



**AGENDA FOR THE REGULAR MEETING OF COUNCIL,
HELD ELECTRONICALLY FROM CITY HALL,
141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON
MONDAY, NOVEMBER 22, 2021 AT 5:30 PM**

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

*The City of North Vancouver acknowledges that this Council meeting is held on the
traditional territories of the Squamish and Tsleil-Waututh Nations.*

CALL TO ORDER

APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, November 22, 2021

ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, November 15, 2021
3. Special Regular Council Meeting Minutes, November 16, 2021

PROCLAMATION

International Day of Persons with Disabilities – December 3, 2021

PUBLIC INPUT PERIOD

CONSENT AGENDA

Items *4, *5, *6, *7, *8 and *9 are listed in the Consent Agenda and may be considered separately or in one motion.

BYLAWS – ADOPTION

- *4. “Official Community Plan Bylaw, 2014, No. 8400, Amendment Bylaw, 2021, No. 8757” (Change Residential Levels in the Duplex Special Study Area – Northern Part and Revise the Duplex Special Study Area Boundary)
- *5. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8758” (New Residential Levels in the Duplex Special Study Area – Northern Part, RT-1)
- *6. “Noise Control Bylaw, 2021, No. 8885”
- *7. “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886” (Noise Control Bylaw)
- *8. “Ticket Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A)

REPORT

- *9. Climate and Environment Advisory Task Force – Update and Terms of Reference Revisions

PUBLIC HEARING – Third Party Rooftop Antenna Systems

BYLAW – THIRD READING

10. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8882”
(Third Party Rooftop Antenna Systems)

Information Report, November 10, 2021 – “Rooftop Antenna Development Permit Guidelines and Zoning Bylaw Update”

PRESENTATION

2022 Utility Rates – Chief Financial Officer and Director, Finance and Director, Engineering, Parks and Environment

REPORT

11. 2022 Utility Rates

Information Report, November 9, 2021 – “2022 Water Utility Update”

Information Report, November 9, 2021 – “2022 Sewerage and Drainage Utility Update”

Information Report, November 9, 2021 – “2022 Solid Waste Utility Update”

BYLAWS – FIRST, SECOND AND THIRD READINGS

12. “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2021, No. 8889”
13. “Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2021, No. 8890”
14. “Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2021, No. 8891”

REPORTS

15. 2021 Children and Youth Initiatives Fund – Special Project Grant Applications
16. Rezoning Application: 2357 Western Avenue (Ardeshir Behmerdi / 2357 Western Holdings Ltd.)

BYLAW – FIRST AND SECOND READINGS

17. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8884”
(Ardeshir Behmerdi / 2357 Western Holdings Ltd., 2357 Western Avenue, CD-742)

REPORT

18. Lonsdale Energy Corporation Loan Request

COUNCIL INQUIRIES / REPORTS

NEW ITEMS OF BUSINESS

NOTICES OF MOTION

RECESS TO CLOSED SESSION

THAT Council recess to the Committee of the Whole, Closed Session, pursuant to the *Community Charter*, Section 90(1)(e) [land matter].

REPORT OF THE COMMITTEE OF THE WHOLE (CLOSED SESSION)

ADJOURN

CALL TO ORDER

APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, November 22, 2021

ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, November 15, 2021
3. Special Regular Council Meeting Minutes, November 16, 2021

PROCLAMATION

International Day of Persons with Disabilities – December 3, 2021

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 addressing Council during the Public Input Period is 2 minutes, with the number of speakers set at 5 persons. Speakers’ comments will be audio recorded, as well as live-streamed on the City’s website, and will form part of the public record.

As City Hall remains closed to the public, the Regular Council Meetings will be held electronically via “WebEx”. To speak during the Public Input Period of a Regular Council Meeting, pre-registration is required by completing an online form at cnv.org/PublicInputPeriod. Persons can also pre-register by phoning 604-990-4230 and providing contact information. **All pre-registration must be submitted no later than 12:00 noon on the day of the meeting.**

Once you have pre-registered, you will receive login/call-in instructions via email/phone.

You will be required to login or phone into the Council meeting between 5:00 and 5:15 pm on the day of the meeting. At the meeting, speakers will be asked to state their name and address for the record. If speakers have written materials to accompany their presentation, these materials must be emailed to the Corporate Officer at clerks@cnv.org no later than 12:00 noon on the day of the meeting.

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

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 or to Public Hearings, Public Meetings and Committee meetings when those matters are scheduled on the same evening’s agenda, as an opportunity for public input is provided when the particular item comes forward for discussion.

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

CONSENT AGENDA

Items *4, *5, *6, *7, *8 and *9 are listed in the Consent Agenda and may be considered separately or in one motion.

RECOMMENDATION:

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

START OF CONSENT AGENDA

BYLAWS – ADOPTION

- *4. “Official Community Plan Bylaw, 2014, No. 8400, Amendment Bylaw, 2021, No. 8757” (Change Residential Levels in the Duplex Special Study Area – Northern Part and Revise the Duplex Special Study Area Boundary)

RECOMMENDATION:

THAT “Official Community Plan Bylaw, 2014, No. 8400, Amendment Bylaw, 2021, No. 8757” (Change Residential Levels in the Duplex Special Study Area – Northern Part and Revise the Duplex Special Study Area Boundary) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

- *5. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8758” (New Residential Levels in the Duplex Special Study Area – Northern Part, RT-1)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8758” (New Residential Levels in the Duplex Special Study Area – Northern Part, RT-1) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

- *6. “Noise Control Bylaw, 2021, No. 8885”

RECOMMENDATION:

THAT “Noise Control Bylaw, 2021, No. 8885” be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

CONSENT AGENDA – Continued

BYLAWS – ADOPTION – Continued

- *7. “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886” (Noise Control Bylaw)

RECOMMENDATION:

THAT “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886” (Noise Control Bylaw) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

- *8. “Ticket Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A)

RECOMMENDATION:

THAT “Ticket Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

REPORT

- *9. Climate and Environment Advisory Task Force – Update and Terms of Reference Revisions – File: 11-5280-20-0008/1

Report: Planner 2, Environmental Sustainability, November 3, 2021

RECOMMENDATION:

PURSUANT to the report of the Planner 2, Environmental Sustainability, dated November 3, 2021, entitled “Climate and Environment Advisory Task Force – Update and Terms of Reference Revisions”:

THAT the revised Terms of Reference of the Climate and Environment Advisory Task Force be endorsed.

END OF CONSENT AGENDA

PUBLIC HEARING – Third Party Rooftop Antenna Systems – 5:30 pm

“Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8882” (Third Party Rooftop Antenna Systems) would amend the Zoning Bylaw to remove height restrictions for the installation of rooftop antennas and to bring into effect the updated Rooftop Antenna Development Permit Guidelines to guide the design and siting of these facilities.

Information Report, November 10, 2021 – “Rooftop Antenna Development Permit Guidelines and Zoning Bylaw Update”

Bylaw No. 8882 to be considered under Item 10.

AGENDA

Staff presentation
Representations from the public
Questions from Council
Motion to conclude the Public Hearing

BYLAW – THIRD READING

10. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8882”
(Third Party Rooftop Antenna Systems)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8882”
(Third Party Rooftop Antenna Systems) be given third reading.

PRESENTATION

2022 Utility Rates – Chief Financial Officer and Director, Finance and Director,
Engineering, Parks and Environment

Item 11 refers.

REPORT

11. 2022 Utility Rates – File: 05-1820-01-0001/2022

Report: Chief Financial Officer and Director, Finance, November 10, 2021

RECOMMENDATION:

PURSUANT to the report of the Chief Financial Officer and Director, Finance, dated November 10, 2021, entitled “2022 Utility Rates”:

THAT the following bylaws be considered:

- “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2021, No. 8889”;
- “Sewerage and Drainage Utility Bylaw 1995, No. 6746, Amendment Bylaw, 2021, No. 8890”; and
- “Solid Waste Management Service Bylaw. 1997, No. 6920, Amendment Bylaw, 2021, No. 8891”.

Items 12, 13 and 14 refer.

Information Report, November 9, 2021 – “2022 Water Utility Update”

Information Report, November 9, 2021 – “2022 Sewerage and Drainage Utility Update”

Information Report, November 9, 2021 – “2022 Solid Waste Utility Update”

BYLAWS – FIRST, SECOND AND THIRD READINGS

12. “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2021, No. 8889”

RECOMMENDATION:

THAT “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2021, No. 8889” be given first, second and third readings.

13. “Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2021, No. 8890”

RECOMMENDATION:

THAT “Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2021, No. 8890” be given first, second and third readings.

BYLAWS – FIRST, SECOND AND THIRD READINGS – Continued

14. “Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2021, No. 8891”

RECOMMENDATION:

THAT “Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2021, No. 8891” be given first, second and third readings.

REPORTS

15. 2021 Children and Youth Initiatives Fund – Special Project Grant Applications
– File: 05-1850-20-0003/2021

Report: Coordinator, Community Development, November 8, 2021

RECOMMENDATION:

PURSUANT to the report of the Coordinator, Community Development, dated November 8, 2021, entitled “2021 Children and Youth Initiatives Fund – Special Project Grant Applications”:

THAT grants be allocated to the following organizations from the 2021 Children and Youth Initiatives Fund:

Jack.org	
Talk at the Top Jack Summit	\$1,400
Junior Achievement of BC	
World of Choices	\$2,325
Family Services of the North Shore	
PROUD2BE Virtual Event Series.....	\$2,000
Moon Time Sisters BC	
Moon Time Sisters Fall Drive	\$500
École Boundary Elementary Students	
Junior Dungeons and Dragons	\$275
North Shore Restorative Justice Society	
Youth Action Council Event Series	\$3,000
Mom Bop	
Mom Bop Concert.....	\$1,000
AB Seedlings	
K-Trees	\$500

Continued...

REPORTS – Continued

15. 2021 Children and Youth Initiatives Fund – Special Project Grant Applications
– File: 05-1850-20-0003/2021 – Continued

Queen Mary Elementary	
Social Justice Action Club.....	\$1,500
North Shore Women’s Centre	
Fearless: Girls’ Empowerment Camp	\$2,500
Westcoast Boys Club Network	
Boys Club Network School Clubs	\$2,500
Mountainside Secondary	
Yoga and Wellness Activities.....	\$3,000
TOTAL.....	\$20,500

THAT the following organization be notified that their application for a 2021 Children and Youth Initiatives Fund grant will not be funded:

Queen Mary Elementary	
Body Science Workshops.....	\$700

THAT a copy of the Council’s resolution be sent to the District of North Vancouver and the North Vancouver School Board (District #44) for information;

AND THAT the 2021 Children and Youth Initiatives Grant Committee be thanked for their time and participation.

16. Rezoning Application: 2357 Western Avenue (Ardeshir Behmerdi / 2357 Western Holdings Ltd.) – File: 08-3360-20-0500/1

Report: Planner 1, November 10, 2021

RECOMMENDATION:

PURSUANT to the report of the Planner 1, dated November 10, 2021, entitled “Rezoning Application: 2357 Western Avenue (Ardeshir Behmerdi / 2357 Western Holdings Ltd.)”:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8884” (Ardeshir Behmerdi / 2357 Western Holdings Ltd., 2357 Western Avenue, CD-742) be considered and the Public Hearing be waived;

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

AND THAT the community benefits listed in the report section “Community Benefits” be secured through agreements at the applicant’s expense and to the satisfaction of staff, and collection of the density bonus contribution be received prior to adoption of the bylaw.

Item 17 refers.

BYLAW – FIRST AND SECOND READINGS

17. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8884”
(Ardeshir Behmerdi / 2357 Western Holdings Ltd., 2357 Western Avenue, CD-742)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8884”
(Ardeshir Behmerdi / 2357 Western Holdings Ltd., 2357 Western Avenue,
CD-742) be given first and second readings.

REPORT

18. Lonsdale Energy Corporation Loan Request – File: 05-1610-01-0001/2021

Report: Chief Financial Officer and Director, Finance, November 17, 2021

RECOMMENDATION:

PURSUANT to the report of the Chief Financial Officer and Director, Finance,
dated November 17, 2021, entitled “Lonsdale Energy Corporation Loan
Request”:

THAT Lonsdale Energy Corporation be authorized to borrow up to \$720,000 in
additional funding from the City under the same terms and conditions of the
existing loan of August 1, 2018;

AND THAT the proposed repayment schedule be endorsed, with confirmation
that the City will provide 12 months’ notice to Lonsdale Energy Corporation if
early loan reimbursements are requested by the City prior to the planned
schedule.

COUNCIL INQUIRIES / REPORTS

NEW ITEMS OF BUSINESS

NOTICES OF MOTION

RECESS TO CLOSED SESSION

THAT Council recess to the Committee of the Whole, Closed Session, pursuant
to the *Community Charter*, Section 90(1)(e) [land matter].

REPORT OF THE COMMITTEE OF THE WHOLE (CLOSED SESSION)

ADJOURN



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

PUBLIC HEARING GUIDELINES FOR ELECTRONIC MEETINGS

Public Hearings are included as part of a Regular Council agenda and governed by the provisions of the *Local Government Act*.

A Public Hearing is held to allow the public an opportunity to make representations to Council – in person at the Public Hearing or by written submission – on a proposed amendment to the City's Official Community Plan and/or Zoning Bylaw. All persons who believe their interest in property is affected by a proposed bylaw(s) are afforded a reasonable opportunity to be heard, voice concerns or present written submissions regarding matters contained within the bylaw(s).

All written submissions and representations made at the Public Hearing form part of the official public record. Minutes of the Public Hearing and a video recording of the proceedings will be posted on the City's website at cnv.org.

All written submissions must include the person's name and address. If this information is not provided, it cannot be included as part of the public record. Electronic submissions are preferred, and hand-delivered or mailed submissions will also be accepted. The deadline to submit email submissions is 12:00 noon on the day of the Public Hearing. Due to COVID-19, safety quarantine restrictions have been put in place and the deadline for submissions by mail or delivery to City Hall is 4:00 pm on the Friday prior to the Monday Public Hearing (a minimum of one clear day prior to the Public Hearing).

If persons wish to speak at the Public Hearing, we ask that everyone pre-register to be placed on the speaker's list. The pre-registration form is available at cnv.org/PublicHearings, or speakers can pre-register by contacting the Corporate Officer's office. All pre-registrations must be submitted no later than 12:00 noon on the day of the Public Hearing, to allow City staff time to contact all participants and provide them with call-in/online access instructions.

Comments from the public must specifically relate to the proposed bylaw(s). Speakers are asked to avoid repetitive comments and not to divert to other matters.

Speakers will be asked to confirm their name and address for the record and will be provided one, 5-minute opportunity to present their comments. There will be no opportunity to speak a second time. After all persons who have pre-registered have spoken, the Mayor (Chair) will ask if anyone else from the public has new information to provide. Speakers who have not pre-registered will also have an opportunity to provide input at cnv.org/PublicHearings. Call-in details will be displayed on-screen at the Public Hearing (watch web livestream). Once all registered speakers have provided input, the Mayor will call for a recess to allow additional speakers time to phone in.

Continued...



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

PUBLIC HEARING GUIDELINES FOR ELECTRONIC MEETINGS (continued)

Everyone will be given a reasonable opportunity to be heard and no one should feel discouraged or prevented from making their views known. The City asks for everyone's patience during the electronic Public Hearing.

Procedural rules for the conduct of the Public Hearing are set at the call of the Chair and Council's main function is to listen to the views of the public regarding the change of land use in the proposed bylaw(s). It is not the function of Council to debate the merits of an application with speakers. Questions from members of the public and Council must be addressed through the Chair.

Once the Public Hearing concludes, no further information or submissions can be considered by Council.

Following adjournment of the Public Hearing, the Regular meeting reconvenes and the Zoning and/or Official Community Plan bylaw amendment(s) are discussed and debated by members of Council, followed by consideration of third reading of the bylaw(s).

THIS PAGE INTENTIONALLY LEFT BLANK



MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD ELECTRONICALLY FROM CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON **MONDAY, NOVEMBER 15, 2021**

PRESENT

COUNCIL MEMBERS

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

STAFF MEMBERS

L. McCarthy, CAO
K. Graham, Corporate Officer
C. Baird, Deputy Corporate Officer
J. Peters, Assistant City Clerk
H. Granger, City Solicitor
L. Sawrenko, Director, Finance
M. Epp, Director, Planning and Development
A. Devlin, Acting Deputy Director, Planning and Development
Y. Zeng, Manager, Development Planning
R. de St. Croix, Manager, Long Range and Community Planning
M. Wray, Planner
K. Montgomerie, Planner
D. Pope, Director, Engineering, Parks and Environment
K. Magnusson, Deputy Director, Engineering, Parks and Environment
M. Hunter, Manager, Parks and Environment
T. Ryce, Chief Building Official
R. Skene, Director, Community and Partner Engagement
L. Orr, Acting Director, Community and Partner Engagement
G. Schalk, Public Safety Director and Fire Chief
P. Duffy, Manager, Bylaw Services

The meeting was called to order at 5:30 pm.

APPROVAL OF AGENDA

Moved by Councillor Bell, seconded by Councillor Valente

1. Regular Council Meeting Agenda, November 15, 2021

CARRIED UNANIMOUSLY

ADOPTION OF MINUTES

Moved by Councillor Bell, seconded by Councillor Girard

2. Regular Council Meeting Minutes, November 1, 2021

CARRIED UNANIMOUSLY

PUBLIC INPUT PERIOD

- Nathan Davidowicz, 5347 Oak Street, Vancouver, spoke regarding fossil fuel and electric buses.

CONSENT AGENDA

Moved by Councillor Back, seconded by Councillor Bell

THAT Item 6 be removed from the “Consent Agenda” and the remaining recommendations listed within the “Consent Agenda” be approved.

CARRIED UNANIMOUSLY

START OF CONSENT AGENDA

BYLAWS – ADOPTION

- *3. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8794” (Reza Nobari / Disa Design Group, 1348 Forbes Avenue, RS-2)

Moved by Councillor Back, seconded by Councillor Bell

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8794” (Reza Nobari / Disa Design Group, 1348 Forbes Avenue, RS-2) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

- *4. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8870” (L. Cheung / Karl Wein Associates, 620 Jones Avenue, CD-738)

Moved by Councillor Back, seconded by Councillor Bell

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8870” (L. Cheung / Karl Wein Associates, 620 Jones Avenue, CD-738) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

- *5. “City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2021, No. 8878” (Schedule C and Other Fees)

Moved by Councillor Back, seconded by Councillor Bell

THAT “City of North Vancouver Hydronic Energy Service Bylaw, 2004, No. 7575, Amendment Bylaw, 2021, No. 8878” (Schedule C and Other Fees) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

CONSENT AGENDA – Continued

REPORT

*7. 2022 Schedule of Council Meetings – File: 01-0550-01-0001/2021

Report: Corporate Officer, November 9, 2021

Moved by Councillor Back, seconded by Councillor Bell

PURSUANT to the report of the Corporate Officer, dated November 9, 2021, entitled “2022 Schedule of Council Meetings”:

THAT the 2022 Schedule of Council Meetings be endorsed.

(CARRIED UNANIMOUSLY)

END OF CONSENT AGENDA

CORRESPONDENCE

6. Board in Brief, Metro Vancouver Regional District, October 29, 2021
– File: 01-0400-60-0006/2020

Re: Metro Vancouver – Board in Brief

Moved by Mayor Buchanan, seconded by Councillor Bell

THAT the correspondence from Metro Vancouver, dated October 29, 2021, regarding the “Metro Vancouver – Board in Brief”, be received and filed.

CARRIED UNANIMOUSLY

PUBLIC HEARING – Duplex Special Study Implementation

Moved by Councillor McIlroy, seconded by Councillor Bell

THAT the meeting recess to the Public Hearing for “Official Community Plan Bylaw, 2014, No. 8400, Amendment Bylaw, 2021, No. 8757” (Change Residential Levels in the Duplex Special Study Area – Northern Part and Revise the Duplex Special Study Area Boundary) and “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8758” (New Residential Levels in the Duplex Special Study Area – Northern Part, RT-1).

The meeting recessed to the Public Hearing at 5:42 pm and reconvened at 6:29 pm.

BYLAWS – THIRD READING

8. “Official Community Plan Bylaw, 2014, No. 8400, Amendment Bylaw, 2021, No. 8757” (Change Residential Levels in the Duplex Special Study Area – Northern Part and Revise the Duplex Special Study Area Boundary)

Moved by Councillor Girard, seconded by Councillor Back

THAT “Official Community Plan Bylaw, 2014, No. 8400, Amendment Bylaw, 2021, No. 8757” (Change Residential Levels in the Duplex Special Study Area – Northern Part and Revise the Duplex Special Study Area Boundary) be given third reading.

CARRIED UNANIMOUSLY

9. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8758” (New Residential Levels in the Duplex Special Study Area – Northern Part, RT-1)

Moved by Councillor Girard, seconded by Councillor Back

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8758” (New Residential Levels in the Duplex Special Study Area – Northern Part, RT-1) be given third reading.

CARRIED UNANIMOUSLY

10. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8873” (Farid Sayari / Royal Palace Construction and Design, 322 West 14th Street, CD-739)

Moved by Councillor McIlroy, seconded by Councillor Valente

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8873” (Farid Sayari / Royal Palace Construction and Design, 322 West 14th Street, CD-739) be given third reading.

CARRIED UNANIMOUSLY

PRESENTATION

Metro 2050 Draft – Update to the Regional Growth Strategy – Heather McNell, General Manager, Regional Planning and Housing Services, and Sean Galloway, Director, Regional Planning and Electoral Area Services, Metro Vancouver

Sav Dhaliwal, Board Chair, Jerry Dobrovolny, CAO, and Heather McNell, General Manager, Regional Planning and Housing Services, Metro Vancouver, provided a PowerPoint presentation regarding the “Metro 2050 Draft – Update to the Regional Growth Strategy” and responded to questions of Council.

REPORT

11. City of North Vancouver Response to Metro Vancouver Regional Growth Strategy: Metro 2050 – File: 13-6500-20-0001/1

Report: Manager, Long Range and Community Planning, November 3, 2021

Moved by Councillor McIlroy, seconded by Councillor Girard

PURSUANT to the report of the Manager, Long Range and Community Planning, dated November 3, 2021, entitled “City of North Vancouver Response to Metro Vancouver Regional Growth Strategy: Metro 2050”:

THAT the report containing the City of North Vancouver’s comments regarding the July 2021 version of Metro 2050, the Draft Regional Growth Strategy, be forwarded to the Metro Vancouver Board of Directors for consideration.

CARRIED UNANIMOUSLY

PRESENTATION

Protecting and Growing Tree Canopy Coverage in the City – Acting Deputy Director, Planning and Development

The Acting Deputy Director, Planning and Development provided a PowerPoint presentation regarding the “Protecting and Growing Tree Canopy Coverage in the City” and responded to questions of Council.

REPORT

12. Proposed New Noise Control Bylaw – File: 09-3900-01-0001/2021

Report: Manager, Bylaw Services, November 9, 2021

Moved by Councillor Valente, seconded by Councillor Bell

PURSUANT to the report of the Manager, Bylaw Services, dated November 9, 2021, entitled “Proposed New Noise Control Bylaw”:

THAT the following bylaws be considered:

- “Noise Control Bylaw, 2021, No. 8885”;
- “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886” (Noise Control Bylaw); and
- “Ticketing Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A).

CARRIED UNANIMOUSLY

BYLAWS – FIRST, SECOND AND THIRD READINGS

13. “Noise Control Bylaw, 2021, No. 8885”

Moved by Councillor Valente, seconded by Councillor Bell

THAT “Noise Control Bylaw, 2021, No. 8885” be given first and second readings.

CARRIED UNANIMOUSLY

Moved by Councillor Valente, seconded by Councillor Bell

THAT “Noise Control Bylaw, 2021, No. 8885” be given third reading.

CARRIED UNANIMOUSLY

14. “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886” (Noise Control Bylaw)

Moved by Councillor Valente, seconded by Councillor Bell

THAT “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886” (Noise Control Bylaw) be given first and second readings.

CARRIED UNANIMOUSLY

Moved by Councillor Valente, seconded by Councillor Bell

THAT “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886” (Noise Control Bylaw) be given third reading.

CARRIED UNANIMOUSLY

15. “Ticketing Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A)

Moved by Councillor Valente, seconded by Councillor Bell

THAT “Ticketing Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A) be given first and second readings.

CARRIED UNANIMOUSLY

Moved by Councillor Valente, seconded by Councillor Bell

THAT “Ticketing Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A) be given third reading.

CARRIED UNANIMOUSLY

REPORTS

16. Feasibility of an Adopt-a-Street, Path or Trail Program – File: 15-7710-01-0001/2021

Report: Acting Director, Community and Partner Engagement, November 10, 2021

Moved by Councillor Bell, seconded by Councillor Girard

PURSUANT to the report of the Acting Director, Community and Partner Engagement, dated November 10, 2021, entitled “Feasibility of an Adopt-a-Street, Path or Trail Program”:

THAT staff be directed to implement a pilot Adopt-a-Street, Path or Trail Program that would provide basic equipment and supplies to the public for litter collection;

AND THAT staff report back on the findings of the pilot by fall 2022 with recommendations for next steps.

CARRIED UNANIMOUSLY

17. Sponsorship Policy Direction – File: 01-0340-01-0001/2021

Report: Acting Director, Community and Partner Engagement, November 10, 2021

Moved by Councillor Bell, seconded by Councillor Girard

PURSUANT to the report of the Acting Director, Community and Partner Engagement, dated November 10, 2021, entitled “Sponsorship Policy Direction”:

THAT the Sponsorship Policy Outline be endorsed;

AND THAT staff report back with a Sponsorship Policy for Council’s consideration based upon the Sponsorship Policy Outline.

CARRIED UNANIMOUSLY

COUNCIL INQUIRIES / REPORTS

Nil.

NEW ITEMS OF BUSINESS

Nil.

NOTICES OF MOTION

Nil.

ADJOURN

Moved by Councillor Back, seconded by Councillor Bell

THAT the meeting adjourn.

CARRIED UNANIMOUSLY

The meeting adjourned at 9:52 pm.

“Certified Correct by the Corporate Officer”

CORPORATE OFFICER



MINUTES OF THE SPECIAL REGULAR MEETING OF COUNCIL, HELD ELECTRONICALLY FROM CITY HALL, 141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON **TUESDAY, NOVEMBER 16, 2021 at **4:30 PM****

PRESENT

COUNCIL MEMBERS

Mayor L. Buchanan
Councillor H. Back
Councillor D. Bell
Councillor A. Girard
(joined at 5:00 pm)
Councillor T. Hu
Councillor J. McIlroy
Councillor T. Valente

STAFF MEMBERS

L. McCarthy, CAO
K. Graham, Corporate Officer
B. Pearce, Deputy CAO / Director, Strategic and Corporate Services
R. Skene, Director, Community and Partner Engagement
M. Epp, Director, Planning and Development
L. Sawrenko, Director, Finance
H. Granger, City Solicitor

GUEST

M. Collett, Solicitor, Norton Rose Fulbright

The meeting was called to order at 4:31 pm.

APPROVAL OF AGENDA

Moved by Councillor Bell, seconded by Councillor Back

1. Special Regular Council Meeting Agenda, November 16, 2021

CARRIED UNANIMOUSLY

RECESS TO CLOSED SESSION

Moved by Councillor Bell, seconded by Councillor Back

THAT Council recess to the Special Committee of the Whole (Closed Session) pursuant to the *Community Charter*, Sections 90(1)(e) [land matter] and 90(1)(i) [legal advice].

CARRIED UNANIMOUSLY

The meeting recessed at 4:33 pm and reconvened at 5:56 pm.

REPORT OF THE SPECIAL COMMITTEE OF THE WHOLE (CLOSED SESSION)

2. Land and Legal Matter – File: 02-0800-30-0028/1

Report: Chief Administrative Officer, November 16, 2021

Moved by Councillor Bell, seconded by Councillor Back

PURSUANT to the verbal report of the Chief Administrative Officer, dated November 16, 2021, regarding a land and legal matter:

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

AND THAT the wording of the recommendation and the verbal report of the Chief Administrative Officer, dated November 16, 2021, remain in the Closed session.

CARRIED UNANIMOUSLY

ADJOURN

Moved by Councillor Back, seconded by Councillor Bell

THAT the meeting adjourn.

CARRIED UNANIMOUSLY

The meeting adjourned at 5:57 pm.

“Certified Correct by the Corporate Officer”

CORPORATE OFFICER



Office of the Mayor

CITY OF NORTH VANCOUVER
BRITISH COLUMBIA

Proclamation

INTERNATIONAL DAY OF PERSONS WITH DISABILITIES

Whereas

the International Day of Persons with Disabilities has been commemorated since 1992 to promote action and raise awareness relating to the inclusion of persons with disabilities;

Whereas

the theme for 2021, Leadership and Participation of Persons with Disabilities Toward an Inclusive, Accessible and Sustainable Post-COVID-19 World, will help to spread awareness that people with disabilities have been particularly impacted by the COVID-19 pandemic and the resulting isolation and diminished services; and

Whereas

the City of North Vancouver is committed to following best practices in ensuring our community is accessible, user-friendly and inclusive of all people's needs in order to empower and create opportunities for all people living with a disability to enjoy and fully participate in society;

Now Therefore

I, Linda Buchanan, Mayor of the City of North Vancouver, do hereby proclaim **December 3, 2021** as **International Day of Persons with Disabilities** in the City of North Vancouver, the traditional territories of the Squamish and Tsleil-Waututh Nations.

So proclaimed on Monday, November 22, 2021

Linda C. Buchanan

Mayor Linda Buchanan

THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8757

A Bylaw to amend “Official Community Plan Bylaw, 2014, No. 8400”

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 **“Official Community Plan Bylaw, 2014, No. 8400, Amendment Bylaw, 2021, No. 8757” (Change Residential Levels in the Duplex Special Study Area – Northern Part and Revise the Duplex Special Study Area Boundary)**.
2. “Official Community Plan Bylaw, 2014, No. 8400” is hereby amended by:
 - A. Amending “Schedule ‘A’ Land Use” by deleting the ‘Special Study Area’ designation in the 300 blocks East 15th to 19th Streets and replacing with the attached Schedule 138;
 - B. Subsection 2.8.3 “Duplex Special Study Area (300 block East 15th – 19th Street)” is deleted in its entirety and replaced with the following:

“Duplex Special Study Area – Southern Part

Parts of the 300 blocks of East 13th, 14th, 15th and 16th Streets are designated as a Special Study Area in consideration of a potential change to Residential Level 3 (0.75 FSR mixed housing) or Residential Level 4A (1.0 FSR ground orientated). These properties comprise the Southern Part of the Duplex Special Study Area. Land use changes in the Northern Part of the Duplex Special Study Area have been implemented through a previous OCP amendment. The Residential Level 3 and 4A designations would allow for ground-oriented housing in a variety of forms, including smaller, more affordable housing.”

READ a first time on the 18th day of October, 2021.

READ a second time on the 18th day of October, 2021.

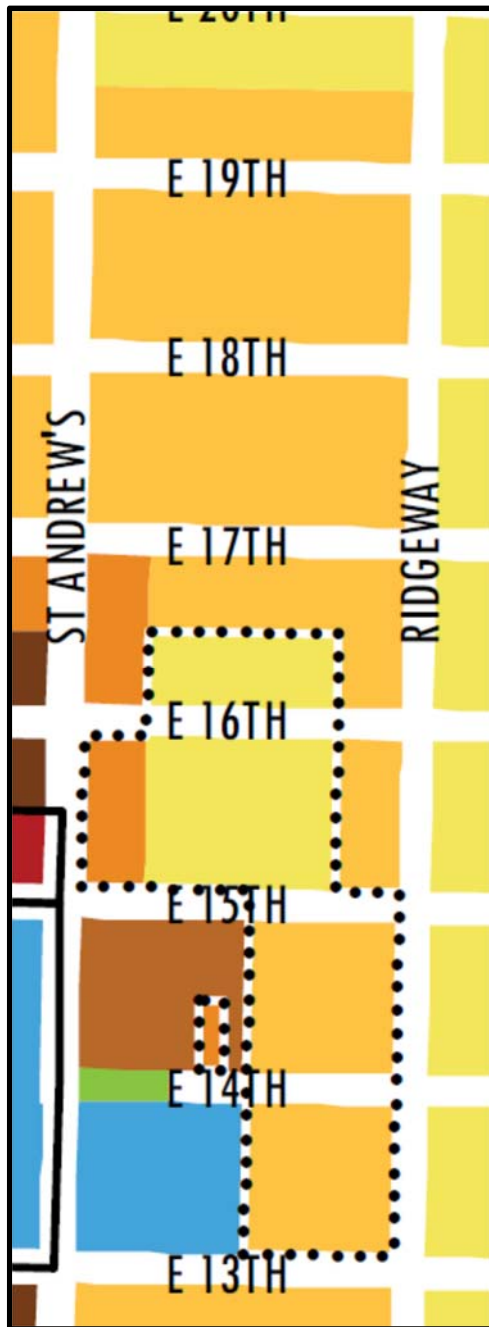
READ a third time on the 15th day of November, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

REVISED PORTION OF SCHEDULE 'A' LAND USE MAP



Legend

	Residential Level 1 (Low Density)	0.5
	Residential Level 2 (Low Density)	0.5
	Residential Level 3 (Low Density)	0.75
	Residential Level 4A (Medium Density)	1.0
	Residential Level 5 (Medium Density)	1.6
	Residential Level 6 (High Density)	2.3
	Parks, Recreation & Open Space	
	School & Institutional	
	Special Study Area	

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8758

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, 2021, No. 8758” (New Residential Levels in the Duplex Special Study Area – Northern Part, 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:

ADDRESS	LOT	BLOCK	DISTRICT LOT	PLAN	ZONE
308 E 17th St	25	16A	550	2642	From RS-1
363 E 18th St	13	16A	550	2642	From RS-1
329 E 19th St	6	16	550	2642	From RS-1
359 E 17th St	J	33	550	7665	From RS-1
314 E 19th St	AM31	9A	550	3738	From RS-1
342 E 17th St	18	16A	550	2642	From RS-1
323 E 18th St	5	16A	550	2642	From RS-1
326 E 17th St	21	16A	550	2642	From RS-1
350 E 19th St	E	9A	550	9912	From RS-1
1848 St. Andrews Ave	1	16	549/550	2642	From RS-1
315 E 19th St	3	16	550	2642	From RS-1
331 E 18th St	6	16A	550	2642	From RS-1
333 E 19th St	7	16	550	2642	From RS-1
335 E 18th St	7	16A	550	2642	From RS-1
356 E 18th St	15	16	550	2642	From RS-1
352 E 17th St	16	16A	550	2642	From RS-1
353 E 19th St	11	16	550	2642	From RS-1
353 E 18th St	11	16A	550	2642	From RS-1
345 E 19th St	10	16	550	2642	From RS-1
322 E 18th St	22	16	550	2642	From RS-1
1790 St. Andrews Ave	1	16A	549/550	2642	From RS-1
342 E 18th St	18	16	550	2642	From RS-1
318 E 17th St	23	16A	550	2642	From RS-1
336 E 17th St	19	16A	550	2642	From RS-1
306 E 19th St	B	9A	550	LMP48079	From RS-2
322 E 19th St	29	9A	550	3738	From RS-1
357 E 18th St	12	16A	550	2642	From RS-1
337 E 17th St	D	33	550	7665	From RS-1
362 E 17th St	14	16A	550	2642	From RS-1
312 E 17th St	24	16A	550	2642	From RS-1
339 E 17th St	E	33	550	7665	From RS-1
339 E 19th St	8	16	550	2642	From RS-1
312 E 18th St	24	16	550	2642	From RS-1

ADDRESS	LOT	BLOCK	DISTRICT LOT	PLAN	ZONE
343 E 19th St	9	16	550	2642	From RS-1
302 E 19th St	A	9A	549/550	LMP48079	From RS-2
318 E 19th St	30	9A	550	3738	From RS-1
364 E 18th St	14	16	550	2642	From RS-1
350 E 15th St	26	33	549/550	1657	From RS-1
1551 Ridgeway Ave	2	33	550	20549	From RS-1
333 E 17th St	C	33	550	7665	From RS-1
1541 Ridgeway Ave	1	33	550	15895	From RS-1
363 E 17th St	K	33	550	7665	From RS-1
358 E 19th St	2	9A	550	BCP48143	From RS-2
307 E 18th St	2	16A	550	2642	From RS-1
338 E 19th St	G	9A	550	11101	From RS-1
348 E 17th St	17	16A	549/550	2642	From RS-1
348 E 18th St	17	16	549/550	2642	From RS-1
308 E 19th St	J	9A	549/550	11323	From RS-1
308 E 18th St	25	16	550	2642	From RS-1
332 E 17th St	20	16A	550	2642	From RS-1
317 E 17th St	A	33	550	7665	From RS-1
1521 Ridgeway Ave	24	33	550	1657	From RS-1
304 E 17th St	26	16A	550	2642	From RS-1
359 E 19th St	12	16	550	2642	From RS-1
364 E 19th St	18	9A	550	3738	From RS-1
323 E 19th St	5	16	550	2642	From RS-1
360 E 16th St	26	33	550	2308	From RS-1
332 E 19th St	26	9A	550	3738	From RS-1
347 E 18th St	10	16A	550	2642	From RS-1
328 E 18th St	21	16	550	2642	From RS-1
319 E 18th St	4	16A	550	2642	From RS-1
1845 Ridgeway Ave	13	16	550	2642	From RS-1
324 E 17th St	22	16A	550	2642	From RS-1
356 E 19th St	1	9A	550	BCP48143	From RS-2
343 E 17th St	F	33	550	7665	From RS-1
1808 St. Andrews Ave	26	16	549/550	2642	From RS-1
318 E 18th St	23	16	550	2642	From RS-1
1625 Ridgeway Ave	23	33	550	2308	From RS-1
319 E 19th St	4	16	550	2642	From RS-1
343 E 18th St	9	16A	550	2642	From RS-1
1513 Ridgeway Ave	25	33	550	1657	From RS-1
347 E 17th St	G	33	550	7665	From RS-1
1529 Ridgeway Ave	23	33	550	1657	From RS-1
315 E 18th St	3	16A	549/550	2642	From RS-1
338 E 18th St	19	16	550	2642	From RS-1
339 E 18th St	8	16A	550	2642	From RS-1
334 E 18th St	20	16	550	2642	From RS-1
1621 Ridgeway Ave	24	33	549/550	2308	From RS-1
325 E 17th St	B	33	550	7665	From RS-1
351 E 17th St	H	33	550	7665	From RS-1
1535 Ridgeway Ave	2	33	550	15895	From RS-1

ADDRESS	LOT	BLOCK	DISTRICT LOT	PLAN	ZONE
326 E 19th St	28	9A	550	3738	From RS-1
358 E 17th St	15	16A	550	2642	From RS-1
309 E 19th St	2	16	550	2642	From RS-1
1615 Ridgeway Ave	25	33	550	2308	From RS-1
1557 Ridgeway Ave	1	33	550	20549	From RS-1
352 E 18th St	16	16	550	2642	From RS-1
344 E 19th St	H	9A	550	11101	From RS-1

READ a first time on the 18th day of October, 2021.

READ a second time on the 18th day of October, 2021.

READ a third time on the 15th day of November, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8885

A Bylaw to Control Noise within the City of North Vancouver

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 “**Noise Control Bylaw, 2021, No. 8885**”.

2. INTERPRETATION

In this Bylaw:

“Acoustic Calibrator” means an electro-mechanical or mechanical device used for the calibration of Sound Level Meters which meet the specifications for such devices, which specifications are set out or described in this section;

“A-weighted Decibel” sometimes denoted “dB(A)” means the unit used to measure the sound pressure level using “A” weighting network settings on an approved Sound Meter;

“Activity Area” includes an area of the Municipality not designated as either a Mixed Area or a Quiet Area, except where residential uses are combined with Commercial or Industrial uses located on the same premises are deemed to be in a Quiet Area for the purposes of determining acceptable sound levels from non-commercial and non-industrial uses;

“Ambient Sound Level” means the general background sound level at or in the immediate vicinity of a point of reception determined within a reasonable time before or after the time a noise is alleged to have been received at such Point of Reception;

“Bylaw Officer” has the same meaning as the City of North Vancouver “Bylaw Notice Enforcement Bylaw, 2018, No. 8675”;

“C-Weighted Decibel” sometimes denoted “dB(C)” means the unit used to measure the sound pressure level using “C” weighting network settings on an approved Sound Meter;

“City” means The Corporation of the City of North Vancouver;

“Commercial” means the use involving the sale or exchange of goods, materials and things, including the extension of services to persons, includes, but is not confined to financial and recreational services;

“Construction” means an activity which includes erection, alteration, repair, relocation, dismantling, demolition, structural maintenance, painting, moving, land clearing, earth moving, grading, excavating, the laying of pipe and conduit (whether above or below ground level), street and highway building, concreting, equipment, installation and alteration, and the structural installation of construction components and materials in any form, or for any purpose, and includes any work being done in connection therewith;

“Construction Equipment” means any equipment or device designed and intended for use in construction, or material handling, including, but not limited to, air compressors, pile drivers, pneumatic or hydraulic tools, bulldozers, tractors, excavators, trenchers, cranes, derricks, loaders, scrapers, pavers, generators, off-highway haulers or trucks, ditchers, compactors and rollers, pumps, concrete mixers, graders, or other material handling equipment;

“Continuous Sound” means any sound occurring for a duration of more than three minutes, or occurring continually, sporadically or erratically, but totaling more than three minutes in any fifteen minute period of time;

“Council” means the City Council of the City;

“Decibel” means the ratio between levels of sound pressure expressed at 20 times the common logarithm of the ratio of sound pressure to a reference quantity of 2×10^{-5} Pascals;

“Daytime” means from 7:00 am to 8:00 pm of the same day;

“Emergency Vehicle” shall have the meaning given to it by the *Motor Vehicle Act*;

“Highway” shall have the meaning given to it by the *Motor Vehicle Act*, and also includes boulevards and sidewalks;

“Holiday” includes Sunday, Christmas Day, Good Friday, Easter Monday, Canada Day, Victoria Day, British Columbia Day, Labour Day, Family Day, New Year’s Day, December 26 and a day set by the Parliament of Canada or by the Legislature, or appointed by proclamation of the Governor General or the Lieutenant Governor, to be observed as a day of general prayer or mourning, a day of public rejoicing or thanksgiving, a day for celebrating the birthday of the reigning Sovereign, or as a public holiday;

“Industrial” means a use providing for the processing, fabricating, assembling, storing, transporting, distributing, wholesaling, testing, servicing, repairing, wrecking, or salvaging of goods, materials, or things, includes the operation of truck terminals, docks, railways, passenger depots, and bulk loading and storage facilities;

“Mixed Area” includes any area of the Municipality where the absence of Noise is of particular importance to persons in that area at any time, and includes any area within the Municipality shown on Schedule A attached hereto. Residential uses located in a Mixed Area are deemed to be in a Quiet Area for the purpose of determining acceptable sound levels from non-commercial and non-industrial uses;

“*Motor Vehicle Act*” means the British Columbia Motor Vehicle Act, R.S.B.C 1996, c. 318 as may be amended;

“Municipality” means the geographic area over which the City is the Municipal Government;

“Nighttime” means from 8:00 pm of any day to 7:00 am of the following day;

“Noise” includes:

- (a) any Sound, Continuous Sound or Non-Continuous Sound which disturbs or tends to disturb the peace, quiet, rest, enjoyment, comfort or convenience of the

neighbourhood in which such sound is received, or, of any reasonable Person in the vicinity of the source of such sound who receives such sound; or,

- (b) any Sound, Continuous Sound or Non-Continuous Sound, which exceeds a Sound level permitted by this bylaw at the Point of Reception of such sound; or
- (c) any Sound, Continuous Sound or Non-Continuous Sound prohibited by this Bylaw;

“Noise Control Officer” means the person appointed by resolution of Council, and may be a Bylaw Enforcement Officer, Vancouver Health Authority Medical Health Officer and Environmental Health Officers, a Peace Officer or any employee of the Municipality properly delegated by Council;

“Person” means a Corporation, Partnership, or Party and the personal or other legal representatives or a person to whom the context can apply according to law;

“Point of Reception” means:

- (a) any place on individual residential premises where Sound originating from any source, other than a source of the same individual residential premises, is received; or,
- (b) any place on non-residential premises where Sound originating from any source, other than a source on the same non-residential use premises, is received; or,
- (c) any place on a Highway where Sound is received;
- (d) for the purposes of Section 4.4(a) means any place in the Municipality more than 15 metres from a source of Sound where Sound is received; or,
- (e) for the purposes of Section 3.6 means any place in the Municipality more than 6 metres from a Vehicle where Sound from such Vehicle is received;

“Power Gardening or Building Maintenance Equipment” means electric or gasoline powered equipment used for landscaping or building maintenance including but not limited to, lawn mowers, yard trimming devices, power washers, mechanical painters or sprayers, leaf blowers, tree or stump grinders, or compressors;

“Quiet Area” includes any area of the Municipality where the absence of Noise is of particular importance to Persons in that area at any time, and includes any area within the Municipality shown on Schedule A attached hereto;

“Slow Response” is a dynamic characteristic setting of an approved Sound Level Meter;

“Sound” is an oscillation in pressure, stress, particle displacement or particle velocity, in a medium with internal forces (i.e. elastic, viscous), or the super-position or such propagated oscillations, which oscillations are capable of causing an auditory sensation;

“Sound Level” means:

- (a) the average of the medians of 5 or more sets of lower and upper measurements of a series of A-weighted Sound pressure levels read or recorded at a Point of Reception on the Slow Response of a Sound Level Meter;
- (b) for the purposes of Section 3.6 means the maximum measurement of an A-weighted Sound pressure level read and recorded at a Point of Reception on the Slow Response setting of a Sound Level Meter;
- (c) for the purposes of Section 4.7 means the average of the medians of 5 or more sets of lower and upper measurements of a series of a C-weighted Sound pressure level read and recorded at a Point of Reception on the Slow Response setting of a Sound Level Meter; and,
- (d) where an integrating Sound Level Meter is used, suitable technical and mathematical means shall be used to determine the source Sound pressure level. A-weighted or C-weighted Sound pressure levels must be recorded at a Point of Reception using the equivalent to Slow Response setting;

“Sound Level Meter” is an A.N.S.I or I.E.C Type 1 Precision Integrating Meter, that is calibrated for the measurement of Sound;

“Tonal Sound” means that that the Sound under investigation which contains one or more distinguishable, discrete, continuous tones or notes including without limitation, Sound characterized by a “whine”, “hiss”, “screech” or “hum” and “music”; and,

“Vehicle” shall have the meaning given to it by the *Motor Vehicle Act*.

3. PERMITTED SOUND LEVELS

3.1 Quiet Area Sound Level

A Person may make, cause or permit to be made, a Continuous Sound with a Sound Level during the Daytime of 55 Decibels or less, and during the Nighttime of 45 Decibels or less when received at a Point of Reception within a Quiet Area.

3.2 Mixed Area Sound Level

A Person may make, cause, or permit to be made, a Continuous Sound with a Sound Level during the Daytime of 55 Decibels or less, and during the Nighttime of 50 Decibels or less when received at a Point of Reception within a Mixed Area.

3.3 Activity Area Sound Level

A Person may make, cause, or permit to be made, a Continuous Sound with a Sound Level during the Daytime of 60 Decibels or less, and during the Nighttime of 55 Decibels or less when received at a Point of Reception within an Activity Area.

3.4 Correction Factors for Sound Levels

For all purposes under this Bylaw, when assessing a Sound relative to the limits set out in Section 3.1, 3.2 and 3.3, the following correction factors must be applied to the measured

equivalent Sound Level whenever the Sound has, as a defining characteristic, a Tonal Sound.

- (a) a +5 Decibel correction if the sound under consideration is Tonal Sound (i.e., contains one or more pure tone components);
- (b) in order for the tonality correction to apply if measurement is required to determine the presence of tonality, the level in the one-third octave band contains the tone, or the arithmetic average of the levels in a pair of bands containing the tone, must exceed the arithmetic average of the two adjacent bands:
 - (i) by 3 Decibel or more for tones in the 500 Hz. To 16 kHz. bands,
 - (ii) by 5 Decibel or more for tones in the 160 Hz. to 400 Hz. bands, and,
 - (iii) by 10 Decibel or more for tones in the 31.5 Hz.to 125 Hz. bands.

3.5 Non-Continuous Sound Levels

A Person may make, cause or permit to be made, Non-continuous Sound with a Sound Level during the Daytime of 80 Decibels or less, and during the Nighttime 75 Decibels or less when received at the Point of Reception in the Municipality.

3.6 Vehicle Sound Levels

Notwithstanding the provisions of Section 3.1, 3.2, 3.3 and 3.5 hereof, a Person may make, cause or permit to be made, a Sound by a Vehicle while on the Highway not in excess of the Sound Levels in the following table:

Vehicle Weight	Maximum Sound Level on Highways with Speed Limits of 50 Km/h or Less	Maximum Sound Level on Highways with Speed Limits in excess of 50 Km/h
Vehicles of Licensed Net Weight of 2200 Kg. or more	75 Decibels	85 Decibels
Other Vehicles	70 Decibels	75 Decibels

4. PROHIBITED NOISES

4.1 A Person shall not make, nor cause to be made, nor permit to be made by:

- (a) any other Person, or by any animal, or by any bird or fowl, if any of the same are in the control of such first-mentioned Person;
- (b) any Vehicle, conveyance, vessel, machinery, equipment or device, if any of the same are in the control of such first-mentioned Person;
- (c) an activity, if any of the same are in the control of such first-mentioned Person:

a Sound, which when received at a Point of Reception in the Municipality, shall constitute a Noise as defined or determined pursuant to the provisions of this Bylaw.

4.2 Neither the owner or any occupier of real property shall bring on to, or keep, or use, or cause to be made, nor permit to be brought on to, to be kept, or to be used, on such real property:

- (a) any Vehicle, conveyance, machinery, equipment or device;
- (b) any animal, or bird, or fowl:

which is a source of a Sound, which when received at a Point of Reception in the Municipality, shall constitute a Noise.

4.3 The following Sounds are prohibited from being made by any Person in the Municipality because they are hereby deemed by Council as objectionable, or liable to disturb the quiet, peace, rest, enjoyment, comfort and convenience of individuals or the public notwithstanding that such Sounds may not constitute a violation of any other provision of this Bylaw:

- (a) the vocal sound made by an animal, bird or fowl, under the control of, or owned by a Person, which is creating any kind of Sound continually or sporadically for any period in excess of 30 minutes;
- (b) the Sound made by a combustion engine that is operated without using an effective muffling system;
- (c) the Sound made by a Vehicle or a Vehicle with a trailer resulting in banging, clanking, squealing or other like sounds due to an improperly secure load or improperly secured equipment, or due to inadequate maintenance;
- (d) the Sound made by a Vehicle horn or other warning device used except under circumstances required or authorized by law;
- (e) the Sound made through the operation of a “Jacobs or Jake” brake or other type of engine brake on a Motor Vehicle for any purpose other than as an emergency braking device for the safe operation of the Motor Vehicle;
- (f) shouting, talking or singing with the use of megaphones or voice amplification equipment, the making of any other Noise, noisy conduct by any Person in or at any street, wharf, dock, pier or public place, save and except when such Noise is made by peace officers or fire fighters while in the conduct of their lawful duty;
- (g) the Sound of a burglar alarm or security system that continues for more than 15 minutes;
- (h) the audible Sound of a Motor Vehicle security system which is made either continuously, or intermittently, for a period exceeding 1 minute; or which produces a false alarm activating more than 3 times in a 24 hour period, but does not include the activation status signal when arming and disarming the alarm. A Vehicle which has a security system operating in contravention of these requirements shall, for the purposes of Section 813 of the Street and Traffic Bylaw, be deemed a vehicle unlawfully placed or maintained or permitted to remain upon a street.
- (i) the Sound made by operating a Vehicle in such a way that the tires squeal;
- (j) the amplified sound of a radio, television, player or other sound playback device or amplification equipment, or the sound of a musical instrument, that emanates from a

Motor Vehicle and can be heard at a distance of 5 metres from the Motor Vehicle; and is continuously made for more than 2 minutes;

- (k) except as permitted under Section 4.4, the sound caused by construction; and,
- (l) except as permitted under Section 4.5, the sound caused by power gardening and building maintenance equipment.

4.4 Construction Noise

- (a) Notwithstanding the provisions of Section 3.1, 3.2, 3.3 and 3.5 hereof, a Person may use of permit to be used, equipment which causes a Continuous Sound Level resulting from construction which does not exceed a Continuous Sound Level of 85 Decibels when measured at the Point of Reception;
- (b) The Sound generated by construction activity or the activity of construction equipment, is permitted during the following times only:
 - (i) between the hours of 7:00 am and 8:00 pm, Monday through Friday;
 - (ii) between the hours of 9:00 am and 5:00 pm on Saturdays.
- (c) Construction activity is prohibited on Holidays.

4.5 Power Gardening and Building Maintenance Equipment Sound

Notwithstanding the provisions of Sections 3.1, 3.2, 3.3, and 3.5, a Person may use or cause or permit to be used, equipment which causes a Continuous Sound Level;

- (a) resulting from Power Gardening or Building Maintenance Equipment during the Daytime, except between 7:00am and 9:00am on Saturday, or Holidays, if the Sound of such lawn mower, or other equipment, when received at such Point of Reception, does not exceed a Sound Level of 77 Decibels.

4.6 Refuse Collection

No Person shall collect refuse from receptacles or refuse containers, in a Quiet Area or in a Mixed Area during the Nighttime.

4.7 Commercial Premises C-Weighted Noise Level

No Person shall in any Commercial premises make, cause, or permit to be made or cause Continuous or Non-continuous Noise or Sound of a radio, television, CD player or other sound playback device, public address system, or any other music or voice amplification equipment, musical instrument, whether recorded or live, whether amplified or not, the level of which during the Daytime exceeds a rating of 70 Decibels C, or during the Nighttime exceeds a rating of 65 Decibels C when measured at the Point of Reception.

4.8 Right of Entry

Pursuant to Section 16 of the *Community Charter*, any Noise Control Officer may enter at all reasonable times upon any property in order to ascertain whether the provisions of this Bylaw are being observed.

5. EXEMPTIONS

5.1 City Exemption

Notwithstanding Sections 3.1, 3.2, 3.3, 3.5, 4.3, 4.4 and 4.5, the City or its agents, may at any time:

- (a) construct, alter, relocate, repair or demolish buildings and structures;
- (b) excavate, grade or fill land;
- (c) engage in well-pointing;
- (d) construct, install, alter, relocate, repair or remove public facilities or utilities;
- (e) construct, alter, relocate, repair, fill or excavate highways; and,
- (f) allow community and City sponsored special events on City streets or parks.

5.2 Emergency Vehicle Exemption

A driver of an Emergency Vehicle may disregard all of the provisions of this Bylaw while acting in the course of his lawful duty.

5.3 Emergency Exemption

A Person may perform works of an emergency nature in order to preserve the life or health of people, or to protect property, without regard to any Sound Level prescribed by this Bylaw for what, in the opinion of the Noise Control Officer at the scene of the emergency, is the duration of the emergency, and for the purpose of this Bylaw, an emergency shall be deemed to include all situations wherein, in the Noise Control Officer's opinion, works are being carried out to serve the public interest and cannot reasonably be carried out within the Sound Levels prescribed by this Bylaw.

6. NOISE EXEMPTION BY PERMISSION

6.1 Authority

A Person may submit an application for an exemption for the provisions of this Bylaw to the Chief Administrative Officer or designate for an exemption from the provisions of this Bylaw. The Chief Administrative Officer or designate may allow the exemption with or without terms and conditions or refuse the exemption request.

6.2 Approval

With respect to exemptions, the Chief Administrative Officer or designate may grant the exemption for construction projects if satisfied that:

- (a) the volume of traffic in the area of the proposed construction is such as to cause danger to the workers on the job or to cause traffic congestion;

- (b) the impact and inconvenience to the residents in the area of the proposed construction can be minimized;
- (c) the construction cannot be undertaken efficiently or safely during the construction hours permitted in this Bylaw;
- (d) interruption of any service during construction hours permitted in this Bylaw that would cause a Person undue hardship; and,
- (e) taking into considerations the past history of the construction site.

6.3 Breach

Breach by the applicant of any of the terms or conditions of the exemption shall render the exemption null and void. The permit shall be revoked by the Noise Control Officer.

