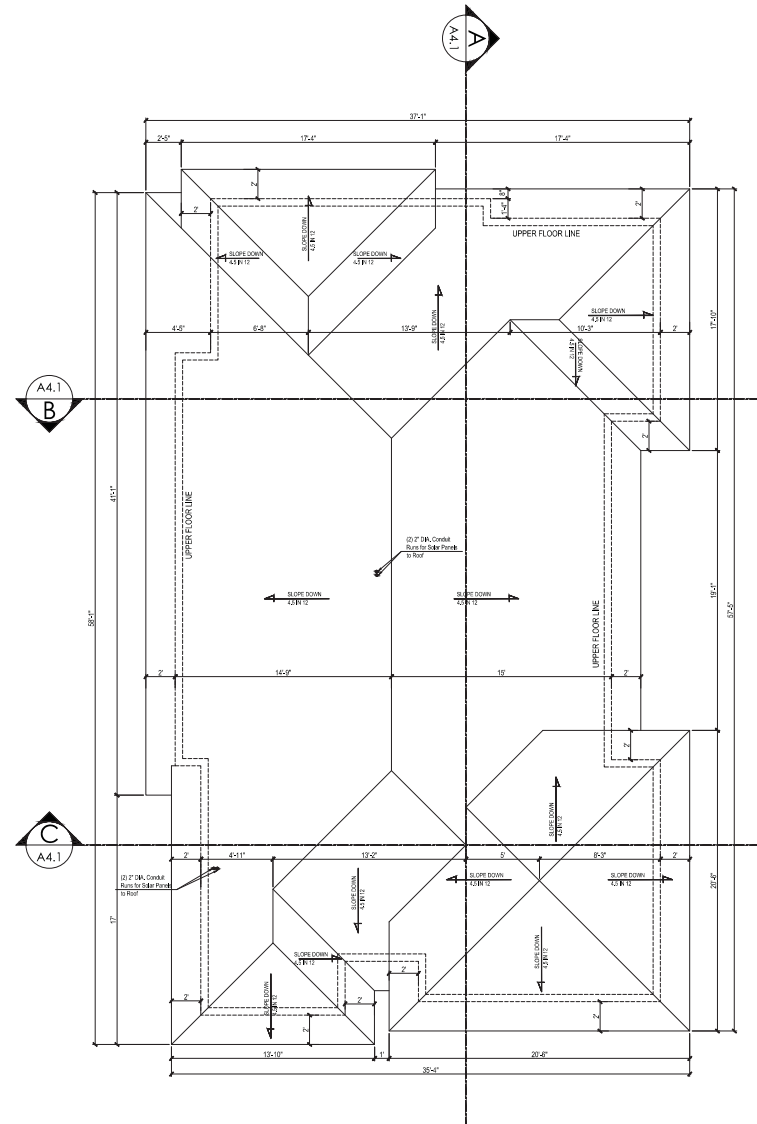
BEDROOMS WINDOW SCREENS TO HAVE A MIN. UNOBSTRUCTED OPENING OF 3.77 S.F. WITH NO DIM LESS THAN 15"



UPPER FLOOR PLAN
North Unit: 805 S.F.
South Unit: 856 S.F.
 TOTAL AREA: 1,661 S.F.

NOTE:

- These drawings comply with BC B.C. 2012 9.36
- The house meets compliance using the performance path(Refer to Energy Report)
- The principal dwelling unit will comply with 9.32.3.4.(2) ducted forced air heating system,Secondary suite 9.32.3.4.(6) Principal fan and passive outlets.



ROOF PLAN

- ☐ SMOKE ALARM
- ☐ PHOTO ELECTRIC ALARM
- ☐ CO DETECTOR
- ☐ BATHROOM EXHAUST FAN

NOTE:
BEDROOMS WINDOW EGRESS TO HAVE A MIN. UNOBSTRUCTED
OPENING OF 3.77 S.F. WITH NO DIM LESS THAN 15"

NOTES:

PROJECT:

PROPOSED DUPLEX
(TWO-UNIT RESIDENTIAL)

CIVIC ADDRESS :
2205 ST. ANDREWS AVE.
NORTH VANCOUVER, BC

LEGAL DESCRIPTION:
LOT: 14 , BLOCK: 208
DL: 546 , PLAN: 5481

FILE :
ROOF & UPPER FLOOR PLANS

CLIENT:
NORTH PACIFIC
DEVELOPMENT LTD.