6.4 Community Notification

Where an exemption to the Bylaw is granted the applicant will notify businesses or residents within 70 metres of the parcel property lines. The notification will be in writing and forwarded by the applicant at least 24 hours and no more than 7 days prior to the exempted noise. The notification shall include:

- (a) the applicant's information including the company name, address and telephone number;
- (b) the details of the exempted work including potential disruptions and other relevant activity including lights, construction cranes and trucks;
- (c) information about the exemption granted as well as any limitations or conditions imposed by the Chief Administrative Officer or delegate regarding the exemption as well as a description of any steps taken or planned to minimize the noise nuisance, and,
- (d) the City of North Vancouver Noise Complaint telephone number.

7. CONSTRUCTION SIGNAGE REQUIREMENTS

7.1 Where the permit application is received for development, a Noise Control Construction Sign must be posted for:

- (a) all demolition permits; and
- (b) all permits with a construction permit value exceeding \$500,000 or at the discretion of the Chief Building Official.

7.2 The holder of the building permit shall prominently post a sign on that parcel of land, and shall maintain the sign during the course of construction, in accordance with the requirements set out in this section. Such a sign may be a separate sign or incorporated into a construction site sign as defined in the Sign Bylaw. A Noise Control Sign must:

- (a) be posted in a prominent location and clearly visible from each street and/or lane fronting the property;
- (b) shall be limited to a maximum height from grade of 3.65 metres;
- (c) be at least 1.50 square metres for single or two family dwellings;
- (d) be at least 3.00 square metres for all other type of construction;
- (e) contain script that is at least 5.08 cm high, and is in a color that contrasts with the background of the sign;
- (f) set out the hours permitted for construction under this Bylaw, and any exemptions to the construction hours which may have been granted;
- (g) state the name of the general contractor for the construction on the parcel of land, the telephone number of an individual representative of that general contractor; and,
- (h) give a monitored 24-hour telephone contact number for complaints and concerns and the City of North Vancouver “Noise Complaint” telephone number.

8. ENFORCEMENT

8.1 Severability

No provision of this Bylaw depends for its validity on the validity of any other provision.

8.2 Offences and Penalties

Every Person who contravenes any provision of this Bylaw is considered to have committed an offence against this Bylaw and is liable on summary conviction, to a fine or to imprisonment for not more than 6 months or to both a fine and imprisonment, to a maximum of \$50,000, and each day that such a violation is caused, or allowed to continue, constitutes a separate and continuing offence.

Any person designated as a Bylaw Enforcement Officer pursuant to the “Bylaw Notice Enforcement Bylaw, 2018, No. 8675”, or is named as the enforcement officer pursuant to the “Ticket Information Utilization Bylaw, 1992, No. 6300”, is hereby authorized and empowered to enforce the provisions of this Bylaw or Bylaw Notice or Municipal Ticket Information or as otherwise provided by this or any other Bylaw of the City of North Vancouver.

9. REPEAL

“Noise Control Bylaw, 1987, No. 5819” and all associated bylaw amendments are hereby repealed.

READ a first time on the 15th day of November, 2021.

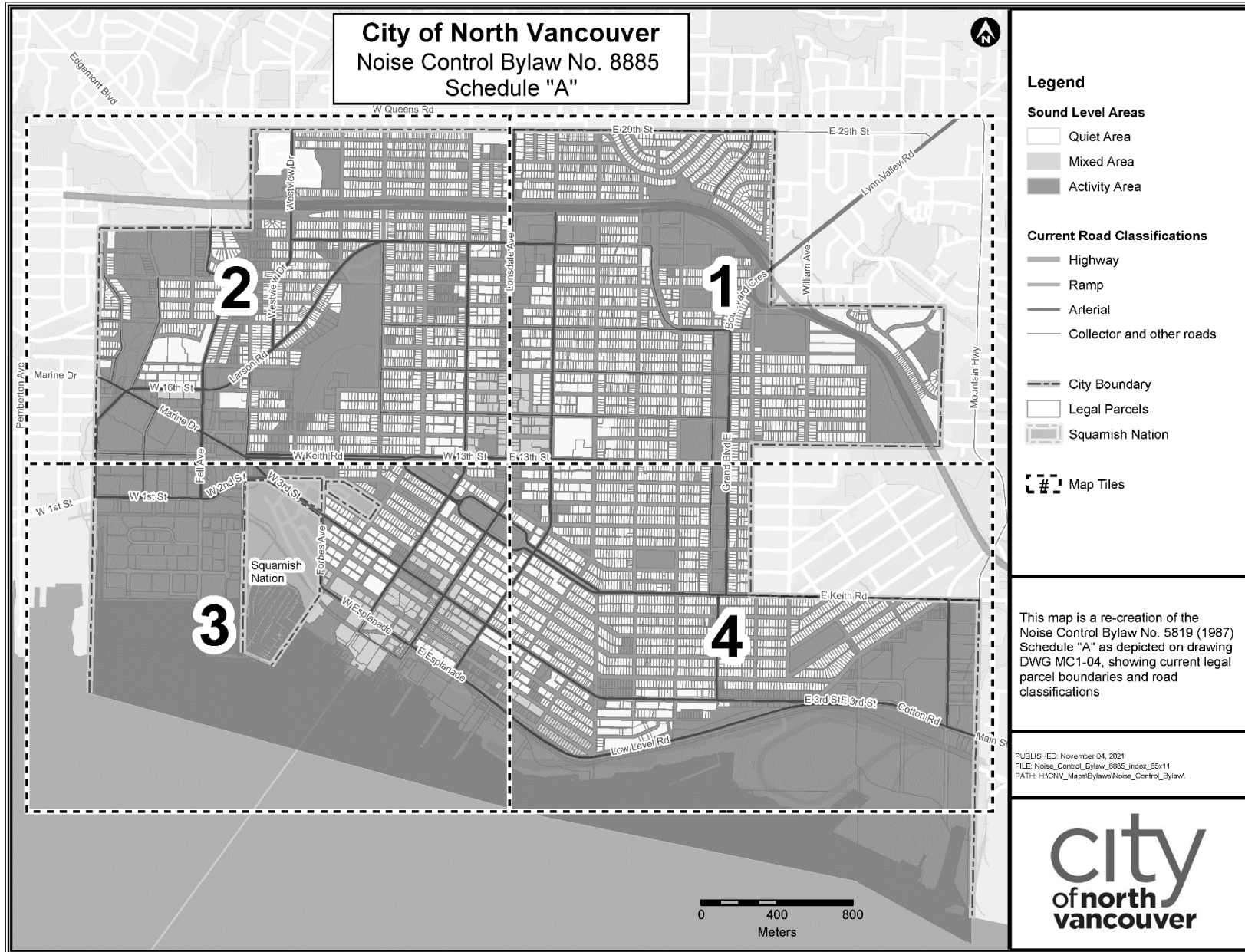
READ a second time on the 15th day of November, 2021.

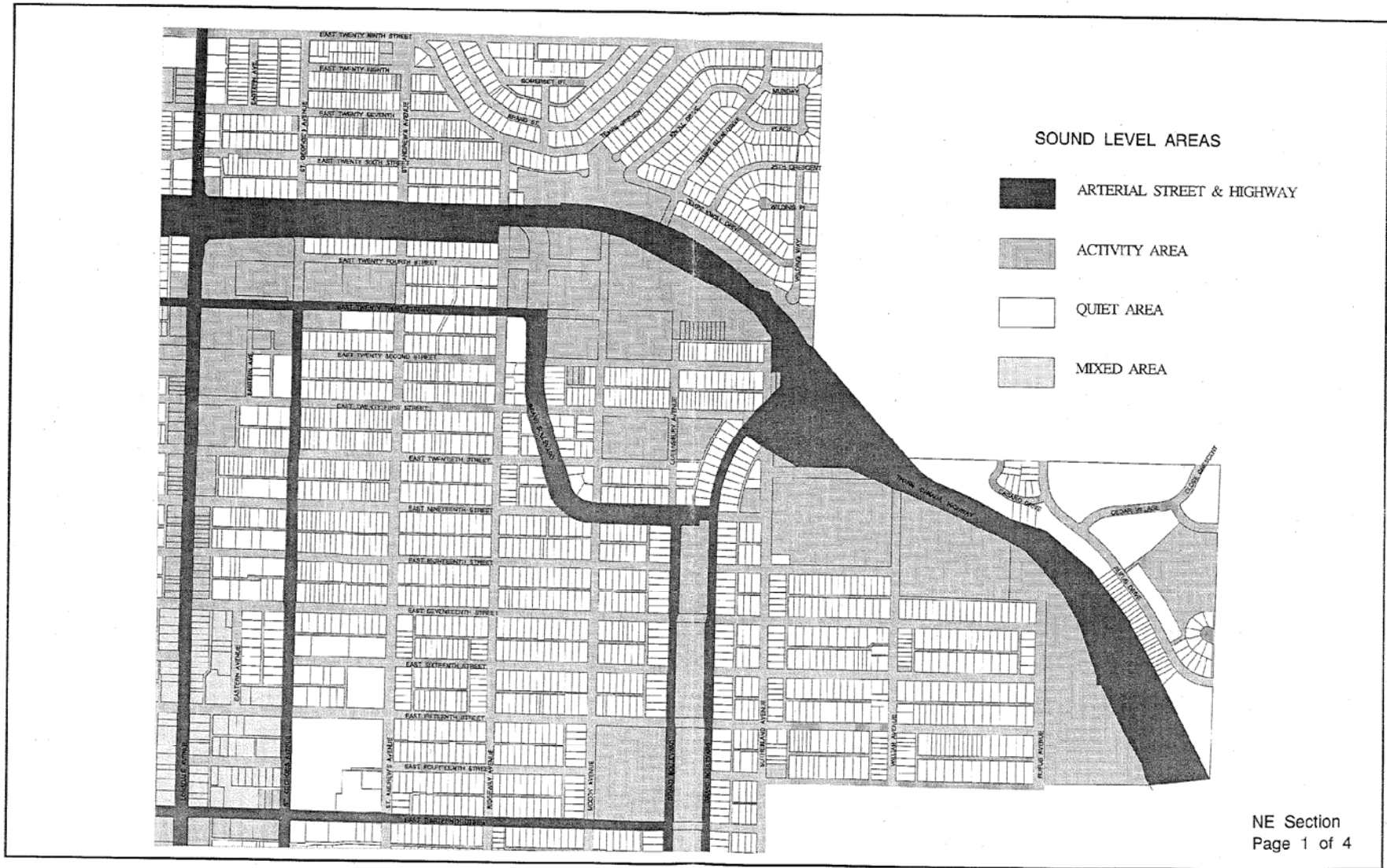
READ a third time on the 15th day of November, 2021.

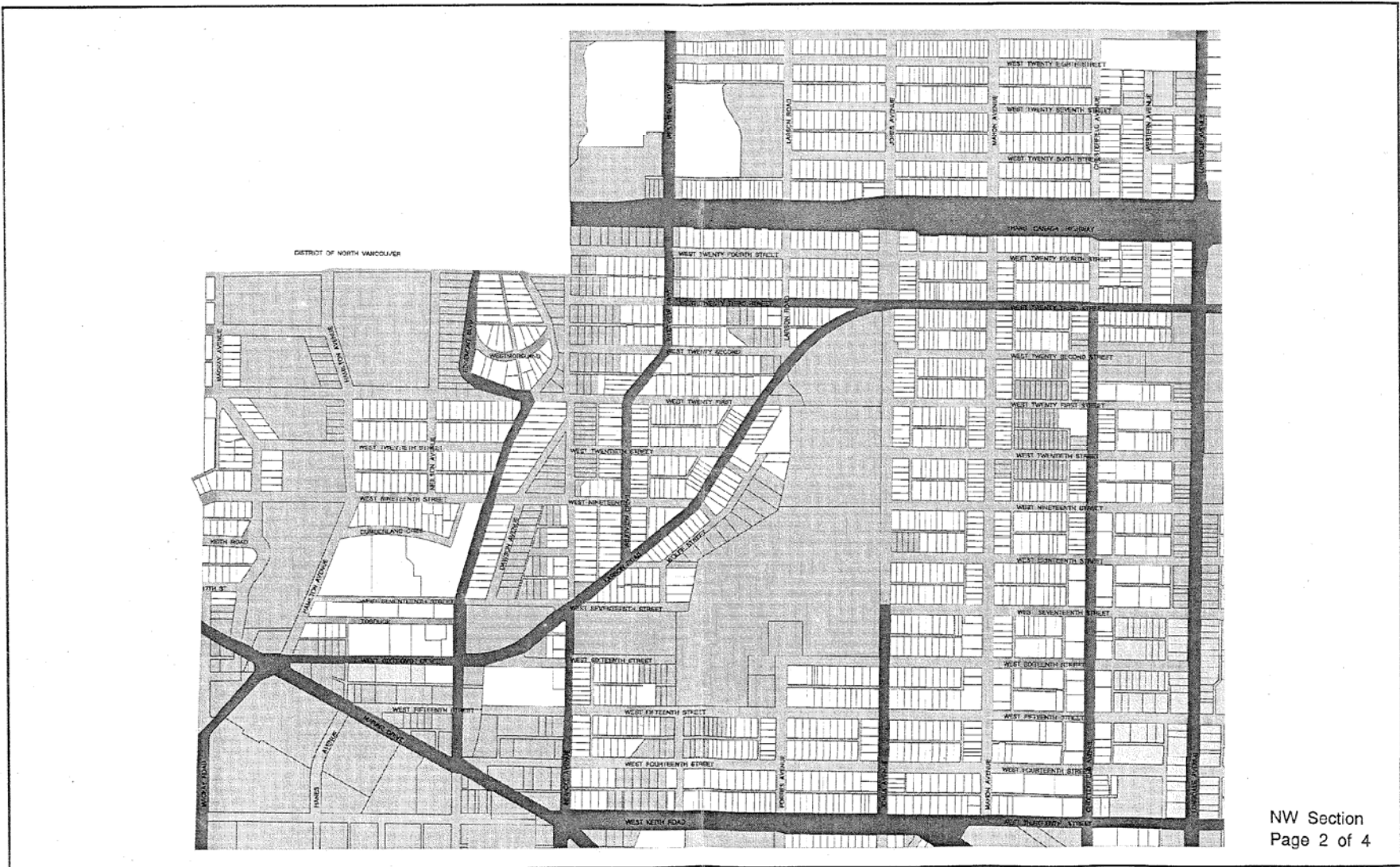
ADOPTED on the <> day of <>, 2021.

MAYOR

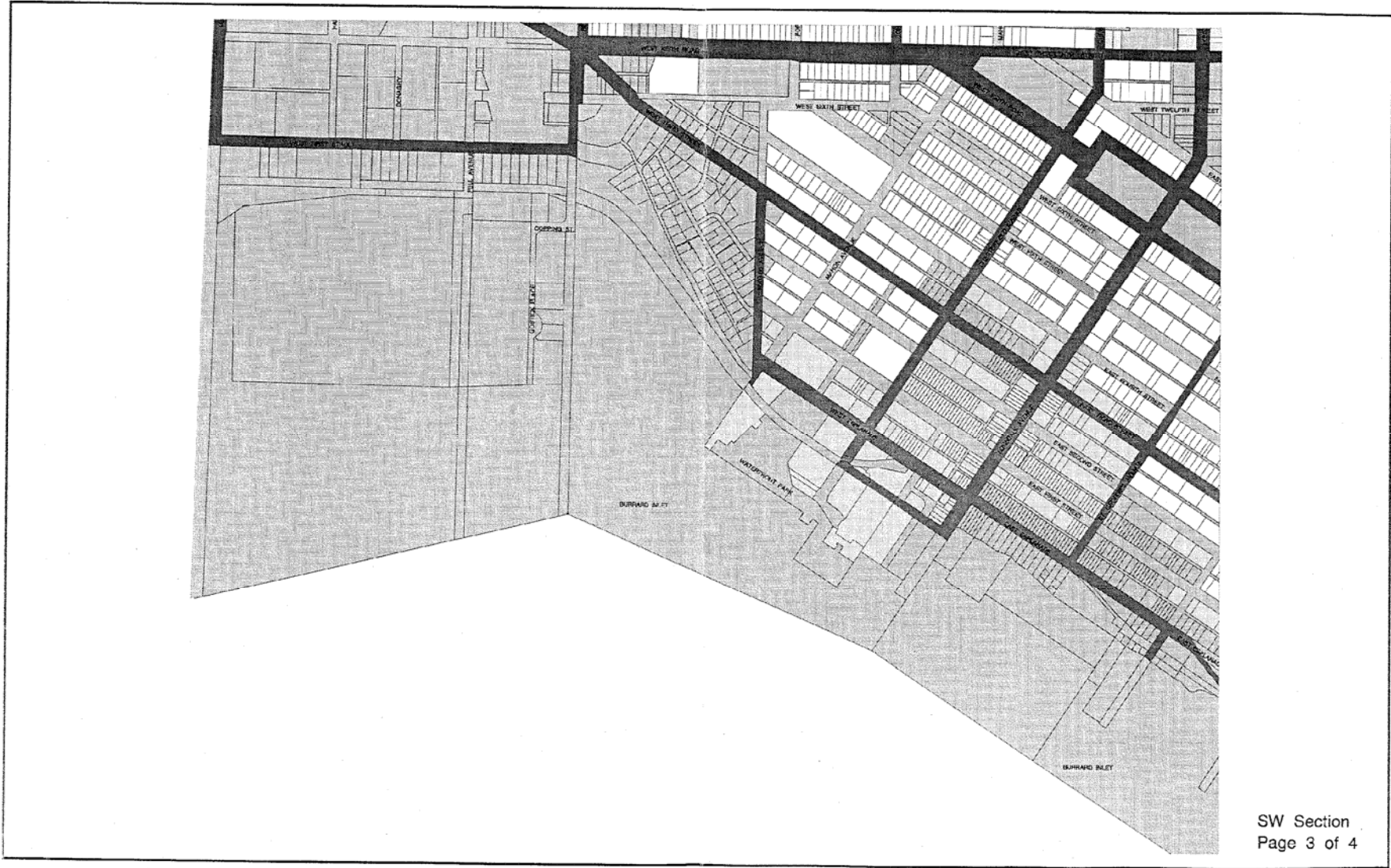
CORPORATE OFFICER



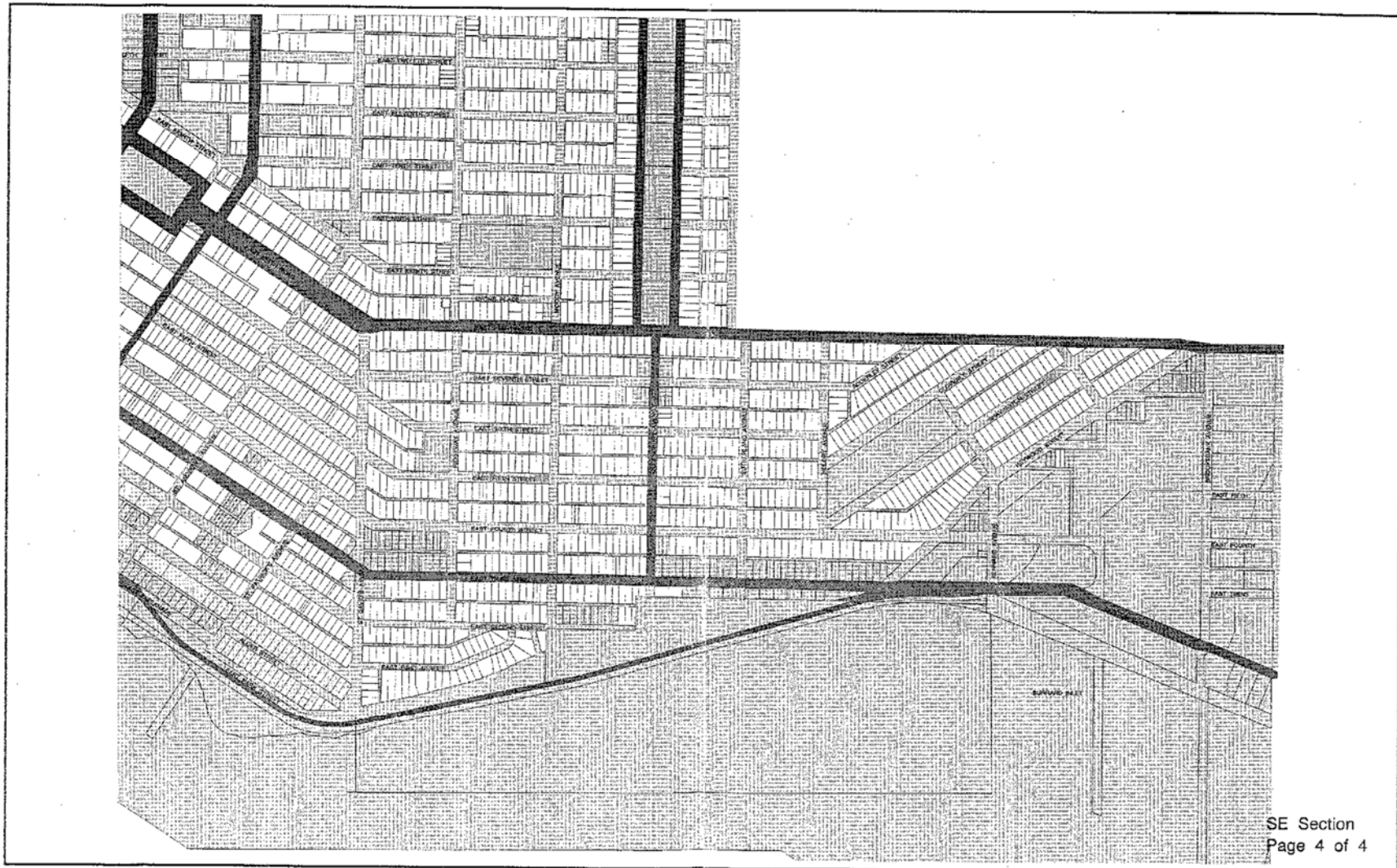




NW Section
Page 2 of 4



SW Section
Page 3 of 4



SE Section
Page 4 of 4

Schedule “B”

Application under Section 6 of the Noise Control Bylaw

The application noted in section 6.1 shall be in writing and submitted to the Chief Administration Officer or designate at least 5 business days prior to the date of the proposed activity, and shall contain:

- (a) the name, address, and telephone number of the applicant;
- (b) the address of the construction site;
- (c) the building permit number, if applicable;
- (d) the reason(s) the exception is sought;
- (e) a description of the source of noise in respect of which the exemption is sought;
- (f) the exact period of time for which the exemption is being sought;
- (g) a statement of the measures planned or presently being taken to minimize the sound or noise; and
- (h) a non-refundable application fee of:
 - i. for an application submitted at least 5 business days prior to the date of the proposed activity: \$150.00
 - ii. for an application submitted less than 5 business days prior to the date of the proposed activity: \$300.00

THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8886

A Bylaw to amend “Bylaw Notice Enforcement Bylaw, 2018, No. 8675”

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 “**Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2021, No. 8886**” (Noise Control Bylaw).
2. “Bylaw Notice Enforcement Bylaw, 2018, No. 8675” is amended as follows:
 - A. In Schedule “A” – Designated Bylaw Contraventions and Penalties for Bylaw Contraventions, by deleting the “Noise Control No. 5819” table in its entirety and replacing it with the following:

“Noise Control Bylaw, 2021, No. 8885”						
Description	Section	A1 Compliance Agreement Available	A2 Penalty	A3 Early Payment Penalty	A4 Late Payment Penalty	A5 Compliance Agreement Discount
Person or Animal Noise	4.1(a)	Yes	\$200	\$150	\$250	\$100
Vehicle/Equipment Noise	4.1(b)	No	\$200	\$150	\$250	n/a
Activity Noise	4.1(c)	No	\$200	\$150	\$250	n/a
Vehicle / Equipment Noise (on Real Property)	4.2(a)	No	\$200	\$150	\$250	n/a
Animal Noise (on Real Property)	4.2(b)	Yes	\$200	\$150	\$250	\$100
Unlawful use of Vehicle Horn	4.3(d)	No	\$150	\$100	\$200	n/a
Amplified Sound	4.3(f)	No	\$200	\$150	\$250	n/a
House Alarm Without Shut Off	4.3(g)	No	\$150	\$100	\$200	n/a
Construction Noise	4.4	No	\$450	\$400	\$500	n/a
Power Gardening and Building Maintenance Equipment Noise	4.5	No	\$200	\$150	\$250	n/a
Collection of Refuse at Night	4.6	No	\$450	\$400	\$500	n/a
Commercial Premise Noise	4.7	No	\$350	\$300	\$400	n/a
Refusal to Allow Noise Control Officer	4.8	No	\$450	\$400	\$500	n/a
No Noise Control Construction Sign	7.2	Yes	\$200	\$150	\$250	\$150

READ a first time on the 15th day of November, 2021.

READ a second time on the 15th day of November, 2021.

READ a third time on the 15th day of November, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8887

A Bylaw to amend “Ticket Information Utilization Bylaw, 1992, No. 6300”

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 **“Ticket Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2021, No. 8887” (Noise Control Bylaw and Schedule A)**.
2. “Ticket Information Utilization Bylaw, 1992, No. 6300” is amended as follows:
 - A. By deleting Schedules A and B1 through B25 in their entirety and replacing with the new Schedule A attached to this bylaw.

READ a first time on the 15th day of November, 2021.

READ a second time on the 15th day of November, 2021.

READ a third time on the 15th day of November, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

**SCHEDULE A
FINES**

“Business Licence Bylaw, 2018, No. 8640”	Section	Fine (\$)
No Business Licence	407	100
Failure to Notify of Changes	412	50
Operating While Suspended	413	200
Fail to Provide Notification of Personnel Change Within 24 Hours	507(1)(b)	100
Fail to Maintain Written Record	507(1)(d)	100
Allow Person Under 19 Years on Premises	507(2)(b)	100
Locking Device on Door	507(4)(b)	100
Additional Means of Viewing	507(4)(f)	100
Lighting Level Not Maintained or Not Kept on When Occupied	507(4)(g)	100
Permit a Person on Premises Between 10:00pm and 8:00am	507(5)	100
Refuse Access to Inspector	514	200
Register Not Maintained	523(1)	100
Daily Register Not Provided	523(9)	100
Item(s) Disposed of Within 30 Days	523(10)	100

“Commercial Vehicle Licence Bylaw, 2006, No. 7832”	Section	Fine (\$)
Failure to Display Valid Plate	5(1)	50
Displaying Unauthorized Plate	15	50

“Construction Regulation Bylaw, 2003, No. 7390”	Section	Fine (\$)
No Permit	5.1	100
Occupying Without Approval	5.5	150
Failure to Comply with Order	5.7	100
Unprotected Open Excavation	5.10	100
Removal of Notice	5.11	50
Occupying Street without Permit	5.18	100

“Dog Tax and Regulation Bylaw, 2010, No. 8113”	Section	Fine (\$)
No Dog Licence	11(a)	50
Failure to affix licence tag	11(b)	50
Dog at large	11(c)	50
Vicious Dog at large	11(c)	100
Removal of licence tag	11(d)	50
Fail to ensure Dog does not bite	11(e)(a)	100
Fail to ensure Vicious Dog does not bite	11(e)(a)	200
Fail to ensure Dog does not injure	11(e)(b)	100
Fail to ensure Vicious Dog does not injure	11(e)(b)	200
Fail to ensure Dog does not aggressively harass or pursue	11(e)(c)	100
Fail to ensure Vicious Dog does not aggressively harass or pursue	11(e)(c)	200
Fail to ensure a Dog does not bite another animal	11(e)(d)	100
Fail to ensure a Vicious dog does not bite another animal	11(e)(d)	200
Unmuzzled Vicious Dog at large	11(f)(i)	200
Unleashed Vicious Dog at large	11(f)(i)	150
Unmuzzled Vicious Dog (private property)	11(f)(ii)(a)	150
Unleashed Vicious Dog (private property)	11(f)(ii)(a)	100

“Dog Tax and Regulation Bylaw, 2010, No. 8113”	Section	Fine (\$)
Unconfined Vicious Dog (private property)	11(f)(ii)(b)	100
More than three Dogs	11(h)	50
Dog in park contrary to Schedule A	11(i)	50
Leaving excrement	11(j)	50
Cruelty to animal	12	100
Failure to provide Pen	12(F)	150

“Fire Bylaw, 2021, No. 8852”	Section	Fine (\$)
Obstruct Member	3.6(a)	500
Enter incident area	3.6(b)	200
Drive over fire hose	3.6(c)	200
Impersonate Member	3.6(d)	500
Fail to secure vacant/damaged Building	3.8	500
Tamper with Fire Protection Equipment	3.15(a)	500
Reset Fire Alarm System without authorization	3.15(b)	200
Fail to comply with Order	4.4	200
Fail to have inspection by Certified Fire Protection Technician	4.6(a)	200
Fail to have Fire Protection Equipment tagged	4.6(b)	200
Falsify records	4.8	300
Fail to have Fire Watch	4.10	200
Fail to comply with Fire Watch requirements	4.11	500
Fail to submit update to Construction Fire Safety Plan	4.19(a)	200
Fail to submit Fire Safety Plan	4.21(a)	200
Fail to have occupancy contact information	4.23	200
Cause fire hazard	5.2	200
Unsafe disposal of hazardous substance	5.3(a)	500
Unauthorized disposal of Hazardous Materials	5.3(b)	500
Unsafe disposal of smoking equipment	5.3(c)	500
Fail to comply with container requirements	5.4	200
Combustible waste near Building	5.5	200
Fail to report potential explosion/Hazardous Materials spill	5.7	500
Start open air fire	5.8(a)	500
Burn land for clearing	5.8(b)	300
Unpermitted cooking fire	5.8(c)	200
Smoke from outdoor cooking fire	5.8(d)	200
Smoke from open air burning	5.9(a)	200
Fail to comply with propane appliance requirements	5.9(c)	200
Smoke from smoker	5.9(e)	200
Tamper with fire ban sign	5.11(a)	200
Violate fire ban Order	5.11(b)	300
Unauthorized high-risk construction/demolition	5.12	200
Fail to obtain approval of construction Fire Safety Plan mitigation checklist	5.13	200
Fail to comply with Construction Fire Safety Plan mitigation checklist	5.14	200
Fail to comply with Order	5.16	300
Enter forest contrary to Order	5.17	200
Fail to keep access routes clear	6.1(a)	200
Fail to post fire lane sign	6.1(b)	200

“Fire Bylaw, 2021, No. 8852”	Section	Fine (\$)
Fail to maintain access routes in compliance with Fire Code	6.1(d)	200
Fail to have address visible from street	6.1(e)	100
Fail to provide directional signage	6.1(f)	100
Fail to keep corridors free of obstructions	6.1(g)	200
Fail to have devices on exit doors per Building Code	6.1(h)	200
Fail to maintain Fire Department Lock Box	6.2	200
Storage contrary to Fire Code	6.4(a)	200
Permit Combustibles around Building	6.4(b)	200
Fail to contain storage in room	6.4(c)	200
Storage room fails to comply with Building Code	6.4(c)	200
Store combustible materials in Storage Garage or Underground Storage Garage	6.4(d)	200
Storage impeding firefighting access	6.4(e)	200
Have storage unit in Storage Garage	6.4(f)	200
Storage in common area of Storage Garage	6.4(g)	200
Storage in portable storage container in common area of Storage Garage	6.4(h)	200
Fail to maintain Fire Separation	6.5	200
Keep fire door open	6.6	200
Fail to have sign on Fire Separation door	6.7	200
Fail to comply with stair numbering requirements	6.8	200
Fail to comply with fire extinguisher requirements	6.8	200
Exit sign not in compliance with Building Code	6.10	200
Fail to maintain exit sign	6.11	200
Fail to maintain emergency power for exit sign	6.12	200
Exit sign not consistent with current Fire Code	6.13	200
Fail to keep records for exit sign	6.14	200
Emergency power system does not meet requirements	6.14	200
Fail to keep records for emergency power system	6.16	200
Storage in exit system area	6.17	200
Fail to inspect exit systems	6.18	200
Fail to keep records for exit system	6.19	200
Fail to comply with smoke control system requirements	6.20	500
Fail to keep records for smoke control system	6.21	200
Fail to obtain inspection of smoke control system	6.22	200
Fail to inspect or maintain fire alarm system	6.23	200
Fail to keep records for Fire Alarm System	6.24	200
Fail to obtain certificate for installation of monitored fire alarm system	6.25	200
Fail to notify of cancellation of monitored Fire Alarm System	6.26	200
Fail to keep records of monitored fire alarm system	6.27	200
Fail to install smoke alarm	6.28(a)	200
Fail to maintain smoke alarm	6.28(b)	200
Fail to keep records for smoke alarm	6.29	200
Fail to comply with standpipe requirements	6.30	200
Fail to keep records for standpipe	6.31	200
Fail to comply with standpipe siting requirements	6.33	200
Fail to comply with automatic sprinkler system requirements	6.34	500

“Fire Bylaw, 2021, No. 8852”	Section	Fine (\$)
Fail to comply with automatic sprinkler system connection requirements	6.35	200
Fail to post sign for automatic sprinkler system connection	6.36	200
Fail to keep records for automatic sprinkler system	6.37	200
Take water without authorization	6.40	200
Fail to maintain fire pump	6.44	200
Fail to keep records for fire pump	6.45	200
Fail to comply with private fire hydrant requirements	6.47	300
Fail to maintain Special Fire Suppression System	6.48	200
Fail to keep records for special fire suppression system	6.49	200
Fail to install fire suppression system for commercial cooking equipment	6.50	200
Fail to maintain fire suppression system for commercial cooking equipment	6.51	200
Fail to maintain exhaust system for commercial cooking equipment	6.52	200
Fail to keep records of commercial cooking equipment	6.53	200
Fail to install radio amplification system	6.54	200
Fail to maintain carbon monoxide monitoring system	6.55	200
Fail to keep records for carbon monoxide monitoring system	6.56	200
Fail to maintain access to storage areas	6.57	200
Enclosed Storage Garage used for other than parking vehicles	6.58	200
Have Private Storage Garage	6.59	200
Fail to install no storage sign in Enclosed Storage Garage	6.60	200
Access to Enclosed Storage Garage blocked	6.62	200
Solid door on Enclosed Storage Garage	6.63	200
Fail to have required info. on Shipping Container	6.64(a)	200
Fail to have required contact info. on Shipping Container	6.64(b)	200
Fail to identify shipping container in Fire Safety Plan	6.64(c)	200
Fail to install safety features in Shipping Container	6.65	200
Fail to install ventilation for Shipping Container	6.66	200
Fail to modify Shipping Container as required	6.67	200
Store compressed gas in shipping container	6.68	300
Fail to have Construction Fire Safety Plan	6.70	200
Decommission fire hydrant without authorization	6.72	200
Fail to notify of fire hydrant conditions	6.73	200
Fail to maintain access route	6.74	200
Fail to comply with Construction Fire Safety Plan	6.75(a)	200
Fail to comply with Exposure Report	6.75(b)	200
Fail to install water supply	6.75(c)	200
New fire hydrant fail to meet requirements	6.78	200
Handle flammable and combustible liquids contrary to Fire Code	6.79	200
Hazardous process contrary to Fire Code	6.80	300
Store Dangerous goods contrary to Fire Code	6.81	300
Fail to obtain Mobile Food Vendor inspection	6.82(a)	200
Mobile Food Vendor fail to comply with commercial cooking equipment requirements	6.82(b)	200
Mobile food vendor fail to safely situate cooking appliances	6.82(c)	200
Mobile food vendor with non-flame retardant tent	6.83	200

"Fire Bylaw, 2021, No. 8852"	Section	Fine (\$)
Mobile food vendor fail to have required fire extinguishers	6.84	200
Fail to comply with commercial cooking requirements for special event	6.85(a)	200
Fail to have required aisle width at Special Event	6.85(b)	200
Fail to have required line of travel at Special Event	6.85(c)	200
Access to exit blocked at Special Event	6.85(d)	200
Fail to obtain inspection for Special Event	6.85(e)	200
Fail to comply with requirements for motor vehicle display	6.86	200
Service station attendant not qualified	6.87(a)	200
Service station fire extinguishers do not meet requirements	6.87(b)	200
Service station fire extinguishers not mounted as required	6.87(c)	200
Fail to post service station emergency signage	6.87(d)	200
Fail to submit Integrated Testing Plan	6.88	200
Fail to conduct Integrated Test before occupancy	6.89	200
Fail to conduct Integrated Test after one year	6.90	200
Fail to conduct Integrated Test every 5 years	6.91	200
Fail to keep records for Integrated Test on site	6.92	200
Fail to provide Integrated Testing Plan	6.93	200
Fail to give functional demonstration of Integrated Test	6.94	200
Exceed occupant load	7.10	300
Fail to post occupant load	7.11	200
Fail to provide fire protection for Special Effects	7.16	200
Fail to comply with Order	9.1	300
Fail to extinguish fire	9.15	300
Obstruction	9.20	500

"Fireworks Regulation Bylaw, 2005, No. 7677"	Section	Fine (\$)
Selling, offering for sale, giving or otherwise distributing Fireworks without a business licence	3(b)	500
Selling firecrackers	4(c)	500
Public safety risk	7(a)	100
False or inaccurate information	7(b)	100
Breach of permit	7(c)	100
Dangerous use	7(d)	100
Discharge in public place	7(e)	100
Discharge within City <i>[Bylaw 8855, July 12, 2021]</i>	7(f)	500
No written permission to purchase, possess, dispose or discharge Fireworks	8(a)	500
Selling to persons without written permission	8(c)	500
Discharging firecrackers	9	500

"Life Safety Upgrade Bylaw, 2011, No. 8090"	Section	Fine (\$)
Maintain Fire Alarm Operations	304	500
Failure to apply for permit by January 1, 2014	404	500
Failure to finalize permit	404	500
Hindering member in execution of duty	505	500

"Noise Control Bylaw, 2021, No. 8885"	Section	Fine (\$)
Animal/Person Noise	4.1(a)	1000

“Noise Control Bylaw, 2021, No. 8885”	Section	Fine (\$)
Vehicle/Equipment Noise	4.1(b)	1000
Activity Noise	4.1(c)	1000
Vehicle Equipment Noise (Real Property)	4.2(a)	1000
Animal Noise (Real Property)	4.2(b)	1000
Amplified Sound	4.3(f)	1000
Construction Noise	4.4	1000
Commercial Premise Noise	4.7	1000

“Nuisance Abatement Bylaw, 1986, No. 5659”	Section	Fine (\$)
Accumulation of Rubbish	3(a)	100
Untidy or Unsightly Premises	3(c)	100
Nuisance Construction Lighting	3(e)	150
Failure to Comply with Order	9(a)(iv)	150

“Park Regulation Bylaw, 1996, No. 6611”	Section	Fine (\$)
Unlawful concession in a park	501	100
Unlawful presence in a park - hours	702	100
Damage to trees	901.1	50
Erection of structure	901.2	50
Damage to a thing or area	901.3	50
Removal/dumping of materials	901.4	200
Fires/lit materials	901.5	50
Interfere with drainage/watercourse	901.6	50
Interfering with persons	901.7	50
Interfering with use	901.8	50
Use without permit	901.9	50
Disorderly conduct/loitering	901.10	50
Animal or fowl at large	1001.1	50
Feeding/interfering with animal bird or fish	1001.2	50
Unlawfully riding on animal	1002.1	50
Dogs unlawfully in a park	1003.1	50
Unlawful use of roller-skates or conveyance	1101.1	100
Unlawful use of vehicle	1101.2	100
Disobeying traffic person	1101.3	100
Parking contrary to signs	1101.4	50
Skateboard or rollerblade - No helmet	1101.5	50
Parent or guardian allowing - No helmet	1101.6	50

“Pet Establishment Regulation Bylaw, 1998, No. 7040”	Section	Fine (\$)
Pet Establishment/Cage not maintained	5	100
Inadequate Cage	5	100
No segregation area	6	100
Name of veterinarian not posted	7(a)	100
Fail to have ill/injured animal treated properly by veterinarian	7(b)	100
Fail to segregate ill/injured animal	7(c)	100
Improper euthanasia/disposal of animal	7(d)	150
Fail to keep/maintain Pet Establishment Register	8	100
Inadequate record in Pet Establishment Register	8, 9	100
Fail to produce Pet Establishment Register	10	100

“Pet Establishment Regulation Bylaw, 1998, No. 7040”	Section	Fine (\$)
Fail to provide information to purchaser	11	100
Fail to post notice describing animals	12	100
Confine incompatible species together	13(a)	150
Separate or deliver animal prior to weaning	13(b)	100
Sold or offered for sale a dyed animal	13(c)	100
Sell, offer for sale or display a wild animal	13(d)	100
Sell ill/injured animal	13(e)(i)(ii)(iii)	150
Obstruct or impede Inspector	14	200

“Radio Amplification Bylaw, 2021, No. 8853”	Section	Fine (\$)
Fail to provide Adequate Radio Coverage	402	200
Fail to test Enhancement System	601	200
Fail to maintain Enhancement System	605	200
Fail to upgrade Enhancement System	606	200
Obstruction	901	500
Fail to comply with order	1101	500

“Real Property Regulation Bylaw, 2006, No. 7831”	Section	Fine (\$)
Placing thing(s) on Real Property	3(a)	150
Building Structure or Occupying Real Property	3(b)	150

“Rental Premises Standards of Maintenance and Prevention of Nuisances Bylaw, 2008, No. 7931”	Section	Fine (\$)
Foundation not maintained	15	100
Walls not maintained	16(1)(a) - (d)	100
Exterior equipment not maintained	16(2)	100
Exterior features not maintained	16(3)	100
Air conditioner not maintained	16(4)	100
Ventilating system not maintained	16(4)	100
Door/Window/Skylight/Hatchway not maintained	17(1)	100
Unprotected exterior wall opening	17(2)	100
Latch/Lock not maintained	17(3)	50
Roof not maintained	18(1)	100
Roof water not drained	18(2)	100
Stairs/Balcony/Porch/Landing not maintained/obstructed	19	100
Fire Escape not maintained/obstructed	19	200
Basement/cellar floor not maintained	20(2)	100
Floor not maintained/level	21(1)	100
Floor covering not maintained	21(2)	100
Bathroom floor covering not maintained	21(3)	100
Wall/Ceiling not maintained	22	100
Plumbing not maintained	23(1)	100
Hot/Cold water not maintained	23(2)	100
Gas appliance/system not maintained	24	100
Heating system not provided/maintained	25	100
Electrical system not maintained	26	100
Common area not lighted	27	100
Lighting/Ventilation not provided/maintained	28	100
Cooking/Refrigeration facilities not maintained	29	100

“Rental Premises Standards of Maintenance and Prevention of Nuisances Bylaw, 2008, No. 7931”	Section	Fine (\$)
Fire Protection systems not maintained	30	100
Elevator not maintained	31(a)	100
Elevator part not working	31(b)	100
Parking or storage garage not kept as required	32	150
Sleeping unit standards not maintained	33	100
Insufficient hand basins	35(a)	100
Insufficient bathrooms	35(b) - (c)	100
inadequate sanitary facility	36(a) - (d)	100
Inadequate kitchen	37	100
Inadequate food storage	38	100
Bedding not maintained	39(a)	100
Furniture not maintained	39 (b)	100
Unit identification not maintained	39(c)	50
Fail to maintain building free of vermin or pests	41(a)	200
Fail to keep garbage or refuse in proper receptacle	41(b)	100
Fail to keep garbage bags in enclosed garage or receptacle	41(c)	100
Fail to provide garbage storage facility or sufficient number of receptacles	41(d)	100
Fail to maintain receptacles rodent or pest proof or clean and tidy	41(e)	100
Fail to maintain garbage storage area, receptacle or container clean and odour free	41(g)	100

“Smoking Regulation Bylaw, 1998, No. 7026”	Section	Fine (\$)
Smoking where prohibited	2(a)-(f), 3(a)-(f)	230
Permitting smoking where prohibited	4(a)-(d)	120
Failure to post sign	5(a)-(e), 6(a)-(f)	120
Removing, altering, concealing, defacing or destroying sign	7	120
Interfere with entry of Bylaw Officer	8	120
Obstruct bylaw officer performing duties	9	120

“Solid Waste Management Service Bylaw, 1997, No. 6920”	Section	Fine (\$)
Garbage containers not protected from disturbance by animals	701.4	200
Garbage or recycling containers placed for emptying prior to designated collection day	703.1(b)	100

“Stream and Drainage System Protection Bylaw, 2003, No. 7541”	Section	Fine (\$)
Discharge of “prohibited substance”	4	500
Obstruct/Impede Drainage System	4	500
Improper Materials Storage	6.1	500
Fail to Submit ESC Plan	6.2	500
Fail to Install and Maintain ESC Measures	6.8	500
Fail to Follow Plans	7.3	500
Fail to Monitor	7.4	500
Fail to Submit Reports	7.4	500
Fail to Notify	8.1	500

“Streamside Protection and Enhancement Development Permit Guidelines” of “Zoning Bylaw, 1995, No. 6700”	Section	Fine (\$)
Failure to obtain a Development Permit	8.1	100



“Water Utility Bylaw, 1994, No. 6417”	Section	Fine (\$)
Failure to follow water use restriction	604	50
Failure to allow admission to City employees	609	50

“Wharf Regulation Bylaw, 2005, No. 7665”	Section	Fine (\$)
Sell goods on Wharf	701(a)	300
Moor commercial boat	701(b)	300
Boat over Length	703	200
Unauthorized Moorage	802	300
Pay Moorage fees	804(a)	200
Over 3hr time limit	804(b)	200
Pay Moorage Agreement fees	804(c)	200
Moor Dangerous Goods at Wharf	901(a)	500
Dispose of hazardous materials	901(b)	500
Loading or unloading of passengers from Seaplane	902	200
Abandoned boat	903	500
Anchor Vessel or Watercraft in Waterlot	904	500
Repair boat on Wharf	905(a)	200
Toxic materials on Wharf	905(b)	500
Impede use of Wharf	905(c)	500
Live-aboard activity at Wharf	905(d)	300
Flush Vessel heads at Wharf	905(e)	500
Encroach on foreshore	905(f)	200
Obstruct other Vessels	905(g)	500
Improper Tying of Lines	905(h)	200
Structure on a Wharf	906	500
Obstruct a person on Wharf	907(a)	200
Dangerous behavior on Wharf	907(b)	200
Animal on Wharf without leash or cage	907(c)(i)	100
Crabbing or fishing on Wharf	907(d)	100
Feeding birds on or from Wharf	907(e)	100
Noise on Wharf	908	100
Diving or Jumping off Wharf	909	100
Sign on Wharf	910	100
Damage a Wharf	911(a)	500
Remove notices	911(b)	100
Garbage on Wharf	911(c)	100
Store material on Wharf	912	200
Vessel unattended in Loading Zone	913(a)	200
Fail to vacate in emergency	913(b)	500
Vessel in Loading Zone for more than 15 minutes	913(c)	200
Contravene an order	1001(a)	500
Fail to move when ordered	1001(b)	500
Obstruct a Manager	1001 (c)	500
Moored overnight	Schedule C 12	500
Permanently Secure Berth	Schedule C 13	500

“Wharf Regulation Bylaw, 2005, No. 7665”	Section	Fine (\$)
Rafting more than 2 Vessels or Watercraft	Schedule C 14	300
Charge fee or solicit donations	Schedule C 17	200

THIS PAGE INTENTIONALLY LEFT BLANK



 Department 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, Planner 2, Environmental Sustainability

Subject: CLIMATE AND ENVIRONMENT ADVISORY TASK FORCE – UPDATE
AND TERMS OF REFERENCE REVISIONS

Date: November 3, 2021 File No: 11-5280-20-0008/1

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

RECOMMENDATION

PURSUANT to the report of the Planner 2, Environmental Sustainability, dated November 3, 2021, entitled “Climate and Environment Advisory Task Force – Terms of Reference Update”:

THAT the revised Terms of Reference of the Climate and Environment Advisory Task Force be endorsed.

ATTACHMENTS

1. Climate and Environment Advisory Task Force Terms of Reference, proposed revisions (CityDocs [#1782752](#))

PURPOSE

This report provides an update on the Climate and Environment Advisory Task Force and presents revisions to the Task Force Terms of Reference for Council consideration to enable the Task Force to continue to guide the development of the Climate and Environment Strategy.

BACKGROUND

The Climate and Environment Advisory Task Force was formed in December 2019 in response to Council’s Climate Action Notice of Motion (February 2019) that established new ambitious greenhouse gas reduction targets. The purpose of the Task Force was

outlined as providing guidance and support on the actions and efforts required to achieve the new targets through the development of the Climate and Environment Strategy in the Terms of Reference (Attachment #1). The Term of Membership was defined as approximately 18 months from the first meeting (February 2020) to align with the anticipated timeline of the Climate and Environment Strategy development. Ten community representatives were appointed by Council to fulfill the Membership Composition specified in the Terms of Reference as a minimum of nine members.

DISCUSSION

Task Force Work to Date

The Task Force’s workplan has closely followed the Climate and Environment Strategy (CES) development process (Figure 1).

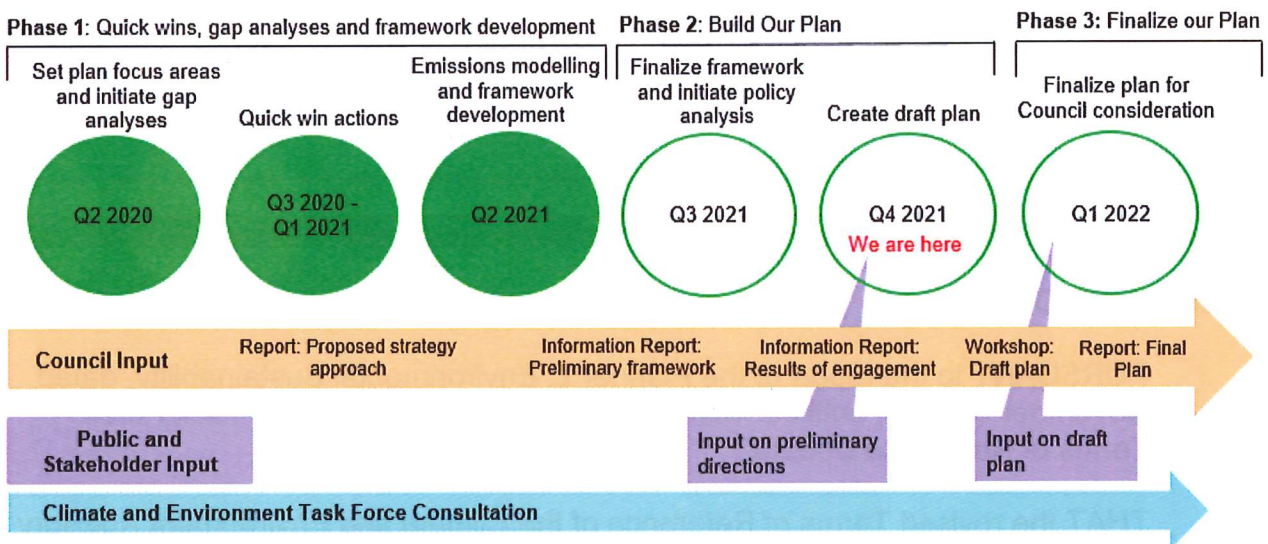


Figure 1. Climate and Environment Strategy development process.

During Phase 1 of the Strategy development, the Task Force was briefed on a number of Strategy topic areas to understand the City’s work to date and be able to identify opportunities for further policy development through the CES. Topic areas covered in Task Force meetings included:

- Climate adaptation and projections for future impacts;
- Carbon pollution from the buildings and transportation sectors;
- Zero waste; and
- Ecological health and stormwater management.

The Task Force also provided input into the following quick win actions:

- Low carbon Energy Step Code requirements;
- Jump on a New Heat Pump program; and
- Electric vehicle charging infrastructure requirements for new non-residential buildings.

In Phase 2 of the CES process, the Task Force guided the development of the Strategy’s preliminary framework of vision, goals and strategies. The Task Force’s

feedback was used to strengthen and refine the Strategy framework before the current version was provided to Council in July.

In Fall 2021, the Task Force provided significant input into the development of CES engagement materials for the current consultation process. Further, the Task Force reviewed proposed project scopes for remaining pieces of background research to inform draft Strategy actions.

Proposed Future Task Force Workplan

Should the attached revisions to the Terms of Reference be endorsed, the Task Force will continue to guide the development of the CES through Phase 3 of the Strategy development. In this phase of the Strategy process, the Task Force will provide input to the draft Strategy actions, and materials and results from public and stakeholder consultation. Specifically, the remaining Task Force workplan items for review and discussion include:

- Results of initial public and stakeholder engagement on preliminary directions;
- Results of remaining background research projects;
- Draft Strategy actions;
- Engagement materials for public and stakeholder input on draft Strategy;
- Results of public and stakeholder engagement on draft Strategy; and
- Revised Strategy for Council consideration.

Proposed Revisions to the Task Force Terms of Reference

Two amendments to the Task Force Terms of Reference are proposed so that the Task Force can continue to function well and guide the development of the Climate and Environment Strategy until it is completed:

1. Extending the Term of Membership to read “through to the conclusion of the Environment Strategy development” from the initial 18 month term.
2. Revising the Membership Composition from “a minimum of nine” members to “up to nine” members.

1. Term of Membership Extension

The Climate and Environment Task Force has now exceeded the 18 month Term of Membership defined in the Terms of Reference. However, the Climate and Environment Strategy is still in development after experiencing delays related to COVID-19 and staff resourcing challenges. In order for the Task Force to continue to provide guidance throughout the development of the new Strategy as originally intended, it is suggested that the Term of Membership be extended “through to the conclusion of the Environment Strategy development” which is anticipated to be Q1 or Q2 of 2022. Task Force members are aware that the original timeline of the Task Force has exceeded and they have expressed a strong interest in continuing on to see the new Strategy through to completion.

2. Membership Composition Revision

Since the Task Force was established, three members have withdrawn, resulting in a current membership of eight community representatives. To continue on with the current group of experienced members, a revision to the Membership Composition to “up to nine” members will provide greater flexibility in the number of members that would allow the Task Force to continue its work with available members but also accommodate new members in to the future.

RESPECTFULLY SUBMITTED:



Larisa Lensink
Planner 2, Environmental Sustainability



CLIMATE AND ENVIRONMENT ADVISORY TASK FORCE

TERMS OF REFERENCE

PURPOSE

The Climate and Environment Advisory Task Force is being established to work with City staff, consultants and other stakeholders to provide guidance and support on policy and actions required to achieve the City's new greenhouse gas reduction (GHG) targets and to protect and enhance the City's natural habitat and ecosystems.

On February 25, 2019, Council passed a Notice of Motion adopting more ambitious GHG reduction targets of 80% below 2007 levels by 2040 and net zero or 100% emissions reductions by 2050 and directed staff to incorporate the targets into forthcoming updates to City plans, policies and practices. The Notice of Motion also directed that a Climate and Environment Advisory Task Force be struck to provide guidance and support for this work.

In response to this Notice of Motion, and in conjunction with the City's integrated planning process currently underway, the City will be developing progressive avenues for deep emissions reductions and enhancement of ecological health through the new Environment Strategy. The Strategy will identify specific policy direction, implementation actions and priorities to achieve net zero emissions, protect and enhance natural assets and ensure resilience to climate change impacts. The Strategy scope includes the following areas: building energy & emissions, renewable energy, zero emissions transportation, zero waste, natural areas & ecosystems, urban agriculture, green infrastructure, and corporate practices.

OBJECTIVES

- Review the City's existing environmental policies, plans and programs to identify opportunities for further development and advancement
- Generate proposals for key actions to achieve the City's emissions reduction targets and environmental protection goals
- Provide a forum for sharing information among various community stakeholders and encourage positive community engagement
- Assist staff with analysis of best practices and consultant recommendations
- Participate in topic-specific workshops with staff and/or consultants
- Provide guidance and support towards development and implementation of the City's Environment Strategy

TIME FRAME OF TASK FORCE

The Climate and Environment Advisory Task Force will be established by Council and remain active through to the conclusion of the Environment Strategy development.

MEMBERSHIP COMPOSITION

The Task Force will be comprised of approximately up to nine (9) community representatives appointed by Council, ideally with experience in one of more of the following areas, and including at least one youth (age 15-24) representative:

- Building energy efficiency and renewable energy (P. Eng. preferred)
- Zero emission and active transportation
- Zero waste
- Climate adaptation and resilience
- Natural habitat and ecosystems (RPBio preferred)
- Green infrastructure
- Urban agriculture

In addition, a council member will be appointed by the Mayor to serve as Chair of the Task Force and a City staff member will be appointed as a staff liaison. A City staff clerk will provide support to the Task Force, including preparing and distributing agendas, attending the meetings, and preparing minutes of the meetings.

TERM OF MEMBERSHIP

The community representatives will serve on the Task Force from their appointment by Council through to the conclusion of the Environment Strategy development approximately 18 months from the first meeting. However, should any member no longer wish to serve on the Task Force, they may be replaced by City Council as applicable.

Any member who fails to attend three consecutive regular meetings of the Task Force shall cease to be a member and their appointment shall be automatically terminated.

MEETINGS

Meetings will be held at City Hall generally on a monthly basis, or as required at the call of the Chair. The agenda will be distributed the week prior to the meeting. A quorum of the Task Force will be fifty percent (50%) of filled voting memberships.

MEETING MINUTES

A record of the meetings will be prepared by the clerk to the Task Force. The record will include key discussions and an action log. City Council will be provided with a copy of the minutes.



CLIMATE AND ENVIRONMENT ADVISORY TASK FORCE

TERMS OF REFERENCE

PURPOSE

The Climate and Environment Advisory Task Force is being established to work with City staff, consultants and other stakeholders to provide guidance and support on policy and actions required to achieve the City's new greenhouse gas reduction (GHG) targets and to protect and enhance the City's natural habitat and ecosystems.

On February 25, 2019, Council passed a Notice of Motion adopting more ambitious GHG reduction targets of 80% below 2007 levels by 2040 and net zero or 100% emissions reductions by 2050 and directed staff to incorporate the targets into forthcoming updates to City plans, policies and practices. The Notice of Motion also directed that a Climate and Environment Advisory Task Force be struck to provide guidance and support for this work.

In response to this Notice of Motion, and in conjunction with the City's integrated planning process currently underway, the City will be developing progressive avenues for deep emissions reductions and enhancement of ecological health through the new Environment Strategy. The Strategy will identify specific policy direction, implementation actions and priorities to achieve net zero emissions, protect and enhance natural assets and ensure resilience to climate change impacts. The Strategy scope includes the following areas: building energy & emissions, renewable energy, zero emissions transportation, zero waste, natural areas & ecosystems, urban agriculture, green infrastructure, and corporate practices.

OBJECTIVES

- Review the City's existing environmental policies, plans and programs to identify opportunities for further development and advancement
- Generate proposals for key actions to achieve the City's emissions reduction targets and environmental protection goals
- Provide a forum for sharing information among various community stakeholders and encourage positive community engagement
- Assist staff with analysis of best practices and consultant recommendations
- Participate in topic-specific workshops with staff and/or consultants
- Provide guidance and support towards development and implementation of the City's Environment Strategy

TIME FRAME OF TASK FORCE

The Climate and Environment Advisory Task Force will be established by Council and remain active through to the conclusion of the Environment Strategy development.

MEMBERSHIP COMPOSITION

The Task Force will be comprised of [approximately up to](#) nine (9) community representatives appointed by Council, ideally with experience in one of more of the following areas, and including at least one youth (age 15-24) representative:

- Building energy efficiency and renewable energy (P. Eng. preferred)
- Zero emission and active transportation
- Zero waste
- Climate adaptation and resilience
- Natural habitat and ecosystems (RPBio preferred)
- Green infrastructure
- Urban agriculture

In addition, a council member will be appointed by the Mayor to serve as Chair of the Task Force and a City staff member will be appointed as a staff liaison. A City staff clerk will provide support to the Task Force, including preparing and distributing agendas, attending the meetings, and preparing minutes of the meetings.

TERM OF MEMBERSHIP

The community representatives will serve on the Task Force from their appointment by Council through to [the conclusion of the Environment Strategy development approximately 18 months from the first meeting](#). However, should any member no longer wish to serve on the Task Force, they may be replaced by City Council as applicable.

Any member who fails to attend three consecutive regular meetings of the Task Force shall cease to be a member and their appointment shall be automatically terminated.

MEETINGS

Meetings will be held at City Hall generally on a monthly basis, or as required at the call of the Chair. The agenda will be distributed the week prior to the meeting. [A quorum of the Task Force will be fifty percent \(50%\) of filled voting memberships.](#)

MEETING MINUTES

A record of the meetings will be prepared by the clerk to the Task Force. The record will include key discussions and an action log. City Council will be provided with a copy of the minutes.



 Department Manager	 Director	 CAO
---	---	--

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

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Bram van der Heijden, Planner 1

Subject: ROOFTOP ANTENNA DEVELOPMENT PERMIT GUIDELINES AND ZONING BYLAW UPDATE

Date: October 6, 2021 File No: 09-3900-30-0004/1

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

RECOMMENDATION

PURSUANT to the report of the Planner 1, dated October 6, 2021, entitled "Rooftop Antenna Development Permit Guidelines and Zoning Bylaw Update":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8882" (Third Party Rooftop Antenna Systems) be considered and referred to a Public Hearing;

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

ATTACHMENTS

1. 2021 Rooftop Antenna Development Permit Guidelines (CityDocs [2082816](#))
2. 2017 Rooftop Antenna Development Permit Guidelines (CityDocs [1563008](#))
3. Guide to Assist Land-use Authorities in Developing Antenna System Siting Protocols (CityDocs [2097687](#))
4. Client Procedures Circular Radiocommunication and Broadcasting Antenna Systems (CityDocs [2097684](#))
5. Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8882" (Third Party Rooftop Antenna Systems) (CityDocs [2091175](#))

PURPOSE

This report outlines an update to the existing Rooftop Antenna Development Permit Guidelines (the “Guidelines”) and a Bylaw amendment to the City’s Zoning Bylaw. The Zoning Bylaw amendment would remove any height restriction from the City’s Zoning Bylaw and would also bring into effect the updated Guidelines to guide the design and siting of Development Permit Applications (DPAs).

BACKGROUND

Over the last three decades, cellular communication infrastructure has become an essential part of daily life. The cellphone/wireless industry continues to expand rapidly, putting pressure on existing communications infrastructure. As data demand increases and more wireless spectrum becomes available to a greater number of carriers, the demand for additional cellular infrastructure including rooftop antennas will increase as well.

Regulatory Framework

Cellular Infrastructure is regulated in the federal *Radiocommunication Act*. Additionally, *Safety Code 6: Health Canada's Radiofrequency Exposure Guidelines* regulates the health and safety considerations of cell sites. Innovation, Science and Economic Development Canada (ISED) is the regulating body administering antenna installations.

Because cellular infrastructure is regulated federally, the opportunities for local government to influence siting and design of antennas are somewhat limited. The City’s role in approving cellular infrastructure lies in ensuring land use and neighbourly compatibility.

It should be noted, under the *Radiocommunication Act*, public engagement, including engagement with local governments, is only required for larger cellphone towers, meaning that engagement with local governments for rooftop installations is not necessarily required (Attachments #3 and #4). Nevertheless, it is considered best practice for proponents to engage local governments. A permit from local government is not required under the act.

DISCUSSION

Current City Approval Process

In 2012, the Wireless Communication Design and Consultation Policy was adopted by Council to guide the design and consultation process for all cell site developments. A DPA, administered by staff, is required to install such devices.

In 2017, the City’s Zoning Bylaw was amended to allow rooftop antennas to project beyond a roof or mechanical penthouse, up to a maximum of 1.22 metres (4.0 feet). At the same time, the current Guidelines were adopted (Attachment #2). The goal of adopting the Guidelines was to provide a formalized process to address concerns about private property rooftop installations while ensuring a streamlined approval process.

However, Rooftop Antenna Installations (Third Party Rooftop Antenna Systems) in the City frequently involve an additional layer of complexity as these installations for commercial purposes were not exempted from height calculation in the City's Zoning Bylaw. Most of the existing tall buildings in the City have been constructed to the maximum heights permitted in the Zoning Bylaw, often through a site-specific rezoning. This situation leads to Development Variance Permits (DVPs) being required for any rooftop antenna systems. The approval authority for a DVP rests with Mayor and Council.

The current Guidelines and height restrictions in the Zoning Bylaw no longer reflect most technological advances in use today; moreover, the current Guidelines do not provide adequate guidance or support for the best design outcomes.

At this time, there are two instream Rooftop Antenna applications that cannot comply with the current Bylaw and Guidelines, and no development permits for Rooftop Antenna Installations have been issued without a variance since the adoption of the 2017 DP Guidelines. Effectively, the changes made in 2017 have not resulted in the envisioned streamlined process as DVPs are still required to permit rooftop antennas on buildings.

On October 7th 2020, City Council adopted the following resolution:

THAT staff be directed to review the Rooftop Antenna Development Permit Guidelines and Zoning Bylaw with regard to requirements for Third Party Rooftop Antennas and prepare revisions to the Development Permit Guidelines and prepare a Zoning Bylaw text amendment for Council's consideration.

Challenges with Existing Guidelines

There are three main issues that hinder the development of rooftop antennas in the current Bylaw and Guidelines.

- **Inadequate Height**

The Zoning Bylaw and Guidelines require that Rooftop antennas do not extend further than 1.22 metres (4.0 feet) above the maximum building height. Rooftop antennas are substantially higher than the specified height.

Therefore, it is not possible to comply with this requirement.

(Figure 1).

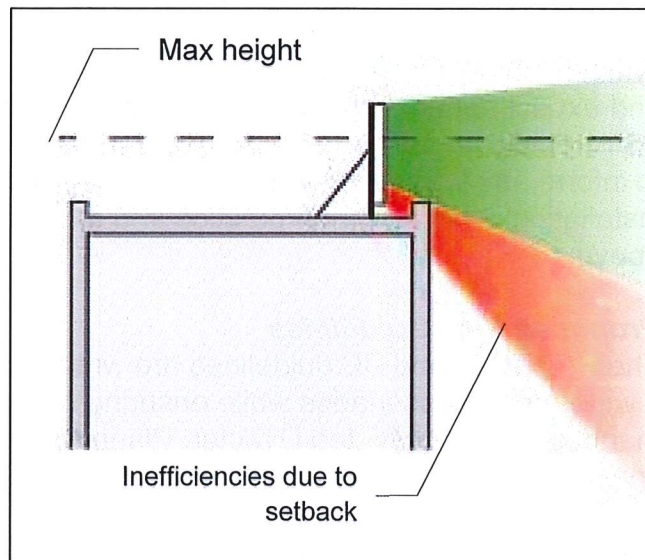


Figure 1 issues caused by height and setback requirements

- **Setback Requirements**

Safety Code 6 outlines maximum exposure allowances, Setback requirements specified in the current Guidelines often make it impossible to meet these requirements, unless the Antenna is placed higher. Additionally, the setback can severely reduce the effectiveness of rooftop antennas, rendering some Rooftop Antenna Installation projects unfeasible (Figure 1). For these reasons it is better to allow antennas to be placed at the roof edge.

- **Design Considerations**

The maximum width of antennas specified in the current Guidelines is narrower than that of most antennas currently in production, making it impossible to comply with this requirement

Some of these issues have been exacerbated by technical advancement. For instance, antennas have become larger and safety requirements have become stricter. Additionally, technical site specific antenna placement requirements can make it even more challenging to comply with the current guidelines.

The current Development Permit Guidelines require proponents of Rooftop Antenna Installations to notify area residents. However, during the stakeholder engagement for this project, it became clear it is uncommon for municipalities to require proponents to notify area residents. The main reason being that by notifying area residents, residents may get false expectations of how their concerns will be taken into consideration. Since municipalities can only comment on the design quality and visual impact of rooftop antenna installations, it is challenging to adequately address concerns from residents, especially concerns related to topics such as health and safety, effect on property value or any other aspects the federal government has explicitly excluded from engagement procedures for cellular Infrastructure.

The revised Guidelines have been carefully written to address concerns we have heard, and expect to hear, from residents regarding the visual impact of rooftop antennas. While public response to future antenna installations will be considered and will be used to inform any future revisions to the Guidelines, consultation for each proposed installation is not common practice and is not recommended, for the reasons noted above.

Proposed New Guidelines

The Proposed new DP guidelines are written to provide a broad toolkit to accommodate a wide range of scenarios while ensuring rooftop antennas are installed in a desirable manner. Additionally, the Director, Planning and Development will have the discretion to consider alternative solutions if certain guidelines cannot be achieved.

In contrast to the current DP Guidelines, no height restrictions, setback requirements or any specific measurements of Rooftop Antenna Installations are included since these kinds of requirements may result in issues similar to those associated with the current DP Guidelines. Instead, the proposed DP Guidelines provide:

- Guidance consistent with the OCP regarding site selection;
- Direction to ensure the effect on the public realm is minimized;
- General design considerations to ensure Antennas are installed in an orderly manner and in a way that complements the building massing and materiality, and;
- Design standards for a variety of common scenarios.

Through the proposed guidelines, a high standard of design can be achieved while ensuring a wide range of Rooftop Antenna Development Scenarios can be accommodated now and in the future. With flexibility for site-specific considerations built into the Guidelines, it is unlikely that any applications would have to be referred to Council for a Development Variances Permit, thus ensuring a streamlined approval process.

Another change in the process is the elimination of neighbourhood notification, given that a City permit is not required and the City has limited discretionary authority. The removal of the notification requirement would align the City's review process with most municipalities in Canada.

Additionally, the Development Planning team is exploring ways to connect developers of proposed buildings with wireless carriers early on. By doing so, there is an opportunity to ensure Rooftop Antennas are integrated within the building design. This approach will allow for the installation of infrastructure during construction of the building without the need for additional work once the building is already completed.

Stakeholder Engagement

As part of the Rooftop Antenna Update, two stakeholder engagement sessions were conducted. Stakeholders from Cypress Land Services, a planning consulting firm that specializes in cellular infrastructure, and stakeholders from the wireless carriers Freedom Mobile, Rogers and TELUS were present. The aim of the stakeholder consultation was to gain a fulsome understanding about:

- the technical requirements of Rooftop Cell Sites,
- trends in cellular infrastructure,
- what cellular infrastructure industry professionals foresee will need to be installed in the City of North Vancouver and
- their view on the direction of the Rooftop Antenna Guidelines.

In these sessions it became evident that in order to achieve the required network coverage and comply with safety code 6, the siting of Rooftop Antennas is dependent on site specific considerations and that it can be challenging to comply with all guidelines due to technical requirements or due to regulations in Safety Code 6. Height restrictions and setback requirements are especially challenging. For this reason it is better to have guidelines that focus on the orderly installation of rooftop antennas and provide a degree of discretion. Additionally, concerns were raised regarding the current requirement to notify area residents as this is typically not required by municipalities.

The feedback from the stakeholders has been used to inform the proposed new Rooftop Antenna Guidelines. By doing so, The proposed Guidelines provide a framework to achieve rooftop antenna installations that are well integrated with buildings without causing significant challenges that would conflict with technical requirements to achieve network coverage, and federal requirements (Safety Code 6)

In addition to the information regarding Rooftop Antenna Installations, staff acquired valuable insights in the future of cellular infrastructure at street level. This included the installation of small cell sites (small local antennas for extra capacity) and how local governments can respond to these, for instance, by integrating them in new bus stops or utility poles. These insights were communicated to the Engineering department. Currently some interest has been expressed to install small cell sites in the City, but no specific applications for small sites have been submitted. The City does have policies in place to accommodate this infrastructure and can work with carriers to roll this kind of infrastructure out when required.

Advisory Body Input

The City's Advisory Design Panel reviewed the draft guidelines and regularly moved and seconded:

THAT the Advisory Design Panel has reviewed and considered the overview of changes to the Rooftop Antennas Design Guidelines and recommends approval subject to addressing the following issues to the satisfaction of the Director of Planning:

Proposed Guidelines should emphasize the importance of creating a high-quality public realm and should guide the design of Rooftop Antenna installations to mitigate potential visual impacts within the public realm;

AND THAT the Panel wishes to thank staff for their presentation.

Carried Unanimously

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

The proposed approach supports the goals and objectives of the Official Community Plan including the provision of basic services that contribute to the social and economic wellbeing of the community; and by mitigating potential localized impacts through design reviews and specifying preferred locations of cellular infrastructure. This approach also supports the City's Strategic Plan goals to enhance community wellbeing while balancing the economic and social needs of the community.

CONCLUSION

The proposed Development Permit Guidelines will lead to rooftop antenna systems that are well integrated with buildings, minimizing visual impacts, all through a relatively simple process that does not require Council consideration. At the same time the

Zoning bylaw requirements and the development Permit Guidelines will be better aligned with the federal policy framework that regulate such installations to avoid conflict with federal regulations.

The new guidelines are designed to be achievable, allow for discretion, be mindful of changing requirements of future technology; and be able to accommodate site specific consideration within the review criteria. Moreover, over time, the community (residents and businesses alike) will benefit from a cellular network that is faster and more reliable as a result.

RESPECTFULLY SUBMITTED:



B. van der Heijden
Planner 1



Rooftop Antenna Development Permit Guidelines

Updated October 2021



Contents

Part I – General Regulations.....	3
1. Introduction.....	3
2. Intent and Use of The Guidelines.....	4
3. Exemptions.....	4
4. Regulatory Framework and authority.....	4
5. Approval Process	5
Part II - Design Guidelines	6
6. General Considerations	6
7. Standard of design.....	7

Part I – General Regulations

1. Introduction

These guidelines apply to development applications for “third party rooftop antenna system” installations in the City of North Vancouver. The City of North Vancouver recognizes that cellular communication infrastructure is imperative in the lives of residents and in the functioning of businesses operating in the City. The cellphone/wireless industry continues to expand rapidly, putting pressure on existing communications infrastructure; as data demand increases and more wireless spectrum becomes available to a greater number of carriers, the increase of towers and rooftop antennas and new technology is inevitable. These guidelines serve to provide a comprehensive understanding of the City of North Vancouver’s expectations regarding siting and the quality of design of rooftop antenna installations.

A City policy for design and consultation on other wireless communication forms (e.g. tower and utility pole installations) exists separately, in Council Policy 6: Wireless Communication Design and Consultation Policy (adopted November 20, 2017).

2. Intent and Use of the Guidelines

These guidelines are intended to provide a framework to ensure rooftop cell sites are installed in a desirable manner and ensure the impact on the public realm is minimized as much as possible. The proponent of a rooftop antenna installation should comply with the guidelines where possible.

If, due to technical constraints, certain aspects of the Rooftop Antenna Development Permit Guidelines cannot be achieved:

- A suitable alternative proposal should be provided, reflecting the intent of the guidelines;
- If satisfactory, the Director of Planning may provide a relaxation to any of the guidelines to accommodate the alternative proposal.

3. Exemptions

Installations to facilitate emergency service providers such as police, fire, ambulance and search and rescue services are exempt from the DPA guidelines.

4. Regulatory Framework and authority

Section 488 of the Local Government Act (LGA) gives local governments in BC the authority to establish development permit areas and their associated guidelines to address issues such as the form and character of commercial, industrial or multifamily residential development.

The City's 2014 Official Community Plan establishes development permit areas (DPA) for rooftop antennas to identify specific land use categories in the city where third party rooftop antenna systems should be located, subject to compliance with these DPA guidelines and other applicable city permit requirements. The DPA guidelines work in conjunction with the Zoning Bylaw 1995, No. 6700 to provide a building height exemption for rooftop antennas and associated screening structures.

The City of North Vancouver recognizes that Innovation, Science and Economic Development Canada (ISED) regulates the location and installation of antenna systems, including masts, towers, and other antenna-supporting structures under the Radiocommunication Act and that the engagement of carriers with the City regarding Rooftop Antenna Installations is voluntary. The

City also recognizes that ISED refers to Safety Code 6 as the standard to which wireless facilities are held and that the health and safety of wireless facilities in their many forms are under the jurisdiction of Health Canada. It is the applicant's responsibility to ensure compliance with Safety Code 6 guidelines for the protection of the general public.

5. Approval Process

All sites need approval of the land owner, whether public or private. In the case of a strata corporation, a letter from the strata council agreeing to the installation is required.

A. Pre-Application Meeting

To facilitate a preliminary discussion about the proposed Rooftop Antenna installation.

B. Preliminary revision

To address concerns raised during the reapplication process.

C. Application submission

D. Staff design review

E. Final revision

F. Development Permit issuance and registration at Land Titles

G. Building and Electrical permit (as required)

H. Removal (or upgraded replacement) of obsolete equipment

I. Installation of Rooftop Antennas

5.1. Submission Requirements

Each application for a development permit for rooftop antennas should be accompanied by relevant development information in the form prescribed by the city. This information includes, but is not limited to:

5.1.1. Plans to demonstrate the location of the proposed building site in context;

5.1.2. Plans to demonstrate the location of the proposed installation including equipment dimensions;

5.1.3. Plans to demonstrate the location and type of existing rooftop antenna structures and associated equipment currently located on the building by any provider;

5.1.4. Plans for screening, painting, or other measures to blend into the existing building.

Part II- Design Guidelines

6. General Considerations

6.1. Site Selection

- 6.1.1. Third party rooftop antennas are preferred in Residential Levels 5 and 6, Mixed-Use, Commercial, Industrial, and Mixed Employment designated lands as identified on Schedule A in Appendix 1.0 in the 2014 Official Community Plan, and are discouraged from locating on buildings near schools, institutions or on buildings in lower density residential areas.
- 6.1.2. Third party rooftop antenna systems should be located on buildings not less than three storeys above grade;
- 6.1.3. Third party rooftop antenna systems should not impede maintenance and building operations, this may include but is not limited to access to mechanical installations and facade maintenance systems;
- 6.1.4. Third party rooftop antenna systems should not impede access to nor diminish the quality of rooftop amenities such as playgrounds, roof decks and urban agriculture;
- 6.1.5. Third party rooftop antenna systems should not be installed on sloped roofs.

6.2. Design considerations

- 6.2.1. The visual impact of third party rooftop antenna systems should be minimized to reduce visual impact and clutter;
- 6.2.2. The visual impact on the public realm should be considered and should be minimized as much as possible.
- 6.2.3. The height of third party rooftop antennas should be minimized as much as possible;
- 6.2.4. Equipment cabinets and cable raceways included in the third party rooftop antenna system should be internal to the building, and, where external installations cannot be avoided, should be oriented for minimum visibility and treated with materials and colours similar to the building.

7. Standard of design

7.1. Unscreened third party rooftop antennas

- 7.1.1. Unscreened third party rooftop antennas should not be located within 30.48 metres (100 feet) of neighbouring residential dwelling units.
- 7.1.2. Unscreened third party rooftop antennas should only be located on the highest roof and mechanical penthouse of a building.

7.2. Unscreened third party rooftop antennas along the roof edge:

- 7.2.1. Third party rooftop antennas should be grouped on each building face and should be equally spaced.
- 7.2.2. Spacing between third party rooftop antennas should not exceed 1.52 metres (5 feet).
- 7.2.3. Except for microwave dishes, antenna groupings should be aligned with each other (see Figure 1).

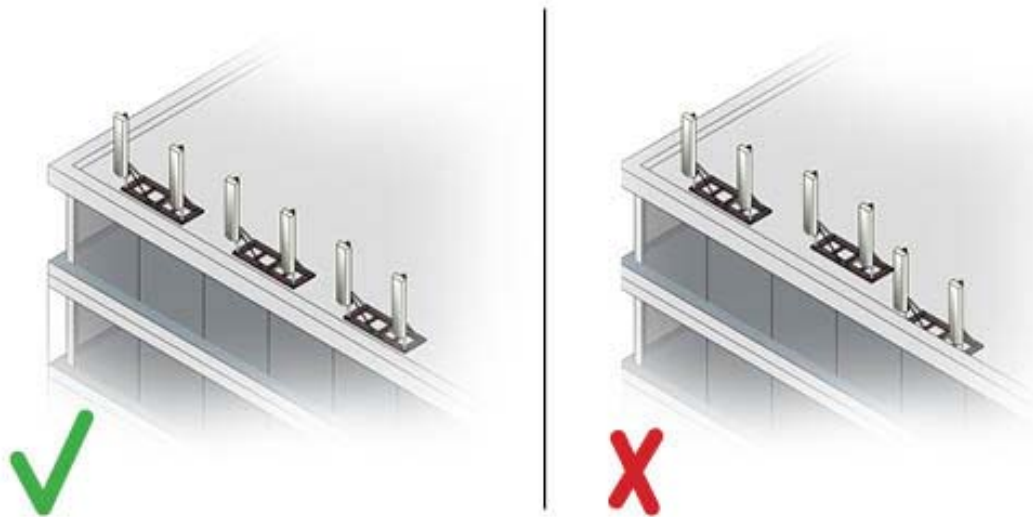


Figure 1 Antenna alignment

- 7.2.4. The top of all third party rooftop antennas should be aligned.
- 7.2.5. Mounting/cabling hardware should be cleanly housed.
- 7.2.6. Third party rooftop antennas may be mounted by means of a through-wall face mount, suspended over the parapet or can be installed on the roof edge.
- 7.2.7. Except for microwave dishes, the method of installation should be consistent for all third party rooftop antennas located on the same building.

7.2.8. On midrise and low-rise buildings, the maximum number of antennas should be determined according to the following formula:

$$\text{Max number of antennas} = \text{roof edge length in meters} \times 0.1$$

The maximum number of antennas should be rounded up to a whole number.

7.2.9. On high-rise buildings, the maximum number of antennas should be determined according to the following formula:

$$\text{Max number of antennas} = \text{roof edge length in meters} \times 0.15$$

The maximum number of antennas should be rounded up to a whole number.

7.3. Unscreened third party rooftop antennas on a penthouse

7.3.1. An unlimited number of units per face is permitted, except on penthouse walls flush with the exterior of the building.

7.3.2. For antennas on a penthouse wall flush with the exterior of the building, antennas should be screened to support an unlimited number of antennas or the number of antennas should be limited to 4.

7.3.3. Antenna units should align with each other (see Figure 1).

7.3.4. Mounting/cabling and hardware should be cleanly housed.

7.3.5. The tops of antennas should be aligned.

7.3.6. Antennas should be grouped and equally spaced

7.3.7. Antennas or associated equipment should not extend above the penthouse.

7.3.8. Antennas and mounting equipment colours should match the penthouse behind it.

7.4. Screened antennas along the roof edge

7.4.1. An unlimited number of antennas are permitted along a roof edge if adequately screened.

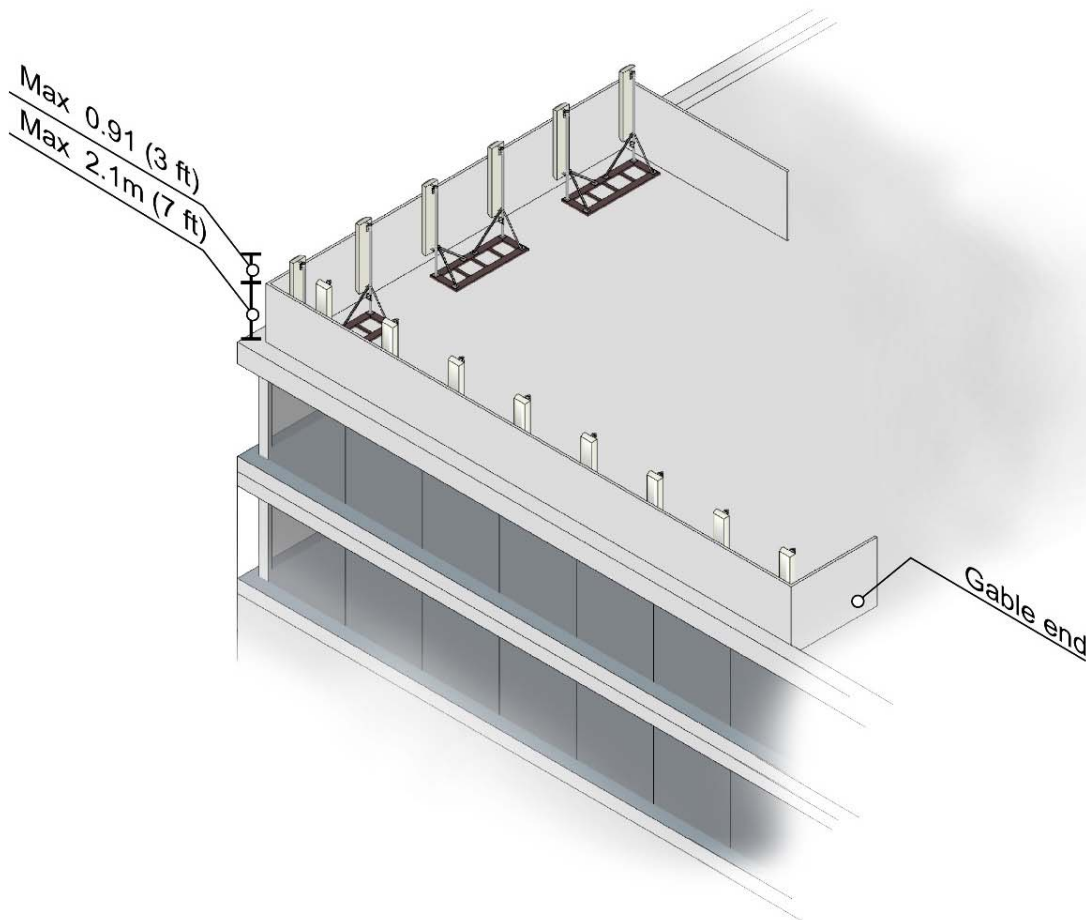


Figure 2 Screening

7.4.2. Screens should extend no more than 2.1 m (7 feet) high above the parapet (Figure 2).

7.4.3. Antennas should extend no more 0.91 m (3 feet) above the top of the screen (Figure 2).

7.4.4. The top of antennas that extend above a screen should be aligned.

7.4.5. Screens should have a minimum setback of 300 mm (1 feet) from the parapet.

7.4.6. Gable ends should be installed on screens if the rear of antennas is visible from adjacent streets (Figure 2).

7.4.7. Screens should cover no more than 40% of the roof edge.

7.4.8. A maximum of 4 screens are allowed per building.

7.4.9. Screens should be respectful of building massing, materials and articulation.

7.5. Screened antennas on top of penthouse

- 7.5.1. The entire penthouse roof should be screened
- 7.5.2. Antennas or associated equipment should not extend above or under the screen.
- 7.5.3. Screens should respect massing, materials and articulation of the building
- 7.5.4. A 30.48 metres (100 feet) minimum setback to dwelling units in neighbouring buildings should be provided (see Figure 3).
- 7.5.5. Rooftop antennas on top of a penthouse should only be permitted on buildings taller than 23 metres (75.50 feet).

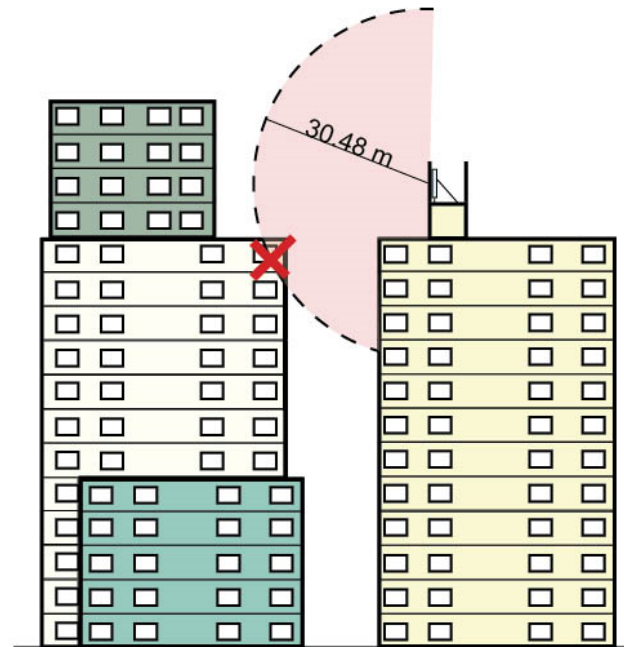


Figure 3 30.48 (100ft) setback

7.6. Obsolete antennas

- 7.6.1. For a development application for rooftop antennas on a roof with existing antennas, obsolete antennas should be identified and removed prior to the installation of any new antennas.



Rooftop Antenna

Development Permit Area Guidelines



This page intentionally left blank

Contents

Part I – General Regulations

1	Introduction	2
1.1	Intent and Use of the Guidelines	3
1.2	Regulatory Framework and Authority	3
2	Approval Process	4
2.1	Application	4
2.2	Exemption	4
2.3	Submission Requirements	5

Part II - Form and Character Guidelines

3	General	6
3.1	Site Selection	6
3.2	Design Considerations	6
3.3	Standard of Design	6

Part III - Consultation Guidelines

4	Consultation Requirements	8
----------	----------------------------------	----------

Part I – General Regulations

1.0 INTRODUCTION

These guidelines apply to development applications for “Third Party Rooftop Antenna System” installations in the City of North Vancouver. The 2014 Official Community Plan, No.8400 (OCP) establishes the Rooftop Antennas Development Permit Area (DPA) to respond to location, design and consultation issues in the local context. These guidelines work in conjunction with the Zoning Bylaw 1995, No.6700 to direct future installations to specific land use areas and ensure adequate design considerations and community consultation on them. City policy for design and consultation on other wireless communication forms exists separately.

The cellphone/wireless industry continues to expand rapidly putting pressure on existing communications infrastructure. As more wireless spectrum becomes available to a greater number of carriers the need for more towers and rooftop antennas and new technology increases. The widespread increase in the use of devices is drawing on the network capacity to the extent that cell sites that could once be counted on are now suffering from reduced coverage and gaps in service are appearing. The industry is expanding in its demand for new sites around the region.

The City of North Vancouver has seen increased demand for rooftop antenna on taller buildings. As an urban municipality with a growing number of tall buildings taking advantage of views to the south toward Burrard Inlet and beyond and to the north to take in mountain views, visual obstructions must be treated sensitively.

These guidelines serve to balance the desire for improved service levels, ensuring quality design in new installations and transparency in the process.

1.1 INTENT AND USE OF THE GUIDELINES

Development Permit guidelines allow for more detailed consideration of development. This includes more certainty of the form and character of new Third Party Rooftop Antenna Systems on Buildings in the City to the benefit of owners, neighbours and the broader community.

1.1.1 Objectives: Applicants are encouraged to consider the location, design and existing local conditions and the potential impact on neighbours.

1.1.2 Development Permit applications are reviewed against these guidelines by staff. In some instances, review by the City's Advisory Design Panel may be required.

The Rooftop Antenna guidelines should be considered in conjunction with the City's Zoning Bylaw, 1995, No.6700 and other City regulations.

1.2 REGULATORY FRAMEWORK AND AUTHORITY

Section 488 of the Local Government Act (LGA) gives local governments in BC the authority to establish Development Permit Areas and their associated guidelines to address issues such as the form and character of commercial, industrial or multi-family residential development.

The City's 2014 Official Community Plan established Development Permit Areas (DPA) for Rooftop Antennas to identify specific land use categories in the City where Third Party Rooftop Antenna Systems may be located, subject to compliance with these DPA guidelines and other applicable City permit requirements. Other types of antenna installations are guided by the City's Wireless Design and Communication Policy.

The City of North Vancouver recognizes that Industry Canada regulates the location and installation of antenna systems, including masts, towers, and other antenna-supporting structures under the Radiocommunication Act and that Industry Canada mandates that where local governments have established policy and procedure this be adhered to by proponents of new installations.

The City also recognizes that Industry Canada refers to Safety Code 6 as the standard to which wireless facilities are to held. And that the health and safety of wireless facilities in their many forms are under the jurisdiction of Health Canada. It is the applicant's responsibility to ensure compliance with Safety Code 6 guidelines for the protection of the general public. The City of North Vancouver will refer inquiries regarding public health and safety to the applicant for response.

2.0 APPROVAL PROCESS

2.1 APPLICATION

- 2.1.1 Rooftop Antennas Development Permit Guidelines apply to those Lots designated in the Official Community Plan as Residential Level Five and Six, Mixed-Use, Commercial, Industrial and Mixed Employment designated lands on Schedule A in Appendix 1.0 of the 2014 Official Community Plan on Buildings at not less than three stories above grade. Third Party Rooftop Antenna Systems are not permitted to locate adjacent to schools or on lots designated Residential Level 4 or lower in the OCP.
- 2.1.2 Projects identified by staff as requiring particular attention can be referred to the Advisory Design Panel as needed. It is the expectation that most projects will not need to appear before the Panel, provided that reasonable design requests are considered and accommodated where possible by the applicant.
- 2.1.3 All sites need approval of the land owner, whether public or private. In the case of a strata corporation, a letter from the Strata Council agreeing to the installation is required.
- 2.1.4 Rooftop facilities shall follow this process:

- a) Pre-application meeting;
- b) Preliminary revisions;
- c) Application submission;
- d) Notification of Installation (mailout and lobby notice);
- e) Staff design review;
- f) Advisory Design Panel (as required);
- g) Final revisions;
- h) Building and Electrical Permit (as required);
- i) Removal (or upgrade replacement) of obsolete equipment.



2.2 EXEMPTION

- 2.2.1 Exceptions to the Rooftop Antenna DPA Guidelines include:
- a) Installations to facilitate Emergency Service providers such as police, fire, ambulance and search and rescue services.

2.3 SUBMISSION REQUIREMENTS

2.3.1 Each application for a Development Permit for Rooftop Antennas must be accompanied by relevant development information in the form prescribed by the City. This information includes, but is not limited to:

- a) Plans demonstrating the:
 - i. Location of the proposed building site in context;
 - ii. Location of the proposed installation including equipment dimensions;
 - iii. Location and type of existing rooftop antenna structures and associated equipment currently located on the building by any provider;
 - iv. Plans for screening, painting, or other measures to blend into the existing building.

- b) Proposed materials for area notification:
 - i. A notification map indicating the properties that are within 40m of the subject property (as measured from the edge of the subject property line);

 - ii. Proposed materials for area notification:
 - A notification map indicating the properties that are within 40m of the subject property (as measured from the edge of the subject property line);
 - A copy of the notice to be mailed to residents within 40m; and,
 - A copy of the notice to be placed in the lobby of the building in a prominent location and include a description of the proposed installation and contact information for the applicant.

Part II – Form and Character

3.0 GENERAL

These guidelines are applied to Third Party Rooftop Antenna Systems located on the roof of Mixed Use, Multifamily, Commercial & Industrial Buildings in the City.

3.1 SITE SELECTION

- 3.1.1 Third Party Rooftop Antenna Systems are to be located on lots designated as Residential Level Five and Six, Mixed-Use, Commercial, Industrial and Mixed Employment identified on Schedule A in Appendix 1.0 of the 2014 Official Community Plan with Buildings not less than three storeys above grade;
- 3.1.2 Third Party Rooftop Antenna Systems shall not impede access to rooftop amenities such as playgrounds, roof decks and urban agriculture;
- 3.1.3 Third Party Rooftop Antenna Systems are to be disclosed to Building tenants (see Part III Consultation).

3.2 DESIGN CONSIDERATIONS

- 3.2.1 The visual impact of Third Party Rooftop Antenna Systems should be minimized to reduce visual impact and clutter (see examples in Appendix A);
- 3.2.2 Where more than one Third Party Rooftop Antenna System is located on the same building shrouding should be used where possible without increasing the visual bulk of the Building;
- 3.2.3 Equipment cabinets and cable raceways included in the Third Party Rooftop Antenna System should be internal to the Building, and where external installations cannot be avoided, should be oriented for minimum visibility and treated with materials and colours similar to the Building.

3.3 STANDARD OF DESIGN

- 3.3.1 Third Party Rooftop Antenna Systems are permitted in designated areas provided that:
 - a) They not exceed a maximum Height of 1.22 metres (4.0 feet) vertically beyond the top of the building it is being attached to (see examples in Appendix A);
 - b) They are set back a minimum of 0.91 metres (3 feet) horizontally from the parapet of the Building in consideration of the roof as a visible elevation from the street and other buildings¹
 - c) Panel antennas included in the Third Party Rooftop Antenna System are not to exceed 0.15 metres (0.5 feet) in width or 1.22 metres (4 feet) in length;
 - d) Microwave dishes included in the Third Party Rooftop Antenna System are not to exceed 0.61 metres (2 feet) in diameter per facility.

- 3.3.2 Where a combined total of more than five panel antennas and microwave dishes are proposed for one side of the Building rooftop they should be shrouded without increasing the visual bulk of the Building.
- 3.3.3 Obsolete technology or equipment should be removed from the Building as soon as possible.

Part III – Consultation

4.0 CONSULTATION

4.1 Applicants shall conduct a Notification of Installation of their application in conjunction with the City of North Vancouver's standards for Rooftop Antennas outlined below:

- a) Notification of Installation to properties within a 40m radius of the subject site:

Notification should be sent with the subject site shown in a map with a description of the installation and include contact information for the applicant.

- b) Post a notice in the lobby of the subject Building:

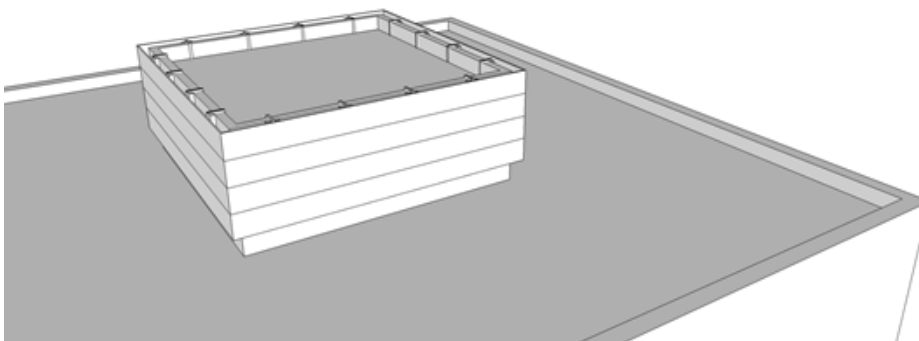
The notice should be placed in a prominent location and include a description of the proposed installation and contact information for the applicant. A draft of the notice is to be approved in advance by City staff.

Part IV – Appendix

Appendix A:

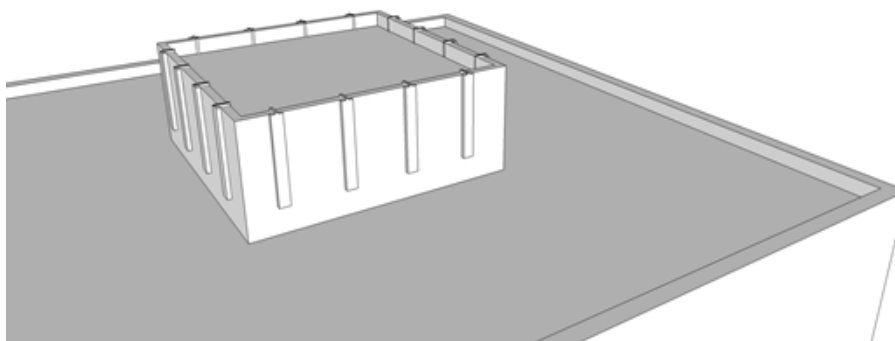
Examples of Rooftop Antenna installations include:

1. Preferred

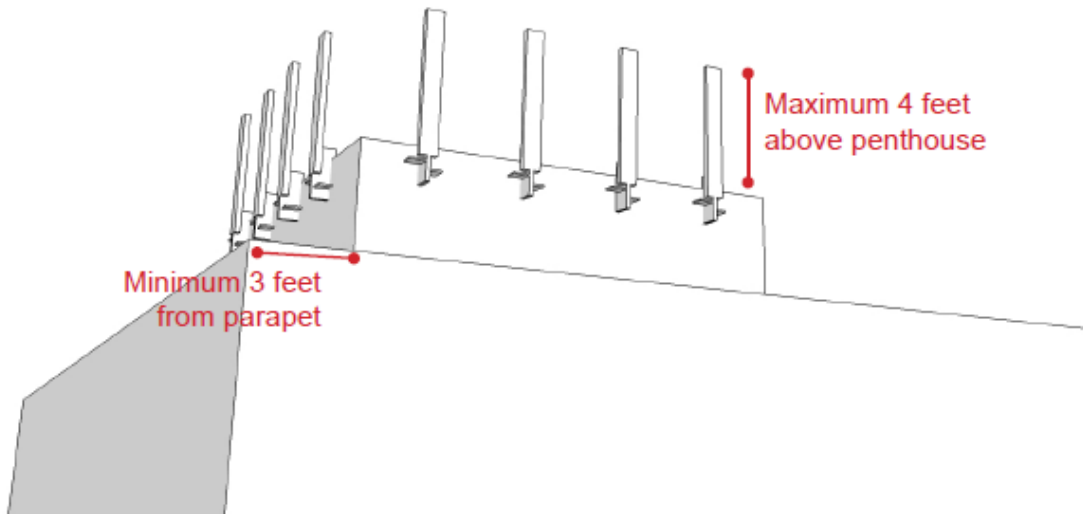


2. Acceptable

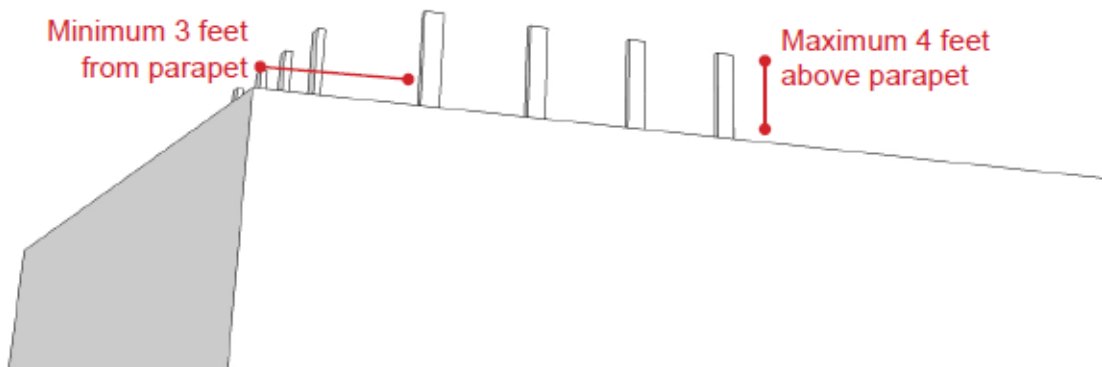
i) Attached to existing mechanical penthouse



ii) Projecting from the top of existing mechanical penthouse



iii) Setback from edge of building (parapet) and grouped



3. Not Acceptable



Source: City of North Vancouver photo library.



Industry
Canada

Industrie
Canada

Issue 2
August 2014

Spectrum Management and Telecommunications

Guide to Assist Land-use Authorities in Developing Antenna System Siting Protocols

Aussi disponible en français

Canada 

Contents

1.	Introduction.....	1
2.	Participation Process	2
2.1	Placement of Antenna System	2
2.2	Use of Existing Infrastructure (Sharing).....	3
2.3	Preliminary Consultation	3
2.4	Involving Local Public.....	4
2.5	Responding to Consultation.....	4
2.6	Concluding Consultation	5
2.7	Impasse Negotiations, Dispute Resolution Process	5
2.8	A Timely Process	5
3.	Local Protocol Guide Development.....	5
3.1	Protocol Principles	5
3.2	General Protocol Template	6
4.	Conclusion	8

1. Introduction

This guide is intended to assist Land-use Authorities (LUA) in ensuring effective local participation in decisions regarding proposals to build antennas and their supporting structures within their communities. For the purposes of this guide, an LUA means any local authority that governs land-use issues and includes a municipality, town council, regional commission, development authority, township board, band council or similar body. This guide complements Industry Canada's Client Procedures Circular CPC-2-0-03, Issue 5, [Radiocommunication and Broadcasting Antenna Systems](#). LUAs are encouraged to consult CPC-2-0-03 to better understand roles and responsibilities.

The requirements of CPC-2-0-03 apply to anyone (referred to as a "proponent") who is planning to install or modify an antenna system,¹ regardless of the type. This includes telecommunications carriers, businesses, governments, Crown agencies, operators of broadcasting undertakings and the public (including for amateur radio operation and over-the-air and satellite TV reception). The requirements also apply to those who install towers or antenna systems on behalf of others or for leasing purposes ("third party tower owners"). As well, the procedures contain obligations that apply to existing antenna system owners and operators, including those relating to the use of existing infrastructure (sharing).

This guide specifically addresses two areas:

- **Participation Process:** Addresses the LUA's role in effectively participating and influencing decisions with respect to proposed antenna systems within Industry Canada's antenna siting procedures. Industry Canada believes that antenna siting protocols jointly developed between proponents and LUAs can supplement the Department's antenna siting procedures, while at the same time having a higher degree of acceptance and compliance.
- **Local Protocol Development:** Sets out elements that LUAs might wish to include when developing protocols with proponents of antenna systems.

The federal Minister of Industry has the authority under the [Radiocommunication Act](#) to issue radio authorizations, to approve each site on which radio apparatus, including antenna systems (referred to as "antenna systems" or "installations"), may be located and to approve the erection of all masts, towers and other antenna-supporting structures. Industry Canada's role includes ensuring the orderly development and efficient operation of radiocommunications in Canada. In this regard, Industry Canada considers that the questions, comments and concerns of the local public and the LUA are important elements for proponents to consider when seeking to install, or make major modifications to, an antenna system.

Radiocommunication and broadcasting services are important for all Canadians and are used daily by the public, safety and security organizations, all levels of government, wireless service providers, broadcasters, utility companies and other businesses. Antenna systems are an essential component in providing these services and must be installed on towers, buildings or other antenna-supporting structures. Antennas and the structures that support them are integral to wireless network communication systems

¹ For the purposes of this document, an "antenna system" is normally composed of an antenna and some sort of supporting structure, normally a tower. Most antennas have their own integral mast so they can be fastened directly to a building or a tower.

and they provide the radio coverage the public and safety services need. With advancements in technology and given the growing demand for high-speed wireless access, communities in Canada are currently experiencing, or will soon experience, the deployment of new antenna systems.

Thanks to their local knowledge, LUAs are well qualified to explain to proponents the particular amenities, cultural or environmental sensitivities, planning priorities and other relevant characteristics of their area. The LUA may also be aware of potential Aboriginal or treaty rights or land claims that may be affected by a proposed installation. Working together, LUAs and proponents can find solutions which address reasonable and relevant concerns or point the way to alternative antenna system siting arrangements. Accordingly, Industry Canada encourages LUAs to develop local protocols to manage the process of identifying their own concerns, as well as those of the public they represent, regarding antenna system modifications or installations.

For the purposes of this document, Industry Canada will refer to any written local guideline, policy or process that addresses the issue of antenna placement as a “protocol”. Cooperation between LUAs and proponents through clear and reasonable protocols can result in the development of new and enhanced wireless services in a community-friendly manner.

Industry Canada² is available to assist in the creation of local land-use protocols for antenna system installations.

2. Participation Process

There are a number of steps a proponent typically follows in choosing a site for an antenna system installation; unless specifically excluded under Industry Canada’s process, one of these steps is consulting with the LUA. The community in an LUA’s area expect it to provide local knowledge, experience and leadership. The LUA can also ensure that any questions, comments or concerns are appropriately addressed by the proponent.

The subsections that follow suggest various aspects of a consultation process that an LUA may want to take into consideration when developing antenna siting protocols. Protocols are an effective means for an LUA to use to convey its preferences, as well as those of the community it represents, to antenna system proponents.

2.1 Placement of Antenna System

Proponents must consider various antenna system placement options, including using existing structures such as building rooftops and water towers, to minimize the impact on the local community. Radiocommunication antennas need to be strategically located to satisfy specific technical criteria and operational requirements. Therefore, there is a limited measure of flexibility in the placement of antennas and proponents are constrained to some degree by:

2 Please refer to *Radiocommunication Information Circular RIC-66* for a list of addresses and telephone numbers for Industry Canada’s regional and district offices. [RIC-66](http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf06073.html) is available via the Internet at: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf06073.html.

- the need to achieve the required radiocommunication coverage, often in response to public demand;
- the availability and physical limitations of nearby existing structures (towers, rooftops, water towers, etc.) to accommodate additional antennas; and
- the securing of lease agreements to permit access to an existing structure.

Consequently, the LUA's or the public's preferred location for siting an antenna installation may not always be feasible.

LUAs are encouraged to develop protocols that are clear and within their area of responsibility. Protocols can include promoting the placement of antennas in optimal locations from a land-use point of view, or excluding certain types of installations from protocol requirements. Through protocols, an LUA can highlight its local knowledge and expertise related to area sensitivities, including environmental or cultural concerns, and land-use compatibility. Protocols can recognize local amenities and planning priorities while expediting the planning and approvals necessary for the installation of radiocommunication and broadcasting antenna systems.

2.2 Use of Existing Infrastructure (Sharing)³

The installation of a new antenna structure may at times reveal sensitivity in the local community. Therefore, Industry Canada requires proponents to first consider using existing towers or infrastructure (such as rooftops, water towers, utility poles, etc.). This approach is intended to minimize the proliferation of antenna towers. However, it is important to note that technical constraints, such as the need to: achieve a certain amount of radiocommunication coverage; re-use frequencies; and address equipment isolation issues; etc., may prevent a proponent from using an existing structure.

2.3 Preliminary Consultation

LUAs may wish to include in their protocols a mechanism for preliminary consultation. This would allow the proponent, before making any site selection decisions, to inform the LUA of its plans. Also, this initial contact allows a proponent to determine whether an LUA has a protocol in place regarding antenna system installations preferences. Within its own process, Industry Canada considers written formal contact as marking the official commencement of its 120-day⁴ consultation process between the LUA and the proponent.

With a protocol in place, this initial contact allows the LUA an excellent opportunity to:

- inform the proponent of established and documented local requirements and consultation procedures;

3 See also Client Procedures Circular CPC-2-0-17, *Conditions of Licence for Mandatory Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements*. CPC-2-0-17 is available via the Internet at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09081.html>.

4 The 120-day consultation period commences only once the proponent has formally submitted, in writing, all plans required by the LUA, and does not include preliminary discussions with the LUA.

- advise the proponent of historic and environmental land-use sensitivities including any related to potential Aboriginal or treaty right or land claim;⁵
- provide guidance and preferences to the proponent on the various preferred areas and sites to be considered;
- indicate its preferences; and
- provide information concerning any aesthetic or landscaping preferences.

2.4 Involving Local Public

Local public consultation offers a forum for members of the public located near the proposed installation to make comments, ask questions or raise concerns related to the proposed antenna system installation. This is an opportunity for the local public and the LUA to make the proponent aware of local considerations and, in so doing, influence the siting.

Industry Canada's own process recognizes two possible public consultation scenarios:

1. The LUA can set the format for public consultation in its protocol. This could identify situations that require public consultation and those that do not. It is important to note that, in all cases, telecommunications carriers, broadcasting undertakings and third party tower owners must notify and consult with the local public when proposing a new antenna tower.
2. If an LUA's protocol is silent on the issue of public consultation, or if there is no protocol, then the proponent will be required to follow Industry Canada's default public consultation process.

However an LUA is in an ideal position to develop a public consultation process because of its local experience and knowledge. For this reason, the Department encourages LUAs to include public consultation as part of their processes. The LUA, as the representative of the local community, can assist and guide proponents to conduct meaningful consultation by establishing reasonable and timely protocols which ensure local land-use concerns are appropriately addressed.

2.5 Responding to Consultation

Even in cases where the LUA does not have a local protocol, the LUA should take the opportunity built into Industry Canada's procedures to examine carefully the details of the proponent's proposal. During its examination of the proposal, an LUA may ask the proponent for additional information to determine whether there are any local land-use or public concerns. As part of the discussions, the LUA can engage the proponent by suggesting reasonable alternatives and/or mitigation measures that would address any questions, comments or concerns.

To maximize the benefit of this consultation process, both parties have to consider each other's requirements and constraints so they can work effectively together. In so doing, the parties can devise solutions that will minimize the impact of the proposed structure on the local surroundings, while at the same time taking into consideration each other's interests.

5 LUAs are encouraged to refer to online resources [for example, the Aboriginal and Treaty Rights Information System (ATRIS) (http://sidait-atris.aadnc-aandc.gc.ca/atris_online/home-accueil.aspx)] as applicable.

2.6 Concluding Consultation

Industry Canada advises that an LUA's protocol should include a mechanism for issuing a formal concurrence to mark the end of the consultation with the proponent. This may consist of a formal decision by a designated official or relevant committee or another formal means, such as a sentence or other reference in the town council minutes. If an LUA decides that a consultation ends with the issuance of a building permit, then the protocol should indicate this.