NORTH ARROW



CAD FILE:
2205 St.Andrews Ave - Rezone.dwg

DESIGN BY:

MOREZ

DATE:
Nov. 2017

REV-01: 3rd July 2018

REV-02: 15th January 2019

SCALE:
 $\frac{1}{4}" = 1'-0"$

DWG NO.	A - 2.2
---------	---------

- A. STUCCO FINISH (OFF WHITE)
- B. METAL HANDRAIL
- C. ASPHALT SHINGLE ROOFING
- D. CLEAR NON REFLECTIVE GLASS
- E. CONCRETE FINISH



SOUTH ELEVATION

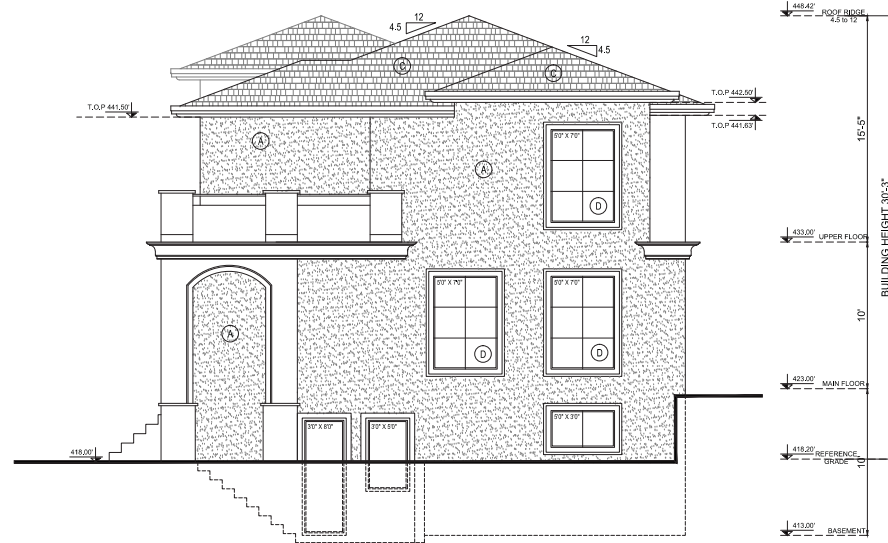


EAST ELEVATION

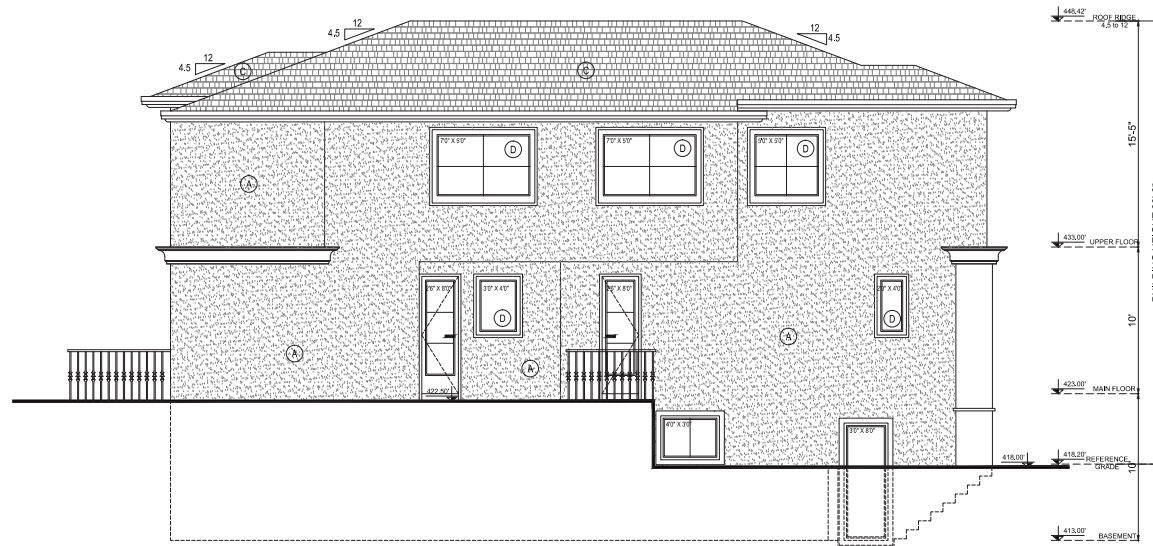
- NOTE:**
- These drawings comply with BC B.C. 2012 9.36
 - The house meets compliance using the performance path(Refer to Energy Report)
 - The principal dwelling unit will comply with 9.32.3.4.(2) ducted forced air heating system,Secondary suite 9.32.3.4.(6) Principal fan and passive outlets.