If the proponent has met the public consultation requirements, either through the LUA's or Industry Canada's default process, and neither the LUA nor the public formally communicates any concerns to the proponent about its proposal, Industry Canada will deem that the land-use authority and the public have no objections.

2.7 Impasse Negotiations, Dispute Resolution Process

When developing protocols, LUAs should consider the means by which disputes will be resolved, ensuring they are appropriate for the local community. By documenting this process, all stakeholders will understand their roles and responsibilities as well as the process for resolving disputes. Industry Canada generally favours having the proponent, the local public and the LUA work toward a solution which takes each other's interests into consideration. Where an LUA or a proponent feels it may be helpful to do so, it may engage Industry Canada in an effort to move the discussions forward. Under Industry Canada procedures, if either the LUA or proponent believes discussions have reached an impasse, either can formally request departmental intervention concerning a reasonable and relevant concern. It is anticipated this will occur rarely.

LUAs may wish to consider incorporating alternate dispute resolution options into their protocols. Many alternate dispute resolution processes are interest-based rather than regulatory in nature. Therefore, the parties are more likely to find a mutually beneficial resolution.

2.8 A Timely Process

To avoid unnecessary delays, Industry Canada's process indicates that LUAs are normally expected to conclude the consultation process within 120 days from the receipt of the formal consultation request. Accordingly, when developing protocols, LUAs should not exceed these timelines.

3. Local Protocol Guide Development⁶

3.1 Protocol Principles

The following set of considerations and suggested principles may serve as a guide to LUAs developing protocols that respectfully balance local land-use interests with the benefits that radiocommunication, including broadcasting, brings to a community. The protocol should, as appropriate, address the following:

⁶ Municipalities may also wish to refer to the protocol template developed in partnership between the Federation of Canadian Municipalities (FCM) and the Canadian Wireless Telecommunications Association (CWTA). The FCM/CWTA template can be found on the FCM's website, www.fcm.ca.

- Information to proponents describing:
 - areas of historic or environmental importance to the community and the need to minimize the impact of the proposal on these areas; and
 - local preferences for antenna siting.
- Incentives to encourage aesthetically pleasing structures.
- Exclusions, which may build upon those established by Industry Canada (CPC-2-0-03, Section 6).
- Public consultation requirements that Industry Canada believes should be proportional to the proposal and its impact on the local surroundings. LUAs may wish to consider establishing a two-track process:
 - a streamlined concurrence process for less controversial proposals, such as new sites in industrial areas or on municipal properties, for emergency services or personal installations by members of the public (including for amateur radio operation and over-the-air and satellite TV reception), and
 - a process that includes broader public consultation for non-excluded structures likely to be of interest to the local community, such as the construction of new towers used by telecommunications carriers, broadcasting undertakings and third party tower owners.

The protocol should also establish a reasonable processing timeline that respects the timelines established in CPC-2-0-03 for proposals submitted to the LUA for concurrence.

3.2 General Protocol Template

The following elements are provided to aid LUAs in developing protocols dealing with antenna system installations:

Objectives

A short discussion on the overall objectives of the local protocol.

Jurisdiction

A discussion of the LUA's responsibilities and obligations in safeguarding legitimate concerns related to local land-use. Also, the role and responsibility of Industry Canada and the authority granted under the *Radiocommunication Act* to approve the location of radiocommunication facilities.

Consultation with the LUA

This may include:

- criteria for excluding additional antenna systems, other than those listed in the CPC-2-0-03, from LUA consultation;
- process for LUA notification;
- list of all documents and drawings that the proponent must submit;
- processing and administrative fees;
- the means by which the LUA will indicate concurrence; and
- process time frames that respect those established by CPC-2-0-03.

Excluded Antenna Structures

Industry Canada believes that not all antenna systems should be subject to a full land-use or public consultation process. Subjecting all proposals to the full consultation process would place an unnecessary and significant administrative burden on proponents, the LUA and the local public. Under Industry Canada's process, certain proposals are considered to have minimal impact on the local surroundings and so are excluded from public and land-use consultations. Industry Canada believes that consultation requirements should be proportional to the potential impact of the proposal. When establishing a local protocol, LUAs should consider the types of proposals that have minimal impact and so would warrant exemption from land-use and/or public consultation. It should be noted that any exclusion criteria established by the LUA can only augment, as appropriate, those established under Industry Canada's Exclusion List (CPC-2-0-03, Section 6).

Antenna Structures Not Excluded

LUAs may wish to consider the following when developing consultation protocols:

- the type of structure: new, temporary or existing antenna systems as well as non-tower structures;
- the intended use of the structure, whether personal, commercial or safety;
- the effect on significant natural or cultural features; and
- the landscaping, access control, fencing and road access.

Furthermore, LUAs can:

- encourage the placement of new towers in commercial, industrial/agricultural areas and utility or roadway easements;
- ask the proponent to suggest various options for consideration; and
- identify preferred criteria for antenna structure siting for new structures that exceed a specified height.

Public Consultation

Public consultation is an important part of the overall consultation process. Industry Canada believes that the local public should be consulted regarding non-excluded antenna proposals. Consultation allows the community to be involved and so ultimately influence the proposal's siting. Discussions can allow stakeholders to work towards a consensus. While LUAs are free to structure their public consultation process to meet their needs, Industry Canada's process consists of two distinct components:

- **Public Notification** - where the proponent informs the public of the proposed antenna system installation or modification, providing the information needed for a complete understanding of the proposal.
- **Public Engagement** - where the proponent engages the public and responds to all questions and comments, addressing all reasonable and relevant concerns. Public engagement may take various forms, from answering letters to hosting a public meeting or drop-in, depending on the community's level of interest.

Establishing Appropriate Time Frames

It is important that the protocol establish time frames for a consultation process, to ensure timely response to any questions or concerns and to avoid unnecessary delays to the proponent and the LUA.

Industry Canada expects that any time frames established within an LUA's protocol will respect those established by CPC-2-0-03.

Under Industry Canada's procedures (CPC-2-0-03, Section 4.4), construction of an antenna system must be completed within three years of the conclusion of consultation. After three years, consultations will no longer be deemed valid except in the case where a proponent secures the agreement of the relevant land-use authority to an extension for a specified time period in writing. While Industry Canada does not

support a reduction of the three-year time limit, LUAs may wish to consider including in their protocols procedures related to extending the time limit for construction.

Criteria not Necessary to Address Through Local Protocols

As described in Industry Canada's procedures (CPC-2-0-03, Section 7), proponents have specific obligations already subject to federal requirements. Protocols should not impose additional obligations in these areas. However, an LUA may wish to ask questions or seek clarification from proponents concerning their proposed steps and the alternatives available to satisfy these and any other radio authorization requirements. Proponents must comply with:

Health Canada's public radio frequency exposure guidelines - [Safety Code 6](#) (*Limits of Human Exposure to Radiofrequency Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz - Safety Code (2009)*);

Radio Frequency Interference and Immunity - [EMCAB-2 — Criteria for Resolution of Immunity Complaints Involving Fundamental Emissions of Radiocommunications Transmitters](#);

- [Canadian Environmental Assessment Act, 2012](#) – CEAA 2012
- Aeronautical Safety - [Transport Canada](#) and [NAV CANADA](#) requirements for aeronautical safety

4. Conclusion

Land-use authorities, with their local knowledge, experience and leadership ability, have an important role in the consultation process relating to the siting of antenna systems. Clear and reasonable protocols will enable effective participation and cooperation between the LUA and the proponent. Such protocols can be used to identify the interests of the community as well as guiding land-use principles. Moreover, protocols allow for the introduction of radiocommunication services, including broadcasting, in the local community in a timely manner. Protocols can assist proponents planning to install antenna systems, while at the same time giving due consideration to local land-use issues.



Industry
Canada

Industrie
Canada

CPC-2-0-03

Issue 5

Released: June 26, 2014

Effective: July 15, 2014

Spectrum Management and Telecommunications

Client Procedures Circular

Radiocommunication and Broadcasting Antenna Systems

Comments and suggestions may be directed to the following address:

Industry Canada
Spectrum Management Operations Branch
235 Queen Street
Ottawa, Ontario
K1A 0H5

Attention: DOSP

Via e-mail: spectrum_pubs@ic.gc.ca

All [Spectrum Management and Telecommunications](#) publications are available on the following website at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/home>.

Contents

1.	Introduction.....	3
1.1	Mandate.....	3
1.2	Application.....	3
1.3	Process Overview.....	3
2.	Industry Canada Engagement	4
3.	Use of Existing Infrastructure (Sharing)	4
4.	Land-use Authority and Public Consultation	5
4.1	Land-use Authority Consultation.....	6
4.2	Industry Canada’s Default Public Consultation Process	7
4.3	Concluding Consultation	9
4.4	Post-Consultation.....	11
5.	Dispute Resolution Process	11
6.	Exclusions	11
7.	General Requirements.....	12
7.1	Radio Frequency Exposure Limits.....	13
7.2	Radio Frequency Immunity	14
7.3	Proximity of Proposed Structure to Broadcasting Undertakings	14
7.4	Canadian Environmental Assessment Act	14
7.5	Aeronautical Safety.....	15
	Appendix 1 – Industry Canada’s Default Public Consultation Process - Public Notification Package	17

1. Introduction

Radiocommunication and broadcasting services are important for all Canadians and are used daily by the public, safety and security organizations, government, wireless service providers, broadcasters, utilities and businesses. In order for radiocommunication and broadcasting services to work, antenna systems including masts, towers, and other supporting structures are required. Antenna systems are normally composed of an antenna and some type of supporting structure, often called an antenna tower. Most antennas have their own integral mast so that they can be fastened directly to a building or a tower. There is a certain measure of flexibility in the placement of antenna systems which is constrained to some degree by: the need to achieve acceptable coverage for the service area; the availability of sites; technical limitations; and safety. In exercising its mandate, Industry Canada believes that it is important that antenna systems be deployed in a manner that considers the local surroundings.

1.1 Mandate

Section 5 of the *Radiocommunication Act* states that the Minister may, taking into account all matters the Minister considers relevant for ensuring the orderly development and efficient operation of radiocommunication in Canada, issue radio authorizations and approve each site on which radio apparatus, including antenna systems, may be located. Further, the Minister may approve the erection of all masts, towers and other antenna-supporting structures. Accordingly, proponents must follow the process outlined in this document when installing or modifying an antenna system. Also, the installation of an antenna system or the operation of a currently existing antenna system that is not in accordance with this process may result in its alteration or removal and other sanctions against the operator in accordance with the *Radiocommunication Act*.

1.2 Application

The requirements of this document apply to anyone (referred to in this document as the proponent) who is planning to install or modify an antenna system,¹ regardless of the type. This includes telecommunications carriers,² businesses, governments, Crown agencies, operators of broadcasting undertakings and the public (including for amateur radio operation and over-the-air TV reception). Anyone who proposes, uses or owns an antenna system must follow these procedures. The requirements also apply to those who install towers or antenna systems on behalf of others or for leasing purposes (“third party tower owners”). As well, parts of this process contain obligations that apply to existing antenna system owners and operators.

1.3 Process Overview

This document outlines the process that must be followed by proponents seeking to install or modify antenna systems. The broad elements of the process are as follows:

¹ For the purposes of this document, an “antenna system” is normally composed of an antenna and some sort of supporting structure, normally a tower. Most antennas have their own integral mast so that they can be fastened directly to a building or a tower. Thus, where this document refers to an “antenna,” the term includes the integral mast.

² For the purpose of this document, a “telecommunications carrier” means a person who owns or operates a transmission facility used by that person or another person to provide telecommunications services to the public for compensation.

1. Investigating sharing or using existing infrastructure before proposing new antenna-supporting structures.
2. Contacting the land-use authority (LUA) to determine local requirements regarding antenna systems.
3. Undertaking public notification and addressing relevant concerns, whether by following local LUA requirements or Industry Canada's default process, as is required and appropriate.
4. Satisfying Industry Canada's general and technical requirements.
5. Completing the construction.

It is Industry Canada's expectation that steps (2) to (4) will normally be completed within **120 days**. Some proposals may be excluded from certain elements of the process (see Section 6). It is Industry Canada's expectation that all parties will carry out their roles and responsibilities in good faith and in a manner that respects the spirit of this document. If the requirements of this document are satisfied and the proposal proceeds then, under step (5), construction of the antenna system must be completed within three years of conclusion of consultation.

2. Industry Canada Engagement

There are a number of points in the processes outlined in this document where parties must contact Industry Canada to proceed. Further, anyone with any question regarding the process may contact the local Industry Canada office³ for guidance. Based on a query by an interested party, Industry Canada may request parties to provide relevant records and/or may provide direction to one or more parties to undertake certain actions to help move the process forward.

3. Use of Existing Infrastructure (Sharing)⁴

This section outlines the roles of proponents and owners/operators of existing antenna systems. In all cases, parties should retain records (such as analyses, correspondence and engineering reports) relating to this section.

Before building a new antenna-supporting structure, Industry Canada requires that proponents first explore the following options:

- consider sharing an existing antenna system, modifying or replacing a structure if necessary;

³ Please refer to Radiocommunication Information Circular RIC-66 for a list of addresses and telephone numbers for Industry Canada's regional and district offices. [RIC-66](http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf06073.html) is available via the Internet at: http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf06073.html.

⁴ See also Client Procedures Circular CPC-2-0-17, *Conditions of Licence for Mandatory Roaming and Antenna Tower and Site Sharing and to Prohibit Exclusive Site Arrangements*. CPC-2-0-17 is available via the Internet at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09081.html>.

- locate, analyze and attempt to use any feasible existing infrastructure such as rooftops, water towers etc.

A proponent is not normally expected to build a new antenna-supporting structure where it is feasible to locate an antenna on an existing structure, unless a new structure is preferred by the land-use authority.

Owners and operators of existing antenna systems are to respond to a request to share in a timely fashion and to negotiate in good faith to facilitate sharing where feasible. It is anticipated that 30 days is reasonable time for existing antenna system owners/operators to reply to a request by a proponent in writing with either:

- a proposed set of reasonable terms to govern the sharing of the antenna system; or
- a detailed explanation of why sharing is not possible.

4. Land-use Authority and Public Consultation

Contacting the Land-use Authority

Proponents must always contact the applicable land-use authorities to determine the local consultation requirements and to discuss local preferences regarding antenna system siting and/or design, unless their proposal falls within the exclusion criteria outlined in Section 6. If the land-use authority has designated an official to deal with antenna systems, then proponents are to engage the authority through that person. If not, proponents must submit their plans directly to the council, elected local official or executive. The 120-day consultation period commences only once proponents have formally submitted, in writing, all plans required by the land-use authority, and does not include preliminary discussions with land-use authority representatives.

Proponents should note that there may be more than one land-use authority with an interest in the proposal. Where no established agreement exists between such land-use authorities, proponents must, as a minimum, contact the land-use authority(ies) and/or neighbouring land-use authorities located within a radius of three times the tower height, measured from the tower base or the outside perimeter of the supporting structure, whichever is greater. As well, in cases where proponents are aware that a potential Aboriginal or treaty right or land claim may be affected by the proposed installation,⁵ they must contact Industry Canada in order to ensure that the requirements for consultation are met.

Following the Land-use Authority Process

Proponents must follow the land-use consultation process for the siting of antenna systems, established by the land-use authority, where one exists. In the event that a land-use authority's existing process has no public consultation requirement, proponents must then fulfill the public consultation requirements contained in Industry Canada's Default Public Consultation Process (see Section 4.2). Proponents are not required to follow this requirement if the LUA's established process explicitly excludes their type of

⁵ Proponents are encouraged to refer to local community and online resources (for example, the Aboriginal and Treaty Rights Information System (ATRIS) (http://sidait-atris.aadnc-aandc.gc.ca/atris_online/home-accueil.aspx) as applicable.

proposal from consultation or it is excluded by Industry Canada's criteria.⁶ Where proponents believe the local consultation requirements are unreasonable, they may contact the local Industry Canada office in writing for guidance.

Broadcasting Undertakings

Applicants for broadcasting undertakings are subject to Canadian Radio-television and Telecommunications (CRTC) licensing processes in addition to Industry Canada requirements. Although Industry Canada encourages applicants to consult as early as practical in the application process, in some cases it may not be prudent for the applicants to initiate public and municipal/land-use consultation before receiving CRTC approval, as application denial by the CRTC would have result in unnecessary work for all parties involved. Therefore, assuming that the proposal is not otherwise excluded, broadcasting applicants may opt to commence land-use consultation after having received CRTC approval. However, broadcasting applicants choosing this approach are required, at the time of the CRTC application, to notify the land-use authority with a Letter of Intent outlining a commitment to conduct consultation after receiving CRTC approval. If the land-use authority raises concerns with the proposal as described in the Letter of Intent, applicants are encouraged to engage in discussions with the land-use authority regarding their concerns and attempt to resolve any issues. Refer to Broadcasting Procedures and Rules, Part 1 (BPR-1), for further details.

4.1 Land-use Authority Consultation

Industry Canada believes that any concerns or suggestions expressed by land-use authorities are important elements to be considered by proponents regarding proposals to install, or make changes to, antenna systems. As part of their community planning processes, land-use authorities should facilitate the implementation of local radiocommunication services by establishing consultation processes for the siting of antenna systems.

Unless the proposal meets the exclusion criteria outlined in Section 6, proponents must consult with the local land-use authority(ies) on any proposed antenna system prior to any construction. The aim of this consultation is to:

- discuss site options;
- ensure that local processes related to antenna systems are respected;
- address reasonable and relevant concerns (see Section 4.2) from both the land-use authority and the community they represent; and
- obtain land-use authority concurrence in writing.

Land-use authorities are encouraged to establish reasonable, relevant, and predictable consultation processes⁷ specific to antenna systems that consider such things as:

⁶ In all cases, telecommunications carriers, broadcasting undertakings and third party tower owners must notify and consult with the local public when proposing a new antenna tower either by following Industry Canada's Default Public Consultation Process or, where one exists, the land-use authority's public consultation process..

⁷ Industry Canada is available to assist land-use authorities in the development of local processes. In addition, land-use authorities may wish to consult Industry Canada's guide for the development of local consultation processes.

- the designation of suitable contacts or responsible officials;
- proposal submission requirements;
- public consultation;
- documentation of the concurrence process; and
- the establishment of milestones to ensure consultation process completion within *120 days*.

Where they have specific concerns regarding a proposed antenna system, land-use authorities are expected to discuss reasonable alternatives and/or mitigation measures with proponents.

Under their processes, land-use authorities may exclude from consultation any antenna system installation in addition to those identified by Industry Canada's own consultation exclusion criteria (Section 6). For example, an authority may wish to exclude from consultation those installations located within industrial areas removed from residential areas, low visual impact installations, or certain types of structures located within residential areas such as personal antenna systems (e.g. used for over the air and satellite television reception or amateur radio operation).

4.2 Industry Canada's Default Public Consultation Process

Proponents must follow Industry Canada's Default Public Consultation Process where the local land-use authority does not have an established and documented public consultation process applicable to antenna siting. Industry Canada's default process has three steps whereby the proponent:

1. provides written notification to the public, the land-use authority and Industry Canada of the proposed antenna system installation or modification (i.e. public notification);
2. engages the public and the land-use authority in order to address relevant questions, comments and concerns regarding the proposal (i.e. responding to the public); and
3. provides an opportunity to the public and the land-use authority to formally respond in writing to the proponent regarding measures taken to address reasonable and relevant concerns (i.e. public reply comment).

Public Notification

1. Proponents must ensure that the local public, the land-use authority and Industry Canada are notified of the proposed antenna system. As a minimum, proponents must provide a notification package (see Appendix 1) to the local public (including nearby residences, community gathering areas, public institutions, schools, etc.), neighbouring land-use authorities, businesses, and property owners, etc.

Municipalities may also wish to refer to the protocol template developed in partnership between the Federation of Canadian Municipalities (FCM) and the Canadian Wireless Telecommunications Association (CWTA). The FCM/CWTA template can be found on the [FCM's website](http://www.fcm.ca) www.fcm.ca.

located within a radius of three times the tower height.⁸ The radius is measured from the outside perimeter of the supporting structure. For the purpose of this requirement, the outside perimeter begins at the furthest point of the supporting mechanism, be it the outermost guy line, building edge, face of the self-supporting tower, etc. Public notification of an upcoming consultation must be clearly marked, making reference to the proposed antenna system, so that it is not misinterpreted as junk mail. The notice must be sent by mail or be hand delivered. The face of the package must clearly reference that the recipient is within the prescribed notification radius of the proposed antenna system.

2. It is the proponent's responsibility to ensure that the notification provides at least 30 days for written public comment.
3. In addition to the minimum notification distance noted above, in areas of seasonal residence, the proponent, in consultation with the land-use authority, is responsible for determining the best manner to notify such residents to ensure their engagement.
4. In addition to the public notification requirements noted above, proponents of an antenna system proposed to be 30 metres or more in height must place a notice in a local community newspaper circulating in the proposed area.⁹ Height is measured from the lowest ground level at the base, including the foundation, to the tallest point of the antenna system. Depending on the particular installation, the tallest point may be an antenna, lightning rod, aviation obstruction lighting or some other appurtenance. Any attempt to artificially reduce the height (addition of soil, aggregate, etc.) will not be included in the calculation or measurement of the height of the antenna system.

Responding to the Public

Proponents are to address all reasonable and relevant concerns, make all reasonable efforts to resolve them in a mutually acceptable manner and must keep a record of all associated communications. If the local public or land-use authority raises a question, comment or concern relating to the antenna system as a result of the public notification process, then the proponent is required to:

1. respond to the party in writing within **14 days** acknowledging receipt of the question, comment or concern and keep a record of the communication;
2. address in writing all reasonable and relevant concerns within **60 days** of receipt or explain why the question, comment or concern is not, in the view of the proponent, reasonable or relevant; and
3. in the written communication referred to in the preceding point, clearly indicate that the party has **21 days** from the date of the correspondence to reply to the proponent's response. The proponent must provide a copy of all public reply comments to the local Industry Canada office.

⁸ Proponents are advised that municipalities may set reasonable public notification distances appropriate for their communities when establishing their own protocols.

⁹ The notice must be synchronized with the distribution of the public notification package. It must be legible and placed in the public notice section of the newspaper. The notice must include: a description of the proposed installation; its location and street address; proponent contact information and mailing address; and an invitation to provide public comments to the proponent within **30 days** of the notice. In areas without a local newspaper, other effective means of public notification must be implemented. Proponents may contact the local Industry Canada office for guidance.

Responding to reasonable and relevant concerns may include contacting a party by telephone, engaging in a community meeting or having an informal, personal discussion. Between steps 1 and 2 above, the proponent is expected to engage the public in a manner it deems most appropriate. Therefore, the letter at step 2 above may be a record of how the proponent and the other party addressed the concern at hand.

Public Reply Comments

As indicated in step 3 above, the proponent must clearly indicate that the party has **21 days** from the date of the correspondence to reply to the response. The proponent must also keep a record of all correspondence/discussions that occurred within the **21-day** public reply comment period. This includes records of any agreements that may have been reached and/or any concerns that remain outstanding.

The factors that will determine whether a concern is reasonable or relevant according to this process will vary but will generally be considered if they relate to the requirements of this document and to the particular amenities or important characteristics of the area surrounding the proposed antenna system. Examples of concerns that proponents are to address may include:

- Why is the use of an existing antenna system or structure not possible?
- Why is an alternate site not possible?
- What is the proponent doing to ensure that the antenna system is not accessible to the general public?
- How is the proponent trying to integrate the antenna into the local surroundings?
- What options are available to satisfy aeronautical obstruction marking requirements at this site?
- What are the steps the proponent took to ensure compliance with the general requirements of this document including the *Canadian Environmental Assessment Act* (CEAA), Safety Code 6, etc.?

Concerns that are not relevant include:

- disputes with members of the public relating to the proponent's service, but unrelated to antenna installations;
- potential effects that a proposed antenna system will have on property values or municipal taxes;
- questions whether the *Radiocommunication Act*, this document, Safety Code 6, locally established by-laws, other legislation, procedures or processes are valid or should be reformed in some manner.

4.3 Concluding Consultation

The proponent may only commence installation/modification of an antenna system after the consultation process has been completed by the land-use authority, or Industry Canada confirms concurrence with the consultation portion of this process, and after all other requirements under this process have been met. Consultation responsibilities will normally be considered complete when the proponent has:

1. concluded consultation requirements (Section 4.1) with the land-use authority;
2. carried out public consultation either through the process established by the land-use authority or Industry Canada's Default Public Consultation Process where required; and
3. addressed all reasonable and relevant concerns.

Concluding Land-use Authority Consultation

Industry Canada expects that land-use consultation will be completed within **120 days** from the proponent's initial formal contact with the local land-use authority. Where unavoidable delays may be encountered, the land-use authority is expected to indicate when the proponent can expect a response to the proposal. If the authority is not responsive, the proponent may contact Industry Canada. Depending on individual circumstances, Industry Canada may support additional time or consider the land-use authority consultation process concluded.

Depending on the land-use authority's own process, conclusion of local consultation may include such steps as obtaining final concurrence for the proposal via the relevant committee, a letter or report acknowledging that the relevant municipal process or other requirements have been satisfied, or other valid indication, such as the minutes of a town council meeting indicating LUA approval. Compliance with informal city staff procedures, or grants of approval strictly related to zoning, construction, etc. will not normally be sufficient.

Industry Canada recognizes that approvals for construction (e.g. building permits) are used by some land-use authorities as evidence of consultation being concluded. Proponents should note that Industry Canada does not consider the fact a permit was issued as confirmation of concurrence, as different land-use authorities have different approaches. As such, Industry Canada will only consider such approvals as valid when the proponent can demonstrate that the LUA's process was followed and that the LUA's preferred method of concluding LUA consultation is through such an approval.

Concluding Industry Canada's Default Public Consultation Process

Industry Canada's Default Public Consultation Process will be considered concluded when the proponent has either:

- received no written questions, comments or concerns to the formal notification within the **30-day** public comment period; or
- if written questions, comments or concerns were received, the proponent has addressed and resolved all reasonable and relevant concerns and the public has not provided further comment within the **21-day** reply comment period.

In the case where the public responds within the **21-day** reply comment period, the proponent has the option of making further attempts to address the concern on its own, or can request Industry Canada engagement. If a request for engagement is made at this stage, Industry Canada will review the relevant material, request any further information it deems pertinent from any party and may then decide that:

- the proponent has met the consultation requirements of this process and that Industry Canada concurs that installation or modification may proceed; or
- the parties should participate in further attempts to mitigate or resolve any outstanding concern.

4.4 Post-Consultation

Whether the proponent followed a land-use authority's consultation process or Industry Canada's default public consultation process, construction of an antenna system must be completed within three years of the conclusion of consultation. After three years, consultations will no longer be deemed valid except in the case where a proponent secures the agreement of the relevant Land-Use Authority to an extension for a specified time period in writing. A copy of the agreement must be provided to the local Industry Canada office.

5. Dispute Resolution Process

The dispute resolution process is a formal process intended to bring about the timely resolution where the parties have reached an impasse.

Upon receipt of a written request from a stakeholder other than the general public, asking for Departmental intervention concerning a reasonable and relevant concern, the Department may request that all involved parties provide and share all relevant information. The Department may also gather or obtain other relevant information and request that parties provide any further submissions if applicable. The Department will, based on the information provided, either:

- make a final decision on the issue(s) in question, and advise the parties of its decision; or
- suggest the parties enter into an alternate dispute resolution process in order to come to a final decision. Should the parties be unable to reach a mutually agreeable solution, either party may request that the Department make a final decision.

Upon resolution of the issue under dispute, the proponent is to continue with the process contained within this document as required.

6. Exclusions

All proponents must satisfy the General Requirements outlined in Section 7 regardless of whether an exclusion applies to their proposal. All proponents must also consult the land-use authority and the public unless a proposal is specifically excluded. Individual circumstances vary with each antenna system installation and modification, and the exclusion criteria below should be applied in consideration of local circumstances. Consequently, it may be prudent for the proponent to consult even though the proposal meets an exclusion noted below. Therefore, when applying the criteria for exclusion, proponents should consider such things as:

- the antenna system's physical dimensions, including the antenna, mast, and tower, compared to the local surroundings;

- the location of the proposed antenna system on the property and its proximity to neighbouring residents;
- the likelihood of an area being a community-sensitive location; and
- Transport Canada's marking and lighting requirements for the proposed structure.

The following proposals are excluded from land-use authority and public consultation requirements:

- **New Antenna Systems:** where the height is less than 15 metres above ground level. This exclusion does not apply to antenna systems proposed by telecommunications carriers, broadcasting undertakings or third party tower owners;
- **Existing Antenna Systems:** where modifications are made, antennas added or the tower replaced¹⁰, including to facilitate sharing, provided that the total cumulative height increase is no greater than 25% of the height of the initial antenna system installation¹¹. No increase in height may occur within one year of completion of the initial construction. This exclusion does not apply to antenna systems using purpose built antenna supporting structures with a height of less than 15 metres above ground level operated by telecommunications carriers, broadcasting undertakings or third party tower owners;
- **Non-Tower Structure:** antennas on buildings, water towers, lamp posts, etc. may be excluded from consultation provided that the height above ground of the non-tower structure, exclusive of appurtenances, is not increased by more than 25%;¹² and
- **Temporary Antenna Systems:** used for special events or emergency operations and must be removed within three months after the start of the emergency or special event.

No consultation is required prior to performing maintenance on an existing antenna system.

Proponents who are not certain if their proposals are excluded, or whether consultation may still be prudent, are advised to contact the land-use authority and/or Industry Canada for guidance.

Height is measured from the lowest ground level at the base, including the foundation, to the tallest point of the antenna system. Depending on the particular installation, the tallest point may be an antenna, lightning rod, aviation obstruction lighting or some other appurtenance. Any attempt to artificially reduce the height (addition of soil, aggregate, etc.) will not be included in the calculation or measurement of the height of the antenna system.

7. General Requirements

In addition to roles and responsibilities for site sharing, land-use consultation and public consultation, proponents must also fulfill other important obligations including: compliance with Health Canada's

¹⁰ The exclusion for the replacement of existing antenna systems applies to replacements that are similar to the original design and location.

¹¹ Initial antenna system installation refers to the system as it was first consulted on, or installed.

¹² Telecommunication carriers, operators of broadcasting undertakings and third party tower owners may benefit from local knowledge by contacting the land-use authority when planning an antenna system that meets this exclusion criteria.

Safety Code 6 guideline for the protection of the general public; compliance with radio frequency immunity criteria; notification of nearby broadcasting stations; environmental considerations; and Transport Canada/NAV CANADA aeronautical safety responsibilities.

7.1 Radio Frequency Exposure Limits

Health Canada has established safety guidelines for exposure to radio frequency fields, in its Safety Code 6 publication, entitled: *Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz*.¹³ While the responsibility for developing Safety Code 6 rests with Health Canada, Industry Canada has adopted this guideline for the purpose of protecting the general public. Current biomedical studies in Canada and other countries indicate that there is no scientific or medical evidence that a person will experience adverse health effects from exposure to radio frequency fields, provided that the installation complies with Safety Code 6.

It is the responsibility of proponents and operators of installations to ensure that all radiocommunication and broadcasting installations comply with Safety Code 6 at all times, including the consideration of combined effects of nearby installations within the local radio environment.

Telecommunications common carriers and operators of broadcasting undertakings are to carry out an exposure evaluation on all new installations and following any increases in radiated power. Either measurement surveys or mathematical or numerical computations can be used for this evaluation. Where the radio frequency emission of any installation, whether telecommunications carrier or broadcasting operator, is greater than, or is equal to, 50%, of the Safety Code 6 limits for uncontrolled environments at locations accessible to the general public (i.e. not solely available for access by workers), the operator(s) of radio frequency emitters must notify Industry Canada and demonstrate compliance with Safety Code 6. This determination of 50% of Safety Code 6 must be in consideration of the local radio environment.

For all proponents following Industry Canada's Default Public Consultation Process, the proponent's notification package must provide a written attestation that there will be compliance with Safety Code 6 for the protection of the general public, including consideration of nearby radiocommunication systems. The notification package must also indicate any Safety Code 6 related signage and access control mechanisms that may be used.

Compliance with Safety Code 6 is an ongoing obligation. At any time, antenna system operators may be required, as directed by Industry Canada, to demonstrate compliance with Safety Code 6 by (i) providing detailed calculations, and/or (ii) conducting site surveys and, where necessary, by implementing corrective measures.¹⁴ At the request of Industry Canada, telecommunications carriers and operators of broadcasting undertakings must provide detailed compliance information for individual installations within five days of the request. Proponents and operators of existing antenna systems must retain copies of all information related to Safety Code 6 compliance such as analyses and measurements.

¹³ To obtain an electronic copy of Safety Code 6, contact: publications@hc-sc.gc.ca.

¹⁴ See Client Procedures Circular [CPC-2-0-20](#), *Radio Frequency (RF) Fields – Signs and Access Control*.

7.2 Radio Frequency Immunity

All radiocommunication and broadcasting proponents and existing spectrum users are to ensure that their installations are designed and operated in accordance with Industry Canada's immunity criteria as outlined in EMCAB-2¹⁵ in order to minimize the malfunctioning of electronic equipment in the local surroundings. Broadcasting proponents and existing undertakings should refer to Broadcasting Procedures and Rules - Part 1, *General Rules* (BPR-1) for additional information and requirements¹⁶ on this matter.

Proponents are advised to consider the potential effect that their proposal may have on nearby electronic equipment. In this way, they will be better prepared to respond to any questions that may arise during the public and land-use consultation processes, or after the system has been installed.

Land-use authorities should be prepared to advise proponents and owners of broadcasting undertakings of plans for the expansion or development of nearby residential and/or industrial areas. Such expansion or development generally results in the introduction of more electronic equipment in the area and therefore an increased potential for electronic equipment to malfunction. By keeping broadcasters aware of planned developments and changes to adjacent land-use, they will be better able to work with the community. Equally, land-use authorities have a responsibility to ensure that those moving into these areas, whether prospective residents or industry, are aware of the potential for their electronic equipment to malfunction when located in proximity to an existing broadcasting installation. For example, the LUA could ensure that clear notification be provided to future prospective purchasers.

7.3 Proximity of Proposed Structure to Broadcasting Undertakings

Where the proposal would result in a structure that exceeds 30 metres above ground level, the proponent is to notify operators of AM, FM and TV undertakings within 2 kilometres, due to the potential impact the physical structure may have on these broadcasting undertakings. Metallic structures close to an AM directional antenna array may change the antenna pattern of the AM broadcasting undertaking. These proposed structures can also reflect nearby FM and TV signals, causing "ghosting" interference to FM/TV receivers used by the general public.

7.4 Canadian Environmental Assessment Act

Industry Canada requires that the installation and modification of antenna systems be done in a manner that complies with appropriate environmental legislation. This includes the *Canadian Environmental Assessment Act, 2012* (CEAA 2012), where the antenna system is incidental to a physical activity or project designated under CEAA 2012, or is located on federal lands.

An antenna system may not proceed where it is incidental to a designated project (as described in the *Regulations Designating Physical Activities*), or is otherwise expressly designated by the Minister of the

¹⁵ For more information see [EMCAB-2](http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01005.html), entitled: *Criteria for Resolution of Immunity Complaints Involving Fundamental Emissions of Radiocommunications Transmitters* available at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01005.html>.

¹⁶ [BPR-1 - Part I: General Rules](http://strategis.ic.gc.ca/epic/internet/insmt-gst.nsf/en/sf01326e.html) can be found on the Spectrum Management and Telecommunications website at: <http://strategis.ic.gc.ca/epic/internet/insmt-gst.nsf/en/sf01326e.html>.

Environment without satisfying certain requirements applicable to designated projects. Therefore, a proponent of this type of project must contact Industry Canada for direction on how to proceed.

Any proposed antenna system on federal land may not proceed without a determination of environmental effects by Industry Canada. In order to assist the Department in making such a determination, proponents must submit a project description to Industry Canada, considering and addressing those elements of the environment described in CEAA 2012, as well as any determination of environmental effects that may have been made by the authority responsible for managing the federal land. Industry Canada may also require further information before it can complete its assessment. Industry Canada will inform the proponent of the results of its determination and may impose conditions related to mitigating any adverse effects after making its determination and/or may need to refer the matter to the Governor-in-Council under CEAA 2012.

In addition, notices under Industry Canada's default public consultation process require written confirmation of the project's status under CEAA 2012 (e.g., whether it is incidental to a designated project or, if not, whether it is on federal lands).

In addition to CEAA requirements, proponents are responsible to ensure that antenna systems are installed and operated in a manner that respects the local environment and that complies with other statutory requirements, such as those under the *Canadian Environmental Protection Act, 1999*, the *Migratory Birds Convention Act, 1994*, and the *Species at Risk Act*, as applicable.

For projects north of the 60th parallel, environmental assessment requirements may arise from federal statutes other than the aforementioned Acts or from Comprehensive Land Claim Agreements. Industry Canada requires that installation or modification of antennas or antenna supporting structures be done in accordance with these requirements, as appropriate.

7.5 Aeronautical Safety

Proponents must ensure their proposals for any antenna system are first reviewed by Transport Canada and NAV CANADA.

Transport Canada will perform an assessment of the proposal with respect to the potential hazard to air navigation and will notify proponents of any painting and/or lighting requirements for the antenna system. NAV CANADA will comment on whether the proposal has an impact on the provision of their national air navigation system, facilities and other services located off-airport.

As required, the proponent must:

1. submit an Aeronautical Obstruction Clearance form to Transport Canada;
2. submit a Land-use Proposal Submission form to NAV CANADA;
3. include Transport Canada marking requirements in the public notification package;
4. install and maintain the antenna system in a manner that is not a hazard to aeronautical safety; and

5. retain all correspondence.

For those antenna systems subject to Industry Canada's Default Public Consultation Process, the proponent will inform the community of any marking requirements. Where options are possible, proponents are expected to work with the local community and Transport Canada to implement the best and safest marking options. Proponents should be aware that Transport Canada does not advise Industry Canada of marking requirements for proposed structures. Proponents are reminded that the addition of, or modification to, obstruction markings may result in community concern and so any change is to be done in consultation with the local public, land-use authority and/or Transport Canada, as appropriate.

References and Details

Aeronautical Obstruction Clearance forms are available from any Transport Canada Aviation Group Office. Both the Aeronautical Obstruction Clearance form (#26-0427) and a list of Transport Canada Aviation Group regional offices are available on the Transport Canada website.¹⁷ Completed forms are to be submitted directly to the nearest Transport Canada Aviation Group office. (Refer to Canadian Aviation Regulations, Standard 621.19, Standards Obstruction Markings).

Land-use Proposal Submission forms are available from NAV CANADA¹⁸ and completed forms are to be sent to the appropriate NAV CANADA General Manager Airport Operations (GMAO) office, East or West.

¹⁷ The [Transport Canada website](http://www.tc.gc.ca) can be found at: <http://www.tc.gc.ca>.

¹⁸ Search keywords "Land-use Proposal" on the [NAV CANADA website](http://www.navcanada.ca) at: <http://www.navcanada.ca>.

Appendix 1 – Industry Canada’s Default Public Consultation Process - Public Notification Package

The proponent must ensure that at least **30 days** are provided for public comment. Notification must provide all information on how to submit comments to the proponent in writing. Notices must be clearly marked, making reference to the proposed antenna system, so that it is not misinterpreted as junk mail. The notice must be sent by mail or be hand delivered. The face of the package must clearly indicate that the recipient is within the prescribed notification radius of the proposed antenna system. The proponent must also provide a copy of the notification package to the land-use authority and the local Industry Canada office at the same time as the package is provided to the public.

Notification must include, but need not be limited to:

- 1) the proposed antenna system’s purpose, the reasons why existing antenna systems or other infrastructure cannot be used, a list of other structures that were considered unsuitable and future sharing possibilities for the proposal;
- 2) the proposed location within the community, the geographic coordinates and the specific property or rooftop;
- 3) an attestation¹⁹ that the general public will be protected in compliance with Health Canada’s Safety Code 6 including combined effects within the local radio environment at all times;
- 4) identification of areas accessible to the general public and the access/demarcation measures to control public access;
- 5) information on the environmental status of the project, including any requirements under the *Canadian Environmental Assessment Act, 2012*;
- 6) a description of the proposed antenna system including its height and dimensions, a description of any antenna that may be mounted on the supporting structure and simulated images of the proposal;
- 7) Transport Canada’s aeronautical obstruction marking requirements (whether painting, lighting or both) if available; if not available, the proponent’s expectation of Transport Canada’s requirements together with an undertaking to provide Transport Canada’s requirements once they become available;
- 8) an attestation that the installation will respect good engineering practices including structural adequacy;
- 9) reference to any applicable local land-use requirements such as local processes, protocols, etc.;

¹⁹ Example: I, (*name of individual or representative of company*) attest that the radio installation described in this notification package will be installed and operated on an ongoing basis so as to comply with Health Canada’s Safety Code 6, as may be amended from time to time, for the protection of the general public, including any combined effects of nearby installations within the local radio environment.

- 10) notice that general information relating to antenna systems is available on Industry Canada's Spectrum Management and Telecommunications website (<http://www.ic.gc.ca/towers>);
- 11) contact information for the proponent, land-use authorities and the local Industry Canada office;
and
- 12) closing date for submission of written public comments (not less than **30 days** from receipt of notification).

Public Hearing Rooftop Antenna Regulation Update

Presented November 22, 2021
Planning and Development



Background Regulatory Framework

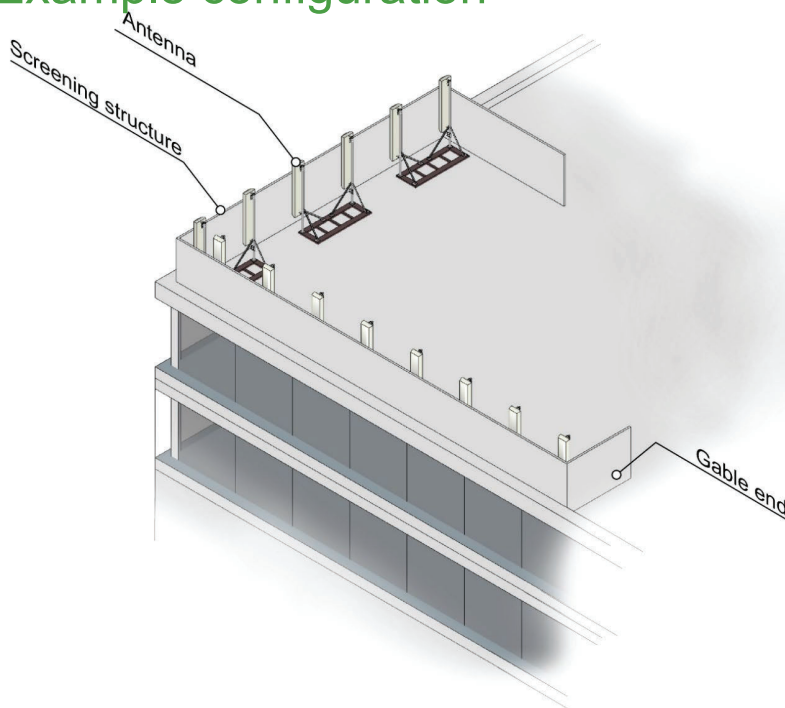
- Industry Canada regulates the installation of cellular antennas.
- Cellular communication infrastructure is considered essential infrastructure.

Key Changes

- Zoning:
 - Eliminate height restriction.
- Development Permit Guidelines:
 - Ensure siting is desirable and mitigate visual impact.
 - Public notification no longer required

Guidelines

Example configuration





Thank you.



NOTICE OF PUBLIC HEARING

WHO: City of North Vancouver

WHAT: Zoning Amendment Bylaw No. 8882
Third Party Rooftop Antenna Systems

WHEN: Monday, November 22, 2021 at 5:30 pm

HOW: View the meeting online at cnv.org/LiveStreaming

Notice is hereby given that Council will consider:

Zoning Amendment Bylaw No. 8882 to amend the Zoning Bylaw to remove height restrictions for the installation of rooftop antennas and to bring into effect the updated Rooftop Antenna Development Permit Guidelines to guide the design and siting of these facilities.

The Public Hearing will be held electronically via WebEx. All persons who believe their interest in property may be affected by the proposed bylaw will be afforded an opportunity to speak at the Public Hearing and/or by email or written submission. All submissions must include your name and address and should be sent to the Corporate Officer at input@cnv.org, or by mail or delivered to City Hall, **no later than 12:00 noon on Monday, November 22, 2021**, to ensure their availability to Council at the Public Hearing. Once the Public Hearing has concluded, no further information or submissions can be considered by Council.

To speak at the Public Hearing by phone: Pre-register by completing the online form at cnv.org/PublicHearings, or by phoning 604-990-4230 and providing contact information, so call-in instructions can be forwarded to you. **All pre-registration must be submitted no later than 12:00 noon on Monday, November 22, 2021.**

Speakers who have not pre-registered will also have an opportunity to speak at the Public Hearing. Once all registered speakers have provided input, the Mayor will call for a recess to allow time for additional speakers to phone in. Call-in details will be displayed on-screen at the Public Hearing (watch web livestream).

The proposed Zoning Amendment Bylaw, background material and staff presentation will be available for viewing online at cnv.org/PublicHearings on Friday, November 12, 2021.

Please direct inquiries to Bram van der Heijden at bheijden@cnv.org or 604-982-3995.



 Department Manager	 Director	 CAO
---	---	--

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

INFORMATION REPORT

To: Mayor Linda Buchanan and Members of Council

From: Bram van der Heijden, Planner I

Subject: ROOFTOP ANTENNA DEVELOPMENT PERMIT GUIDELINES AND
ZONING BYLAW UPDATE

Date: November 10, 2021 File No: 09-3900-30-0004/1

On October 18, 2021, Council referred the Rooftop Antenna Development Permit Guidelines and Zoning Bylaw Update to a Public Hearing, which is now scheduled for November 22.

Since then staff have identified one minor clarification on a guideline provision. At introduction, the provision read:

"7.4.8. A maximum of 4 screens are allowed per building."


To clarify that a "screen" constitutes an entire screening structure (including multiple faces), the following wording has been incorporated in the updated DP Guidelines:

"7.4.8. A maximum of 4 screening structures are allowed on one building (see figure 2 as an example of one such screening structure)."

The updated DP Guidelines are now included as part of the Public Hearing package for Council for November 22.

The minor changes also include correcting a couple of grammatical errors in the document – these do not impact the amending by-law (Amendment Bylaw, 2021, No. 8882, which was introduced to Council on October 18) nor change the intent of the DP Guidelines. However, since the DP Guidelines form part of the Zoning By-law, Council action is still required to rescind the second reading of the amending by-law and give the amending by-law along with the updated Guidelines a second reading.

RESPECTFULLY SUBMITTED:


Bram van der Heijden
Planner I

THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8882

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, 2021, No. 8882” (Third Party Rooftop Antenna Systems)**.
2. Division II: General Zoning Standards, Part 4, section 409 Height Exceptions, in “Zoning Bylaw, 1995, No. 6700”, is hereby amended as follows:
 - A. By removing Section (9) in its entirety and replacing it with “Third Party Rooftop Antenna Systems and any associated screening structures;”
 - B. By removing section (10) in its entirety.
3. The “Rooftop Antenna Development Permit Area Guidelines”, as attached to this bylaw, replace the “Rooftop Antenna Development Permit Area Guidelines” currently integral to “Zoning Bylaw, 1995, No. 6700”.

READ a first time on the 18th day of October, 2021.

READ a second time on the 18th day of October, 2021.

READ a third time on the <> day of <>, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

THIS PAGE INTENTIONALLY LEFT BLANK

2022 Utility Rates

Council Presentation
November 22, 2021



Outline

- Background
- Asset Management
- Utility Rate Options
- Utilities
 - Water
 - Sewerage and Drainage
 - Solid Waste
- New Items
- Rate Recommendations
- Next Steps

Background

Guiding Principle:

Revenues collected provide adequate funds for:

- Operating & maintenance expenditures
- Infrastructure renewal and growth

Background

- Water, Sanitary and Drainage costs are primarily driven by:
 - Water purchase & sewer levy costs from Metro Vancouver (“MV”)
 - Water purchases from MV account for 55% of CNV Water expenditures
 - MV Sewer charges account for over 50% of CNV Sewer expenditures
 - Capital projects to replace aging infrastructure
 - Building of reserves to offset future MV increases
 - For example, North Shore Waste Water Treatment Plant (“NSWWTP”)
- Solid Waste costs are primarily driven by:
 - Waste collection services and staffing

Background

Significant Future Increases in MV Rates coming:



Metro Vancouver utility fees could spike to almost \$1,000 by 2026

Oct 22, 2021 4:20 PM By: [Sofia Lalibadi](#)



The recent delay of a \$1 billion wastewater treatment plant in North Vancouver is one of several expensive capital projects driving projected hikes in Metro utility bills over the next five years. / Paul McGowan, North Shore News

Metro Vancouver's annual utility fees are projected to climb 65 per cent over the next half-decade to almost \$1,000 annually by 2026, a massive spike as the region races to replace costly and aging infrastructure.

“Metro Vancouver’s annual utility fees are projected to climb 65 per cent over the next half-decade to almost \$1,000 annually by 2026, a massive spike as the region races to replace costly and aging infrastructure.”

Background

Significant Future Increases in MV Rates coming:

	2022	2023	2024	2025	2026	Avg.
Bulk Water	4.1%	6.1%	10.7%	11.7%	11.5%	9.2%
GVS&DD Levy	6.1%	22.9%	25.3%	19.7%	9.0%	16.6%
Tipping Fees	3.4%	5.8%	5.5%	5.2%	4.9%	5.0%

- MV water costs are expected to increase by **55% over the next 5 years**
 - Primary increased cost in 2022 is debt service required to fund its \$2.7B capital plan (ie 5 new water tunnels in the region)
- MV sewer costs are expected to increase by over **113% over the next 5 years**
 - Primary increased cost in 2022 is debt service/contributions to future capital spending (ie North Shore Waste Water Treatment Plant)

Background

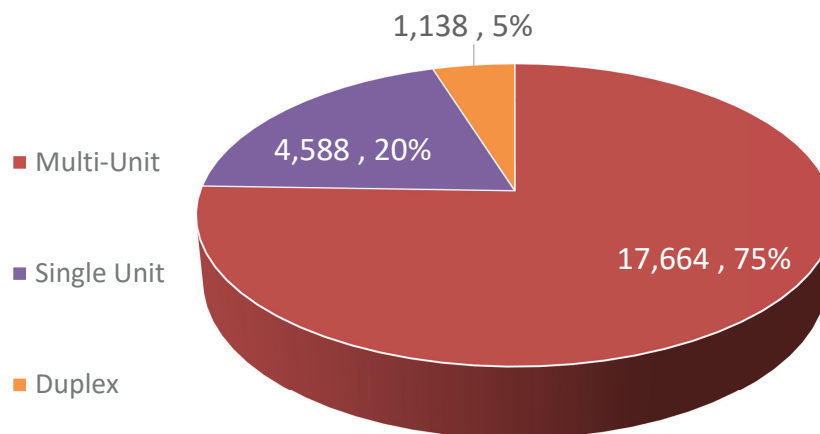
Significant Future Increases in MV Rates coming:

- Iona Island Waste Water Treatment Plant
 - Design and Early Works planned for late 2022
 - Secondary Treatment Compliance 2034



Background

CNV Flat Rate Customer Breakdown:



- Multi-Units make up the majority of CNV Housing stock

Asset Management



ASSET MANAGEMENT ROADMAP

FOUNDATIONS ●

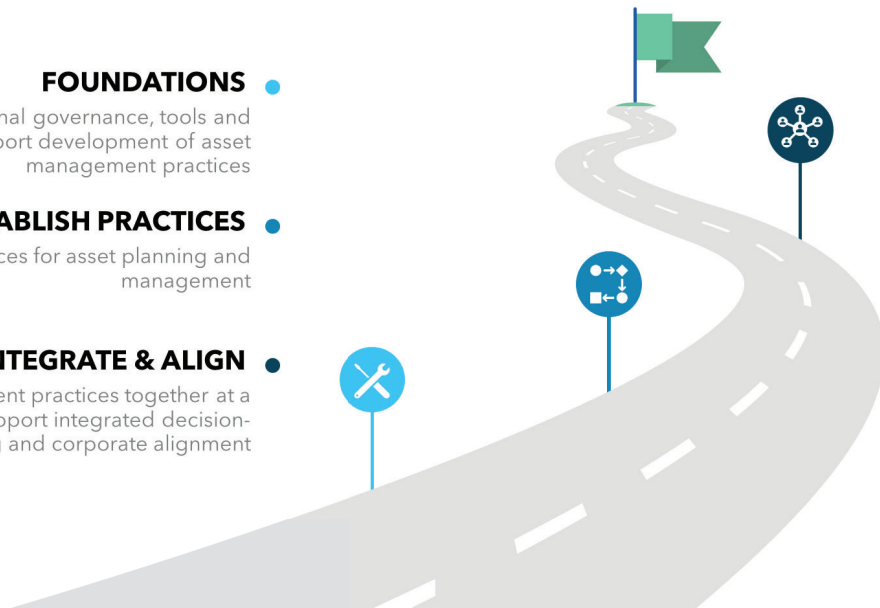
Build the foundational governance, tools and approaches to support development of asset management practices

ESTABLISH PRACTICES ●

Establish critical practices for asset planning and management

INTEGRATE & ALIGN ●

Bring asset management practices together at a corporate level to support integrated decision-making and corporate alignment

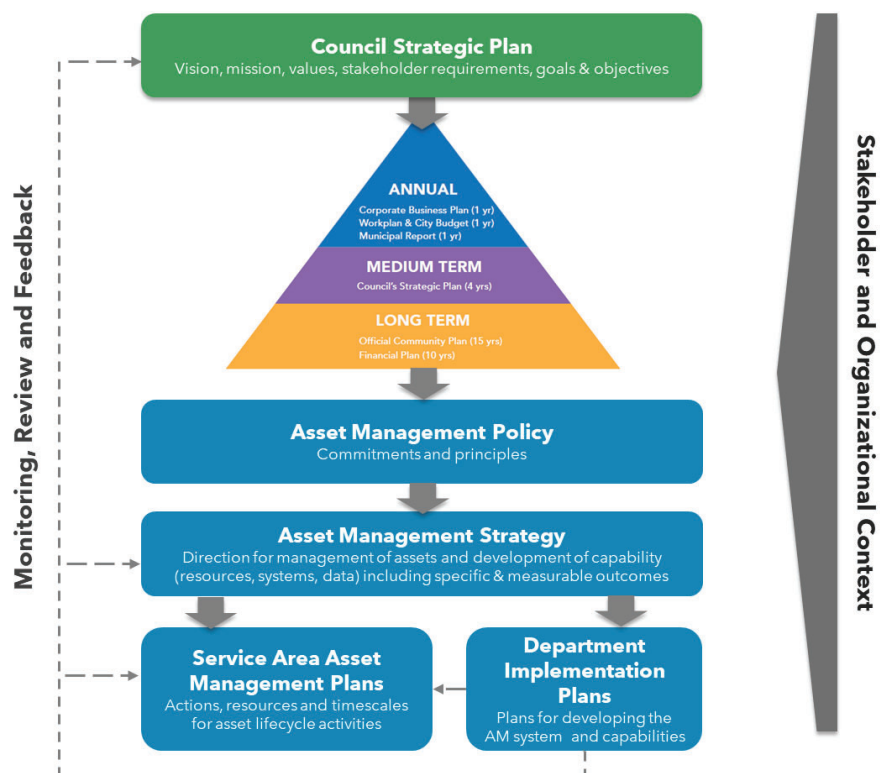


Asset Management

ASSET MANAGEMENT BC FRAMEWORK For Sustainable service Delivery



Asset Management



Utility Rate Options:

#1 Smoothed Rate Plan

Multi-Unit

Option #1 \$	2021	2022	2023	2024	2025	2026
Water	\$301	\$320	\$340	\$361	\$383	\$403
Sanitary Sewer	\$277	\$309	\$345	\$385	\$430	\$480
Drainage*	\$48	\$50	\$52	\$55	\$57	\$60
Eco Levy*	\$24	\$25	\$27	\$28	\$29	\$31
Total Multi-Unit	\$650	\$704	\$764	\$829	\$900	\$973
YoY Change	\$42	\$54	\$60	\$65	\$71	\$74

Option #1 %	2021	2022	2023	2024	2025	2026
Water	5.1%	6.3%	6.1%	6.1%	6.0%	5.1%
Sanitary Sewer	8.0%	11.6%	11.7%	11.6%	11.7%	11.6%
Drainage*	5.0%	5.0%	5.0%	5.0%	4.0%	4.0%
Eco Levy	15%	3.6%	5.1%	5.3%	5.0%	5.1%
Total Multi-Unit	6.8%	8.3%	8.5%	8.5%	8.5%	8.2%

NSWWTP Reserve	\$3.4M	\$4.2M	\$4.6M	\$3.9M	\$2.2M	\$1.0M
----------------	--------	--------	--------	--------	--------	--------

Utility Rate Options:

#2 Delayed Action Plan

Multi-Unit

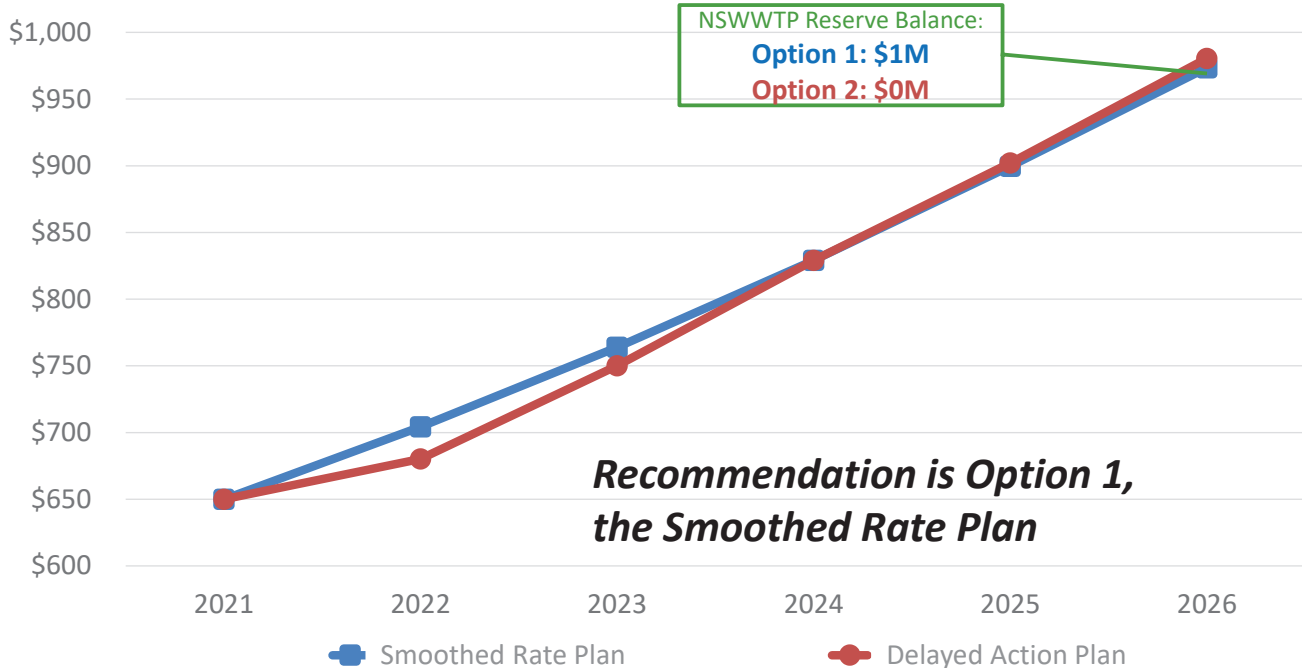
Option #2 \$	2021	2022	2023	2024	2025	2026
Water	\$301	\$314	\$336	\$360	\$382	\$405
Sanitary Sewer	\$277	\$291	\$335	\$386	\$433	\$485
Drainage*	\$48	\$50	\$52	\$55	\$58	\$60
Eco Levy*	\$24	\$25	\$27	\$28	\$29	\$30
Total Multi-Unit	\$650	\$680	\$750	\$829	\$902	\$980
YoY Change	\$42	\$30	\$70	\$79	\$73	\$78

Option #2 %	2021	2022	2023	2024	2025	2026
Water	5.1%	4.3%	7.0%	7.1%	6.1%	6.0%
Sanitary Sewer	8.0%	5.1%	15.1%	15.2%	12.2%	12.0%
Drainage*	5.0%	5.0%	5.0%	5.0%	5.0%	4.0%
Eco Levy	15%	3.6%	5.1%	5.3%	5.0%	3.3%
Total Multi-Unit	6.8%	4.7%	10.3%	10.5%	8.8%	8.7%

NSWWTP Reserve	2021	2022	2023	2024	2025	2026
	\$3.4M	\$3.4M	\$3.4M	\$2.9M	\$1.2M	\$0M

Utility Rate Options

Multi-Unit



Water System

- 131 km with average age:~52 years
- 6,700 water connections
- 730 hydrants
- Forecasting significant replacement of small diameter cast iron pipe
- MV water charges increasing 6.1%



Water Utility: 2022 Multi-Unit Increase of \$19

Explanation	Increase
Water Purchases increase due to Metro rate increase of 4.1%, and a forecasted increase in consumption	
Impact of Metro Rate increase: \$7.20	\$7.80
Impact of increased volume forecast: <u>\$0.60</u>	
Net impact to water purchases \$7.80	
Water Op's and Administration increase dues to wages and financial costs	\$3.20
Capital and Reserves: Net increased by \$0.34M. Reserve transfers used for fund future capital work.	
Transfer to Capital (-\$260K): (\$6.10)	\$8.20
Net Transfers to Reserves (+\$610K): <u>\$14.30</u>	
Net impact \$8.20	
Other Increases to other revenues (Fees etc.)	(\$0.20)
2022 Water Utility Rate Increase:	\$19.00

Sewerage & Drainage Systems

Sanitary Sewer

- 124 km with average age: ~63 years
- 6,800 service connections
- MV Sewer levy up by 6.1%
- New NSWWTP will drive significant future rate increases

Storm Sewer

- 153 km with average age: ~47 years
- 5,400 service connections
- Storm system vulnerable to climate change

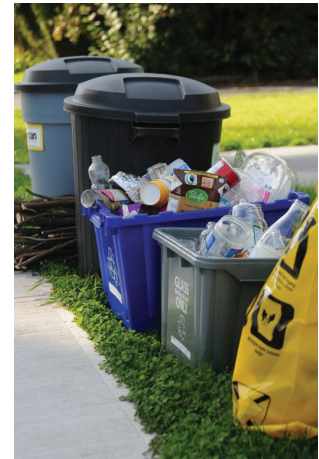


Sanitary Sewer Utility: 2022 Multi-Unit Increase of \$32

Explanation	Increase
Metro Levy GVS&DD charges increased by 6.1%	\$11.40
Sanitary Operations & Admin: Increase of \$67K	\$1.70
Capital Projects/Maintenance increased \$0.4M	
Transfer to Capital (+)\$525K \$13.00	
Capital Maintenance (+)\$70K <u>\$1.80</u>	\$14.80
Net Impact	\$14.80
Transfers to Reserves (net) increased for NSWWTP, offset by increased reserve usage for Capital Projects	\$4.50
Other Increases to other revenues (Fees etc.)	(\$0.20)
2022 Sewer Utility Rate Increase:	\$32.00

Solid Waste Service

- Refuse and Green Can Service to 7,836 households
- Covid 19 impacts (2020 statistics)
 - Residential refuse increased 7% (to 220 kg/household)
 - Green Can increased 12% (to 420 kg/household)
 - Streetscape and Parks refuse increased 30% over 2019 (190 tonnes)
 - Corresponding 9% regional decrease in commercial sector
 - Overall impact is increased quantities and costs for municipalities
- 2022 Metro Vancouver fees increases
 - 3.4% to \$121/T for Refuse
 - 8% (to \$108/T) for Green Can



Eco Levy: *2022 Multi-Unit Increase of \$1*

Explanation	Increase
Increased Seasonal Litter Collection (\$54K)	\$0.60
New Positions (\$7.9K) Eco Levy component of new Development techs and Revenue manager.	\$0.10
Other (\$26.1K) Inflationary and other operations changes	\$0.30
2022 Eco Levy Increase:	\$1.00

New Items

	Total	Water	Sanitary	Storm	Refuse	Eco Levy	Green Bin
RFT Dev Tech 1	\$60,900	\$28,900	\$15,000	\$15,000	-	\$2,000	-
RFT Dev Tech 2	\$66,000	\$31,400	\$16,200	\$16,200	-	\$2,000	-
Environmental Coordinator	\$138,800	\$13,800	-	\$62,500	-	-	\$62,460
Finance Manager	\$37,000	\$12,900	\$9,300	\$3,700	\$3,700	\$3,700	\$3,700
Tech Assistant 1	\$26,500	\$26,500	-	-	-	-	-
Seasonal Litter Collection (TFT)	\$54,000	-	-	-	-	\$54,000	-
Cost	\$383,200	\$113,500	\$40,500	\$97,400	\$3,700	\$61,900	\$66,200
Rate Impact*		0.9%	0.4%	3.8%	0.4%	4.9%	6.9%

*Numbers shown above are the full impact to Utilities from the new items. Rate impact is spread over 2 years, as it assumes a mid-year start for new items in 2022.

➤ The New Items result in a **1.65% rate increase, or \$22.50** to an average Multi-Unit.

Rate Recommendations

Smoothed Rate Plan

Multi-Unit	2021 Rate	2022 Rate	\$ Increase	% Increase
Water	\$301.00	\$320.00	\$19.00	6.3%
Sanitary Sewer	\$277.00	\$309.00	\$32.00	11.6%
Drainage*	\$47.53	\$49.91	\$2.38	5.0%
Solid Waste*	\$24.43	\$25.30	\$0.87	3.6%
Total Single Unit	\$649.97	\$704.21	\$54.25	8.3%

Single Unit	2021 Rate	2022 Rate	\$ Increase	% Increase
Water	\$514.00	\$545.00	\$31.00	6.0%
Sanitary Sewer	\$444.00	\$496.00	\$45.00	10.1%
Drainage*	\$97.48	\$102.35	\$4.87	5.0%
Solid Waste*	\$307.10	\$328.90	\$21.80	7.1%
Total Single Unit	\$1,362.58	\$1,472.25	\$109.67	8.0%

* Estimated

Rate Recommendations

Looking Back

5-year Combined Multi-Unit Rates

	2017	2018	2019	2020	2021	2022
Water	9.00	(5.70)	14.30	11.50	15.00	19.00
Sanitary Sewer	8.60	21.90	25.70	16.60	21.00	32.00
Drainage*	5.60	1.20	5.00	2.30	(1.30)	2.00
Solid Waste*	-	-	-	1.60	6.40	1.00
Total Multi-Unit	23.20	17.40	45.00	32.00	41.10	\$54.00

*Estimated

- Driven by increased MV charges and CNV capital spending, 2022 rates will be higher than in the past, but near 2021 levels

Rate Recommendations

Compared to 2020 Council Presentation

Shown to Council in 2020:

	2020	2021	2022	2023	2024	2025
Water	4.2%	5.1%	5.1%	5.0%	6.2%	6.1%
Sanitary Sewer	7.1%	8.0%	10.1%	12.1%	13.1%	13.1%
Drainage*	4.0%	5.0%	5.0%	5.0%	4.0%	4.0%

Current Recommendation:

	2020	2021	2022	2023	2024	2025
Water	4.2%	5.1%	6.0%	6.1%	6.1%	6.0%
Sanitary Sewer	7.1%	8.0%	11.7%	11.7%	11.6%	11.7%
Drainage*	4.0%	5.0%	5.0%	5.0%	5.0%	4.0%

- Recommended 2022 Utility rate increases are near the rates previously forecast

Rate Recommendations

North Shore Comparative

Multi Unit Estimates

2021	CNV	DNV	DWV
Water	\$301	\$658	\$383
Sewer	328	612	919
Solid Waste	25	15	48
Total Single Unit	\$655	\$1,284	\$1,296

- CNV's Utility charges remain well below those of the other North Shore municipalities

Rate Recommendations

Utility Rates Value: "A Comparative View"



Typical 2021 Multi Family
Utilities cost was \$655

Utility Services

- Drinking water
- Sewer services
- Storm drainage and flood prevention
- Garbage collection at home
- Green Bin services
- Litter collection from parks and streets
- Cigarette waste collection
- "Red bin" dog waste collection



Estimated rate increase = \$54

What does \$54/month get you?

Monthly phone bill

or

Dinner out for 1

or

Streaming Subscriptions

or

Capilano Suspension Bridge Ticket

or

3 trips down the Grouse Grind

or

Family Movie Night


Next Steps

- Manage Utility infrastructure assets to optimize service life and ensure long term system viability
 - Asset Management Strategy
 - Asset Management Plans
- Work with MV on the review and update of Integrated Solid Waste and Resource Management Plan
- Work with MV to obtain long range financial planning information for regional systems

Next Steps

Date	Items for Discussion
November 22, 2021	2022 Utilities Rates at Council
December 2021	Utility Rates Bylaw at Council
January 2022	Utility bills sent to residents
February 2022	Utility payments due



	
Director	CAO

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

INFORMATION REPORT

To: Mayor Linda Buchanan and Members of Council

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

Subject: 2022 WATER UTILITY UPDATE

Date: November 09, 2021 File No: 11-5600-01-0001/2022

PURPOSE

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

BACKGROUND

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

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

DISCUSSION

Bulk water purchases from the GVWD account for more than half of the total expenses of the City's Water Utility. For 2022 the main cost drivers are the increase in the price of bulk water as well as funding for infrastructure renewal projects.

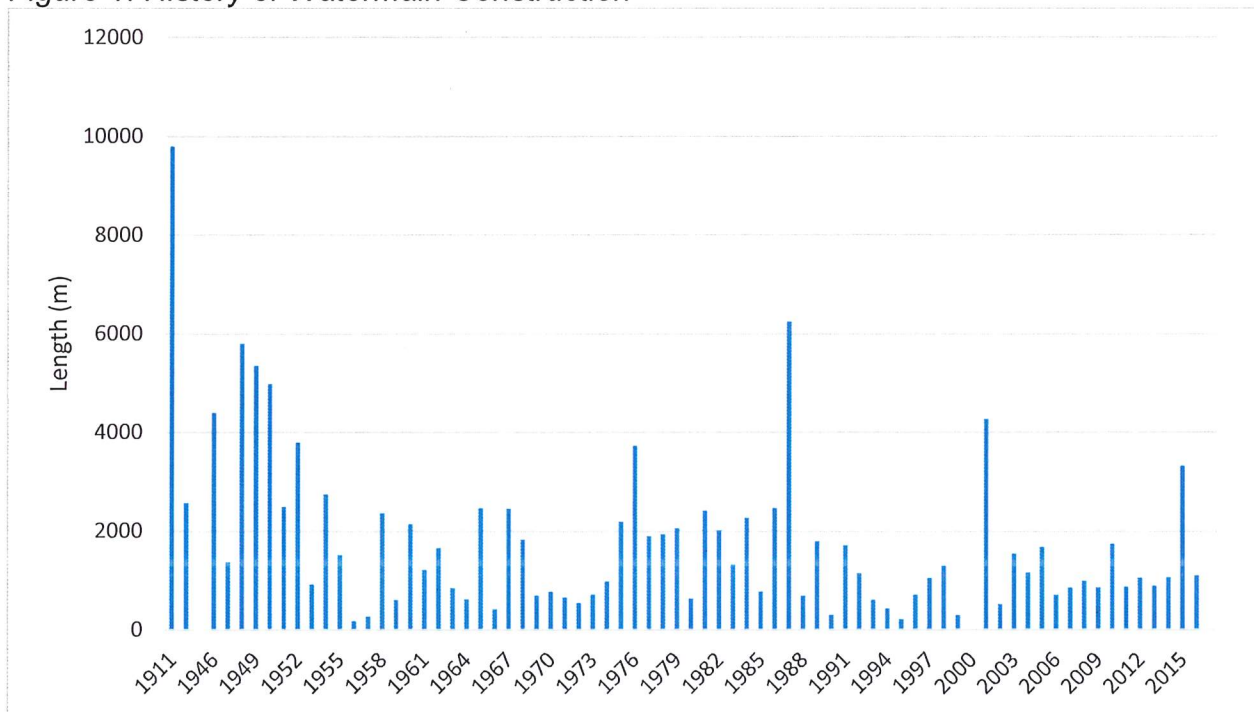
Water Utility Infrastructure Renewal

The average age of the City's water system is approximately 52 years old (by pipe length) and generally comprises the following primary components:

- 131 kilometres of watermains;
- 6,700 water service connections;
- 730 fire hydrants;
- 12 pressure reducing stations; and,
- 20 water quality sample stations.

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

Figure 1: History of Watermain Construction



For long-term financial planning of overall water system replacement, an average annual replacement target of 0.8% (1,000 metres per year) is included in the Official Community Plan (OCP). This annual target provides a simplistic approach to plan how much of the total system should be replaced each year and is based on the assumption that the average economic life of a watermain is 125 years.

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

years. Similarly, land-use changes create different system demands that may trigger system upgrades to increase capacity.

Looking ahead to the next 10-15 years, a large quantity of small diameter cast iron watermains will continue to be the focus of the annual replacement program. For 2022, watermain replacements are proposed for the 100 block West 27th Street to deal with ongoing water quality concerns related to the small diameter cast iron pipe, as well as the 200 block East 23rd Street to increase capacity to support redevelopment of the Harry Jerome Recreation Centre and neighbourhood lands. Funding is also proposed to replace the pressure regulating valve (PRV) station in Victoria Park which has reached the end of its service life. The new PRV station will be coordinated with construction of a new washroom building in the park.

In addition to watermain replacement, EPE administers ongoing proactive programs to replace aging water service connections, add new and replace old hydrants, as well as improve the overall water system to add redundancy and improve reliability. The budget also provides funding for technical studies and planning tools for the water system. Highlights for 2022 include an asset management plan for the overall water utility.

2022 Water Utility Budget

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

- Water Studies: annually funded, periodic studies, or updates to planning tools;
- Water Capital Projects: one time large construction projects for new or replacement of existing watermains and structures;
- Ongoing Capital Maintenance: annually funded construction of small components in the water system; and,
- Water Operations: funding for daily activities to support water utility reliability.

Table 1 presents the breakdown of the proposed 2022 water utility budget:

Table 1: 2022 Water Utility Budget

Utility Area	Description	Pre-Design Budget
Water Studies	Water Model	\$20,000
	Record Keeping/As Built Project	\$25,000
	Utility Benchmarking	\$20,000
	Water Conservation Plan	\$20,000
	Water Studies Total:	\$85,000
Water Capital Projects	Watermain Replacement - 200 Block East 23rd	\$400,000
	Watermain Replacement - 100 West 27th	\$360,000
	Watermain Replacement - 400 West 27th	\$340,000
	PRV Station Replacement - Victoria Park	\$430,000
	Water Projects Total:	\$1,530,000
Ongoing Capital Maintenance	Water Service Connection	\$300,000
	Water Valve Replacement Program	\$100,000

	Water Meter Replacement Program	\$140,000
	Water Pressure Reducing Station Capital Upgrades	\$50,000
	Water Hydrant Replacement Program	\$25,000
	Water System Sampling Stations	\$15,000
	Redundant Watermain Decommissioning	\$75,000
	Mainline Trench Restoration	\$45,000
	TFT Infrastructure Engineer	\$60,000
	Water Programs Total:	\$810,000
Water Operations	Watermain Repair	\$154,000
	Watermain Flushing	\$52,000
	Water Sampling	\$22,000
	Water Valve Inspection and Maintenance	\$52,000
	Water Service Repair	\$42,000
	Water Service On/Off	\$22,000
	Water Service Inquiries	\$42,000
	Backflow Device Inspection & Maintenance	\$27,000
	Water Meter Repairs	\$27,000
	Water Meter Reading	\$47,000
	Hydrant Repair	\$15,000
	Hydrant Preventative Maintenance	\$69,000
	PRV Station Inspection	\$30,000
		Water Maintenance Total:
Water Equipment	Small Tools and equipment	\$10,000
		Water Equipment Total:

Water Utility Total: **\$3,036,000**

Connection and Severance Fees

Staff is proposing a 4% inflationary increase in connection and severance fees. These fees are intended to ensure the fee covers the actual cost of the work. All larger diameter water connections are charged at cost.

Water Utility Efficiency and Incentives

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

The City adopted a Water Conservation Strategy in 2015 and implementation of the strategy continues to raise awareness around water use and conservation. In 2022, the City will continue with several actions in the plan, including:

- Expanding the leak detection program to actively monitor and correlate leak locations on both the public and private systems with leak listening equipment;

- Continuing the “meter ready” program, where all new service connections and developments are required to install water meters; and,
- Supporting water and energy conservation programs, such as the BC Hydro appliance rebate program.

During the summer of 2021, regional water use increased significantly above historic levels for most of July and August. This increased water use was attributed to the drought and lawn sprinkling, so after consulting with municipalities, Metro Vancouver recently updated Stage 1 of the regional Drinking Water Conservation Plan to reduce lawn sprinkling to one day per week between May 1st and October 15th each year starting in 2022. Staff will bring a corresponding amendment to the City’s Drinking Water Conservation Plan Bylaw to Council early in 2022.

FINANCIAL IMPLICATIONS

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

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

INTER-DEPARTMENTAL IMPLICATIONS

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

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

The 2018-2022 Council Strategic Plan identifies a vision to create the Healthiest Small City in the World, through five key priorities. Provision of an affordable, safe, and sustainable water utility to meet the needs of future residents supports the priorities of:

- A City for People; and
- A Liveable City.

The annual water utility project plan provides ongoing operation, asset management and renewal of our water system. The utility is fundamental for all residents and businesses in the City with overarching goals for public health and safety.

The 2014 Official Community Plan includes the guiding principles to serve the community vision for infrastructure management, which reads as follows:

- Goal 8.1 Provide the community with public infrastructure that protects the natural environment at an affordable cost;
- Goal 8.2.1 Maintain or improve service levels related to water supply, sewers, transportation, communication and energy infrastructure;

- Goal 8.2 Employ a proactive approach to infrastructure maintenance and upgrades;
- Goal 8.2.2 Identify and monitor the condition of our infrastructure on a regular basis in order to identify the remaining operation life of individual elements, and to identify and rectify weaknesses before failure, thereby optimizing capital and maintenance program expenditures;
- Goal 8.3 Use innovative planning and design to ensure infrastructure longevity.

RESPECTFULLY SUBMITTED:



Douglas T. Pope, P.Eng.
Director, Engineering, Parks and Environment



Director	CAO
----------	-----

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

INFORMATION REPORT

To: Mayor Linda Buchanan and Members of Council

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

Subject: 2022 SEWERAGE AND DRAINAGE UTILITY UPDATE

Date: November 9, 2021 File No: 11-5340-01-0001/2022

PURPOSE

The purpose of this report is to provide Council with information related to the operation and infrastructure management of the Sewerage and Drainage Utility for the upcoming 2022 Sewerage and Drainage Utility Project Plan review. This report is a companion document to the rate setting report.

BACKGROUND

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

The Drainage component of the Utility provides for the collection and conveyance of rainstorm water run off from individual properties and City streets to discharge locations into creeks and Burrard Inlet. The system is similarly comprised of service connections, mains and manholes, but also includes infiltration areas (wherever possible) as well as culverts, ditches, catch basins, and oil and sediment removal systems.

DISCUSSION

The Greater Vancouver Sewer and Drainage District (GVS&DD) levy accounts for approximately half of the total expenses for the City's Sewerage and Drainage Utility. For 2022 the main cost drivers for the City utility are the increase in the regional GVS&DD levy, an \$800,000 allocation toward the sewer and drainage reserve which will smooth the rate jump anticipated when the North Shore Wastewater Treatment Plant comes on

line, incremental extension of the storm sewer system as well as replacement and renewal of storm sewer and sanitary sewer infrastructure.

The Engineering Planning and Design staff work in cooperation with Operations staff to create the optimal approach for operating, maintaining and repairing these assets as well as capital replacement and renewal efforts to maximize their life and minimize the system cost impacts on the ratepayer. For each asset component to have the longest possible operational life, it must be maintained and repaired and then, at end of life, be replaced.

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

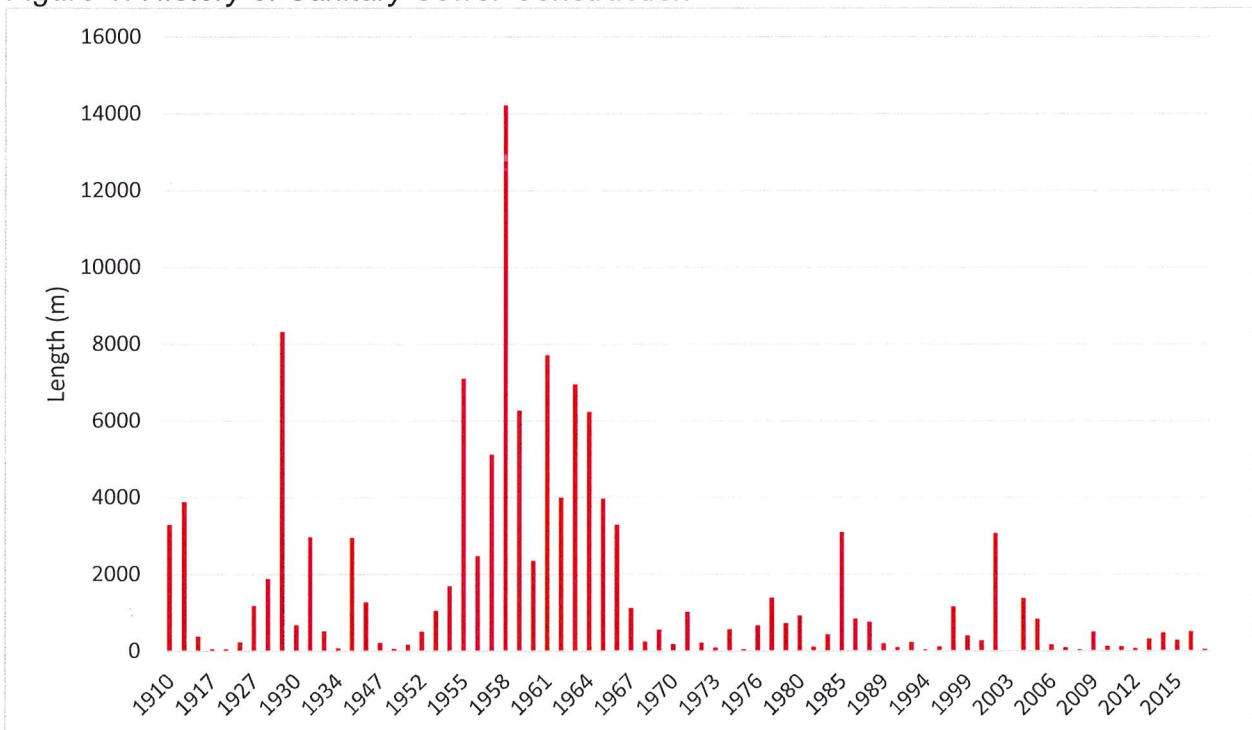
Sanitary Sewer System

The average age of the City's sanitary sewer system is approximately 63 years old, based on total pipe length, and was constructed between 1910 and the present, as shown in the following Figure 1. The peak period of sanitary sewer construction occurred during the 1960s, when many of the City's subdivisions were constructed.

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

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

Figure 1: History of Sanitary Sewer Construction



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

Sanitary System Condition Assessment

In 2015, staff initiated a methodical CCTV inspection program to assess the condition of the sanitary sewer system. The goal is to inspect between 5-10% of sanitary sewer main each year starting with the oldest areas first. To date, approximately one-third (45 kms) of the total length of sanitary mains have been inspected using CCTV to assess pipe condition. Current staff vacancies have delayed the detailed processing and analysis of these inspections, but the results generally indicate 25% of the pipes already inspected are in poor condition, 25% in fair condition, and 50% in good condition.

Detailed analysis of the latest CCTV inspections will be completed early in 2022 and will help prioritize future infrastructure renewal projects and will also inform the sanitary sewer asset management plan currently under development.

Sanitary System Infrastructure Renewal

For long-term financial planning of overall sanitary system replacement, an annual replacement target of 1.0% (1,240 metres) is included in the Official Community Plan (OCP). There are two main ways to extend the life of sewer mains: to excavate and replace them, or to reline them in-place without any digging. The cost to reline sewer mains is about 20% of the cost to excavate and replace them, and the goal is to structurally reline mains where possible. Relining is possible if the sewer main is in sufficiently good condition and has enough capacity for the future. If the sewer does not have sufficient capacity, then the main must be replaced with a larger pipe.

2022 Proposed Sewerage Budget

Table 1 on the following page presents the breakdown of the sewerage portion of the proposed 2022 budget. The budget is comprised of four main areas: studies, one-time capital projects, annual capital programs, and operations.

Studies are capital projects that may occur annually or less frequently to support utility planning and asset management. The largest study item is the annual condition assessment and CCTV program, which is core to ongoing sewer asset management.

In 2022, the capital projects continue to focus on relining efforts as well as two sewer main replacement projects to coordinate with redevelopment projects.

Table 1: 2022 Sewerage Budget

Utility Area	Description	Pre-Design Budget
Sewerage Studies	Sanitary Model Update and Calibration	\$ 10,000
	Annual CCTV and Sanitary Sewer Condition Assessment Reporting	\$ 100,000
	Record Keeping/As Built Project	\$ 20,000
	Sewer Utility Benchmarking	\$ 20,000
	Sewerage Studies Total:	\$150,000
Sewerage Capital Projects	Sanitary Main Capital Renewal - Relining	\$146,000
	Sanitary Main Replacement: 200 East 13th (VGH)	\$205,000
	Sanitary Main Replacement: 100 West 20th	\$75,000
	Sanitary Main Replacement: St Davids 1st to 3rd	\$306,000
	Sewerage Projects Total:	\$732,000
Ongoing Capital Maintenance	Sanitary Sewer System - Renewal / Replacement by Area	\$400,000
	Sanitary Sewer IC and Connection Program	\$100,000
	Sanitary Sewer Private Side - I&I Management	\$200,000
	Trench Restoration Contingency	\$45,000
	Sanitary Sewer Manhole Replacement	\$35,000
	TFT Infrastructure Engineer	\$30,000
	Sewerage Programs Total:	\$810,000
Sewerage Operations	Sanitary Sewer Flow Monitoring Program	\$30,000
	Capital Paving	\$5,000
	Concrete Sidewalk Construction	\$5,000
	Pump Repairs - Pump Station Maintenance	\$20,000
	Pump Station Monitoring	\$10,000
	Sanitary Main Cleaning	\$15,000
	Sanitary Main Inspection	\$10,000
	Sanitary Main Repair or Grouting	\$50,000
	Sanitary Manhole Adjust / Repair / Inspection	\$10,000
	Sanitary Service Repair / Blockage Assistance / Video	\$85,000
	Small Equipment Service	\$1,000
	Wet Well Cleaning	\$15,000
	Sewerage Maintenance Total:	\$256,000
Sew/Drge Equipment	Small Tools and equipment	\$15,000
	Sewerage & Drainage Equipment Total:	\$15,000

Sewerage Utility Total: **\$1,963,000**

Budget Provision for New North Shore Wastewater Treatment Plant

Over the past several budget cycles, Council has approved budget allocations to the sewer and drainage reserve to reduce future rate shock for the North Shore Waste Water Treatment Plant (NSWWTP). Council approved a \$600,000 contribution to the reserve in 2018, \$600,000 in 2019, \$400,000 in 2020 and 2021. For 2022, staff propose an \$800,000 allocation.

Construction of the new NSWWTP is currently paused while Metro Vancouver determines how to proceed. It is expected that the total cost of the treatment plant will be significantly higher than estimated and that higher costs to the sewer utility rate will be needed in the coming 3-5 years.

Sanitary Sewer Connection and Severance Fees

Staff is proposing a 4% inflationary increase in connection and severance fees. These increases are intended to ensure the fee covers the actual cost of the work. All large diameter sanitary sewer connections are charged at cost.

Inflow and Infiltration

Rainwater inflow and groundwater infiltration (inflow and infiltration) into the sanitary sewer system consumes capacity in the both the City's and Metro Vancouver's sewer mains, as well as in the treatment plant. The City of North Vancouver along with the District of North Vancouver and a number of other Metro Vancouver municipalities have chronic inflow and infiltration where the peak sanitary sewer flows during wet weather are many times higher than during dry weather. Consequently, the cost of sewer treatment is much higher because rainwater and groundwater is being collected and treated. This may also result in a premature need to upgrade sewer pipes and increase capacity to prevent untreated sewage being released to Burrard Inlet during large rainfall events.

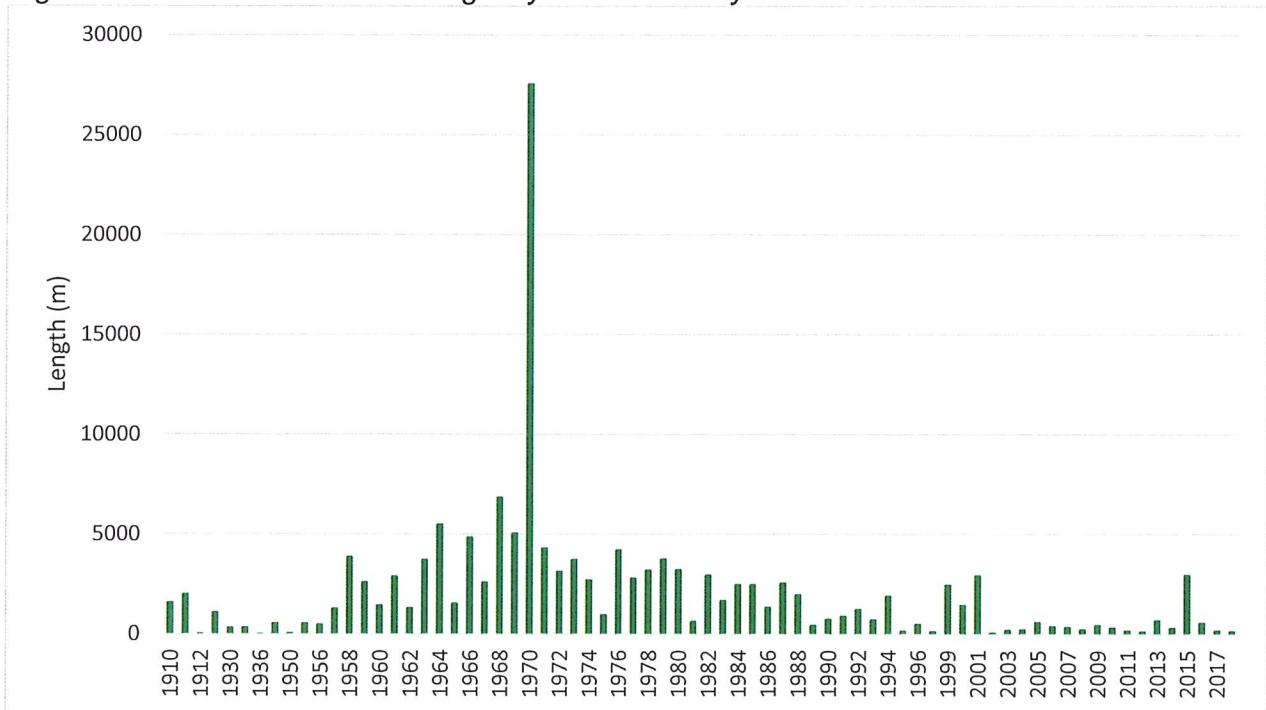
Rainwater inflow typically occurs where drainage infrastructure such as downspouts and foundation drains are connected to the sanitary sewer system. System testing during the summer of 2021 identified several properties with rainwater connections to the sanitary system. This is in contravention to the Sewer Use Bylaw and is a leading contributor to inflow and infiltration, however there has historically been no incentive, for property owners to address the problem. In 2021 a revision to the bylaw was approved to charge a surcharge fee for any property with a known source of inflow from a combined rainwater connection. The surcharge is 100% of the annual flat rate or metered sewerage fee, and would be applied until the issue is resolved.

Groundwater infiltration typically occurs through defects such as cracks or holes in the pipes or leaky joints. Over the past twenty years, the City has proactively worked to repair these defects in sewer mains to minimize infiltration. While this work has successfully limited infiltration into the sewer mains, it also revealed that service connections (the pipe connecting the building to sewer main) are a significant source of infiltration. These connection pipes typically comprise a public portion between the sewer and main and the property line and a private portion between the property line and the building. This presents a complex situation to determine who and how to repair defects/leaks on these pipes which span public and private infrastructure. This will likely be an area of emerging importance and attention for the next several years and the City will explore methods to support and incentivize repair to private connection leaks to reduce the wet weather flows.

Storm Sewer and Drainage System

The average age of the City's storm sewer and drainage system is approximately 47 years, based on pipe length. While some storm sewers in Lower Lonsdale date back to the 1910s, much of the storm sewer system was constructed during the 1960s and 1970s. Figure 2 shows the history of storm sewer construction.

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



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

The storm sewer system generally comprises the following primary components:

- 153 kilometres of storm sewer main;
- 1,550 manholes;
- 5,400 storm service connections;
- 3,200 catch basins; and,
- Two detention ponds (Wagg and Tempe).

The majority of the storm sewer mains are concrete pipe, but since the mid-1980s, most storm sewers have been constructed using PVC pipe, which is more efficient for construction.

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

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

Storm Sewer System Condition Assessment

Similar to the sanitary system, in 2015 staff initiated a methodical condition assessment program of the storm sewer system. Current staff vacancies have delayed the detailed processing and analysis of recent inspection information. Detailed analysis of the latest CCTV inspections will be completed early in 2022 and will help prioritize future infrastructure renewal projects and will also inform the storm sewer asset management plan currently under development.

Storm Sewer and Drainage System Infrastructure Renewal

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

Future storm system capacity planning considers the anticipated increase in total impervious (hard surface) area contained in the OCP as well as potential increased precipitation due to climate change. In March 2017, Council endorsed the Integrated Stormwater Management Plan (ISMP) which is an approach to improve overall watershed health, but also serves to extend the service-capacity life of the storm sewer system. Environmental monitoring is conducted every two years in accordance with the City's Environmental Protection Plan (2000). This program has been adapted in recent years to meet regulatory requirements from Ministry of Environment and Climate Change, and is showing that ecological health of City of North Vancouver streams is either improving or is not be degraded by current development patterns.

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

incrementally extend the storm sewer system to unserved blocks. Project locations are coordinated with private developments to provide service to new buildings on unserved blocks. Continuing this approach will extend service to all blocks over the next 20 to 30 years, and will also limit the rainwater inflow into the sanitary sewer.

2022 Drainage Budget

The Drainage budget, like the Sewerage budget, has a studies component for non-construction related capital costs. These costs include pipe inspection and condition assessment as well as programs for operational review and consulting services. In 2022, the studies component is primarily for pipe condition inspections and assessment.

In 2022, the Drainage Capital Plan includes funding for the replacement of the storm sewer on St Davids between Alder and 3rd to service growth in the Moodyville neighbourhood, as well as habitat and channel improvements in Mosquito Creek. The remainder of the new drainage capital project plan is directed to the construction of smaller storm sewers in blocks that do not currently have drainage mains.

Table 2 presents the breakdown of the drainage portion of the proposed 2022 budget.

Table 2: 2022 Proposed Drainage Budget

Utility Area	Description	Pre-Design Budget
Drainage Studies	Record Keeping/As Built Project	\$20,000
	CCTV Inspection and data management	\$100,000
	Environmental Monitoring (MAMF)	\$40,000
	Drainage Model Update and Calibration	\$20,000
	Infrastructure Benchmarking	\$20,000
	Drainage Studies Total:	\$200,000
Drainage Capital Projects	Stormmain - St Davids: Alder to 3rd	\$150,000
	Stormmain Development Supported Infill	\$410,000
	Drainage Projects Total:	\$560,000
Ongoing Capital Maintenance	Storm Service IC Installation and Connection Replacement	\$52,000
	Storm Manhole Installation	\$27,000
	Catch Basin Installation	\$52,000
	Driveway Culvert Installation	\$10,000
	Creek - Slope Stability and Hazard Management	\$100,000
	Trench Restoration for Mainline Projects	\$45,000
	Stormwater Treatment Facilities	\$225,000
	Creek Environmental Improvements	\$300,000
	Culvert Capital Improvements	\$50,000
	TFT Infrastructure Engineer	\$30,000
	Drainage Programs Total:	\$891,000
Drainage Operations	Storm Main Repair	\$32,000
	Storm Main Blockage Response	\$22,000
	Storm Main Inspection	\$10,000
	Storm Main Cleaning	\$27,000
	Storm Connection Blockage Assistance / Video / Clear	\$52,000

	Storm Manhole Adjust / Repair / Inspection	\$15,000
	Catchbasin Adjust / Repair / Inspection	\$27,000
	Catchbasin Cleaning	\$42,000
	Culvert Repair / Clean	\$10,000
	Ditch Maintenance	\$15,000
	Water Course Maintenance	\$10,000
	Spill Response	\$52,000
	Drainage Maintenance Total:	\$314,000

Drainage Total: **\$1,965,000**

Storm Sewer Connection and Severance Fees

Staff is proposing a 4% increase in connection and severance fees in alignment with proposed increase for sanitary sewer connection fees. All larger diameter storm sewer services are charged at cost and all other fees remain unchanged.

Storm Sewer Efficiency and Incentives

The City’s storm sewer system is a combination of old and new infrastructure with a range in size and condition. As part of the City’s Integrated Stormwater Management Plan (ISMP), a number of initiatives have been developed to improve the utility efficiency, environmental performance, and longevity. The approach of the plan is to introduce rainwater source controls to lessen the impact of development and climate change on the City’s storm water utility and the natural receiving waters of Mosquito Creek, Mackay Creek, Lynn Creek, and Burrard Inlet. The strategy includes:

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

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

FINANCIAL IMPLICATIONS

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

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

INTERDEPARTMENTAL IMPLICATIONS

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

The 2018-2022 Council Strategic Plan identifies a vision to create the Healthiest Small City in the World, through five key priorities. Provision of an affordable, safe, and sustainable sewer and drainage utility to meet the needs of future residents supports the priorities of:

- A City for People; and
- A Liveable City.

The annual sewer and drainage utility project plan provides sustainable funding for ongoing operation, asset management and renewal of our sanitary and storm sewers. The utility is fundamental for all residents and businesses in the City with overarching goals for public health and safety.

The 2014 Official Community Plan includes the guiding principles to serve the community vision for infrastructure management, which reads as follows:


- Goal 8.1 Provide the community with public infrastructure that protects the natural environment at an affordable cost;
- Goal 8.2.1 Maintain or improve service levels related to water supply, sewers, transportation, communication and energy infrastructure;
- Goal 8.2 Employ a proactive approach to infrastructure maintenance and upgrades;
- Goal 8.2.2 Identify and monitor the condition of our infrastructure on a regular basis in order to identify the remaining operation life of individual elements, and to identify and rectify weaknesses before failure, thereby optimizing capital and maintenance program expenditures;
- Goal 8.3 Use innovative planning and design to ensure infrastructure longevity.

RESPECTFULLY SUBMITTED:



Douglas T. Pope, P.Eng.
Director, Engineering, Parks and Environment



	
Director	CAO

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

INFORMATION REPORT

To: Mayor Linda Buchanan and Members of Council

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

Subject: 2022 SOLID WASTE UTILITY UPDATE

Date: November 09, 2021 File No: 11-5380-01-0001/2021

PURPOSE

The purpose of this report is to provide background information regarding the City's Solid Waste Utility, which includes residential garbage, Green Can, and Eco Levy programs. This report is a companion document to the annual rate setting report.

BACKGROUND

The City's Solid Waste Utility provides for the collection and disposal of residential curbside garbage and the recycling of Green Can materials (yard trimmings and food scraps) from single-family homes and smaller multi-family buildings. As well, public realm litter collection (including parks, streetscape, and plazas) and community waste reduction initiatives are funded by the Eco Levy. As of July 1, 2020, responsibility for the residential recycling collection program now belongs to Recycle BC, the provincial stewardship group funded by the businesses that supply packaging and printed paper to BC residents.

DISCUSSION

Residential Solid Waste and Green Can Collection

The City provides collection and disposal of residential garbage and Green Can materials from single-family homes and multi-family properties with nine units or less that are appropriate for curbside collection. The garbage and Green Can material collected by City staff is then transported to the North Shore Recycling and Waste Centre, operated by Metro Vancouver. These materials are then transported by Metro Vancouver to facilities either within or outside of the region for processing.

Each year, Metro Vancouver establishes the rate or "tipping fee" for materials received at regional Waste and Recycling Centres, with separate rates for garbage and organics

(Green Can). The 2022 Metro Vancouver tipping fee for municipal garbage disposal will be \$121 per tonne, representing a \$4 per tonne increase from 2021.

The City and the Districts of North and West Vancouver have a new multi-year agreement with Metro Vancouver to receive the community's municipal organics at the North Shore Recycling and Waste Centre. The agreement begins on January 1, 2022 and expires June 30, 2026, and establishes the 2022 municipal organics tipping fee at \$108 per tonne, representing an \$8 per tonne increase from 2021. This increase is due to the costs of Metro Vancouver's recent contract for the transportation and off-site processing of the materials as well as the administration of this North Shore-specific service. Under the terms of the agreement, the organics tipping fee will increase to \$110 in 2023, \$113 in 2024, \$115 in 2025 and \$117 in 2026.

Recycling Service Update

As previously mentioned, since July 1, 2020, Recycle BC has taken responsibility for the delivery of residential recycling services on the North Shore. By transitioning residential recycling services to Recycle BC, the City is supporting the principles of extended producer responsibility. The cost of the recycling program and contract administration are no longer funded by City residents through the Recycling Levy in the Solid Waste Utility.

Recycling Drop-off Area at the North Shore Recycling and Waste Centre

Metro Vancouver operates the rebranded North Shore Recycling and Waste Centre (formerly the North Shore Transfer Station). The recycling drop-off area accepts a wide range of recyclable items including metal, electronics, paint, textiles and books. It also includes an ENCORP "Return-It Express" bottle return and in 2021, it added a used motor oil collection facility, funded by the BC Used Oil Management Association.

In previous years, the costs for the recycling portion of the North Shore Recycling and Waste Centre was funded by the three North Shore municipalities. However, beginning in 2022 the facility will be entirely funded by Metro Vancouver as part of the region-wide services, with the costs recovered as part of the regional tipping fees. This shift reduced the City's direct costs by approximately \$30,000 per year.

Residential Disposal Rates

The City continues to make progress in diverting food scraps and other organic material from the waste stream through the curbside Green Can program, along with implementation of bi-weekly garbage collection in 2014. Since that time, the City's residential refuse disposal tonnage had been steadily decreasing. However, with people spending more time at home due to the pandemic, the 2020 refuse tonnage increased by 7% from 2019 and Green Can tonnage increased by 13%. At the regional level, this increase in the residential sector was off-set by 9% decrease in disposal from the commercial sector. While the overall regional disposal rate has therefore remained consistent, the increasing volume of residential materials collected and the increased tipping fees have resulted in increasing overall costs for the City's residential collection service. Despite these changes, the City's overall diversion rate remained high at 73%, compared to the already high regional average of 64%.

Zero Waste Challenge

Management of the City's Solid Waste Utility is guided by the regional Integrated Solid Waste and Resource Management Plan (ISWRMP). The current ISWRMP was written in 2010 and Metro Vancouver is currently beginning the process of updating the plan over the next three years. Metro Vancouver will be supplying regular updates and opportunities for feedback.

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

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

The Climate and Environment Strategy (CES) will be the City's playbook to cut carbon pollution and promote a healthy environment, including actions to transition to Zero Waste. Staff are currently seeking feedback on the preliminary framework of vision, goals and set of strategies from the public and stakeholders. Initial strategies of the CES include reducing waste going to landfill, transitioning to a circular economy and increasing construction and demolition waste diversion. Following a second period of public and stakeholder input on the draft CES, the Strategy will be brought forward for Council consideration in early 2022.

Eco Levy

In 2011, the City implemented an Eco Levy so that waste diversion programs are funded by both residential and non-residential sectors. The Eco Levy ensures that the City's litter program and additional waste diversion initiatives, such as the provision of public realm recycling and the dog waste collection (red bin) program, are now managed and funded through the City's solid waste utility. Since the onset of the COVID-19 pandemic, the use of City parks, streetscapes and plazas has increased significantly. There was approximately 190 tonnes of streetscape and parks litter collected in 2020 representing an increase of approximately 30% from 2019. Additional funding for the Eco Levy program has been used to increase the number of multi-stream refuse and recycling receptacles in the public realm and the frequency of collection. These initiatives will support the City's waste diversion goals along with continuing to keep our parks and streets clean supporting the City's waste diversion goals.

FINANCIAL IMPLICATIONS

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

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

INTERDEPARTMENTAL IMPLICATIONS

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

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

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


Waste reduction is a significant factor in reducing greenhouse gas emissions and minimising the environmental impacts from the production and consumption of energy, goods, and the delivery of services in the community. Focusing resources on this work supports Council's Strategic Plan vision to be the "healthiest small city in the world" with a priority of creating "a liveable city" that leads the way in climate action and acts as a steward of the environment for future generations.

RESPECTFULLY SUBMITTED:



Douglas T. Pope, P. Eng.
Director, Engineering, Parks and Environment



 Department Manager	 Director	 CAO
---	---	--

The Corporation of **THE CITY OF NORTH VANCOUVER**
FINANCE DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Larry Sawrenko, Chief Financial Officer and Director of Finance

Subject: 2022 UTILITY RATES

Date: November 10, 2021 File No: 05-1820-01-0001/2022

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

RECOMMENDATION

PURSUANT to the report of the Chief Financial Officer and Director of Finance, dated November 10, 2021, entitled “2022 Utility Rates”:

THAT the following bylaws be considered:

- “Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2021, No. 8889”;
- “Sewerage and Drainage Utility Bylaw 1995, No. 6746, Amendment Bylaw, 2021, No. 8890”; and
- “Solid Waste Management Service, Bylaw 1997, No. 6920, Amendment Bylaw, 2021, No. 8891”.

ATTACHMENTS

1. Rates and Levies Summary (CityDocs [2115431](#))
2. 2022 Water Budget (CityDocs [2115434](#))
3. 2022 Sewerage and Drainage Budget (CityDocs [2115432](#))
4. 2022 Solid Waste Budget (CityDocs [2115433](#))
5. Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2021, No. 8889 (CityDocs [2115435](#))
6. Sewerage and Drainage Utility Bylaw 1995, No. 6746, Amendment Bylaw, 2021, No. 8890 (CityDocs [2115436](#))
7. Solid Waste Management Service, Bylaw 1997, No. 6920, Amendment Bylaw, 2021, No. 8891 (CityDocs [2115437](#))

SUMMARY

The purpose of this report is to provide Council with the financial impact and recommended bylaw amendments for the 2022 Utility Rates.

BACKGROUND

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

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

DISCUSSION

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

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

The proposed 2022 flat rate utility fees for a **multi-unit dwelling** are as follows:

Flat Rate Utility Fees Multi-Unit Dwelling	2021	2022	Net Change	Net Change %
Water	\$301.00	\$320.00	\$19.00	6.3%
Sewerage & Drainage				
Sewer	277.00	309.00	32.00	11.6%
Storm Drainage (average)*	<u>47.53</u>	<u>49.91</u>	<u>2.38</u>	5.0%
Net Sewerage & Drainage	324.53	358.91	34.38	10.6%
Solid Waste				
Eco Levy (average) *	24.43	25.30	0.87	3.6%
Total Flat Rate Utility Fee	\$649.96	\$704.21	\$54.25	8.3%

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

Approximately 75% of the City’s flat rate residential utility customer base is multi-unit dwellings. As such the above reflects the impact of the proposed 2022 utility rate increases for the majority of City residents.

The proposed 2022 flat rate utility fees for a **single unit dwelling** are as follows:

Flat Rate Utility Fees Single Unit Dwelling	2021	2022	Net Change	Net Change %
Water	\$514.00	\$545.00	\$31.00	6.0%
Sewerage & Drainage				
Sewer	444.00	496.00	52.00	11.7%
Storm Drainage (average)*	<u>97.48</u>	<u>102.35</u>	<u>4.90</u>	5.0%
Net Sewerage & Drainage	541.48	598.35	56.90	10.5%
Solid Waste				
Refuse	119.00	127.00	8.00	6.7%
Green Can	138.00	150.00	12.00	8.6%
Eco Levy (average) *	<u>50.10</u>	<u>51.90</u>	<u>1.80</u>	3.5%
Net Solid Waste	307.10	329.90	21.80	7.1%
Total Flat Rate Utility Fee	\$1,362.58	\$1,472.26	\$109.67	8.0%

Attachment #1 provides a summary of the proposed 2022 utility rates and levies by dwelling types. The summary also includes 2021 comparisons between the North Shore municipalities. It should be noted that the City’s utility rates are the lowest on the North Shore and continue to be competitive through the region.

Water Utility

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

The City’s proposed overall 2022 Water budget is \$14.3 million, a \$0.5 million increase over 2021. This overall budget is comprised of a \$10.3 million Operating Budget and a \$4.0 million Capital Budget (including reserves transfers).

	2021	2022	Change	%
Operating Expenses				
Operations	\$585,000	\$601,000	\$16,000	
Admin	9,343,100	9,794,000	450,900	
Sub-Total	\$9,928,100	\$10,395,000	\$466,900	4.7%
Capital				
Overhead				
Transferred to Capital*	\$2,701,000	\$2,441,000	(\$260,000)	
Third party connections	547,700	564,100	16,400	
Transfers to Reserves	520,000	820,000	300,000	
Other	141,700	107,100	(34,600)	
Sub-Total	\$3,910,400	\$3,932,200	\$21,800	0.6%
Total	\$13,838,500	\$14,327,250	\$488,700	3.5%

* Funds "Transferred to Capital" fund 2022 planned capital projects and capital maintenance activities

Bulk Water purchases from the Greater Vancouver Water District (GVWD) account for approximately 55% of total and 70% of operating expenses of the water utility. Metro Vancouver has recently provided CNV with its estimated purchase volumes and 2022 rates. A slight increase in volume is anticipated and a 4.1% increase in the price of bulk water over 2021 has been indicated. The cost of water purchases accounts for \$324,100 of the \$466,950 increased Operating Budget.

The City's 2022 Water revenues consist of flat rate utility fees, metered charges, and other fees (intergovernmental, connection fees, severance fees etc.). The Proposed 2022 Operating and Capital Budgets will be funded as follows:

	2021	2022	Change	%
Flat Rate Sales	\$8,084,500	\$8,683,100	598,600	7.4%
Metered Sales	4,567,200	4,776,000	208,800	4.6%
Other	841,900	868,100	26,200	3.1%
Transfers from Reserves	344,900	-	(344,900)	(100%)
Total	\$13,838,500	\$14,327,200	\$488,700	3.5%

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

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

It's proposed that the current tiered rate structure remains in place and the 2022 seasonal rates per cubic meter are the following:

Period	2021	2022	Annual Net Change %
Jan1 to May 31	1.2823	1.3592	6.0%
June 1 to Sept 30	1.6029	1.6990	
Oct 1 to Dec 31	1.2823	1.3592	
Blended Rate	1.3949	1.4782	

Attachment #2 provides a summary of the 2022 Water Utility Budget.

Sewerage & Drainage Utility

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

The City's proposed overall 2022 Sewerage & Drainage Operating and Capital budgets total approximately \$15.9 million, a \$1.7 million increase over 2021. These budgets are a \$10.9 million Operating Budget and a \$5.1 million Capital budget (including reserves transfers). The Sewerage & Drainage Utility Capital Budget includes a provision for the new North Shore Wastewater Treatment Plant (NSWWTP) of \$800,000, which is equal to an increase of \$400,000 from 2021. The provision aims to set aside funds to smooth out future rate increases associated with the construction of the NSWWTP. The current amount of funds set aside to date to smooth rate increases related to the NSWWTP is \$3.4 million. The 2021 plan assumed that, beginning in 2022, the City would draw from the funds put aside to smooth the impact of future GVS&DD Levy increases. The delays associated with the construction of the NSWWTP have allowed the continued accumulation of funds. It is now forecast that the City will draw from the funds beginning in 2024.