NOTES:	
PROJECT:	
PROPOSED DUPLEX (TWO-UNIT RESIDENTIAL)	
CLIENT ADDRESS:	
2205 ST. ANDREWS AVE. NORTH VANCOUVER, BC	
LEGAL DESCRIPTION:	
LOT: 14 , BLOCK: 208 DL: S46 , PLAN: S481	
TITLE :	
SOUTH & EAST ELEVATIONS	
CLIENT:	
NORTH PACIFIC DEVELOPMENT LTD.	
NORTH ARROW	
CAD FILE:	
2205 St.Andrews Ave - Rezone.dwg	
DESIGN BY :	
MOREZ	
DATE:	
Nov. 2017	
REV- 01 :	
3rd July 2018	
REV- 02 :	
15th January 2019	
SCALE:	
1/4" = 1'-0"	
DWG NO.	
A - 3.1	

- A. STUCCO FINISH (OFF WHITE)
- B. METAL HANDRAIL
- C. ASPHALT SHINGLE ROOFING
- D. CLEAR NON REFLECTIVE GLASS
- E. CONCRETE FINISH



NORTH ELEVATION



WEST ELEVATION

- NOTE:**
- These drawings comply with BC B.C. 2012 9.36
 - The house meets compliance using the performance path(Refer to Energy Report)
 - The principal dwelling unit will comply with 9.32.3.4.(2) ducted forced air heating system,Secondary suite 9.32.3.4.(6) Principal fan and passive outlets.

MOREZ DESIGN INC

312 - 850 Harbourside Dr
North Vancouver, BC V7P 0A3
morez@morezdesign.ca
www.morezdesign.ca
C: 604-727-2584
T: 778-319-6489

NOTES:	
PROJECT:	
PROPOSED DUPLEX (TWO-UNIT RESIDENTIAL)	
CLIENT ADDRESS:	
2205 ST. ANDREWS AVE. NORTH VANCOUVER, BC	
LEGAL DESCRIPTION:	
LOT: 14 , BLOCK: 208 DL: S46 , PLAN: S481	
TITLE:	
North & West ELEVATIONS	
CLIENT:	
NORTH PACIFIC DEVELOPMENT LTD.	
NORTH ARROW	
CAD FILE:	
2205 St.Andrews Ave - Rezone.dwg	
DESIGN BY:	
MOREZ	
DATE:	
Nov. 2017	
REV- 01:	
3rd July 2018	
REV- 02:	
15th January 2019	
SCALE:	
1/4" = 1'-0"	
DWG NO.	
A - 3.2	

NOTES:

PROJECT:

PROPOSED DUPLEX
(TWO-UNIT RESIDENTIAL)

CNIC ADDRESS:

2205 ST. ANDREWS AVE.
NORTH VANCOUVER, BC

LEGAL DESCRIPTION:

LOT: 14, BLOCK: 208
DL: S46, PLAN: S481

TITLE:

SECTIONS

CLIENT:

NORTH PACIFIC
DEVELOPMENT LTD.