	2021	2022	Change	%
Operating Expenses				
Sanitary Operations	\$261,000	\$256,000	(\$5,000)	(1.9%)
Sanitary Admin	8,685,600	9,216,900	531,300	6.1%
Storm Drainage Operations	307,000	314,000	7,000	2.3%
Storm Drainage Admin	988,100	1,122,100	133,900	13.6%
Sub-Total	\$10,241,700	\$10,909,000	\$667,300	6.5%
Capital				
Transferred to Capital*	\$2,519,000	\$3,114,000	\$595,000	23.6%
Third party connections	975,400	1,024,100	48,700	5.0%
Transfer to Reserves	18,000	18,000	0	0%

Transfer to Reserves for NSWWTP	400,000	800,000	400,000	100%
Other	86,100	43,600	(42,500)	(49%)
Sub-Total	\$3,998,500	\$4,999,700	\$1,001,200	24.7%
Total	\$14,240,200	\$15,908,700	\$1,668,500	11.7%

* Funds "Transferred to Capital" fund 2022 planned capital projects and capital maintenance activities

The Greater Vancouver Sewer and Drainage District (GVS&DD) levy accounts for approximately 70% of the operating expenses of the sewerage and drainage utility. Metro Vancouver has recently indicated its 2022 rates are increasing 6.1% over 2021. The increase in GVS&DD levy contributes 4% of the proposed 11.6% sewerage rate increase. The cost of water purchases accounts for \$459,000 of the \$677,000 increased Operating Budget.

The City's 2022 Sewer and Drainage revenue sources consist of sanitary sewerage flat rate and metered charges, storm drainage levy, use of reserves and other fees (intergovernmental, connection fees, severance fees etc.). The proposed operating and capital budgets will be funded by:

	2021	2022	Change	%
Flat Rate Sales	\$7,322,500	\$8,265,800	\$943,300	12.9%
Metered Sales	3,256,700	3,602,800	346,100	10.6%
Storm Drainage Levy	2,481,500	2,630,500	149,000	6.0%
Other	1,100,300	1,154,700	54,400	4.9%
Transfers from Reserves	79,200	254,900	175,700	221.8%
Total	\$14,240,200	15,908,700	1,668,500	11.7%

The City uses a single rate billing system for metered sewer, which is consistent with a user pay pricing strategy. The proposed metered sewer rate for 2022 is \$2.0207 per cubic meter, which is an 11.5% increase over the 2021 rate of \$1.8123 per cubic meter.

Attachment #3 provides a summary of the 2022 Sewerage & Drainage Budget.

Solid Waste Utility

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

The Utility's Operating expenses and recommended budget is summarized as follows:

	2021	2022	Change	%
Operating Expenses				
Recycling Ops	\$45,000	\$-	(\$45,000)	(-100%)
Green Can Ops & Admin	1,241,900	1,310,300	68,400	5.5%

Refuse Ops and Admin	960,200	1,068,800	108,600	11.3%
Eco Levy Ops and Admin	1,383,400	1,471,400	88,000	6.5%
Total	\$3,630,500	\$3,850,500	\$220,000	6.1%

The recommended rates will increase revenue as follows:

	2021	2022	Change	%
User Fees	\$1,827,000	\$1,955,300	\$128,300	7.0%
Eco Levy	1,265,000	1,309,300	44,300	3.5%
Transfers from Reserve	538,500	585,900	47,400	8.8%
Total	\$3,630,500	3,850,500	220,000	6.1%

The 2022 recommended rates increase Refuse, Green Can and Eco Levy rates by 6.0%, 8.0%, and 3.6% respectively, resulting in overall solid waste fee increases of 3.6% for multi unit dwellings and 7.1% for single unit dwellings. It should be noted that multi unit dwellings are responsible for their own Refuse and Green Can disposal through third party entities.

Multi Unit Rates	2021	2022	Change	%
Eco Levy (average)*	\$24.43	\$25.30	\$0.87	3.6%

Single Unit Rates	2021	2022	Change	%
Refuse	\$119.00	\$127.00	\$8.00	6.7%
Green Can	138.00	150.00	12.00	8.7%
Eco Levy (average)*	50.10	51.90	1.80	3.6%
Net Solid Waste	\$307.10	\$328.90	\$21.80	7.1%

* The Eco Levy is estimated. The amount is levied based on taxable assessment

For 2022, the recommended Eco Levy has been increased by 3.6% as a result of increasing operational costs from collecting larger volumes of litter. Since the onset of the COVID-19 pandemic, the use of City parks, streetscapes and plazas has increased significantly. The additional funding will also be used to increase the number of multi-stream refuse and recycling receptacles in the public realm to help address the litter volume increases and to support the City's waste diversion goals. The increases to Refuse (6.7%) and Green Can (8.7%) can be attributed to Metro's increased tipping fees and increased residential collection volume, resulting from more people working at home.

New Items

Provisions for the following new items have been included in the 2022 utility budgets:

	Total	Water	Sewer	Storm Drainage	Refuse	Eco Levy	Green Bin
RFT Dev Tech 1	\$ 60,900	\$ 28,900	\$ 15,000	\$ 15,000	\$ -	\$ 2,000	\$ -
RFT Dev Tech 1	66,000	31,400	16,200	16,200	-	2,200	-
Environmental Coordinator	138,800	13,880	-	62,460	-	-	62,460
Finance Manager	37,000	12,900	9,300	3,700	3,700	3,700	3,700
Tech Assistant 1	26,500	26,500	-	-	-	-	-
	\$ 329,200	\$ 113,580	\$ 40,500	\$ 97,360	\$ 3,700	\$ 7,900	\$ 66,160

The amounts included above are the portions of the positions that, using the City's allocation model, are to be funded by the utilities. For all positions other than the Environmental Coordinator, there is also a property tax funded component. The new items will also be presented to Council for consideration as part of the 2022 budget process. Should the new items not be approved as part of the 2022 budget process, the utility budgets would be reduced by corresponding amounts.

FINANCIAL IMPLICATIONS

To summarize, the proposed 2022 flat rate utility fees by dwelling type are the following:

Dwelling Type	2021 Net Flat Rate	2022 Net Flat Rate (proposed)	Net Change \$
Multi-Unit	\$649.96	\$704.21	\$54.25
Single Unit	\$1,362.58	\$1,472.26	\$109.67

This translates into a total annual utility charge increase of 8.3% for multi-unit dwellings and 8.0% for single unit dwellings. The City's utility rates continue to be among the lowest in the region.

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

	2023	2024	2025	2026
Bulk Water	6.1%	10.7%	11.7%	11.5%
GVS&DD Levy	22.9%	25.3%	19.7%	9.0%
Tipping Fees	5.8%	5.5%	5.2%	4.9%

While the City has been planning to buffer the impacts of the NSWWTP coming on-line, if the above increases materialize, it is likely that future rate increases averaging 8% per year will be required in order for the City to reach the capital renewal and rehabilitation goals discussed in the accompanying information reports from the City Engineer.

INTER-DEPARTMENTAL IMPLICATIONS

This report has been prepared with the input and participation of the EPE department and should be read in conjunction with the information reports provided by EPE regarding each utility. The Leadership Team reviewed the recommendations in the report at its November 10, 2021 meeting.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

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

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

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

RESPECTFULLY SUBMITTED:



Larry Sawrenko
Chief Financial Officer and Director of
Finance

The City of North Vancouver
Rates and Levies Summary

	2021 **DWV	2021 ***DNV	2021 CNV	2022 CNV	Increase	
					\$	%
SINGLE UNIT DWELLING						
Flat Rate Water	\$ 764.00	\$ 772.00	\$ 514.00	\$ 545.00		
5% Discount			-	-		
Single Unit Net Water	764.00	772.00	514.00	545.00	31.00	6.0%
Flat Rate Sanitary Sewer	659.04	735.80	444.00	\$ 496.00		
5% Discount			-	-		
Single Unit Net Sewer	659.04	735.80	444.00	496.00	52.00	11.7%
Storm Drainage Levy (estimate)	526.96		97.48	102.35 *	4.90	5.0%
Total Single Unit Water/Sanitary/Storm	\$ 1,950.00	\$ 1,507.80	\$ 1,055.48	\$ 1,143.35	\$ 87.90	8.3%
Other Rates						
Refuse	\$ 204.38	\$ 295.90	\$ 119.00	\$ 127.00	8.00	6.7%
Green Can			138.00	\$ 150.00	12.00	8.7%
Recycling - Single Unit	-	23.70	-	-	-	0.0%
Eco Levy (estimate)	48.05		50.10	\$ 51.90 *	1.80	3.6%
Total Single Unit Solid Waste	\$ 252.43	\$ 319.60	\$ 307.10	\$ 328.90	\$ 21.80	7.1%
TOTAL SINGLE UNIT ALL LEVIES	\$ 2,202.43	\$ 1,827.40	\$ 1,362.58	\$ 1,472.26	\$ 109.67	8.0%
DUPLEX Including Infills & Strata SFD)						
Flat Rate Water	\$ 611.20	\$ 657.60	\$ 431.00	\$ 457.00		
5% Discount						
Duplex Net Water	611.20	657.60	431.00	457.00	26.00	6.0%
Flat Rate Sanitary Sewer	565.65	\$ 612.20	411.00	\$ 459.00		
5% Discount						
Duplex Net Sewer	565.65	612.20	411.00	459.00	48.00	11.7%
Storm Drainage Levy (estimate)	526.96		92.61	97.24 *	4.63	5.0%
Total Duplex Water/Sanitary/Storm	\$ 1,703.81	\$ 1,269.80	\$ 934.61	\$ 1,013.24	\$ 78.63	8.4%
Other Rates						
Refuse	\$ 204.38	\$ 295.90	80.00	\$ 85.00	5.00	6.3%
Green Can			83.00	90.00	7.00	8.4%
Recycling - Duplex	-	23.70	-	-	-	0.0%
Eco Levy (estimate)	48.05		47.60	49.31 *	1.71	3.6%
Total Duplex Solid Waste	\$ 252.43	\$ 319.60	\$ 210.60	\$ 224.31	\$ 13.71	6.5%
TOTAL DUPLEX ALL LEVIES	\$ 1,956.24	\$ 1,589.40	\$ 1,145.20	\$ 1,237.54	\$ 92.34	8.2%
MULTI-UNIT DWELLING						
Flat Rate Water	\$ 328.52	\$ 657.60	\$ 301.00	\$ 320.00		
5% Discount			-	-		
Multi-Unit Net Water	328.52	657.60	301.00	320.00	19.00	6.3%
Flat Rate Sanitary Sewer	392.22	\$ 612.20	277.00	\$ 309.00		
5% Discount			-	-		
Multi-Unit Net Sewer	392.22	612.20	277.00	309.00	32.00	11.6%
Storm Drainage Levy (estimate)	526.96		47.53	49.91 *	2.38	5.0%
Total Multi Unit Water/Sanitary/Storm	\$ 1,247.70	\$ 1,269.80	\$ 625.53	\$ 678.91	\$ 53.38	8.5%
Recycling - Multi Unit	-	14.60	-	-	-	0.0%
Eco Levy (estimate)	48.05		24.43	25.30 *	0.87	3.6%
Total Multi Family Solid Waste	\$ 48.05	\$ 14.60	\$ 24.43	25.30	0.87	3.6%
TOTAL MULTI-UNIT ALL LEVIES	\$ 1,295.75	\$ 1,284.40	\$ 649.96	\$ 704.21	\$ 54.25	8.3%

* Average storm and eco levy based on average property assessment, plus overall increase for 2022

** DWV is fully metered; therefore, the water and sewer rates are estimates based on expected usages

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

2022 WATER BUDGET

Programs	2021 Annual Budget	2022 Annual Budget	Variance 2022 Annual to 2021 Annual	% Variance	Notes
WATER REVENUE					
PERMITS SPRINKLER	1,000	1,000	0		
FEES CONNECTION-WATER/SANITARY	547,700	564,100	16,400		Updated to reflect projected actuals
FEES CONSTRUCTION SITE	12,000	12,400	400		
FEES SEVERANCE	63,700	65,600	1,900		
WATER CONNECTION REUSE	50,900	52,700	1,800		
Water Operations	675,300	695,800	20,500	3.0%	
FLAT RATE SALES	8,084,501	8,683,116	598,615		Consistent with proposed rate increase
METERED SALES	4,567,200	4,776,019	208,819		Consistent with proposed rate increase
PENALTIES FLAT RATE	14,400	14,900	500		
TRANSFER FROM DNV	152,100	157,400	5,300		
Water Admin	12,818,201	13,631,436	813,235	6.3%	
TRANSFER FROM STATUTORY RESERVE	345,000	0	-345,000		DCC reserve budgeted for Capital project in 2021
Transfers	345,000	0	-345,000	-100.0%	
Total Water Revenue	13,838,501	14,327,236	488,735	3.5%	
WATER EXPENSES					
WAGES AND BENEFITS	409,860	421,070	11,210		Consistent with inflationary increases
GOODS AND SUPPLIES	70,700	72,620	1,930		
SERVICES	48,320	49,640	1,320		
FINANCIAL SERVICES	56,120	57,650	1,530		
Water Operations	585,000	601,000	16,000	2.7%	
WAGES AND BENEFITS	960,300	1,056,750	96,450		Inflationary increase and impact of New Items (\$57K)
GOODS	5,000	5,000	0		
WATER PURCHASES DNV	252,500	260,100	7,600		
WATER PURCHASES GWWD	7,175,200	7,499,300	324,100		4.1% increase in regional cost of bulk water - 50% of total utility budget
SERVICES	90,500	90,500	0		
FINANCIAL SERVICES	859,600	882,400	22,800		Inflationary increase and increase in services allocation % based on use
Water Admin	9,343,100	9,794,050	450,950	4.8%	
Sub Total Water Operating	9,928,100	10,395,050	466,950	4.7%	
OHead Water Capital	-33,000	-33,000	0	0.0%	Capital project overhead recovery of operating costs
TRANSFER TO CAPITAL	2,701,000	2,441,000	-260,000		Significant 2022 project pushed to 2023, resulted in decrease
THIRD PART CONNECTIONS	547,700	564,100	16,400		Updated to reflect projected actuals
RESERVE FOR FUTURE EXPENDITURES	400,000	800,000	400,000		Increased reserves for large capital projects in 2023 and 2024. See EPE report
TRANSFER TO STATUTORY RESERVE	120,000	20,000	-100,000		\$100k in 2021 for one time project
TRANSFER TO UN/APPROPRIATED EQUITY	174,701	140,086	-34,615		Balancing transfer
Transfers	3,943,401	3,965,186	21,785	0.6%	
Total Water Expenses	13,838,501	14,327,236	488,735	3.5%	

2022 SEWERAGE AND STORM DRAINAGE BUDGET

Programs	2021 Annual Budget	2022 Annual Budget	Variance 2022 Annual to 2021 Annual	% Variance	Notes
SEWER AND STORM REVENUES					
FEEES CONNECTION-WATER/SANITARY	430,600	452,100	21,500		Increased to reflect projected actuals
FEEES SEVERANCE	60,700	63,700	3,000		
MISCELLANEOUS	16,000	16,500	500		
Sanitary Operations	507,300	532,300	25,000	4.9%	
FLAT RATE SALES	7,322,500	8,265,766	943,266		Consistent with proposed rate increase and increased number of units
METERED SALES	3,256,700	3,602,832	346,132		Consistent with proposed rate increase and increased number of units
PENALTIES FLAT RATE	9,600	9,900	300		
Sanitary Admin	10,588,800	11,878,498	1,289,698	12.2%	
FEEES STORM CONNECTION	544,800	572,000	27,200		Increased to reflect projected actuals
FEEES SEVERANCE STORM	38,600	40,500	1,900		
Storm Operations	583,400	612,500	29,100	5.0%	
STORM DRAINAGE LEVY	2,481,500	2,630,500	149,000		Consistent with proposed rate increase over 2021 actuals
Storm Admin	2,481,500	2,630,500	149,000	6.0%	
Sub-Total Operating Revenues	14,161,000	15,653,798	1,492,798	10.5%	
TRANSFER FROM APPROPRIATED EQUITY	60,000	180,675	120,675		\$180K from Capital Reserves for future expenditures
TRANSFER TO STATUTORY RESERVE	19,200	74,250	55,050		
Sewer and Storm Transfers	79,200	254,925	175,725	221.9%	
Total Sewer and Storm Revenue	14,240,200	15,908,723	1,668,523	11.7%	
SEWER AND STORM EXPENSES					
WAGES AND BENEFITS	148,140	145,300	-2,840		
CONFERENCES, EDUCATION, TRAVEL	0	0	0		
GOODS AND SUPPLIES	21,730	21,310	-420		
SERVICES	63,490	62,270	-1,220		
FINANCIAL SERVICES	27,650	27,120	-530		
Sanitary Operations	261,000	256,000	-5,000	-1.9%	
WAGES AND BENEFITS	485,300	525,800	40,500		Inflationary increase and impact of New Items (\$21K)
GOODS AND SUPPLIES	5,600	5,900	300		
SERVICE EXPENSES AND FEES	150,000	150,000	0		
GVS&DD LEVY	7,513,070	7,971,747	458,677		9.8% GVS&DD Sewer levy increase - 50% of total utility budget
GVRD GEOSPATIAL LEVY	8,700	9,600	900		
FINANCIAL SERVICES	522,950	553,900	30,950		Inflationary increase and increase in services allocation % based on use
Sanitary Admin	8,685,620	9,216,947	531,327	6.1%	
WAGES AND BENEFITS	157,460	161,050	3,590		
GOODS AND SUPPLIES	24,150	24,700	550		
SERVICES	93,460	95,590	2,130		
FINANCIAL SERVICES	31,930	32,660	730		
Storm Operations	307,000	314,000	7,000	2.3%	
WAGES AND BENEFITS	507,600	566,400	58,800		Inflationary increase and impact of New Items (\$49K)
GOODS AND SUPPLIES	5,600	5,900	300		
SERVICES	140,000	200,000	60,000		Environmental Monitoring program added in 2022.
FINANCIAL SERVICES	334,950	349,800	14,850		Inflationary increase and increase in services allocation % based on use
Storm Admin	988,150	1,122,100	133,950	13.6%	
Sub-Total Sewer and Storm Expenses	10,241,770	10,909,047	667,277	6.5%	
FINANCIAL SERVICES	-29,000	-29,000	0		Capital project overhead recovery of operating costs
OHead Sewer Capital	-29,000	-29,000	0		
FINANCIAL SERVICES	-23,000	-23,000	0		Capital project overhead recovery of operating costs
OHead Drainage Capital	-23,000	-23,000	0		
Sub-Total Sewer and Storm Recoveries	-52,000	-52,000	0	0.0%	
TRANSFER TO CAPITAL	2,519,000	3,114,000	595,000		Planned increase for replacement of aging infrastructure
THIRD PARTY CONNECTIONS	975,400	1,024,100	48,700		Adjusted to reflect projected actuals
TRANSFER TO STATUTORY RESERVE	18,000	18,000	0		
TRANSFER TO APPROPRIATED EQUITY	138,030	95,576	-42,454		Balancing transfer
RESERVE FOR FUTURE EXPENDITURES	400,000	800,000	400,000		Reserve contribution for NSWWTW
Sewer and Storm Transfers	4,050,430	5,051,676	1,001,246	24.7%	
Total Sewer and Storm Expenses	14,240,200	15,908,723	1,668,523	11.7%	

2022 SOLID WASTE BUDGET

Programs	2020 Annual Budget	2021 Annual Budget	Variance 2021 Annual to 2020 Annual	% Variance	Notes
SOLID WASTE REVENUE					
GREEN CAN	966,100	1,043,400	77,300		Consistent with proposed rate increase
PPP PROGRAM INCENTIVE	0	0	0		Reduced due to transition to Recycle BC for Recycling services
Recycling & Green Can	966,100	1,043,400	77,300	8.0%	
REFUSE TAGS COMMERCIAL	3,500	3,500	0		Program discontinued
REFUSE TAGS RESIDENTIAL	9,000	9,000	0		
Refuse	12,500	12,500	0	0.0%	
REFUSE LEVY	848,400	899,300	50,900		Consistent with proposed rate increase
Refuse Admin	848,400	899,300	50,900	6.0%	
ECO LEVY	1,265,000	1,309,300	44,300		Consistent with proposed rate increase
Eco Levy Programs	1,265,000	1,309,300	44,300	3.5%	
TRANSFER FROM APPROPRIATED EQUITY	538,500	585,900	47,400		Reserves used to smooth rate increases
Transfers	538,500	585,900	47,400	8.8%	
Total Solid Waste Revenue	3,630,500	3,850,400	219,900	6.1%	
SOLID WASTE EXPENSES					
SERVICES	45,000	0	-45,000		Reduced due to transition to Recycle BC for Recycling services
Recycling	45,000	0	-45,000	-100.0%	
WAGES AND BENEFITS	208,100	217,800	9,700		
SERVICES	521,900	546,200	24,300		Additional truck/staff added to collection route in 2021
Green Can	730,000	764,000	34,000	4.7%	
WAGES AND BENEFITS	160,700	231,850	71,150		Inflationary increase; impact of New Items (\$31K); reallocation of Goods & Svcs
GOODS AND SUPPLIES	126,100	49,750	-76,350		Reallocation of Goods & Supplies expense to Wages & Benefits and Services
SERVICES	36,100	60,000	23,900		Reallocation of Goods & Supplies expense
FINANCIAL SERVICES	189,000	204,650	15,650		Inflationary increase and increase in services allocation % based on use
Recycling & Green Can Admin	511,900	546,250	34,350	6.7%	
WAGES AND BENEFITS	198,950	228,450	29,500		Cost allocation updated between Refuse and Green Can, net increase of 6%
SERVICES	293,170	336,640	43,470		Additional truck/staff added to collection route in 2020
FINANCIAL SERVICES	87,890	100,920	13,030		
Refuse	580,000	666,000	86,000	14.8%	
WAGES AND BENEFITS	165,900	172,600	6,700		
GOODS AND SUPPLIES	2,000	2,000	0		
FINANCIAL SERVICES	212,300	228,150	15,850		Inflationary increase and increase in services allocation % based on use
TRANSFER TO APPROPRIATED EQUITY	0	0	0		
Refuse Admin	380,200	402,750	22,550	5.9%	
WAGES AND BENEFITS	1,179,200	1,346,950	167,750		Increased public realm litter collection; reallocation from Goods & Supplies
GOODS AND SUPPLIES	126,100	49,750	-76,350		Reallocation of Goods & Supplies expense to Wages & Benefits
SERVICES	36,100	37,200	1,100		
FINANCIAL SERVICES	42,000	37,500	-4,500		
Eco Levy Programs	1,383,400	1,471,400	88,000	6.4%	
Total Solid Waste Expenses	3,630,500	3,850,400	219,900	6.1%	

THIS PAGE INTENTIONALLY LEFT BLANK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8889

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

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

1. This Bylaw shall be known and cited for all purposes as **“Water Utility Bylaw, 1994, No. 6417, Amendment Bylaw, 2021, No. 8889”**.
2. “Water Utility Bylaw, 1994, No. 6417” is amended as follows:
 - A. SCHEDULES:
 - (1) Delete Schedule “A” in its entirety and replace with the new Schedule “A” attached to this bylaw.
 - (2) Delete Schedule “B” in its entirety and replace with the new Schedule “B” attached to this bylaw.
3. This Bylaw shall be effective as of the 1st day of January, 2022.

READ a first time on the <> day of <>, 2021.

READ a second time on the <> day of <>, 2021.

READ a third time on the <> day of <>, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

SCHEDULE A

Water Services

2022 CONNECTIONS AND SEVERANCE RATES

1. Water Service Connections

Size	Fee
Standard 19 mm	\$5500
>19 mm	At Cost, with a minimum charge equal to the standard fee.

2. Water Service Severance

For Standard 19 mm Replacement	\$1250
>19 mm service replacement	At Cost, with a minimum charge equal to the standard fee.

3. Water Connection Reuse \$2600

4. Turn on/off \$50

5. Flat fee for installation and removal of temporary meter \$420

A 50% rebate is available for standard 19mm water service replacements that are installed less than 2 years in advance of a City initiated programmed replacement of water services within the block.

SCHEDULE B

2022 Water Use Rates

1. WATER RATES

1. For Temporary Service during construction

Building Size (Total Floor Area)

46 sq. m to 460 sq. m	\$175
Over 460 sq. m but not exceeding 4,600 sq. m	\$345
Over 4,600 sq. m but not exceeding 23,000 sq. m	\$573
Over 23,000 sq. m	\$912

2. Flat Rates (un-metered premises)

Single Unit Dwelling	\$545 per year
Duplexes (including infills) per unit	\$457 per year
Multiple Unit Dwellings (including extra living units within single unit dwellings, apartments, condominiums, garden apartments and coach houses) for each dwelling	\$320 per year
Stores, offices, other commercial premises not elsewhere designated; Churches and Public Halls per fixture	\$122 per year
Water Cooling Units	\$848 per year
Schools per Classroom	\$391 per year
Minimum charge for any service	\$545 per year

2. METERED WATER RATES

For commercial and industrial properties, hospitals and schools served by water meters the following scale of charges shall apply:

1.	January 1 to May 31	\$ 1.3592 per cubic metre
	June 1 to September 30	\$ 1.6990 per cubic metre
	October 1 to December 31	\$ 1.3592 per cubic metre

A minimum bill for 30 cubic metres per month will be charged if a lesser quantity or no water is consumed.

2. Metered Charges for Mixed Use Premises

The charge for Mixed Use Premises on metered rates shall be the greater of the flat rate for Multiple Dwelling Units provided in this Schedule times the number of dwelling units or the metered rates.

3. MISCELLANEOUS CHARGES

1. Testing a Meter as Provided in Section 703

For meters 50 mm and smaller	\$364
For meters over 50 mm	\$520

4. DATE OF PAYMENT AND PENALTIES

1. For Flat Rate (un-metered premises)

1. Rates set out above shall be due on the last business day in February each year.
2. A penalty of 5% shall be added to rates that are not paid on or before the last business day of February and a further penalty of 5% shall be added to rates that are not paid on or before the last business day of April in the year the rates are due.

2. For Metered Premises

1. A penalty of five percent (5%) shall be added to rates which are not paid on or before the due date as indicated on metered account bills.

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8890

A Bylaw to Amend “Sewerage and Drainage Utility Bylaw, 1995, No. 6746”

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

1. This Bylaw shall be known and cited for all purposes as **“Sewerage and Drainage Utility Bylaw, 1995, No. 6746, Amendment Bylaw, 2021, No. 8890”**.
2. “Sewerage and Drainage Utility Bylaw, 1995, No. 6746” is amended as follows:
 - A. SCHEDULES:
 - (1) Delete Schedule “A” in its entirety and replace with the new Schedule “A” attached to this bylaw.
 - (2) Delete Schedule “B” in its entirety and replace with the new Schedule “B” attached to this bylaw.
3. This Bylaw shall be effective as of the 1st day of January, 2022.

READ a first time on the <> day of <>, 2021.

READ a second time on the <> day of <>, 2021.

READ a third time on the <> day of <>, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

SCHEDULE A

Sewer and Drainage Services

2022 CONNECTION AND SEVERANCE FEES

1. SANITARY CONNECTION

Size	Fee
Standard 100mm Replacement or Relining	\$5,500
>100mm	At Cost, with a minimum charge equal to the standard fee
Inspection Chamber	\$2,600
Private Sewer Connection Inspection and Certification Deposit	\$2,600
Sanitary Severance	\$1,250

2. STORM CONNECTION

Size	Fee
Standard 150mm Replacement or Relining	\$5,300
>150mm	At Cost, with a minimum charge equal to the standard fee
Inspection Chamber	\$2,600
Storm Sewer Extension and Connection for Single Unit Developments exceeding \$150,000 and excluding subdivision	\$1,300 per linear metre based on the total width of the lot serviced
Storm Severance	\$1,250
Off-Site Stormwater Management Facility Fees	\$33 per square metre of premises lot area or at cost to provide works on public property
Storm Collection System Ditch Culvert	\$260 per linear metre based on Construction the length of the culvert pipe

SCHEDULE B

2022 Sewer and Drainage Rates

The following rates shall apply to all real property used for one or more of the following purposes and from which there is a connection to the sewer systems of the City:

1. SANITARY SEWER 2022 Rates

1. **Annual Sewer Parcel Tax** \$ 0 per year

2. **Flat Rates (un-metered premises)**

Single Unit Dwelling \$496 per year

Duplexes (including infills) per unit..... \$459 per year

Multiple Unit Dwellings (including extra living units
within single unit dwellings, apartments,
condominiums, garden apartments and coach houses)
for each dwelling \$309 per year

Stores, offices, other commercial premises
not elsewhere designated; Churches and Public Halls
per fixture \$120 per year

Minimum charge for any service is..... \$496 per year

Rate surcharge for combined connections..... \$496 per year

3. Metered Rates

For commercial and industrial properties, hospitals and schools served by water meters the following scale of charges shall apply:

\$2.0207 per cubic metre

A minimum bill for 30 cubic metres per month will be charged if a lesser quantity or no water is consumed.

Rate surcharge for combined connections..... \$2.0207 per cubic metre

4. GVS & DD Special Industrial User Charge

Where the owner or occupier of a parcel of real property is a special industrial user, that owner or occupier shall pay to the municipality for the use of the sewerage system the greater of:

- A. the charges payable under Schedule B, Section 1, Subsections 1, 2 and 3; or
- B. the GVS & DD special industrial user charge as determined by the GVS & DD for that owner or occupier, prorated if necessary for monthly or quarterly billings.

5. Charges for Contaminated Groundwater Discharges to Sanitary Sewer

Ground Water Discharges \$0.34/m³, or as determined by the GVS & DD.

6. Metered Charges for Mixed Use Premises

The charge for Mixed Use Premises on metered rates shall be the greater of the flat rate for Multiple Dwelling Units provided in this Schedule times the number of dwelling units or the metered rates.

7. Sewer Use Charges

Users having a metered water service, who return less than 40% of water purchased to the sanitary sewer system, may make application to the Director of Finance for a Flat Rate Sewer charge based on their number of plumbing fixtures discharging into the sewer outlet of the premises, together with a charge of \$400 per million dollars of taxable assessment.

Applications for flat rate sewer charges must be received prior to December 1 of the year of application, and must include a full description of water usage and the total number of fixtures on the property, as described in Schedule "B" of this Bylaw.

The Director of Finance will examine each application and the supporting documentation and may visit the site to ensure that the conditions described are representative of a complete year's usage and that the total number of fixtures is accurate.

The Director of Finance will either reject the application providing reasons, or approve a Flat Rate charge. This charge, if approved, will be billed annually.

Any user rate so adjusted will be subject to periodic review by the Director of Finance and may, at any time, be returned to a user rate based on metered water consumption and the applicant so notified.

In no case shall the annual charge for a sewer-user having a metered water connection be less than the rate for a Single Unit Dwelling.

8. Date of Payment, Penalties and Surcharge Fees

A. For Flat Rate (un-metered premises)

1. Rates set out above shall be due on the last business day in February each year.
2. A penalty of 5% shall be added to rates that are not paid on or before the last business day of February and a further penalty of 5% shall be added to rates that are not paid on or before the last business day of April in the year the rates are due.
3. A 100% surcharge fee will be applied to any sewer connections with combined storm drainage inflow to a sanitary connection contrary to City bylaws. The surcharge would be applied at the discretion of the City Engineer a minimum of 6 months following notification, and would be applied to the annual bill until the combined inflow is separated.

B. For Metered Premises

1. A penalty of 5% shall be added to rates that are not paid on or before the due date as indicated on metered account bills.
2. A 100% surcharge will be will be applied to the unit rate for any sewer connections with combined storm drainage inflow to a sanitary connection contrary to City bylaws. The surcharge would be applied at the discretion of the City Engineer a minimum of 6 months following notification, and would be applied to the annual bill until the combined inflow is separated.

2. STORM DRAINAGE

1. The Storm Drainage Levy is based on the taxable assessment of a property and is charged on the following classes per thousand dollars of taxable assessment based on the BC Assessment assessed value of:

- Residential
- Utility
- Major Industry
- Light Industry
- Business
- Recreation/non-profit

and is included on the Property Tax Notice payable annually in July of each year as set by Council.

2. Storm Drainage Charges

A user, who is aggrieved by the application of Schedule B 2.1 to a specific parcel, may make application to the City Engineer, in writing, stating the basis for the complaint. The City Engineer will respond, in writing, to the applicant's concern outlining any appropriate adjustment that may be authorized.

3. Penalty

A 5% penalty will be added to the balance owed if unpaid by the end of the first working day in July, and a further 5% penalty will be added to the balance owed if unpaid by the first working day of September.

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8891

A Bylaw to Amend “Solid Waste Management Service Bylaw, 1997, No. 6920”

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

1. This Bylaw shall be known and cited for all purposes as **“Solid Waste Management Service Bylaw, 1997, No. 6920, Amendment Bylaw, 2021, No. 8891”**.
2. “Solid Waste Management Service Bylaw, 1997, No. 6920” is amended as follows:
 - A. In PART 11 – SCHEDULES:
 - (1) Delete Schedule “A” in its entirety and replace with the new Schedule “A” attached to this bylaw.
 - (2) Delete Schedule “B” in its entirety and replace with the new Schedule “B” attached to this bylaw.
3. This bylaw shall be effective as of the 1st day of January, 2022.

READ a first time on the <> day of <>, 2021.

READ a second time on the <> day of <>, 2021.

READ a third time on the <> day of <>, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER

PART 11 – SCHEDULES

SCHEDULE A

Schedule of User Charges for Solid Waste Management Service

Definitions

1. *Standard Residential Service* = A maximum of two (2) garbage containers per dwelling unit collected every other week.
2. *Green Can Collection Service* = Weekly collection of a maximum total of six (6) Green Can designated containers, kraft bags and/or tied bundles of yard trimmings.

Annual User Charge

GARBAGE	2022 Rates
1. Per dwelling unit for single unit dwelling, duplex and infill	\$127.00
2. Per dwelling unit for secondary suite, coach house and multi-unit dwellings greater than 2 units	\$85.00
3. Per Residential garbage tag	\$6.00
GREEN CAN	2022 Rates
1. Per dwelling unit for single unit dwelling, duplex and infill	\$150.00
2. Per dwelling unit for secondary suite, coach house and multi-unit dwellings greater than 2 units	\$90.00
ECO LEVY	
The Eco Levy is based on the taxable assessment of a property and is charged on the following classes per thousand dollars of taxable assessment based on the BC Assessment assessed value of: <ul style="list-style-type: none">• Residential• Utility• Major Industry• Light Industry• Business• Recreation / non-profit and is included on the Property Tax Notice payable annually in July of each year as set by Council.	

Penalty

1. A 5% penalty will be added to the balance owed if unpaid by the end of the first working day in July, and a further 5% penalty will be added to the balance owed if unpaid by the first working day of September.

SCHEDULE B

Garbage and Green Can Information Tags

Garbage or Green Can put out for collection and not collected will be marked with a Garbage or Green Can Information Tag as follows:

CITY OF NORTH VANCOUVER
GARBAGE INFORMATION TAG

The Garbage was not taken because:

- [1] Garbage can is larger than 77 litres
- [2] Cans or bags are overweight (20 kg/45 lb limit)
- [3] Over 2 can or bag limit
- [4] Garbage can needs to be cleaned
- [5] Garbage can is in poor condition and requires replacement
- [6] Garbage must be placed at property line or curb between 5:30am and 7:30am
- [7] Access to garbage must not be obstructed
- [8] Bungee cords still attached
- [9] Contents frozen inside can
- [10] Other _____

GENERAL ENQUIRIES
604.987.7155 cnv.org/collection

CITY OF NORTH VANCOUVER
GREEN CAN INFORMATION TAG

The Green Can was not taken because:

- [1] Green Can is larger than 77 litres
- [2] Cans or bags are overweight (20 kg/45 lb limit)
- [3] Over the 6 can, bag and bundle limits
- [4] Green Can needs to be cleaned
- [5] Green Can is in poor condition and requires replacement
- [6] Cans must be placed at property line between 5:30am and 7:30am
- [7] Material is overfilled and must be bundled and tied (1 m x 5 m diameter/3 ft limit)
- [8] Yard trimmings/food scraps must be contained in proper cans (no boxes/buckets/etc)
- [9] Biodegradable, compostable and plastic bags not accepted
- [10] Animal waste, dirt, sod, rocks, treated/painted wood not accepted
- [11] Dust, wood chips, loose material must be contained in paper bags
- [12] Access to Green Can must not be obstructed
- [13] Contents frozen inside can
- [14] Other _____

GENERAL ENQUIRIES
604.987.7155 cnv.org/collection

THIS PAGE INTENTIONALLY LEFT BLANK



 Department Manager	 Director	 CAO
---	---	--

The Corporation of **THE CITY OF NORTH VANCOUVER**
COMMUNITY & PARTNER ENGAGEMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Julia Spitale, Coordinator – Community Development

Subject: 2021 CHILDREN AND YOUTH INITIATIVES FUND – SPECIAL
PROJECT GRANT APPLICATIONS

Date: November 8, 2021 File No: 05-1850-20-0003/2021

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

RECOMMENDATION

PURSUANT to the report of the Coordinator – Community Development, dated November 8, 2021, entitled “2021 Children and Youth Initiatives Fund – Special Project Grant Applications”:

THAT the following Children and Youth Initiative Fund grant allocations totaling \$20,500 for 2021 be approved:

Jack.org	
Talk at the Top Jack Summit.....	\$1,400
Junior Achievement of BC	
World of Choices.....	\$2,325
Family Services of the North Shore	
PROUD2BE Virtual Event Series.....	\$2,000
Moon Time Sisters BC	
Moon Time Sisters Fall Drive.....	\$500
École Boundary Elementary Students	
Junior Dungeons and Dragons.....	\$275
North Shore Restorative Justice Society	
Youth Action Council Event Series.....	\$3,000
Mom Bop	
Mom Bop Concert.....	\$1,000
AB Seedlings	
K-Trees.....	\$500

Queen Mary Elementary	
Social Justice Action Club.....	\$1,500
North Shore Women’s Centre	
Fearless: Girls’ Empowerment Camp.....	\$2,500
Westcoast Boys Club Network	
Boys Club Network School Clubs.....	\$2,500
Mountainside Secondary	
Yoga and Wellness Activities.....	\$3,000
TOTAL.....	\$20,500

THAT the following applications be denied:

Queen Mary Elementary	
Body Science Workshops.....	\$700

THAT a copy of Council’s resolution be sent to the District of North Vancouver and the North Vancouver School Board (District #44) for their information;

THAT the Children and Youth Initiatives Grant Committee be thanked for their time and participation;

ATTACHMENTS

1. Children and Youth Initiative Fund Grant Guidelines (CityDocs [2105489](#))
2. Summary of Children and Youth Initiatives Grant Applications (CityDocs [2105532](#))

BACKGROUND

Since 1998, the City has disbursed the Children and Youth Initiatives Fund to provide seed money to support or initiate events, programs and services for children and youth in the City of North Vancouver.

The City offers grants of up to \$3,000 for special projects undertaken for children and youth up to the age of 21 years and up to \$500 for projects undertaken for youth between the ages of 12 and 21 years.

Grants approved under this fund are for new programs or services, or to enhance existing programs or services which have proven beneficial to young members of our community. All activities supported by this fund must be based in the City of North Vancouver or be of primary benefit to children and youth residents in the City. Applicants are encouraged to involve children and youth who are not normally involved in community activities. Funds can be used to cover expenses such as staffing costs and/or program expenses such as building rental, equipment rentals, publicity, entertainment and/or refreshments.

DISCUSSION

The 2021 Children and Youth Initiatives Grant Selection Committee met via Webex on November 4th to review applications and make recommendations for Council's consideration. Thirteen applications were received this year totalling a request of \$26,838 from an available fund balance of \$20,500. The Selection Committee is recommending that 12 out of the 13 applicants receive funding, for a total allocation of \$20,500.

Appointed Grants Committee members included Councillors Tina Hu and Angela Girard, School District Trustee Megan Higgins and Lisa Hubbard of North Shore Neighbourhood House. Four youth served as Selection Committee members this year based on their level of community involvement with youth in the City. Youth representatives included Arley Morris, Maya Tomes, Neil Chowdhury and Yasamin Riazi of CityFest.

The Committee reviewed applications that met granting criteria with a strong focus on programs and projects that meet the emerging needs of young people in the current climate or provide opportunities for social connection, health and wellbeing.

City staff provided the Committee with a confidential information package to review in advance of the selection process. During the selection meeting, City staff provided background on the granting process, outlined guidelines and criteria, detailed summaries of each application and informed on any associated past funding. The Committee discussed and addressed any conflicts of interest in the selection process to ensure all grants were reviewed and selected in an equitable and fair manner.

Criteria included:

- Program or project that supports connection and wellbeing
- Program or project that supports youth mental health
- Program or project that is preventative in nature, youth driven, or involves youth in program development and implementation
- Supports new events, programs or services
- Provides opportunities for skill development, builds self-esteem and self confidence
- Enhances existing events, programs or services which have proven beneficial to young members of our community
- Involves children and youth who are not normally involved in community activities
- Integrates children and youth with disabilities, low-income families and minority groups
- Encourages broad community involvement or interagency cooperation and collaboration
- Program or project is carried out in the City or primarily benefits City youth

All 13 applications met grant criteria but the limited amount of funds meant that not all applications received the full funding requested. In these cases, the Committee considered current issues effecting youth, the number of City youth served, history of

past funding through the granting program, alternative funding sources and youth driven initiatives.

Funds were allocated by majority vote. Five applications received majority vote for full funding and seven applications for partial funding. One application was rejected only due to North Shore Neighbourhood House being able to provide the full funding for their initiative.

Attachment #2 provides a summary of the applications received and recommended allocations from the Committee.

FINANCIAL IMPLICATIONS

If Council approves the recommendations of the Selection Committee, the total available fund balance of \$20,500 will be allocated from the Children and Youth Initiatives Fund.

INTER-DEPARTMENTAL IMPLICATIONS

City Communications promoted the 2021 Children and Youth Initiatives Grants Intake through social media channels and newsletter and the Community Development Coordinator promoted to city partners.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

The City of North Vancouver's Strategic Plan supports the health and well-being of all, which includes providing opportunities for children and youth to engage and connect with their community. Through supporting these initiatives we enhance social connection and well-being for youth throughout the City.

CNV4ME, the City's Child, Youth and Family Friendly Strategy supports opportunities that increase the overall health and wellbeing of children and youth who live in the City.

RESPECTFULLY SUBMITTED:



Julia Spitale
Coordinator – Community Development



**COMMUNITY & PARTNER ENGAGEMENT DEPARTMENT
BUSINESS AND COMMUNITY PARTNERSHIPS**

CITY OF NORTH VANCOUVER T 604 985 7761
141 WEST 14TH STREET F 604 985 8439
NORTH VANCOUVER INFO@CNV.ORG
BC / CANADA / V7M 1H9 CNV.ORG

CHILD AND YOUTH INITIATIVES FUND GRANTS GUIDELINES

(Agency Initiated Project Grants and Youth Initiated Project Grants)

2021 DEADLINE: September 30, 2021 @ 5 p.m.

1.0 PURPOSE OF THE FUND

The purpose of this fund is to support or initiate events, programs and services for children and youth in the City of North Vancouver. All activities supported by this fund must be based in the City of North Vancouver, or be of primary benefit to children and youth resident in the City. This fund is not available for sports programs, or to supplement core funding for Outreach Youth Services. Efforts should be made to involve children and youth who are not normally involved in community activities. Grants approved under this fund shall be for new events, programs or services, or to enhance existing events, programs or services which have proven successful.

2.0 OBJECTIVES

Events, programs and services which are funded under this initiative will meet fully, or in part, the following objectives.

- 2.1 Be preventative in nature.
- 2.2 Create opportunities for youth to initiate projects.
- 2.3 Create opportunities to contribute to community well-being and to participate in community activities.
- 2.4 Provide opportunities for skill development.
- 2.5 Develop self-esteem and self-confidence.
- 2.6 Be responsive to the diverse and changing needs of children and youth and, as such, give special consideration to children and youth with disabilities, from low-income families, and of newcomers.
- 2.7 Encourage broad community involvement (financial and human resources) from children and youth, business, organizations and individuals.
- 2.8 Maximize the use of existing community resources through creative partnership arrangements.
- 2.9 Involve children and youth in program development and implementation.
- 2.10 Encourage inter-agency / organization, cooperation and collaboration.

3.0 CATEGORIES OF GRANTS

3.1 Youth Initiated Project Grants

The intention of the Youth Initiated Project Grant is to involve children and youth in the development and implementation of projects and events, which can be supported by youth workers, community service agencies and businesses. The intent of youth involvement is to provide opportunities for youth to take the lead in organizing and delivering a program or an event.

Grants of up to \$500 will be available for Projects and Events. The grant may be used to cover such things as building / facility rental costs, equipment rental costs, publicity, entertainment, refreshments, etc. Applications are available on the City of North Vancouver's website at www.cnv.org/YouthGrants.

3.2 Agency Initiated Project Grants

Agency Initiated Projects shall be preventative in nature, providing children and youth with information, skills and activities which promote healthy living and positive activities. Grants of up to \$3,000 will be available for new projects, or to augment existing programs. Grant recipients will be required to provide one-third (1/3) of the amount of the grant received as in-kind services and / or cash.

Core funded agencies, non-profit societies, community groups, Parent Advisory Councils, and School District No. 44 are eligible to apply for these grants. Programs should be offered in the City of North Vancouver, or be of primary benefit to City children and youth. Preference will be given to projects which exhibit inter-agency collaboration. The grant may be used to cover staffing costs and / or program expenses. Applications are available on the City of North Vancouver's website at www.cnv.org/YouthGrants.

4.0 ELIGIBILITY

Youth, non-profit societies, community groups, Parent Advisory Councils and School District No. 44 are eligible to apply for grants under this initiative. Private consultants and businesses are not eligible to apply directly to this fund, but may be partners in projects managed by the above-mentioned groups. Outreach Youth Service agencies are not eligible to apply for a grant under this fund if it is to be applied to core operating costs of Outreach Youth Worker positions. These agencies may, however, apply for a grant that is for a Youth Initiated Project and Event, or Agency Initiated Project that compliments the services provided by Outreach Youth Workers.

All projects, events, programs and services supported by this fund must be located in the City of North Vancouver, or be of primary benefit to children and youth (up to the age of 24 years) residents in the City of North Vancouver.

5.0 APPLICATION AND APPROVAL PROCESS

Individuals and groups interested in applying for a grant under this fund shall complete the application form provided and submit to *Julia Spitale, Community Development Coordinator, City of North Vancouver, 141 West 14th Street, North Vancouver, BC V7M 1H9*. Deadlines for applications may apply.

Applications for Agency Initiated Grants shall be reviewed by a committee comprised of City staff responsible for child and youth issues, two City Councillors, a School Trustee (#44), and youth representatives. This committee will make recommendations to Council regarding allocations.

Applications for Youth Initiated Projects and Events shall be reviewed by City staff responsible for child and youth issues. Staff will recommend grant allocations to Council under this category. **The deadline for applications is 5:00 pm on September 30, 2021.**

All applications will be reviewed using the criteria outlined herein. If you have any questions about the application form, or the grants program, please call Julia Spitale, Community Development Coordinator at 604-998-3285 or email: youth@cnv.org.

6.0 ACCOUNTABILITY

Grant recipients will be required to submit an evaluation of the project at its completion, using a form to be provided by the City or available on the City's website at www.cnv.org/YouthGrants.

7.0 ADMINISTRATION OF FUND

This fund will be administered by staff responsible for child and youth issues.



2021 CHILD & YOUTH INITIATIVES FUND GRANT APPLICATIONS

APPLICANT AND SUMMARY DESCRIPTION OF SERVICE/PROJECT	2021 AMOUNT REQUESTED	2021 AMOUNT RECOMMENDED
<p>Previous Applicant - Existing Program</p> <p><u>Jack.org</u></p> <p>Talk at the Top Jack Summit – An annual community-based mental health advocacy summit that brings together high school students from across BC for mental health education, skill building, and collaboration opportunities. Grant funds would be used to cover event and staff costs.</p>	\$1,500	\$1,400
<p>New Applicant – New Project</p> <p><u>Junior Achievement of BC</u></p> <p>World of Choices – This program focuses on three pillars of financial literacy, work readiness, and entrepreneurship skills for students in grade 4-12. It is designed to raise awareness to youth and families about career possibilities and education pathways to those careers. Grant funds would be used for program staff, operations and administration.</p>	\$3,000	\$2,325
<p>Previous Applicant – Existing Program</p> <p><u>Family Services of the North Shore</u></p> <p>PROUD2BE Gender Identity & Sexual Orientation Virtual Event Series – A series of educational and responsive sessions for LGBTQ2S+ children, youth, parents, caregivers, and professionals will attend to build connections, address inequity, reduce stigma, find support, and receive expert mental/physical health. The program also offers a limited in-person youth rec night. Grant funds would be used for staff, technology, programming, speakers, promotions, and administrative costs.</p>	\$3,000	\$2,000
<p>New Applicant – Existing Project</p> <p><u>Moon Time Sisters BC</u></p> <p>Moon Time Sisters BC Drive – This project collects and sends menstrual products to remote indigenous communities in BC through donation and volunteers across the North Shore. Grant funds would be used for menstrual products, boxes, printing, and shipping.</p>	\$500	\$500

APPLICANT AND SUMMARY DESCRIPTION OF SERVICE/PROJECT	2021 AMOUNT REQUESTED	2021 AMOUNT RECOMMENDED
<p>Previous Applicant – Existing Program</p> <p><u>Queen Mary Community Elementary</u></p> <p>Sexual Health Workshop. Grant funds would be used for workshops with Saleema Noon.</p>	\$700	\$0
<p>New Applicant – New Project</p> <p><u>Ecole Boundary Elementary</u></p> <p>Junior Dungeons and Dragons club at school providing benefits for children who struggle socially. Grant funds would be used for purchasing books, dice, and bins for materials.</p>	\$275	\$275
<p>Previous Applicant – Existing Program</p> <p><u>North Shore Restorative Justice Society</u></p> <p>Youth Action Council Event Series, delivering events that create safe spaces for youth to connect, build leadership & development skills and use restorative justice practices. Grant funds would be used for community outreach materials, honorariums for guest speakers, and staff wages.</p>	\$3,000	\$3,000
<p>New Applicant – New Project</p> <p><u>Mom Bop</u></p> <p>Mom Bop Concert for children. Grant funds would be used to rent PA system and sound tech as well as production and logistics.</p>	\$2,363	\$1,000
<p>Previous Applicant – New Project</p> <p><u>AB Seedlings</u></p> <p>K-Trees, a program that allows children to adopt and plant a tree somewhere in the City of North Vancouver. Grant funds would be used to purchase seedlings.</p>	\$500	\$500
<p>New Applicant – Existing Program</p> <p><u>Queen Mary Elementary School</u></p> <p>Social Justice Action Club to provide young citizens the opportunity to learn about the process of taking action. Grant funds would be used for student projects, two-spirit art installation, pink shirt day supplies, and anti-racism workshops.</p>	\$3,000	\$1,500

APPLICANT AND SUMMARY DESCRIPTION OF SERVICE/PROJECT	2021 AMOUNT REQUESTED	2021 AMOUNT RECOMMENDED
<p>Previous Applicant – Existing Program</p> <p><u>North Shore Women’s Centre</u></p> <p>Fearless: Girls’ Empowerment Camp program provides a forum for teen girls to come together to explore current issues affecting them in a respectful and supportive environment. Grant funds would be used for a group facilitator, presenter honorariums, workshop/field trip, supplies, food, transportation, and wages.</p>	\$3,000	\$2,500
<p>Previous Applicant – Existing Program</p> <p><u>Westcoast Boys Club Network</u></p> <p>Boys Network School Club, an after school club for boys at Carson Graham and Sutherland. Grant funds would be used to supply food, support (clothing, shoes), and field trip expenses.</p>	\$3,000	\$2,500
<p>Previous Applicant – New Project</p> <p><u>Mountainside Secondary</u></p> <p>Yoga and Wellness Activities, a wellness (non-competitive) PE class aimed at youth who are not able to participate in a traditional PE program. Grant funds would be used for field trips to yoga classes, climbing gym, snowshoeing, and the driving range.</p>	\$3,000	\$3,000



 Department Manager	 Director	 CAO
---	---	--

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

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Meg Wray, Planner 1

Subject: REZONING APPLICATION: 2357 WESTERN AVENUE (ARDESHIR
BEHMERDI / 2357 WESTERN HOLDINGS LTD.)

Date: November 10, 2021 File No: 08-3360-20-0500/1

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

RECOMMENDATION

PURSUANT to the report of the Planner 1, dated November 10, 2021, entitled "Rezoning Application: 2357 Western Avenue (Ardeshir Behmerdi / 2357 Western Holdings Ltd.):

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8884" (Ardeshir Behmerdi / 2357 Western Holdings Ltd., 2357 Western Avenue, CD-742) be considered and the Public Hearing be waived;

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

AND THAT the community benefits listed in the report in the section "Community Benefits", be secured through agreements at the applicant's expense and to the satisfaction of staff, and collection of the density bonus contribution prior to adoption of this bylaw.

ATTACHMENTS

1. Context Map (CityDocs [2111014](#))
2. Architectural Drawings Consolidated for Council, dated September 23, 2021 (CityDocs [2109873](#))
3. Landscaping Drawings Consolidated for Council, dated June 29, 2021 (CityDocs [2109879](#))
4. Public Consultation Summary (CityDocs [2109915](#))
5. Zoning Bylaw Amendment Bylaw No. 8884 (CityDocs [2109908](#))

SUMMARY

This report presents a rezoning application to allow a four-unit development with two lock-off suites at 2357 Western Avenue.

Six vehicle and six bike parking spaces are located in the rear portion of the lot, accessed via a driveway from Western Avenue.

DISCUSSION

Site Context

The site is located on Western Avenue, which is bounded by Trans Canada Highway to the north, West 23rd Street to the south, Lonsdale Avenue to the east, and Chesterfield Avenue to the west. The property is situated in close proximity to the City's Lonsdale core, and within 500 m walking distance of public transit, commercial areas and amenities.

The surrounding area consists of mainly single-family dwellings and townhouses. Although Western Avenue is designated to allow for ground-oriented housing forms such as townhouses and four-plexes, a number of properties on the block are older detached dwellings which have not been redeveloped to the Official Community Plan (OCP) potential.

The buildings immediately surrounding the subject site are described in Table 1 below.

Table 1. Surrounding uses

Direction	Address	Description	Zoning
North	2365 Western Avenue	Detached house	RS-1
South	2345 Western Avenue	Detached house	RS-1
East – across Western Avenue	2358 Western Avenue	18 unit Townhouse	CD-635
West – across the lane	2356 Chesterfield Avenue	Detached house	RS-1

The existing 1925 detached house on site is proposed to be demolished. The house is not identified in the City's Heritage Register.

Planning Analysis & Proposed Variances

The property is designated Residential Level 3 in the OCP. The existing zoning is RS-1 (one-unit residential) and the four-plex proposal requires rezoning to a comprehensive development zone (CD-742) with a base zone of RG-2 (ground-oriented residential).

The variances to existing Zoning Bylaw as outlined in Table 2 below.

Table 2. Requested Changes to the Zoning By-law

	Current Designation/Regulation	Proposed Designation/Regulation
Base Zone	RS-1 (One-Unit Residential 1)	RG-2 (Ground-Oriented Residential 2)
GFA	0.3 FSR + 93 sq. m (1000 sq. ft.), equating to 0.41 FSR	0.75 FSR
Setbacks	As in the RS-1 zone: Principal Buildings not less than 1.2 m (4 ft.) from the interior side lot line. Accessory Buildings not less than 1.2 m (4 ft.) from the rear lot line.	As in the RG-2 zone, except that: Principal Buildings not less than 1.2 m (4 ft.) from the interior side lot line. Accessory Buildings not less than 0.6 m (2 ft.) from the rear lot line.

Density

The site is designated Residential Level 3 under the OCP which allows for a variety of ground-oriented housing forms, including townhouses and four-plexes, to a maximum density of 0.75 FSR. The proposed rezoning to a base zone of RG-2 (ground-oriented residential) is fitting for the designation – allowing for a density of 0.75 FSR, and a townhouse form.

The proposed 629.1 sq. m (6,772 sq. ft.) development would suggest a density bonus, for the increase from 0.41 to 0.75 FSR. In accordance with the City’s Density Bonusing and Community Benefit Contribution Policy, this equates to a contribution of approximately \$76,275 as outlined in Table 3 below.