NORTH ARROW

CAD FILE:

2205 St.Andrews Ave - Rzone.dwg

DESIGN BY:

MOREZ

DATE:

Nov. 2017

REV: 01: 3rd July 2018

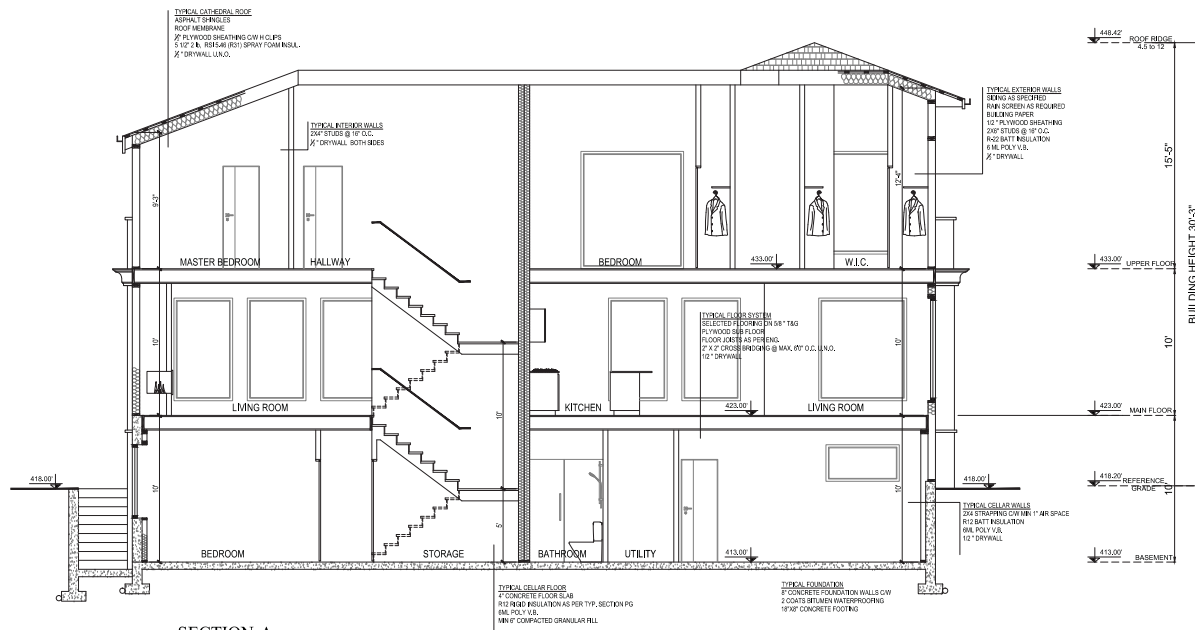
REV: 02: 15th January 2019

SCALE:

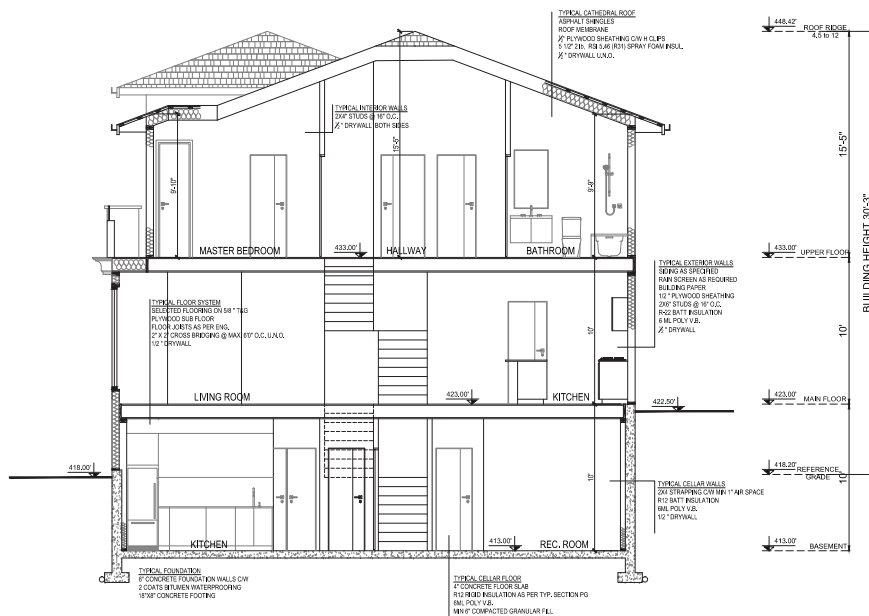
1/4" = 1'-0"