Table 3. Estimated Value of Community Benefits through Density Bonusing

Density Value Calculation	Value
Density bonus from 0.41 FSR to 0.75 FSR / OCP Density (@ \$25 / sq. ft.)	\$76,275
Total Value of Community Benefits	\$76,275

The proposed four-unit townhouse development is an appropriate scale for the lot; the property is close to double the width of adjacent lots.

Setbacks

The proposal is for two buildings on the lot. The front building would be set back from Western Avenue by 4.6 m (15 ft.); this setback is compatible and in line with surrounding lower density forms, so it supports a cohesive streetscape.

The 1.2 m (4 ft.) interior side yard setbacks would also be consistent with a single family or duplex form, as opposed to the slightly larger setback of 1.6 m (5.2 ft.) typical of townhouses. The four-unit proposal is smaller in scale for a townhouse, and closer in form to duplexes. The minor variance is supportable due to the space constraints

imposed by the lack of lane access. The parking turn around area and driveway significantly reduce the space available for buildings.

Additionally, the 0.6 m (2 ft.) accessory building setback from the rear lot line would be less than standard requirement of 1.2 m (4 ft.). The proposed accessory building is small, for waste management and bike storage only, so the reduced setback would have very minimal impact on any future laneway.

Height

The proposed three-storey townhouse is below the 12 m (39.4 ft.) height maximum of the RG-2 base zone. Sloped rooflines also decrease impacts on neighbours, and gradual terracing between units allows the form of the proposed building to follow the natural topography.

Landscaping

Patios and decks offer outdoor space for the units. A large portion of the landscaped area is required to accommodate access. The parking and turnaround area would be landscaped with permeable pavers, and the driveway greened with grass grid. This landscaping of the parking and driveway improves the aesthetic. Should the laneway be constructed in the future and the front access driveway removed, the grass grid driveway would also allow for a seamless transition of this area – from driveway to outdoor amenity space.

Advisory Body Review

Advisory Design Panel

The proposed design was reviewed by the Advisory Design Panel in June 2019. The Panel recommended approval, subject to further review and consideration of some detailed design items, to the satisfaction of staff.

The applicant has worked with staff to review and address these items to staff's satisfaction. For example, privacy between units has been improved with additional plantings.

One minor item is outstanding, which staff are satisfied may be addressed at building permit stage: the applicant will ensure the illuminated address signage for the rear units is clearly visible from the street. Resolution of this outstanding item will be secured through the Development Covenant.

COMMUNITY CONSULTATION

A Developer's Information Session was held on September 18, 2019. Thirteen members of the public attended. Eleven attendees submitted written comments and feedback; seven respondents supported the project, and five opposed.

Support for the project included an appreciation of: the architectural design, the contribution of the proposed four-plex to the mix of housing choice in the city, and the inclusion of the two proposed lock-offs.

There were some concerns raised, particularly regarding:

- Construction impacts and development fatigue in the neighbourhood;
- Increased traffic and loss of on-street parking; and
- Loss of sunlight and views.

This neighbourhood consists of a number of older single-family dwellings, and is expected to see some redevelopment over the coming years as envisaged by the OCP. For example, an 18-unit townhouse development located directly across the street was completed in 2017.

The applicant responded to neighbours' concerns about parking. Following the community consultation, an additional parking space was added to the proposal. Six parking spaces have been provided, equating to one space for each principal unit and lock-off, which is in excess of the Zoning Bylaw requirement. Western Avenue is a dead-end street, so is limited to local traffic.

As discussed in this report, the proposal adheres to the scale of development envisaged in the OCP for this area. The applicant has also reduced the slope of the rooflines thereby reducing the overall building heights, and mitigating overshadowing and view impacts.

Given the proposal's consistency with the OCP, minor variances proposed, and the applicant's responsiveness to community concerns, staff is recommending that the Public Hearing be waived. Should Council wish to refer the application to Public Hearing, the first active clause in the resolution should be amended to read:

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2021, No. 8884" (Ardeshir Behmerdi / 2357 Western Holdings Ltd., 2357 Western Avenue, CD-742) be considered and referred to a Public Hearing;

COMMUNITY BENEFITS

Density Bonus

Should Council approve this proposal, the density bonus contribution, as outlined in Table 3, would be collected prior to final adoption of the Bylaw.

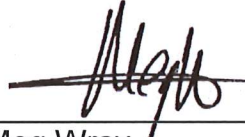
Legal Agreements

The lane at the rear of the property may be constructed at some point in the future as other properties that back onto the lane are redeveloped. A legal agreement will be required to remove the driveway off Western Avenue, at the City's discretion, at such time as the laneway is constructed.

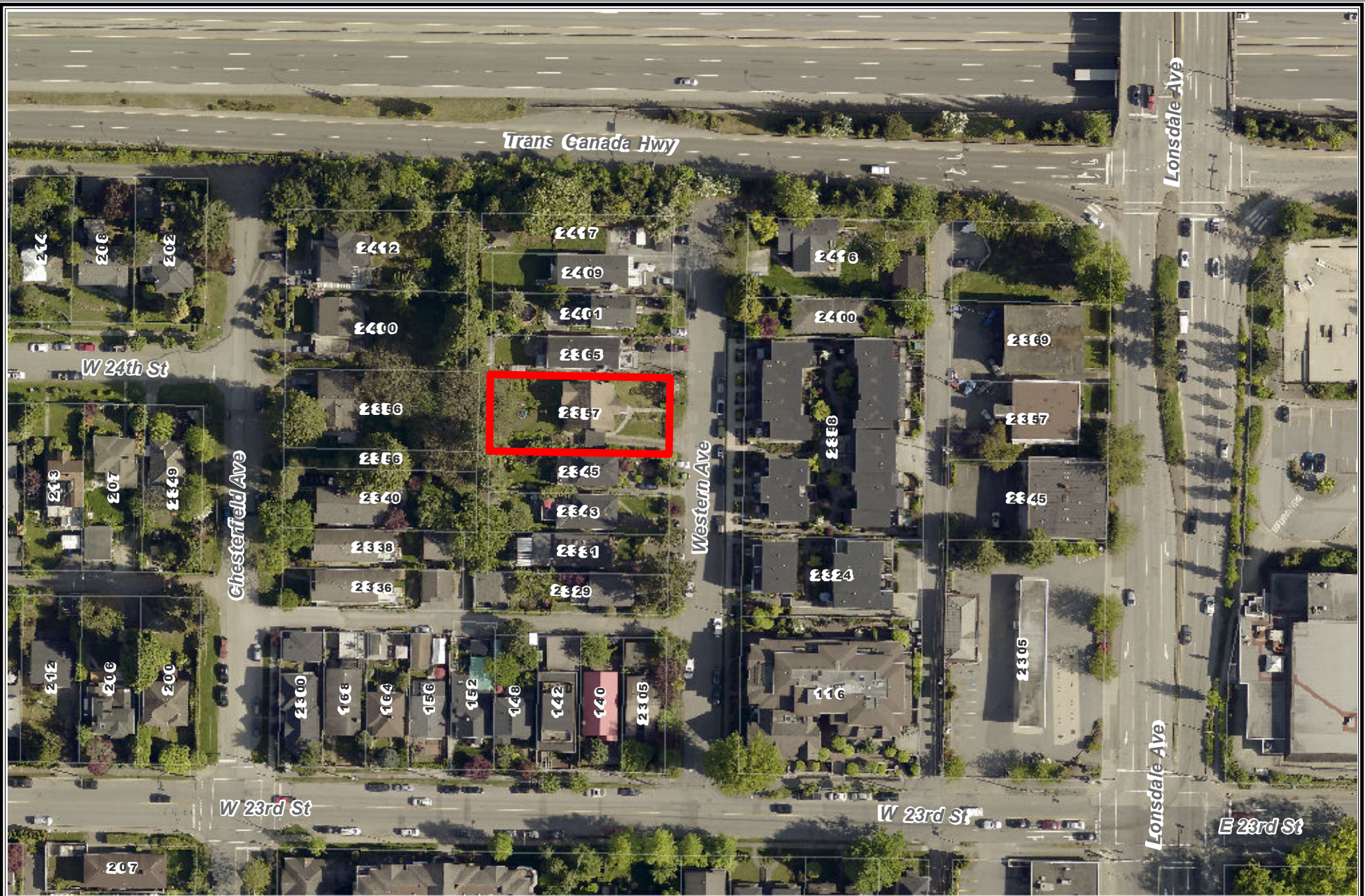
Should Council approve the proposal, the following legal documents would be required to be completed prior to final adoption of the Bylaw:

- Legal agreement to remove the driveway at such time as the laneway is constructed;
- Development Covenant;
- Servicing Agreement;
- Good Neighbour Agreement; and
- Flooding Covenant.

RESPECTFULLY SUBMITTED:



Meg Wray
Planner 1



WESTERN AVENUE DUPLEXES

2357 WESTERN AVE. NORTH VANCOUVER, BC

DP RESUBMISSION

JUNE 24, 2021



ARCH SET

SHEET No.	SHEET NAME	SHEET No.	SHEET NAME
01	COVER SHEET	13	FLOOR PLAN - BASEMENT LEVEL
01a	RENDERINGS	14a	FLOOR PLAN - GROUND LEVEL
01b	RENDERINGS	14b	FLOOR PLAN - PARKING AREA
02	CONTEXT ANALYSIS	15	FLOOR PLAN - SECOND LEVEL
03	PROJECT DESCRIPTION	16	FLOOR PLAN - THIRD LEVEL
04	PRECEDENTS	17	ROOF PLAN
05	PRECEDENTS	18	AREA PLANS
06	DESIGN RATIONALE	19	STREETSCAPE ELEVATIONS
07	PROJECT STATISTICS	20	ELEVATIONS
08	SURVEY	21	ELEVATIONS
09	SITE PLAN	22	LONGITUDINAL SECTIONS
10	FIRE ACCESS PLAN	23	CROSS SECTIONS
11	SHADOW STUDY	24	MATERIAL BOARD
12	FOUNDATION PLAN		

LANDSCAPE SET

SHEET No.	SHEET NAME
L1	LANDSCAPE GENERAL ARRANGEMENT
L2	LANDSCAPE PRECEDENT IMAGES
L4	LANDSCAPE PLANTING PLAN
L5	LANDSCAPE HARDSCAPE PLAN
L6	TYPICAL DETAILS
L6.1	TYPICAL DETAILS
L9	LANDSCAPE TREE PROTECTION / REMOVAL
L11	LANDSCAPE LIGHTING PLAN

CIVIL SET

SHEET No.	SHEET NAME
KEY-1	COVER SHEET
SMP-1	PRELIMINARY KEY PLAN & SITE GRADING
	STORM WATER MANAGEMENT PLAN

APPLICANT

2357 WESTERN HOLDINGS LTD.
ARDESHIR BEHMARDI
PHONE: +1 (604) 715-7551
EMAIL: ardeshir.bk@gmail.com

CODE

CELERITY ENGINEERING LTD
BRIAN FRASER
PHONE: +1 (604) 375-0437
EMAIL: bfraser@celery.ca

ARCHITECT

GRIMWOOD ARCHITECTURE
THOMAS GRIMWOOD
PHONE: +1 (604) 565-3142
EMAIL: thomas@grimwood.ca

LANDSCAPE

CONSIDERED DESIGN INC
JULIAN PATTISON
PHONE: +1 (778) 386-4414
EMAIL: julian@weareconsidered.com

CIVIL

WEBSTER ENGINEERING LTD
MICHELLE FISHER
PHONE: +1 (604) 983-0458
EMAIL: michelle@webstereng.net

REVISIONS No.	DATE
1	2020.09.15
2	2021.06.24



DP RESUBMISSION

RENDERINGS
WESTERN AVENUE DUPLEXES

JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
No. DATE
GRIMWOOD
ARCHITECTURE

01a



DP RESUBMISSION

RENDERINGS
WESTERN AVENUE DUPLEXES

JUNE 24, 2021
2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
No. DATE
1 2020.09.15

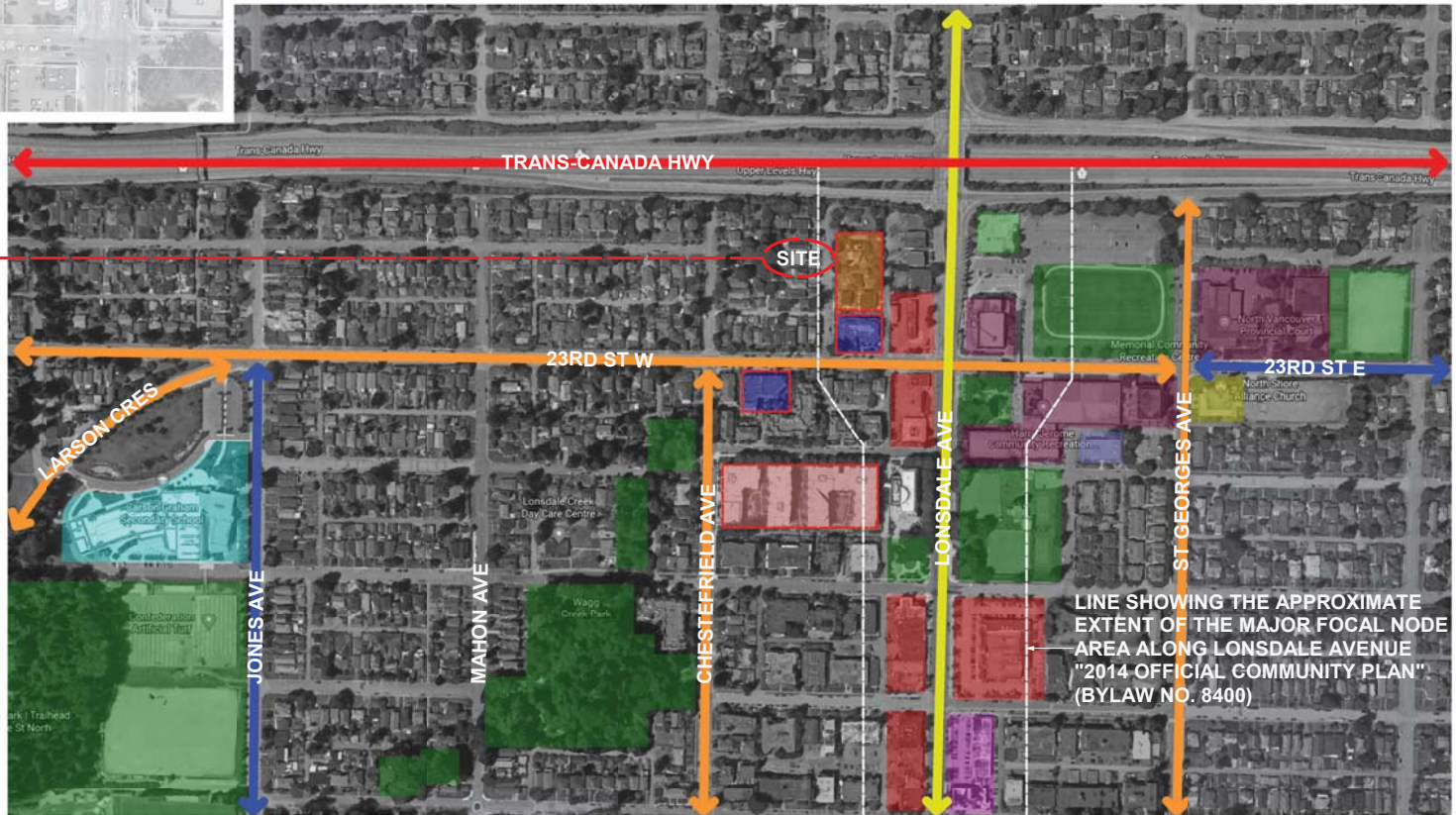
GRIMWOOD
ARCHITECTURE

01b



LEGEND

-  CHURCH
-  COMMERCIAL & MIXED USE
-  MEDICAL
-  MUNICIPAL & RECREATIONAL
-  SCHOOLS & INSTITUTIONAL
-  PARK
-  5-STORY APARTMENT COMPLEX
-  4-STORY APARTMENT COMPLEX
-  4-STORY TOWNHOME COMPLEX
-  SENIORS LIVING
-  HIGHWAY
-  MAJOR ARTERIAL ROAD
-  MINOR ARTERIAL ROAD
-  COLLECTOR ROAD
-  LOCAL ROAD



DP RESUBMISSION

CONTEXT ANALYSIS
WESTERN AVENUE DUPLEXES

JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 No. DATE
GRIMWOOD
 ARCHITECTURE

PROJECT DESCRIPTION

2357 WESTERN HOLDINGS IS SEEKING RE-DEVELOPMENT OF 2357 WESTERN AVENUE (KNOWN AS THE "SITE")

THE PROPOSED DEVELOPMENT WOULD PROVIDE FOUR GROUND-ORIENTED HOUSING UNITS.

THE BUILT FORM WOULD INCLUDE TWO 2.5-STORY TOWNHOME BUILDINGS. THE FIRST STRUCTURE (BUILDING 1), LOCATED IMMEDIATELY OFF OF WESTERN AVENUE, WITH DIRECT PEDESTRIAN ACCESS. THE LOCATION OF THE SECOND BUILDING (BUILDING 2), IS PROPOSED IMMEDIATELY TO THE WEST OF BUILDING 1. BOTH STRUCTURES ARE SEPARATED BY A GENEROUS COURTYARD THAT WILL ENABLE A NATURAL OPPORTUNITY FOR PEDESTRIAN CONNECTIVITY. SOUTH ORIENTED MAIN ENTRANCES TO THE SECOND BUILDING WILL CREATE VISUAL IMPACT WHILE PROVIDING A DIRECT ACCESS THROUGH THE DRIVEWAY.

EACH UNIT WITHIN BUILDING 1 WOULD HAVE A SECONDARY SUITE (ACCESSORY LOCK-OFF UNIT) LOCATED IN THE BASEMENT. PATIOS AND WINDOW WELLS PROVIDE NATURAL LIGHT AND VENTILATION. THE BASEMENTS OF UNITS IN BUILDING 2 CAN BE ACCESSED THROUGH THE PARKING LOT AROUND THE BACK.

THE AVERAGE UNIT SIZE IS APPROXIMATELY 155m². ALL UNITS ARE DESIGNED TO SUPPORT BOTH, GROWING FAMILIES AND DOWNSIZERS.

THE RESIDENTIAL UNITS LOCATED IN BUILDING 1, INCLUDE TWO BEDROOMS AND TWO FOUR-PIECE BATHROOM ON THE SECOND LEVEL AND ONE MASTER BEDROOM WITH WALK-IN-CLOSET AND A FIVE-PIECE BATHROOM ON THE THIRD FLOOR. THE RESIDENTIAL UNITS IN BUILDING 2, INCLUDE ONE BEDROOM AND A THREE-PIECE BATHROOM IN THE BASEMENT, TWO BEDROOMS AND TWO THREE-PIECE BATHROOM ON THE SECOND LEVEL AND ONE MASTER BEDROOM WITH WALK-IN-CLOSET AND A FIVE-PIECE BATHROOM ON THE THIRD LEVEL. EACH UNIT ALSO FEATURES A GENEROUS DECK ON THE THIRD FLOOR, SET BACK AND ORIENTED AWAY FROM ADJACENT NEIGHBOURING PROPERTIES TO MINIMIZE OVERLOOKING. ONE FOUR-PIECE BATHROOM AND A BEDROOM WITH A WALK-IN CLOSET IS PROVIDED IN EACH ACCESSORY LOCK-OFF UNIT IN BUILDING 1.

LAND USE ZONING

THE SITE IS DESIGNATED AS RESIDENTIAL LEVEL 3 MIXED HOUSING (LOW DENSITY) AS PER THE "2014 OFFICIAL COMMUNITY PLAN" (BYLAW NO. 8400) AND CONTEMPLATES A VARIETY OF GROUND-ORIENTED HOUSING TYPES INCLUDING TOWNHOUSES, ROWHOUSES, TRIPLEXES, FOUR-PLEXES WITH A DENSITY OF 0.75 FSR.

CURRENT: SINGLE FAMILY RESIDENTIAL (RS-1)
PROPOSED: RG-2 GROUND-ORIENTED RESIDENTIAL 2

PARKING

EACH UNIT RECEIVES 1 AT GRADE PARKING STALL, INCLUDING THE ACCESSORY LOCK-OFF UNITS, ACCESSED BY A 10FT WIDE DRIVEWAY FROM WESTERN AVENUE. ADDITIONALLY, AN AT-GRADE SECURED BIKE STORAGE WITH A CAPACITY FOR 6 BIKES IS PROVIDED. EACH SECONDARY SUITE ALSO FEATURES 2 VERTICAL BIKE RACKS LOCATED IN PATIOS IN BASEMENT OF BUILDING 1

FSR

THE PROPOSED DEVELOPMENT COMPLIES WITH THE FSR CONTEMPLATED IN THE "2014 OFFICIAL COMMUNITY PLAN" (BYLAW NO. 8400 WITH A TOTAL OF 0.75 FSR.

ALLOWABLE FSR: 0.75
PROPOSED FSR: 0.74 (622m²)

UNIT MIX

THW TOWNHOMES ARE IN AVERAGE 155m² IN SIZE AND FEATURE THREE OR FOUR BEDROOMS, OPEN KITCHENS WITH A CHEF'S TRIANGLE LAYOUT, GENERAL LIVING SPACE WITH 9' CEILINGS, A PRIVATE OUTDOOR PATIO SPACE AT GRADE AND A SPACIOUS ROOFTOP DECK.

TYPE	No. BDRM	SIZE m ²	QTY
TYPE A (3 BRDM)	166 m ²	1	+ (SECONDARY SUITE 58 m ²)
TYPE A1 (3 BRDM)	168 m ²	1	+ (SECONDARY SUITE 58 m ²)
TYPE B (4 BRDM)	145 m ²	1	
TYPE B1 (4 BRDM)	142 m ²	1	

2014 OFFICIAL COMMUNITY PLAN (BYLAW NO. 8400) ANALYSIS

DESIGN GUIDELINES:

BASED ON THE "2014 OFFICIAL COMMUNITY PLAN" (BYLAW NO. 8400), THE PROPOSED DEVELOPMENT COMPLIES WITH THE FOLLOWING:

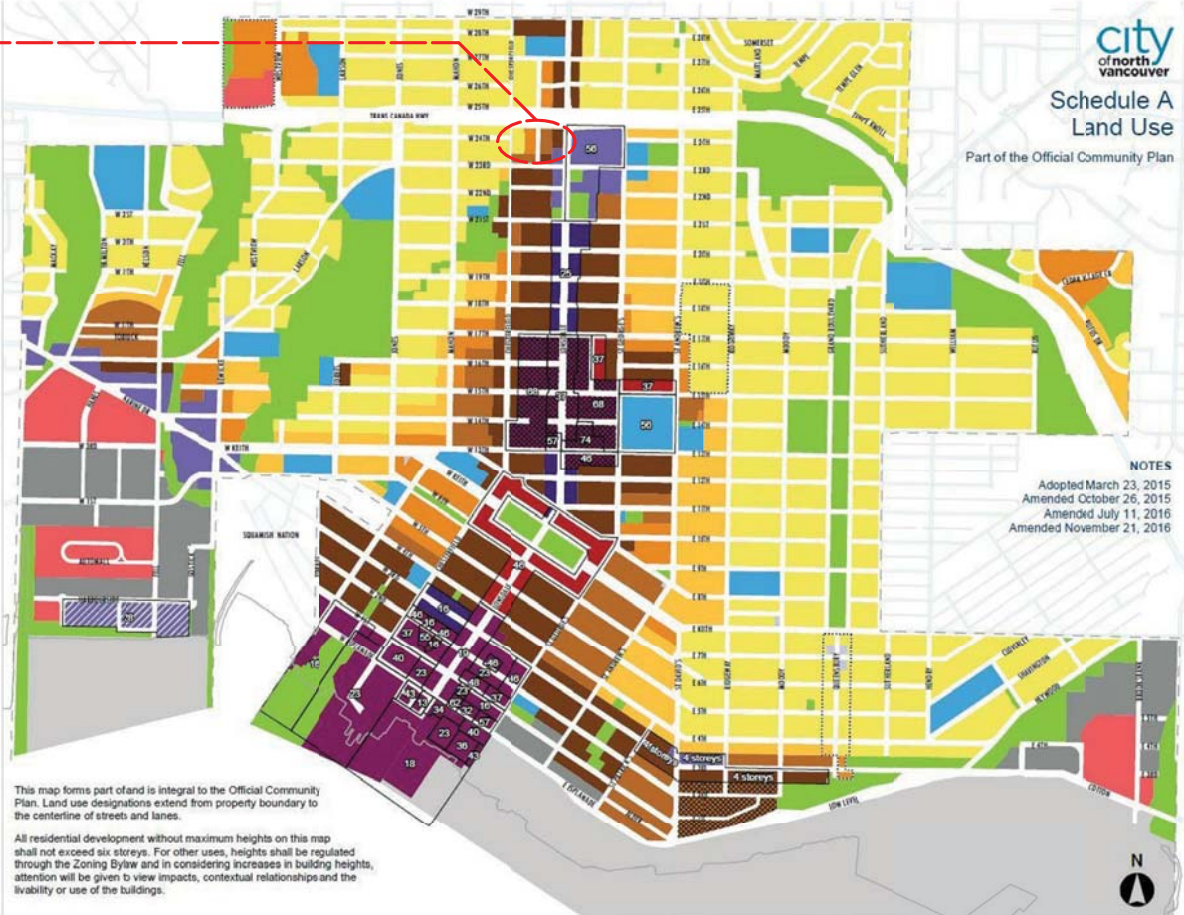
- RESPECTS THE ESTABLISHED URBAN FORM AND PATTERN (PG.20)
- DEMONSTRATES SENSITIVITY TO THE UNIQUE URBAN CONTEXT (PG.20)
- STRONG EXTERIOR CHARACTER AND RESPECTS SURROUNDING BUILDINGS (PG.20)
- CONSIDERATION OF PUBLIC VIEWS CORRIDORS (PG.20)
- THE USE OF OPEN SPACE AROUND AND THROUGH THE DEVELOPMENT (PG.20)
- SCALE AND DESIGN TRANSITIONS BETWEEN DENSITIES (PG.20)

Land Use Designation
This map should be viewed in conjunction with the provisions of Sections 2.1 and 2.2 of Chapter 1

Residential	OCIP Density (PDR)	Maximum Bonus (PSR)
Residential Level 1 (Low Density)	3.5	
Residential Level 2 (Low Density)	3.5	
Residential Level 3 (Low Density)	2.75	
Residential Level 4A (Medium Density)	1.0	
Residential Level 4B (Medium Density)	1.25	
Residential Level 5 (Medium Density)	1.6	up to 1.0
Residential Level 6 (High Density)	2.3	up to 1.0
Mixed Use Level 1 (Low Density)	1.0	
Mixed Use Level 2 (Medium Density)	2.0	up to 0.5
Mixed Use Level 3 (Medium Density)	2.3	up to 0.5
Mixed Use Level 4A (High Density)	2.6	up to 1.0
Mixed Use Level 4B (High Density)	3.0	up to 1.0
Harbourside Waterfront (Mixed Use)	2.05	up to 0.15
Parks, Recreation & Open Space		
School & Institutional		
Commercial		
Mixed Employment		
Industrial		
Maximum Building Heights in Metres		
Special Study Area		
City Boundary		

Example Height Equivalencies

Metres	Approx. Storeys
12-13	4
18-19	6
23-25	8
37	12
46	15
55-56	18
68	22
74	24



city of north vancouver
Schedule A Land Use
Part of the Official Community Plan

NOTES
Adopted March 23, 2015
Amended October 26, 2015
Amended July 11, 2016
Amended November 21, 2016

DP RESUBMISSION

PROJECT DESCRIPTION WESTERN AVENUE DUPLEXES

JUNE 24, 2021
2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
No. DATE
1 2020.09.15
2 2021.06.24
GRIMWOOD ARCHITECTURE

03

NEIGHBOURHOOD

SITUATED ON A LOW TRAFFIC STREET WITHIN THE CORE OF CENTRAL LONSDALE.

THIS AREA RUNS FROM JUST BELOW THE HIGHWAY 1 AT 24TH STREET, DOWN TO KEITH ROAD, EAST TO MOODY AVENUE, AND WEST TO DELBROOK AVENUE.

CENTRAL LONSDALE IS SHOPS AND SERVICE FILLED, DIVERSE, AND CHANGING QUICKLY AND IS LOCATED IN CLOSE PROXIMITY TO THE CITY HALL, LIBRARY, PARKS, SCHOOLS, COMMUNITY CENTRE, THEATRE, LIONS GATE HOSPITAL WITH EASY ACCESS ACROSS THE NORTH SHORE AND DOWNTOWN VIA THE HIGHWAY 1.

ACCESS+CIRCULATION

THE PROJECT PROVIDES A 4.6 m FRONT SETBACK WHICH SERVES TO DEFINE A STRONG URBAN EDGE AND ALLOWS SPACE INTERNALLY FOR SUCCESSFUL DAYLIT FRONT YARDS AND UNDERGROUND PATIOS. THE SETBACK ON THE SOUTH SIDE LOT LINE IS INCREASED TO 6.2 m. THIS STRATEGY ALLOWS THE PROJECT TO FORMALLY AND FUNCTIONALLY PROVIDE TWO MAIN FRONTAGES. THE RESIDENTIAL UNITS MAIN ENTRIES AND LANDSCAPED FRONT YARDS ARE LOCATED FROM WESTERN AVE (EAST) AND DIRECTLY FROM THE PROPOSED DRIVEWAY (SOUTH). THIS ARRANGEMENT ENABLES THE AREA'S CHARACTERISTIC RESIDENTIAL FEEL, WHILE CREATING A STRONGLY DEFINED CORNER WITHIN THE SITE. MINIMALISTIC METAL CANOPIES AND METAL PLANTERS HIGHLIGHT THE MAIN ENTRANCES WHILE PROVIDING A SUBTLE SENSE OF PRIVACY WITHOUT COMPROMISING THE COMMUNITY FEELING WITHIN THE SITE. VEHICLE ACCESS WOULD BE PROVIDED BY A 3 m WIDE PERMEABLE DRIVEWAY LOCATED ALONG THE SOUTH LOT LINE.

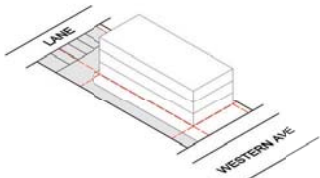
ACCESSIBILITY

ENTRY CANOPIES PROVIDE SHELTER, DOORBELL AT MAX 42" AFF. LARGE, EASY TO READ (DAY AND NIGHT) ADDRESS NUMBERS, MAX 1/2" TRESHOLD BETWEEN DOOR AND FINISHED GRADE, LEVER DOOR HANDLES ON DOORS, PRESSURE BALANCE TUB/SHOWER VALVES, SOLID BACKING IN WALLS AROUND TUBS, SHOWERS AND TOILETS, ADJUSTABLE HEIGHT SHOWER HEADS, THESE ARE SOME OF THE FEATURES THAT WILL BE PROVIDED

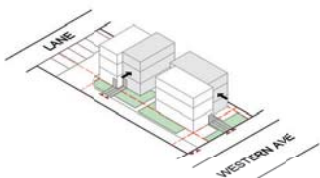
FORM + MASSING

THE PROPOSED DESIGN PROVIDES A DEFINED AND GENTLE TRANSITION BETWEEN RESIDENTIAL AND COMMERCIAL BUILDINGS OF THE MAJOR FOCAL NODE AREA ALONG LONSDALE AVENUE LOCATED 1 BLOCK TO THE EAST OF THE SITE. THE MASSING IS BROKEN INTO TWO BUILDINGS TO SOFTEN THE IMPACT ON THE ADJACENT SINGLE FAMILY HOMES AND TO CREATE A NATURAL OPPORTUNITY FOR PEDESTRIAN CONNECTIVITY THROUGH A SHARED OUTDOOR SPACE.

- LOCATION OF BUILDING MASS
- SETBACKS
- 1 PARKING STALL PER UNIT + 1 ADA VISITOR STALL



- PARTIAL SHIFT OF BUILDINGS
- PROVIDE SOUTHERN EXPOSURE TO NORTH EAST UNIT (UNIT A1)
- ENHANCE PRIVACY AT MAIN ENTRIES WITH LANDSCAPED FRONT YARDS



DETAIL+MATERIALITY

THE ARCHITECTURAL EXPRESSION MERGES THE CLEAN CLEAR LANGUAGE OF CONTEMPORARY ARCHITECTURE WITH FAMILIAR AND WARM TACTILE MATERIALITY OF TRADITIONAL WEST COAST RESIDENTIAL HOMES.

EACH UNIT IS CLEARLY DELINEATED AND LEGIBLE AS A "HOME", ACCESSED BY WELL DEFINED, PRIVATE ENTRY PATHWAYS LEADING TO THE MAIN ENTRIES WHICH ARE HIGHLIGHTED BY A MINIMALISTIC METAL CANOPY WITH BUILT-IN PRIVACY SIDE PANEL, RECESSED CONTRASTING COLOUR METAL PANELS WITH MATCHING COLOUR GLAZED DOORS, A STATE OF THE ART SIDE MOUNTED, METAL/ALU LED LIGHT ADDRESS NUMBER AS WELL AS A MATCHING COLOUR WALL UP/DOWN LIGHT FIXTURE.

SHINGLES IN ALTERNATE COLOURS (LIGHT BROWN / DARK GREY) IS PROPOSED IN THE GROUND, SECOND AND THIRD FLOOR AND WILL BE PUNCTUATED BY FRAMED WINDOWS, THAT ARE SIZED AND LOCATED TO MAXIMIZE DAYLIGHT WHILE MAINTAINING PRIVACY.

THE MASSING IS SOFTENED WITH THE USE OF VERTICAL CEDAR SIDING, STRATEGICALLY LOCATED THROUGHOUT THE GROUND FLOOR. THIS MATERIAL WILL HELP ANCHOR THE PROJECT ON THE SITE, CREATE A FEELING OF QUALITY AND PERMANENCE AND EMPHASIZE THE PEDESTRIAN MOVEMENT AROUND AND THROUGH THE PROJECT ON THE GROUND PLANE. THE CLEAN WOOD TEXTURE IS A WARMER AND VISUALLY LIGHTER COUNTERPOINT AND SERVES TO GIVE THE UPPER LEVELS A FEELING OF ELEVATION, BEING LOFTED ABOVE THE GROUND PLANE.

THE MATERIAL COMBINATION IS INTENDED TO SOFTEN THE PERCEIVED HEIGHT OF THE TWO-AND-A-HALF-STOREY TOWNHOMES AND NOT OVERWHELM THE NEIGHBORING RESIDENTIAL LOTS.

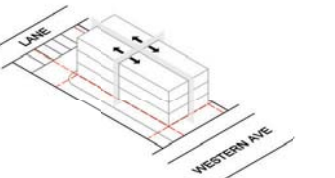
THE CHARACTER OF EACH OF THE FOUR MAIN ELEVATIONS IS CONSISTENT WITH SUBTLE VARIATION IN MATERIAL AND FORM TO REPRESENT THE UNIQUE CHARACTER OF EACH FACADE, ON THE TWO PROPOSED FRONTAGES OF THE PROJECT, ALONG WESTERN AVE AND THE DRIVEWAY. THE MATERIAL PALETTE IS MORE PRONOUNCED. THE AREA OF OPENINGS IN THESE ELEVATIONS IS INCREASED IN ORDER TO TAKE ADVANTAGE OF THE EAST AND SOUTH ORIENTATION ALLOWING MORE NATURAL LIGHT INTO THE SPACES.

THE CHARACTER OF EACH OF THE FOUR MAIN ELEVATIONS IS CONSISTENT WITH SUBTLE VARIATION IN MATERIAL AND FORM TO REPRESENT THE UNIQUE CHARACTER OF EACH FACADE, ON THE TWO PROPOSED FRONTAGES OF THE PROJECT, ALONG WESTERN AVE AND THE DRIVEWAY. THE MATERIAL PALETTE IS MORE PRONOUNCED. THE AREA OF OPENINGS IN THESE ELEVATIONS IS INCREASED IN ORDER TO TAKE ADVANTAGE OF THE EAST AND SOUTH ORIENTATION ALLOWING MORE NATURAL LIGHT INTO THE SPACES.

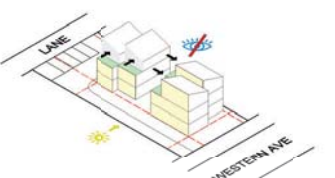
LANDSCAPE

THE LANDSCAPE DESIGN AT THE FRONT OF THE SITE HAS BEEN DEVELOPED TO OFFER A STREET FRIENDLY PRESENCE. A NEW GRASS BOULEVARD HAS BEEN CREATED WITH SIDEWALK AND NEW STREET TREES

- ROTATION OF REAR BUILDING FOR GREATER VARIATION
- TWO MAIN FRONTAGES
- CREATE VISUAL CONNECTIONS THROUGH SITE
- PRIVATE COURTYARD AS BUFFER BETWEEN STRUCTURES



- TWO SECONDARY SUITES IN BASEMENT
- WITH ACCESS VIA PATHWAYS THRU PRIVATE PATIOS
- NATURAL LIGHT THROUGH WINDOW WELLS FOR BASEMENTS



LANDSCAPE (cont'd.)

UNITS DESIGN: EACH UNIT HAS AN ADDRESS SIGN THAT IS LIT AT NIGHT AS WELL AS WALL MOUNTED LIGHTS, AT THE FRONT ENTRANCE AND ABOVE THE DOORS TO PRIVATE PATIOS

FREE-STANDING METAL PLANTERS WILL PROVIDE AN ADDITIONAL LAYER OF PRIVACY BETWEEN ROOF DECKS WHICH ALSO ALLOWING FOR A HINT OF LUSH GREENERY TO BE NOTICED FROM DOWN BELOW

PERMEABILITY: A PERMEABLE DRIVEABLE GRASS GRID WILL BE USED ON THE DRIVEWAY AND PARKING AREA. A CAST-IN-PLACE CONCRETE SURFACE, LIGHT BROOM FINISH, PIGMENT DYED (CHARCOAL GREY) IS PROPOSED ON THE VEHICLE MANUEVER LANE AND PEDESTRIAN PATHWAY ALONG THE DRIVEWAY

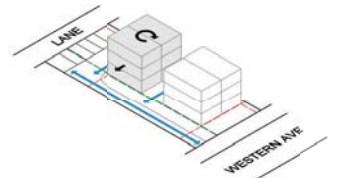
THE COURTYARD AND UNIT PATIOS HAVE 12" SQ. FLAME TEXTURED GRANITE PAVING, SET ON A PERMEABLE SUB-BASE, BONDED WITH PERMEABLE GROUT JOINT

A PERMEABLE CRUSHED COMPACTED BASALT STRIP ALONG THE NORTH SIDE LOT LINE WILL PREVENT WATER ACCUMULATION ON SURFACES DUE TO LONG PERIODS OF SHADE THROUGHOUT THE DAY IN THIS AREA

AFFORDABILITY

HOUSING AFFORDABILITY IS AN OXYMORON IN THE LOWER MAINLAND. IT IS EXPENSIVE, WHAT MAKES THE PROPOSAL AFFORDABLE IS THAT IT IS A REALISTIC MEANS OF ACCOMMODATING FOUR FAMILIES ON A LOT WHERE ONE CURRENTLY LIVES NOW. CONSEQUENTLY, THE LAND COST COMPONENT, WHICH IS THE LARGEST, CAN BE SHARED BETWEEN FOUR PROPERTIES. THERE IS SPACE WITHIN EACH UNIT TO ALLOW FAMILIES TO GROW WITHOUT COMPROMISING NORMAL FAMILY LIFE

- BUILDING 2 TO BE LOCATED 1.07 m (42") BELOW IN RELATION TO BUILDING 1
- ADDITIONALLY, UNIT 1 AND UNIT 4 WILL BE LOWERED 0.60 m (24")



LANDSCAPE (cont'd.)

EVERGREEN VINE PLANTING WILL BE USED IN STRATEGIC LOCATIONS AND WILL BRING INTEREST WHILE PROVIDING PRIVACY WITHIN THE SITE

FREE-STANDING ELEMENTS: 4FT HIGH TIMBER BOLLARDS WITH BUILT-IN LIGHT FIXTURES ON THE PAVING ALONG THE PATHWAYS IN THE OPEN SPACES

PRE-FINISHED METAL PLANTERS: VARIOUS SIZES OF FREE-STANDING METAL PLANTERS HAVE BEEN LOCATED STRATEGICALLY TO PROVIDE PRIVACY

DISPOSAL LOGISTICS

THE PROPOSED DEVELOPMENT WILL PROVIDE A DEDICATED GARBAGE GRID, AT-GRADE DISPOSAL AREA ADJACENT TO THE PARKING STALLS. ADDITIONALLY, THERE WILL BE A TEMPORARY AREA (GARBAGE DAYS ONLY) LOCATED AT THE ENTRANCE OF THE DRIVEWAY ON WESTERN AVENUE.

THE GARBAGE COLLECTION WILL HAPPEN ALONG WESTERN AVENUE; THE GARBAGE TRUCK PARKS IN THE STREET/DRIVEWAY ENTRANCE, GOES ON FOOT AND BRINGS OUT EACH BIN ONE AT A TIME TO DUMP IN THE TRUCK.

CPTED

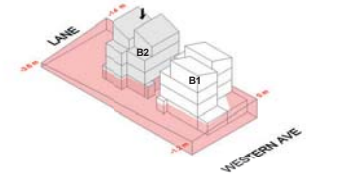
CRIME PREVENTION HAS BEEN ACCOMMODATED WITH WELL LIT OPEN SIDE AND REAR YARDS. LANDSCAPED WITH RELATIVELY LOW VEGETATION THAT WILL PROVIDE A CLEAR BORDER DEFINITION OF CONTROLLED SPACE. THESE CONFIGURATION WILL ALSO MINIMIZE OPPORTUNITIES TO BE UNDETECTED BY RESIDENTS WHILE PROVIDING NATURAL BARRIERS AGAINST TRESPASSERS.

THE FRONT YARD DESIGN WILL PROVIDE CLEARLY MARKED TRANSITIONAL ZONES WHICH INDICATE MOVEMENT FROM PUBLIC TO SEMI-PRIVATE TO PRIVATE SPACE AND WILL CREATE A SENSE OF OWNERSHIP.

TOPOGRAPHY ANALYSIS

THE NORTH-EAST CORNER OF THE LOT HAS THE HIGHEST GRADE ELEVATION AT 117.3 m. FROM THERE, IT SLOPES DOWN TOWARDS SOUTH ALONG WESTERN AVENUE. THE ELEVATION AT THE SOUTH-EAST CORNER IS 116.1 m. THE GRADE ALSO SLOPES DOWN 1.8 m ALONG THE NORTH SIDE LOT LINE. THE NORTH-WEST CORNER IS CURRENTLY AT 115.5 m. THE SOUTH-WEST CORNER OF THE LOT IS THE LOWEST GRADE ELEVATION AT 113.7 m.

- BUILDING 2 TO BE LOCATED 1.07 m (42") BELOW IN RELATION TO BUILDING 1
- ADDITIONALLY, UNIT 1 AND UNIT 4 WILL BE LOWERED 0.60 m (24")



CPTED (cont'd.)

A GENEROUS COURTYARD IS PROVIDED BETWEEN THE TWO BUILDING STRUCTURES CREATING A SENSE OF OPENNESS. THE SETBACK ON THE SOUTH SIDE LOT LINE IS INCREASED TO 6.2 m. AND WILL HOUSE AN AMPLE DRIVEWAY. THIS STRATEGY ALLOWS THE PROJECT TO FORMALLY AND FUNCTIONALLY PROVIDE TWO MAIN FRONTAGES. THIS ARRANGEMENT WILL FACILITATE AN EFFECTIVE NATURAL SURVEILLANCE WHICH IS ITS PRIMARY GOAL IS TO ALLOW OBSERVATION AND TO HELP CREATE AN INCREASED PERCEPTION OF RISK TO THE OFFENDER. THIS ARRANGEMENT ANOTHER STRENGTH OF THIS PROPOSAL IS ITS CLOSE PROXIMITY TO SHOPS AND SERVICES.

OVERLOOK ANALYSIS

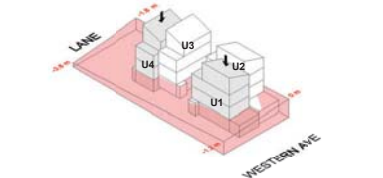
OPENINGS: THE AREA OF OPENINGS ALONG THE NORTH FACADE OF BOTH BUILDINGS IS REDUCED IN ORDER TO MITIGATE THE OVERLOOK IMPACT ON THE NORTH NEIGHBOUR. SOME WINDOW OPENINGS WILL HAVE FROSTED GLASS FINISH THAT WILL COMPLETELY BLOCK VIEW WHILE ALLOWING NATURAL LIGHT TO COME IN. ADDITIONALLY, HORIZONTAL WINDOWS WITH SILLS AT 1.6 m (5'-4") AFF ARE INTRODUCED. (REFER TO DIAGRAM 5 ON THIS SHEET AND ELEVATION 1 ON SHEET DP-19 & DP-20 RESPECTIVELY)

ROOFTOP DECKS: THE ROOF DECKS ON THE THIRD FLOOR ON BOTH BUILDINGS ARE ORIENTED IN SUCH A WAY AS TO REDUCE SIGNIFICANTLY THE OVERLOOK IMPACT. THE ONLY ROOF DECK THAT COULD POTENTIALLY OVERLOOK ON THE NORTH NEIGHBOUR (BUILDING 1, UNIT 2), WILL HAVE A 1.5 m (5'-0") HIGH PRIVACY SCREEN. (REFER TO DIAGRAM 5 ON THIS SHEET AND ELEVATION 1 ON SHEET DP-19 & DP-20 RESPECTIVELY)

SUSTAINABILITY

THE IMMEDIATE ENVIRONMENTAL BENEFIT THIS PROJECT OFFERS, WILL BE THE REPLACEMENT OF A BUILDING WITH EXTREMELY POOR ENERGY PERFORMANCE. COUPLED WITH THAT, IS THAT THE PROPOSED DEVELOPMENT WILL BE LIMITED TO WHERE DEVELOPMENT HAS OCCURRED - NO UNDEVELOPED LAND FOR CONSTRUCTION OR SITE WORK IS INVOLVED. THE SITE IS NOT PROXIMATE TO ANY WATERCOURSES WHICH MINIMIZES ANY POTENTIAL ENVIRONMENTAL DEGRADATION DURING CONSTRUCTION, AS MENTIONED, THE SITE IS IN CLOSE PROXIMITY TO MAJOR PUBLIC TRANSPORTATION ROUTES. THIS MINIMIZES THE NEED FOR DEPENDANCY ON CARS AND ENCOURAGES WALKING TO A WIDE RANGE OF ESSENTIAL AMENITIES. LANDSCAPING HAS BEEN DESIGNED TO ALLOW FOR THE RETENTION OF STORM WATER ON SITE TO RE-DISTRIBUTE TO LOCAL WATER LINES OR TO COMPLEMENT LANDSCAPE IRRIGATION. LIGHT POLLUTION IS MINIMAL AS THE DEVELOPMENT IS COMPACT. FACILITIES ARE PROVIDED ON SITE FOR STORAGE OF RECYCLABLES. THE BUILDING CODE REQUIRES FOR THE PROVISION OF EFFICIENT WATER FIXTURES THROUGHOUT THE DEVELOPMENT. ENERGY PERFORMANCE OF THE COMPLETED PROJECT IS INTENDED TO BE ENERGIUE 80 AND ASHRAE 90.1 2007. THIS DEVELOPMENT HAS THE BENEFIT OF SHARING A PARTY WALL ON EACH DUPLEX MAXIMIZING ITS ENERGY PERFORMANCE. CONSTRUCTION MATERIALS MADE FROM RECYCLED, GEMENTICIOUS, AND ENVIRONMENTALLY SENSITIVE MATERIALS WILL BE USED WHEREVER POSSIBLE.