DWG NO.

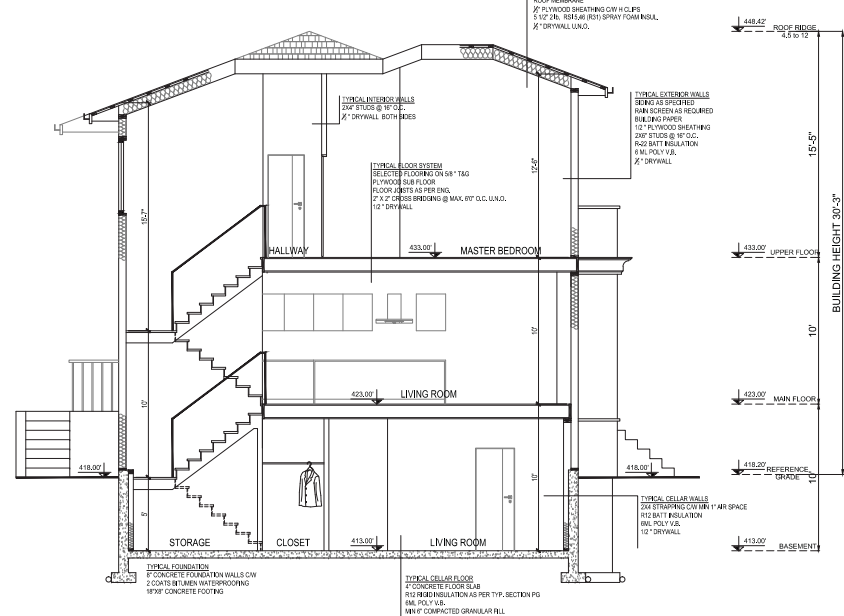
A - 4.1



SECTION-A



SECTION-B



SECTION-C

2205 St. Andrews Rezoning Application for Duplex

Development Information Meeting Summary Report

Event Date: March 1, 2018
Time: 6:30pm – 8:30pm
Location: Memorial Community Recreation Centre Lynn Room
Attendance: 1 member of the public signed in.
Comments: 0 comment sheets

Meeting Purpose:

- 1) To present development application materials to neighbours
- 2) To provide an opportunity for the public to ask questions about the development
- 3) To provide an opportunity for neighbours to comment on the proposal.

Notification:

In accordance with City of North Vancouver policies:

Invitation Brochures

Invitations and informational packages were delivered to 18 addresses within a 40m radius from the site, meeting City requirements. Appendix A includes a copy of this package and a map of the distribution area.

Newspaper Ad

A newspaper ad was placed in the North Shore News on Wednesday, February 21 and Friday, February 23, 2018. A copy of the ad is included in Appendix A: Notification.

Attendance:

1 member of the public signed in for the meeting. A copy of the sign-in sheet is included in Appendix B.

The following project team members were in attendance:

Project Team presenters included:

- Morez Adilipour, Morez Design Inc.

Facilitators:

- Steven Petersson, Petersson Planning Consulting
- Katrina May, Petersson Planning Consulting

Overview:

The meeting was planned to include an Open House, a presentation, and a facilitated dialogue session.

One person came to peruse the boards and engage with the project team. Since only one person came, the planned presentation was cancelled in favour of direct conversation with the participant. The participant was a realtor, and asked some questions about the project in order to understand what new housing, in duplex form, was to be introduced into the market.

The participant was invited to submit written comments to the facilitator. No comment sheets were submitted during the meeting, or within two weeks following the meeting.

Public Dialogue:

(Q = Question, A = Answer, and the number is to track the dialogue)

- Q1** Is the project in the special duplex study area?
A1 No.
- Q2** How does the duplex transition to the single family neighbourhood across St. Andrews Street?
A2 One duplex fronts 22nd St, the other duplex fronts St. Andrews, making it read like a single family home.
- Q3** What is the project's Floor Space Ratio?
A3 The FSR is 0.35 plus 1,000 sq ft.
- Q4** Does that include the basement?
A4 No, basements are excluded in gross floor area calculations.
- Q5** Are there secondary suites in the project?
A5 Yes, one for each unit.

Comment Sheet and Email Summary

Participants were invited to submit comments for a two-week response period after the meeting. No comment sheets were submitted.

Conclusion

The purpose of this development information session was to present to neighbours the proposed rezoning application and the duplex concept, and provide them with an opportunity to ask clarifying questions and comment on the proposal. 18 invitations were distributed by hand to the surrounding community, and one community member signed in. Two newspaper ads notified the community of the meeting, and a sign was posted on the property.

The meeting length and format was sufficient to provide all participants an opportunity to learn more, ask questions, and make the comments they wished to provide that evening. There were no e-mail or telephone inquiries about this rezoning application prior to the session, and only one community member attended. This indicates a lack of opposition to the duplex proposal in the neighbourhood.



NOTICE OF PUBLIC HEARING (WAIVED)

WHO: Morez Design Inc.

WHAT: Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8728

WHERE: 2205 St. Andrews Avenue

WHEN: Monday, September 16, 2019 at 6:30 pm
Council Chamber, City Hall
141 West 14th Street, North Vancouver

Notice is hereby given that Council will consider:

Zoning Amendment Bylaw, 2019, No. 8728

to rezone the subject property from a One-Unit Residential 1 (RS-1) Zone to a Two-Unit Residential 1 (RT-1) Zone to permit the development of a duplex and 2 accessory dwelling units. The density is 0.35 times the lot area (FSR) plus 1000 sq. ft. (92.9 sq. m.), with a maximum building height of 33.1 feet (10.1 m.) and 4 required parking stalls.

If you believe you may be affected by the above proposal, please forward written or email submissions, including your name and address, to the City Clerk, at input@cnv.org, or by mail or delivered to City Hall. Submissions must be received no later than 4:00 pm, Monday, September 16, 2019, to ensure their availability to Council. No further information or submissions can be considered by Council after third reading of the bylaw.

The proposed Zoning Amendment Bylaw and background material will be available for viewing at City Hall between 8:30 am and 5:00 pm, Monday to Friday, except Statutory Holidays, from September 6, 2019, and online at cnv.org/PublicHearings.

Please direct any inquiries to **Mike Friesen**, Planner 1, at mfriesen@cnv.org or **604-990-4206**.

141 WEST 14TH STREET / NORTH VANCOUVER / BC / V7M 1H9
T 604 985 7761 / F 604 985 9417 / CNV.ORG



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8728

A Bylaw to amend “Zoning Bylaw, 1995, No. 6700”

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 “**Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8728**” (Morez Design Inc., 2205 St. Andrews Avenue, RT-1).
2. Division VI: Zoning Map of Document “A” of “Zoning Bylaw, 1995, No. 6700” is hereby amended by reclassifying the following lots as henceforth being transferred, added to and forming part of RT-1 (Two-Unit Residential 1) Zone:

Lots	Block	D.L.	Plan	
14	208	546	5481	from RS-1

READ a first time on the 22nd day of July, 2019.

READ a second time on the 22nd day of July, 2019.

RECEIVED APPROVAL FROM THE
MINISTRY OF TRANSPORTATION ON THE
21st DAY OF August, 2019.

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

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

MAYOR

CITY CLERK