- BUILDING 2 TO BE LOCATED 1.07 m (42") BELOW IN RELATION TO BUILDING 1
- ADDITIONALLY, UNIT 1 AND UNIT 4 WILL BE LOWERED 0.60 m (24")



REVISIONS	DATE
1	2020.09.16
2	2021.06.24

GRIMWOOD
ARCHITECTURE

DP RESUBMISSION

DESIGN RATIONALE WESTERN AVENUE DUPLEXES

JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

06

PROJECT STATISTICS

CIVIC ADDRESS:	2357 WESTERN AVE, CITY OF NORTH VANCOUVER, BC	
LEGAL DESCRIPTION:	LOT C OF LOT A BLOCK 215 DISTRICT LOT 545 GROUP 1 NWD PLAN 15993	
OCP AREA DESIGNATION:	RESIDENTIAL LEVEL 3 (LOW DENSITY)	
ZONING BYLAW:	1995, No. 6700 I.C., RG-2 GROUND ORIENTED RESIDENTIAL 2	
PROPOSAL:	TO DEVELOP FOUR, 2.5 STOREY TOWNHOME UNITS, EACH TOWNHOME WITH ONE (1) ACCESSORY LOCK-OFF UNIT	
LOT AREA AREA:	842.63 m ² (9070 SF)	
GFA:	PERMITTED: 632 m ² (6802.5 SF)	PROPOSED: 622 m² (6692 SF)
FSR:	PERMITTED: 0.75	PROPOSED: 0.74
LOT COVERAGE:	PERMITTED: 50%	PROPOSED: 28%
BUILDING HEIGHT:	PERMITTED: 12m	PROPOSED: *12m

(NOTE: REFER TO DIAGRAMS ON THIS SHEET)

BUILDING SITING:		
FRONT LOT LINE:	PERMITTED: 3m (9.8FT)	PROPOSED: 4.6m (15FT)
REAR LOT LINE:	PERMITTED: 1.6m (5.2FT)	PROPOSED: 12.6m (41.3FT)
SIDE LOT LINES BLDG. 1:		
SIDE LOT LINE NORTH:	PERMITTED: 1.6m (5.2FT)	PROPOSED: 1.2m (4FT)
SIDE LOT LINE SOUTH:	PERMITTED: 1.6m (5.2FT)	PROPOSED: 6.6m (21.7FT)
SIDE LOT LINES BLDG. 2:		
SIDE LOT LINE NORTH:	PERMITTED: 1.6m (5.2FT)	PROPOSED: 1.2m (4FT)
SIDE LOT LINE SOUTH:	PERMITTED: 1.6m (5.2FT)	PROPOSED: 6.2m (20.4FT)
PARKING CALCULATION:		
REQUIRED: 1.05/DU=1.05x4 =4	PROPOSED: 6	
ADA REQ'D: 0.038/DU=0.038x4 =0	PROPOSED: 0	
TOTAL REQUIRED: =4	PROPOSED: 6	
BICYCLE REQ'D: 1.5/DU=1.5x4 =6	PROPOSED: *6	
EXT BICYCLE RACKS =0	PROPOSED: **4	

NOTES: *SECURED BICYCLE STORAGE
**2 FOR EACH SECONDARY SUITE

TERRACES CALCULATION (THIRD LEVEL):		
REQ'D: 10% GFA=622m ² x .10= 62.2m ²	PROPOSED: 61.26m²	

SPATIAL SEPARATION (TABLE 3.2.3.1.D, BCBC 2018)

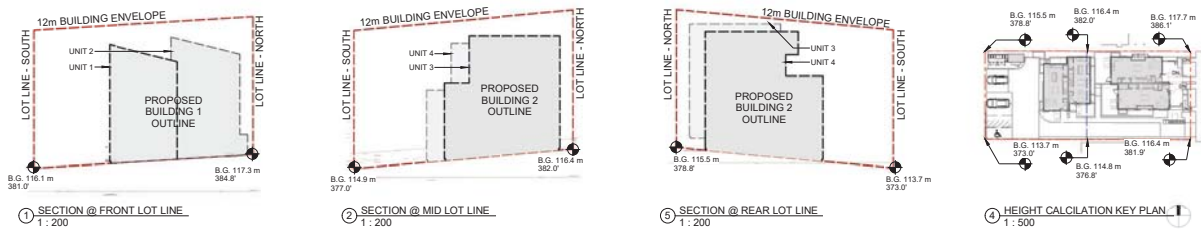
NORTH ELEVATION - BUILDING 1		NORTH ELEVATION - BUILDING 2 - FACE A	
LIMITING DISTANCE:	4.00 FT 1.22 m	LIMITING DISTANCE:	4.00 FT 1.22 m
EXPOSED WALL AREA:	962.28 SF 89.40 m ²	EXPOSED WALL AREA:	529.27 SF 49.17 m ²
PERMITTED UNPROTECTED OPENINGS (14.00%):	134.76 SF 12.52 m ²	PERMITTED UNPROTECTED OPENINGS (14.00%):	74.06 SF 6.88 m ²
PROPOSED UNPROTECTED OPENINGS (9.88%):	95.09 SF 8.83 m ²	PROPOSED UNPROTECTED OPENINGS (10.80%):	57.17 SF 5.31 m ²
WEST ELEVATION (COURTYARD) - BUILDING 1 - FACE A		NORTH ELEVATION - BUILDING 2 - FACE B	
LIMITING DISTANCE:	7.22 FT 2.20 m	LIMITING DISTANCE:	9.19 FT 2.80 m
EXPOSED WALL AREA:	421.77 SF 39.18 m ²	EXPOSED WALL AREA:	645.61 SF 59.98 m ²
PERMITTED UNPROTECTED OPENINGS (25.71%):	108.39 SF 10.07 m ²	PERMITTED UNPROTECTED OPENINGS (30.15%):	194.61 SF 18.08 m ²
PROPOSED UNPROTECTED OPENINGS (25.65%):	108.23 SF 10.05 m ²	PROPOSED UNPROTECTED OPENINGS (14.22%):	91.79 SF 8.53 m ²
WEST ELEVATION (COURTYARD) - BUILDING 1 - FACE B		EAST ELEVATION (COURTYARD) - BUILDING 2	
LIMITING DISTANCE:	19.36 FT 2.95 m	LIMITING DISTANCE:	7.22 FT 2.20 m
EXPOSED WALL AREA:	378.34 SF 35.15 m ²	EXPOSED WALL AREA:	911.81 SF 84.71 m ²
PERMITTED UNPROTECTED OPENINGS (43.02%):	158.98 SF 14.77 m ²	PERMITTED UNPROTECTED OPENINGS (19.23%):	175.45 SF 16.30 m ²
PROPOSED UNPROTECTED OPENINGS (15.16%):	57.42 SF 5.33 m ²	PROPOSED UNPROTECTED OPENINGS (17.25%):	157.25 SF 14.61 m ²



DENSITY LOT COVERAGE UNIT TYPE A UNIT TYPE A1 UNIT TYPE B UNIT TYPE B1

LEVEL	GFA (m ²)	GFA (SF)	FSR	NAME	AREA (m ²)	AREA (SF)	%	FLOOR	AREA (m ²)	AREA (SF)	NAME	AREA (m ²)	AREA (SF)	NAME	AREA (m ²)	AREA (SF)	NAME	AREA (m ²)	AREA (SF)
FIRST LEVEL	228 m ²	2449 SF	0.27	BUILDING 1	127 m ²	1368 SF	15%	FIRST LEVEL	61 m ²	653 SF	FIRST LEVEL	60 m ²	647 SF	FIRST LEVEL	53 m ²	572 SF	FIRST LEVEL	51 m ²	547 SF
SECOND LEVEL	232 m ²	2498 SF	0.28	BUILDING 2	107 m ²	1155 SF	13%	SECOND LEVEL	63 m ²	678 SF	SECOND LEVEL	63 m ²	677 SF	SECOND LEVEL	53 m ²	572 SF	SECOND LEVEL	53 m ²	572 SF
THIRD LEVEL	162 m ²	1744 SF	0.19	TOTAL:	234 m ²	2524 SF	28%	THIRD LEVEL	42 m ²	456 SF	THIRD LEVEL	42 m ²	455 SF	THIRD LEVEL	39 m ²	419 SF	THIRD LEVEL	39 m ²	415 SF
TOTAL:	622 m ²	6692 SF	0.74						166 m ²	1787 SF		165 m ²	1778 SF		145 m ²	1562 SF		142 m ²	1534 SF
									166 m ²	1787 SF		165 m ²	1778 SF		145 m ²	1562 SF		142 m ²	1534 SF

HEIGHT CALCULATION DIAGRAMS



PROJECT STATISTICS WESTERN AVENUE DUPLEXES

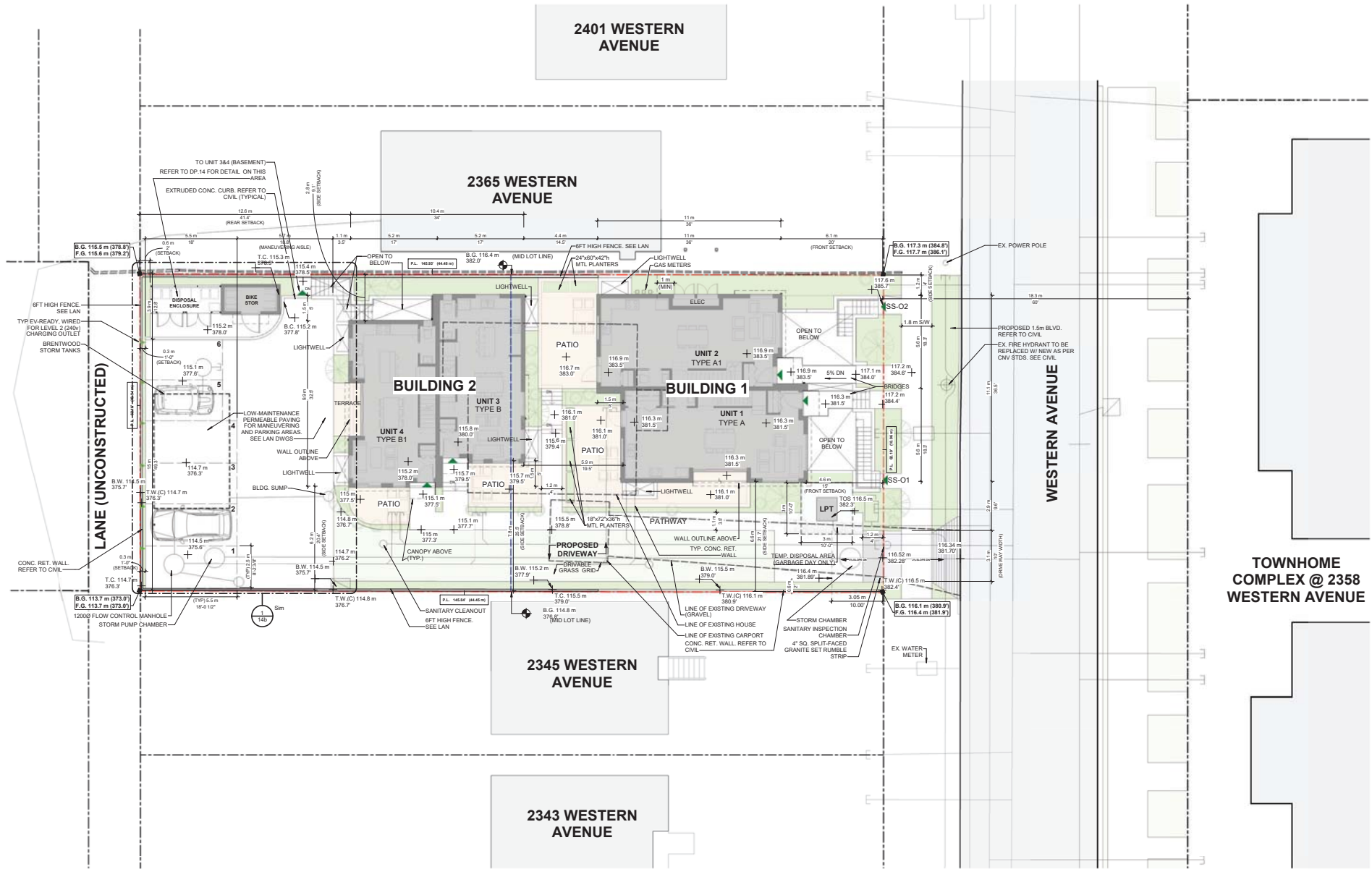
JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS No. DATE 1 2020.09.15 2 2021.06.24 GRIMWOOD ARCHITECTURE

DP RESUBMISSION

07



**TOWNHOME
COMPLEX @ 2358
WESTERN AVENUE**

DP RESUBMISSION

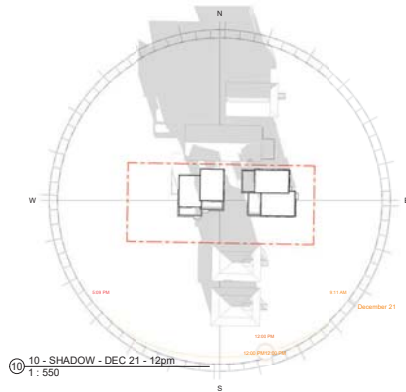
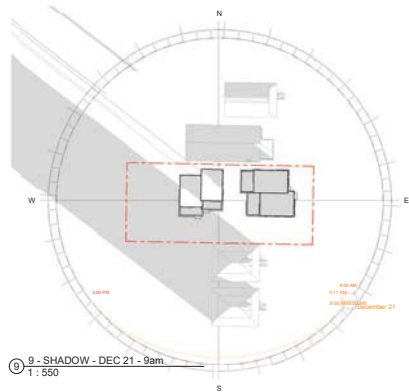
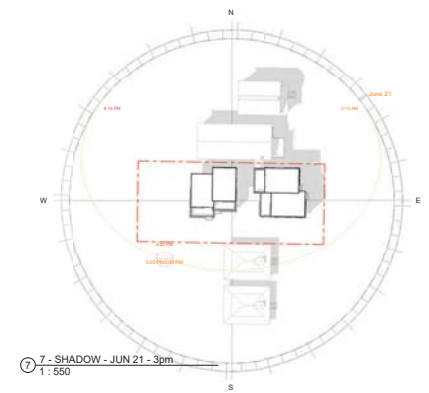
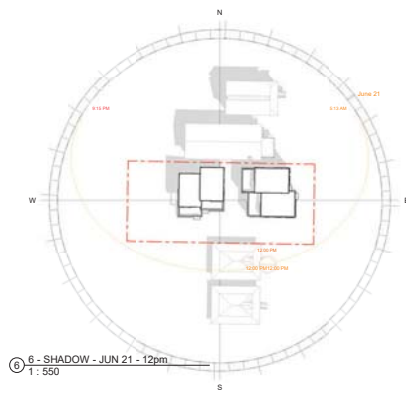
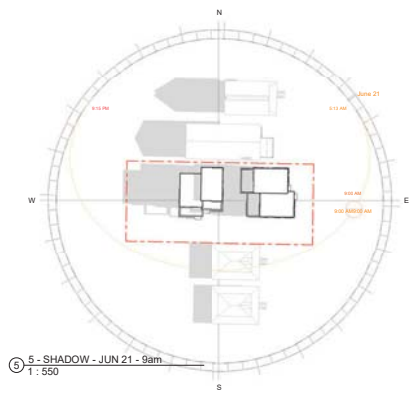
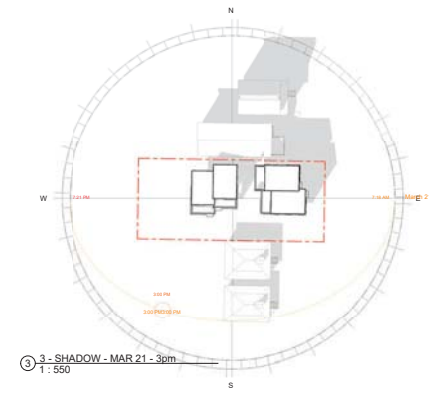
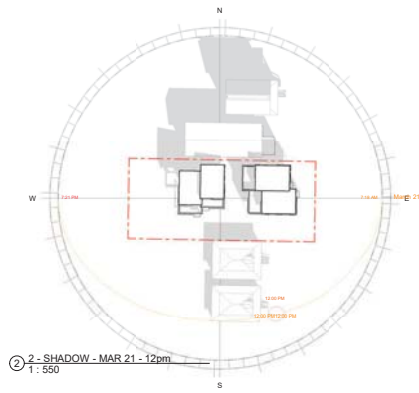
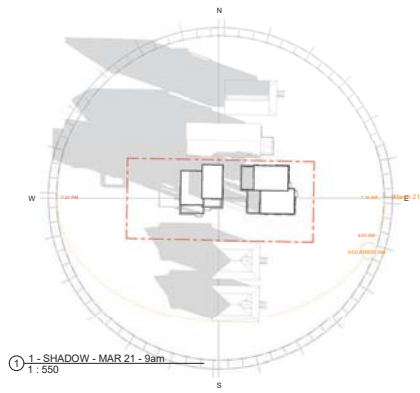
SITE PLAN
WESTERN AVENUE DUPLEXES

SEPTEMBER 21, 2021
2357 WESTERN AVE. NORTH VANCOUVER, BC

GRIMWOOD
ARCHITECTURE

09

REVISIONS	DATE
1	2021.09.16
2	2021.06.24
3	2021.09.21



SHADOW STUDY
WESTERN AVENUE DUPLEXES

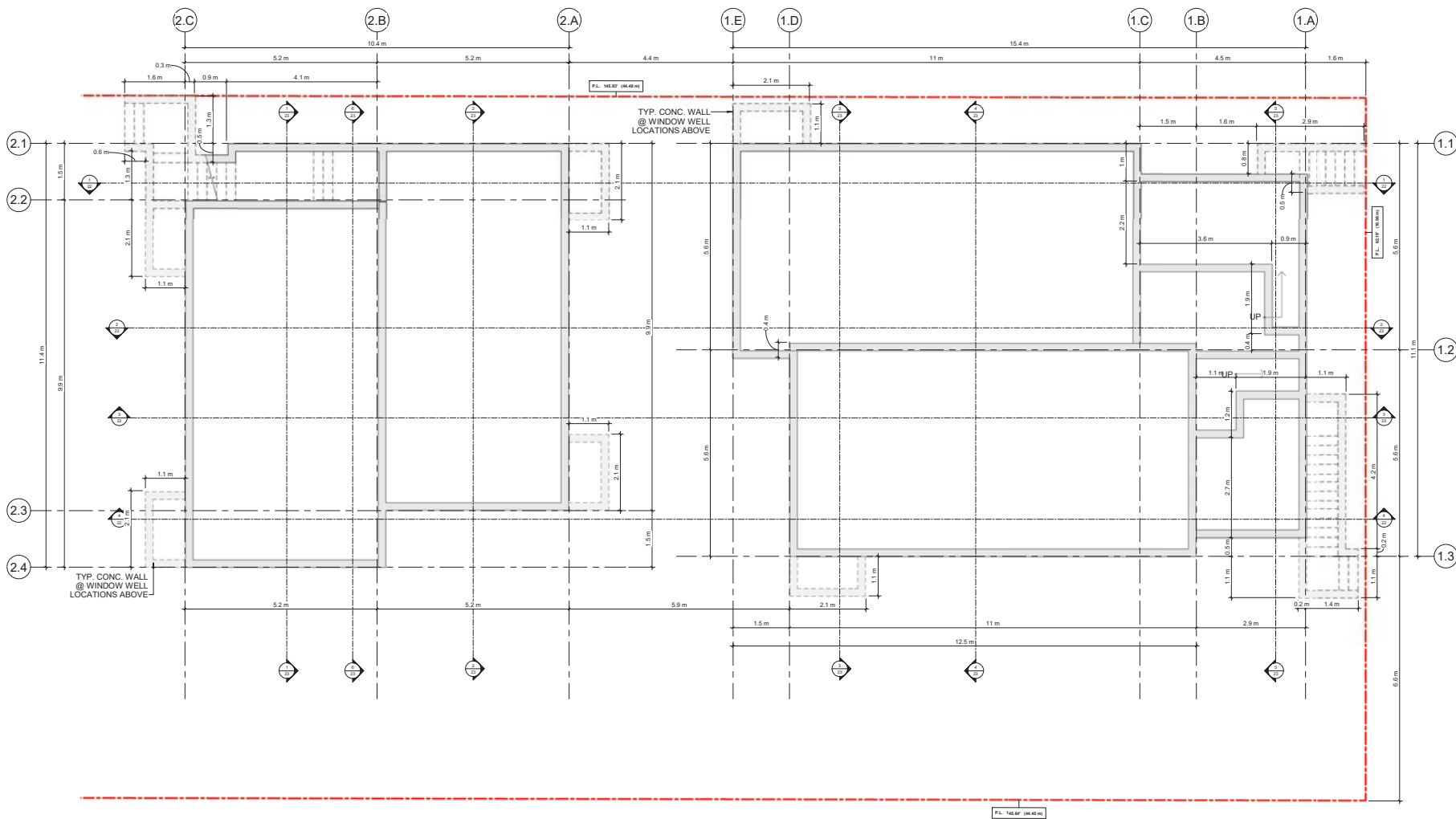
JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 No. DATE
 1 2020.09.15

GRIMWOOD
 ARCHITECTURE

DP RESUBMISSION



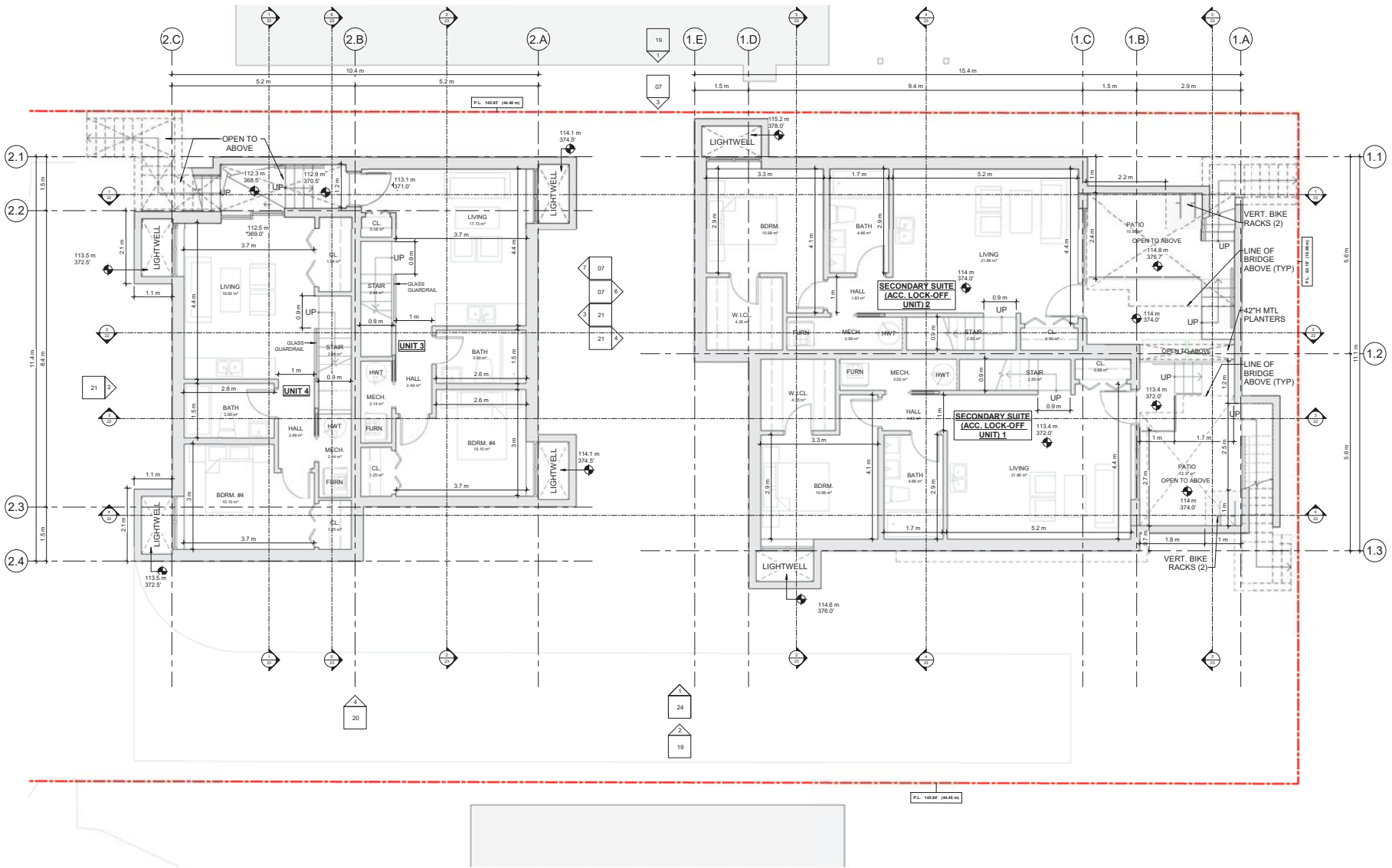
DP RESUBMISSION

FOUNDATION PLAN
 WESTERN AVENUE DUPLEXES



JUNE 24, 2021
 2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 No. DATE
 1 2020.09.15
GRIMWOOD
 ARCHITECTURE



DP RESUBMISSION

FLOOR PLAN - BASEMENT LEVEL

WESTERN AVENUE DUPLEXES



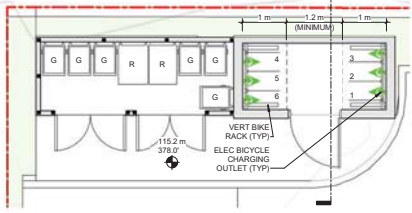
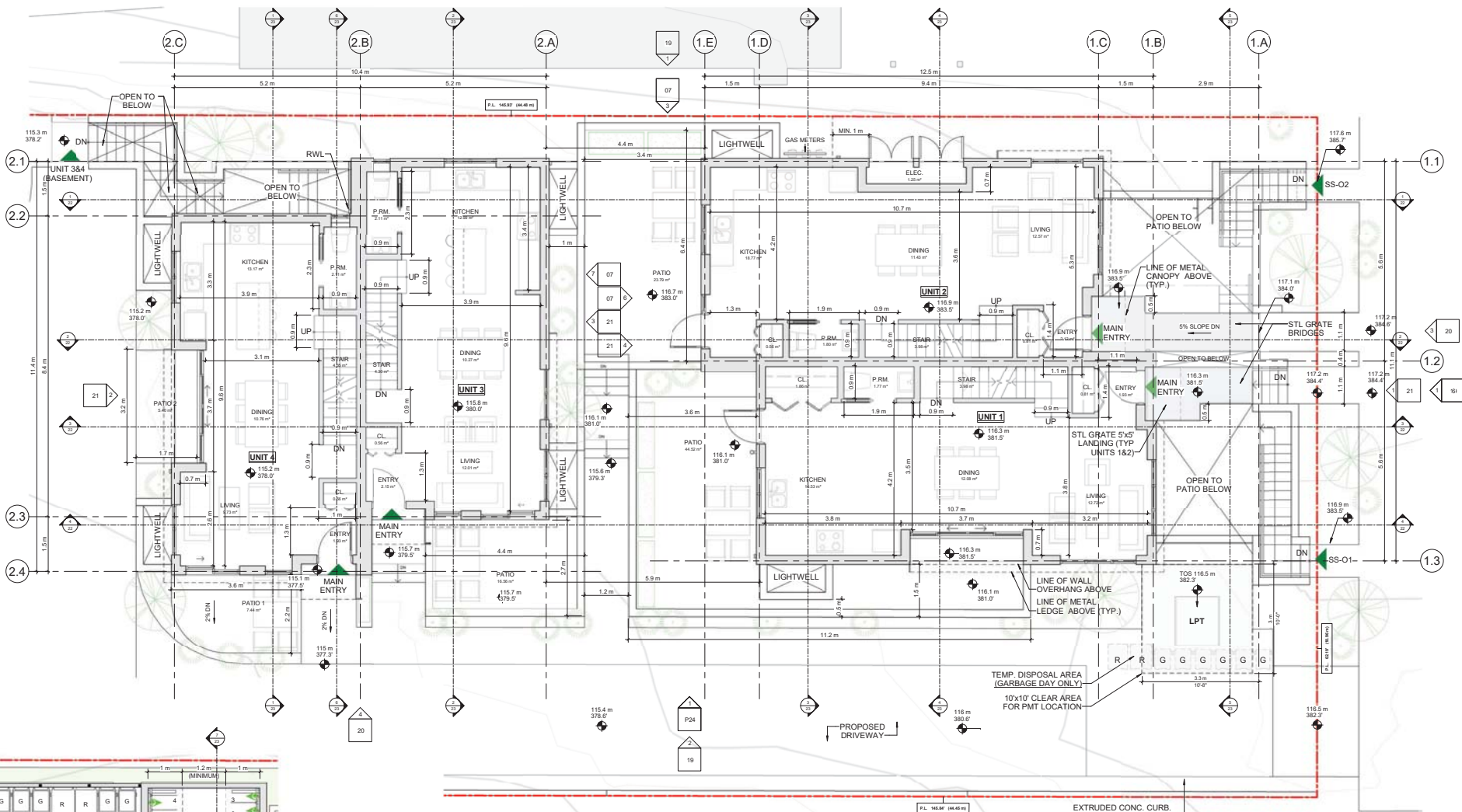
JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 No. DATE
 1 2020.09.15
 2 2021.06.24

GRIMWOOD
 ARCHITECTURE

13



FLOOR PLAN - GROUND LEVEL

WESTERN AVENUE DUPLEXES



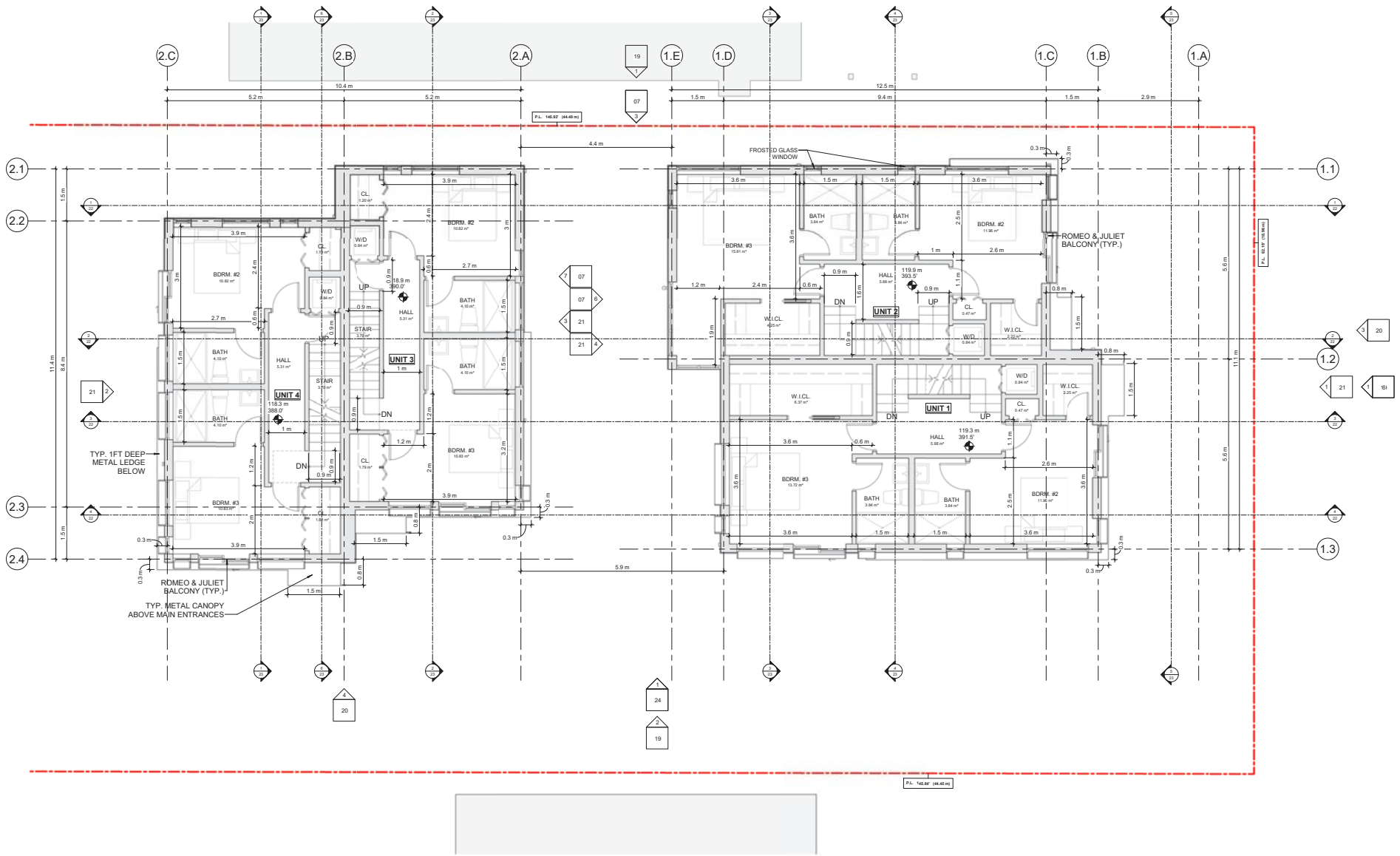
JUNE 24, 2021
 2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 No. 1 DATE 2020.09.15
 No. 2 DATE 2021.06.24

GRIMWOOD
 ARCHITECTURE

14a

DP RESUBMISSION



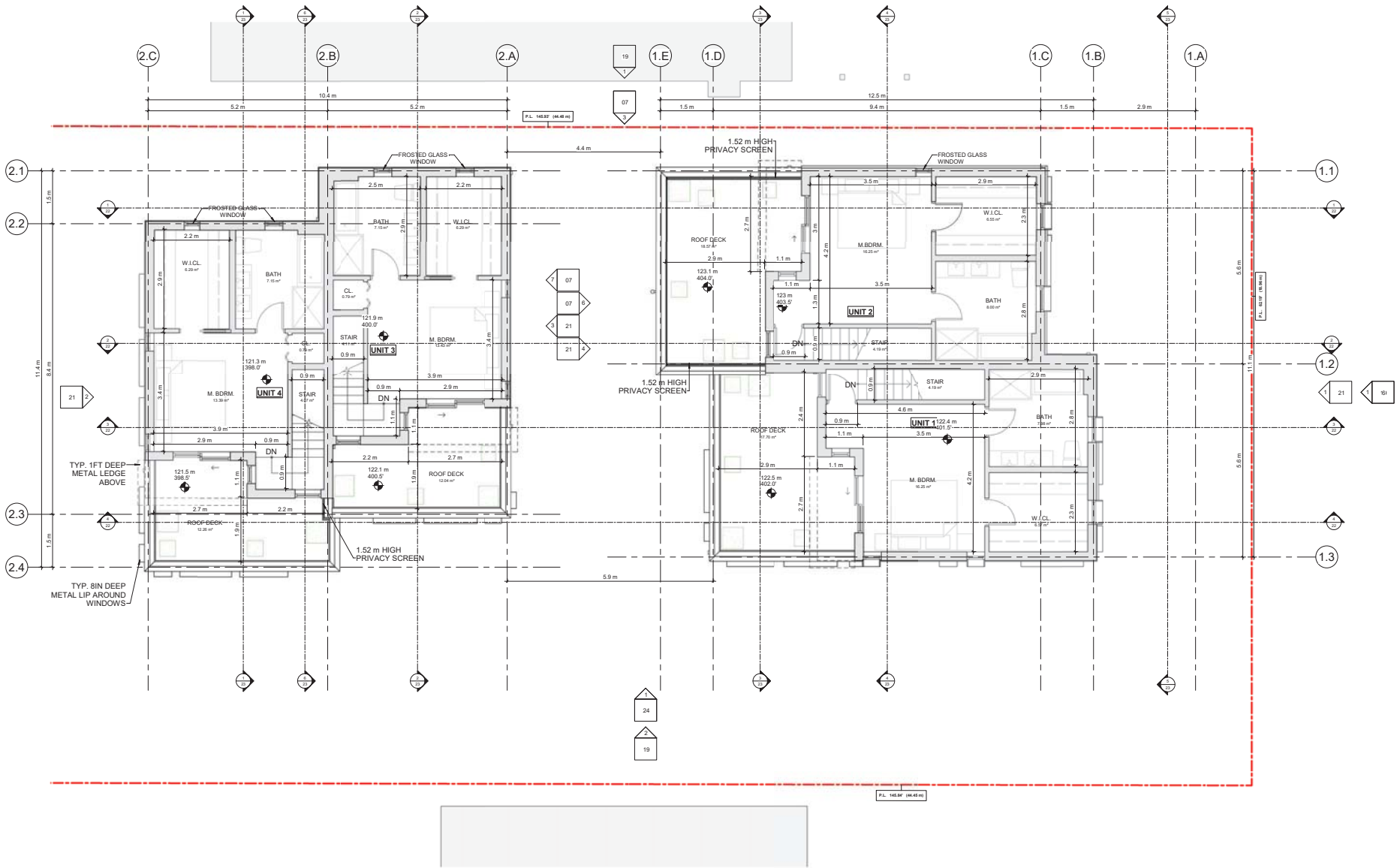
FLOOR PLAN - SECOND LEVEL

WESTERN AVENUE DUPLEXES



JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC



DP RESUBMISSION

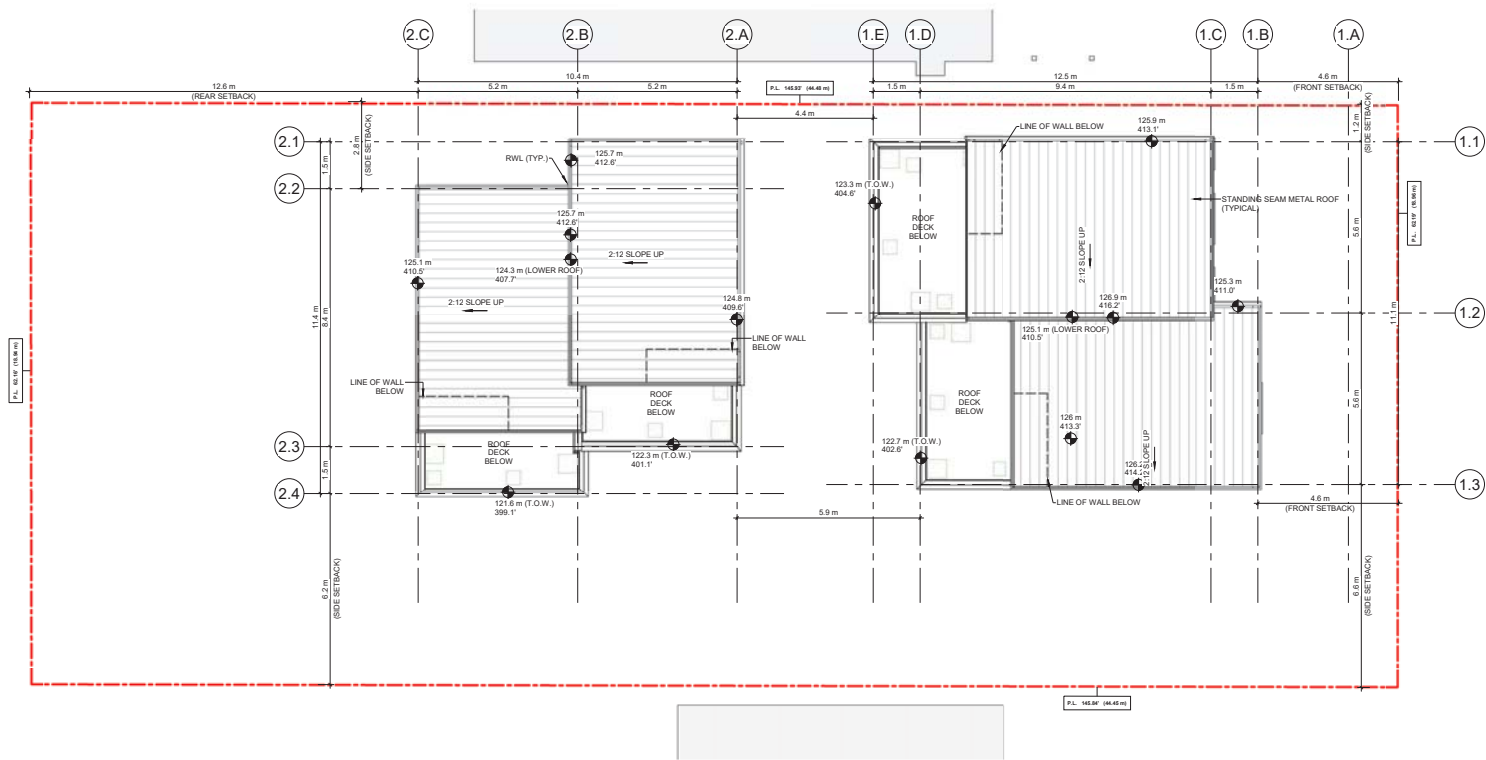
FLOOR PLAN - THIRD LEVEL

WESTERN AVENUE DUPLEXES



JUNE 24, 2021
 2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 No. DATE
GRIMWOOD
 ARCHITECTURE



ROOF PLAN



WESTERN AVENUE DUPLEXES

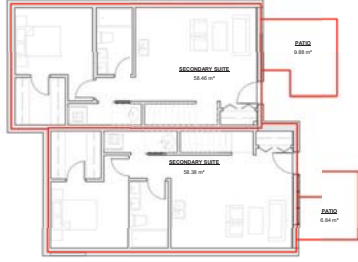
JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

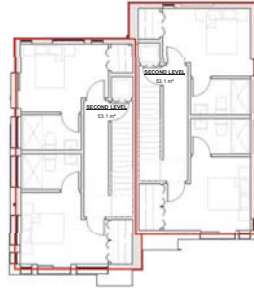
REVISIONS
No. 1 DATE 2020.09.15
GRIMWOOD
ARCHITECTURE



① BASEMENT LEVEL
1 : 100



③ SECOND LEVEL
1 : 100



② FIRST LEVEL
1 : 100



④ THIRD LEVEL
1 : 100



⑤ LOT COVERAGE
1 : 200

UNIT MIX

UNIT TYPE NAME	AREA (m²)	AREA (SF)
TYPE A PATIO	7 m²	74 SF
TYPE A SECONDARY SUITE	58 m²	628 SF
TYPE A FIRST LEVEL	61 m²	653 SF
TYPE A PATIO	33 m²	359 SF
TYPE A SECOND LEVEL	63 m²	678 SF
TYPE A TERRACE	18 m²	195 SF
TYPE A THIRD LEVEL	42 m²	456 SF
	283 m²	3044 SF
TYPE A1 PATIO	10 m²	106 SF
TYPE A1 SECONDARY SUITE	58 m²	629 SF
TYPE A1 FIRST LEVEL	60 m²	647 SF
TYPE A1 PATIO	24 m²	258 SF
TYPE A1 SECOND LEVEL	63 m²	677 SF
TYPE A1 TERRACE	19 m²	200 SF
TYPE A1 THIRD LEVEL	42 m²	455 SF
	276 m²	2972 SF
TYPE B BASEMENT	48 m²	520 SF
TYPE B FIRST LEVEL	53 m²	572 SF
TYPE B PATIO	12 m²	129 SF
TYPE B SECOND LEVEL	53 m²	572 SF
TYPE B TERRACE	12 m²	131 SF
TYPE B THIRD LEVEL	39 m²	419 SF
	218 m²	2342 SF
TYPE B1 BASEMENT	48 m²	521 SF
TYPE B1 FIRST LEVEL	51 m²	547 SF
TYPE B1 PATIO	7 m²	80 SF
TYPE B1 PATIO	6 m²	61 SF
TYPE B1 SECOND LEVEL	53 m²	572 SF
TYPE B1 TERRACE	12 m²	134 SF
TYPE B1 THIRD LEVEL	39 m²	415 SF
	216 m²	2329 SF
	993 m²	10686 SF

EXCLUDED AREAS

UNIT TYPE NAME	AREA (m²)	AREA (SF)
TYPE A PATIO	7 m²	74 SF
TYPE A SECONDARY SUITE	58 m²	628 SF
TYPE A PATIO	33 m²	359 SF
TYPE A TERRACE	18 m²	195 SF
	117 m²	1256 SF
TYPE A1 PATIO	10 m²	106 SF
TYPE A1 SECONDARY SUITE	58 m²	629 SF
TYPE A1 PATIO	24 m²	258 SF
TYPE A1 TERRACE	19 m²	200 SF
	111 m²	1193 SF
TYPE B BASEMENT	48 m²	520 SF
TYPE B PATIO	12 m²	129 SF
TYPE B TERRACE	12 m²	131 SF
	72 m²	780 SF
TYPE B1 BASEMENT	48 m²	521 SF
TYPE B1 PATIO	7 m²	80 SF
TYPE B1 PATIO	6 m²	61 SF
TYPE B1 TERRACE	12 m²	134 SF
	74 m²	795 SF
	374 m²	4025 SF

AREA PLANS WESTERN AVENUE DUPLEXES



JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
No. DATE

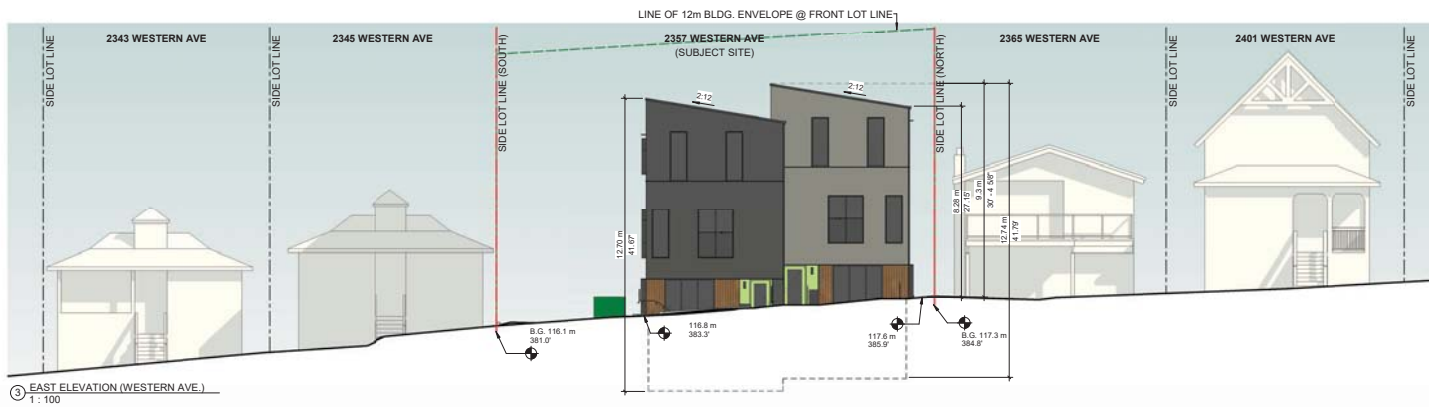
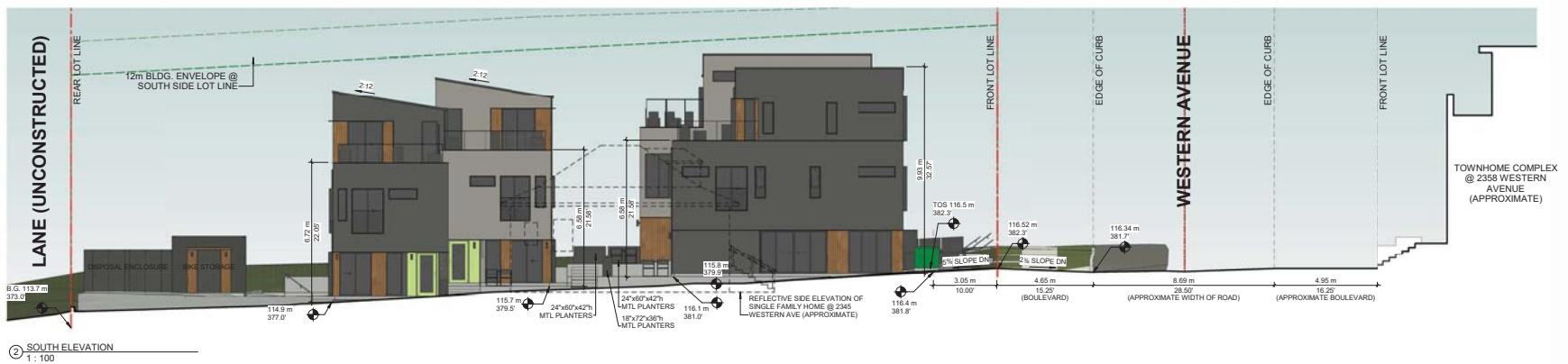
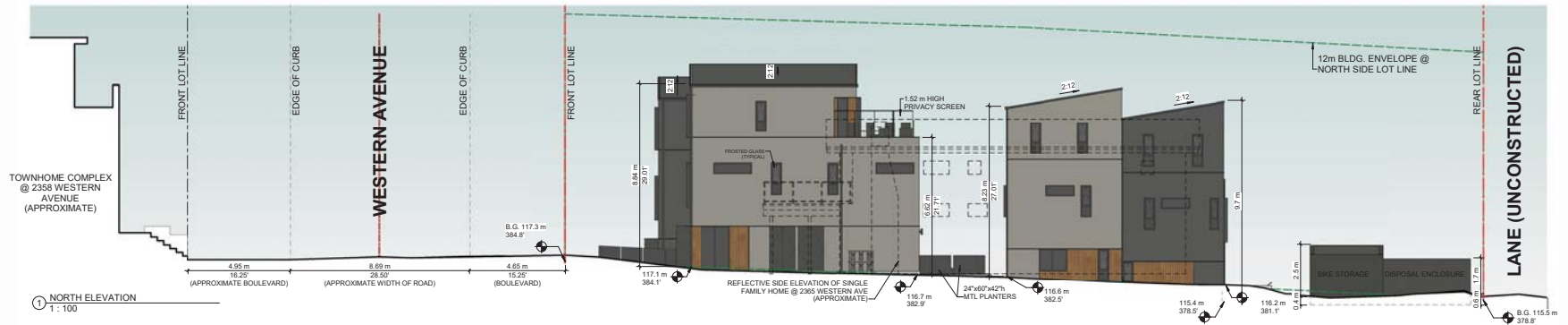
1 2020.09.15

2 2021.06.24

GRIMWOOD
ARCHITECTURE

DP RESUBMISSION

18



DP RESUBMISSION

STREETSCAPE ELEVATIONS

WESTERN AVENUE DUPLEXES

SEPTEMBER 21, 2021

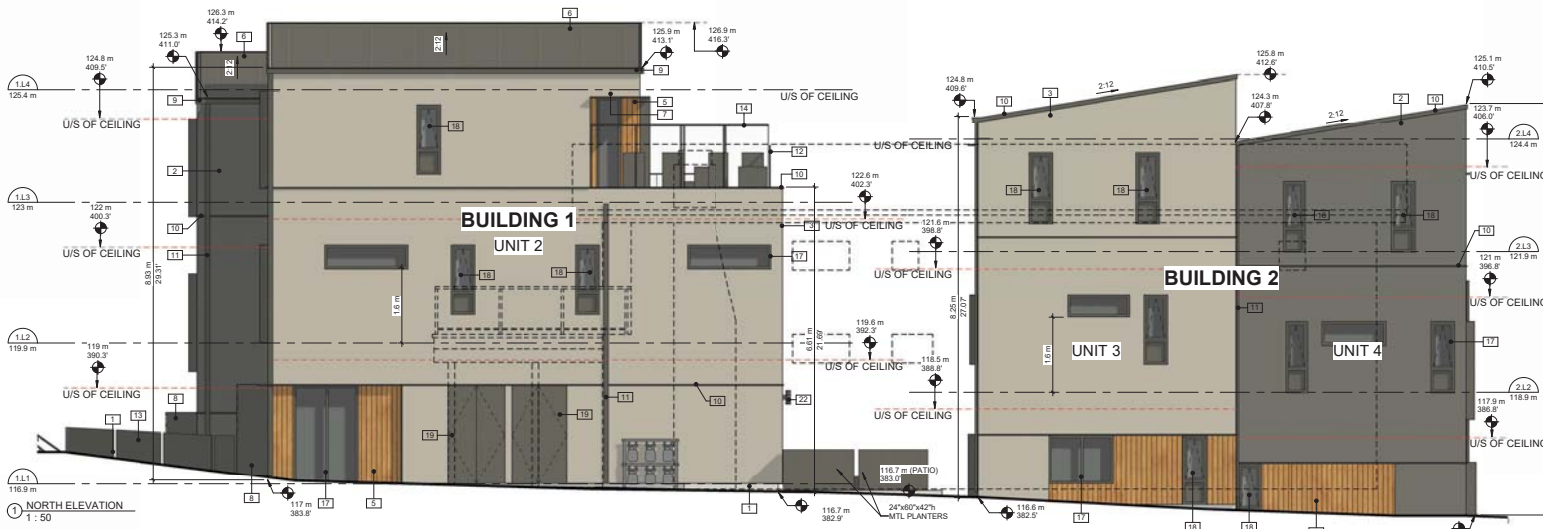
2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 NO. DATE
 1 2021.09.16
 2 2021.06.24
 3 2021.09.21

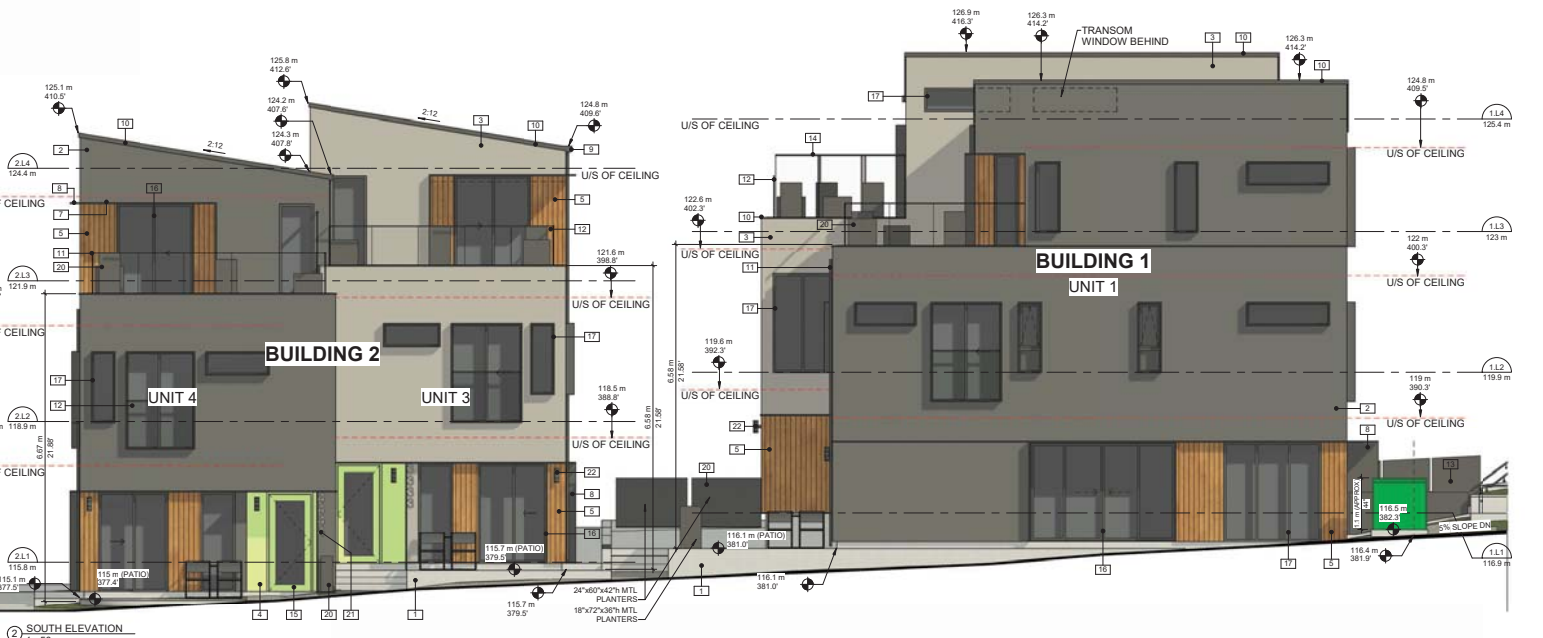
GRIMWOOD
ARCHITECTURE

MATERIALS SCHEDULE

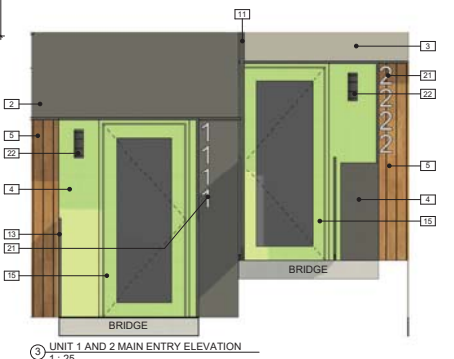
- No. MATERIAL**
- 1 CONCRETE WALL
 - 2 SHINGLES - BLACK
 - 3 SHINGLES - LIGHT BROWN
 - 4 FLUSH METAL PANEL - PAINTED - LIME GREEN
 - 5 VERTICAL NATURAL WOOD SIDING - TREATED
 - 6 PRE-FINISHED STANDING SEAM METAL ROOF - PAINTED - BLACK
 - 7 NATURAL CEDAR SOFFIT - TREATED
 - 8 P/C METAL CANOPYLEDGE/PRIVACY PANEL - PAINTED - BLACK
 - 9 PRE-FINISHED GUTTER - PAINTED - BLACK
 - 10 PRE-FINISHED METAL FLASHING - PAINTED - BLACK
 - 11 PRE-FINISHED METAL RWL - PAINTED - BLACK
 - 12 P/C METAL & CLEAR TEMPERED GLASS GUARD (42"H) - PAINTED - BLACK
 - 13 P/C 1/2" SOLID METAL PLATE GUARD (42"H) - PAINTED BLACK
 - 14 P/C METAL & FROSTED TEMP. GLASS PRIVACY SCREEN (60"H) - PAINTED - BLACK
 - 15 METAL/GLASS ENTRY DOOR - PAINTED - LIME GREEN
 - 16 PRE-FINISHED ALUMINUM/GLASS DOORS - PAINTED - BLACK
 - 17 PRE-FINISHED ALUMINUM WINDOWS - PAINTED - BLACK
 - 18 PRE-FINISHED ALUMINUM WINDOWS - PAINTED - BLACK - FROSTED GLASS
 - 19 PRE-FINISHED INSULATED HOLLOW METAL DOORS - PAINTED - BLACK
 - 20 PRE-FINISHED METAL PLANTERS - PAINTED - BLACK
 - 21 ADDRESS NUMBER - METAL/HALO LED LIGHT - SIDE MOUNTED
 - 22 ENTRY WALL LIGHT FIXTURE - BLACK



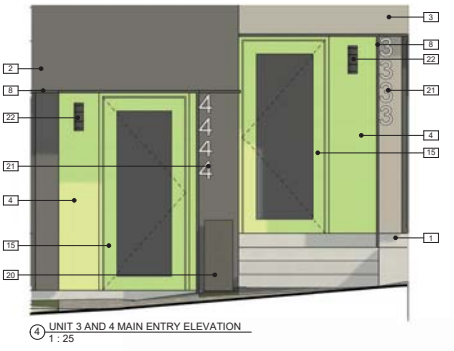
① NORTH ELEVATION
1:50



② SOUTH ELEVATION
1:50



③ UNIT 1 AND 2 MAIN ENTRY ELEVATION
1:25



④ UNIT 3 AND 4 MAIN ENTRY ELEVATION
1:25

ELEVATIONS WESTERN AVENUE DUPLEXES

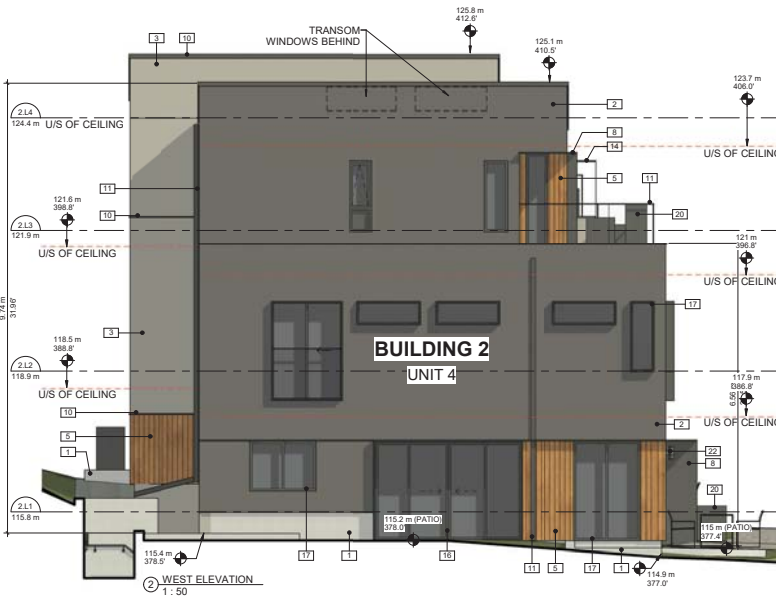
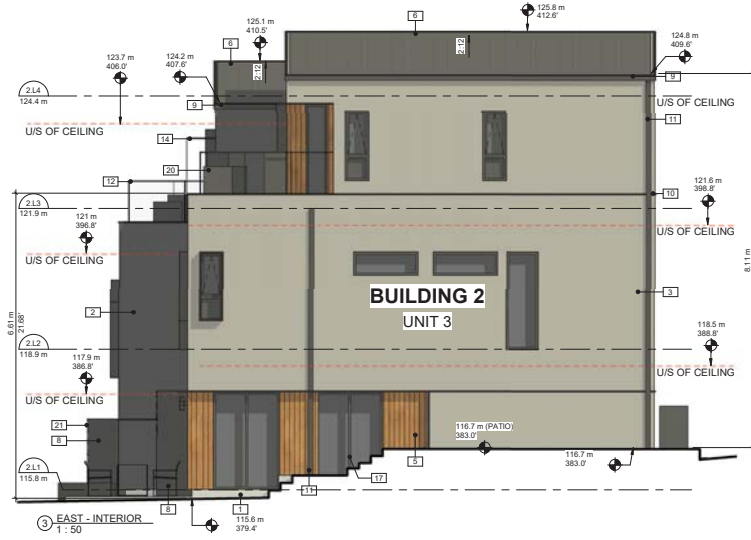
SEPTEMBER 21, 2021
2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
No. DATE
1 2021.09.15
2 2021.06.24
3 2021.09.21

GRIMWOOD
ARCHITECTURE

MATERIALS SCHEDULE

- No. MATERIAL**
- 1 CONCRETE WALL
 - 2 SHINGLES - BLACK
 - 3 SHINGLES - LIGHT BROWN
 - 4 FLUSH METAL PANEL - PAINTED - LIME GREEN
 - 5 VERTICAL NATURAL WOOD SIDING - TREATED
 - 6 PRE-FINISHED STANDING SEAM METAL ROOF - PAINTED - BLACK
 - 7 NATURAL CEDAR SOFFIT - TREATED
 - 8 P/C METAL CANOPYLEDGE/PRIVACY PANEL - PAINTED - BLACK
 - 9 PRE-FINISHED GUTTER - PAINTED - BLACK
 - 10 PRE-FINISHED METAL FLASHING - PAINTED - BLACK
 - 11 PRE-FINISHED METAL RWL - PAINTED - BLACK
 - 12 P/C METAL & CLEAR TEMPERED GLASS GUARD (42"H) - PAINTED - BLACK
 - 13 P/C 1/2" SOLID METAL PLATE GUARD (42"H) - PAINTED BLACK
 - 14 P/C METAL & FROSTED TEMP. GLASS PRIVACY SCREEN (60"H) - PAINTED - BLACK
 - 15 METAL GLASS ENTRY DOOR - PAINTED - LIME GREEN
 - 16 PRE-FINISHED ALUMINUM/GLASS DOORS - PAINTED - BLACK
 - 17 PRE-FINISHED ALUMINUM WINDOWS - PAINTED - BLACK
 - 18 PRE-FINISHED ALUMINUM WINDOWS - PAINTED - BLACK - FROSTED GLASS
 - 19 PRE-FINISHED INSULATED HOLLOW METAL DOORS - PAINTED - BLACK
 - 20 PRE-FINISHED METAL PLANTERS - PAINTED - BLACK
 - 21 ADDRESS NUMBER - METAL/HALO LED LIGHT - SIDE MOUNTED
 - 22 ENTRY WALL LIGHT FIXTURE - BLACK

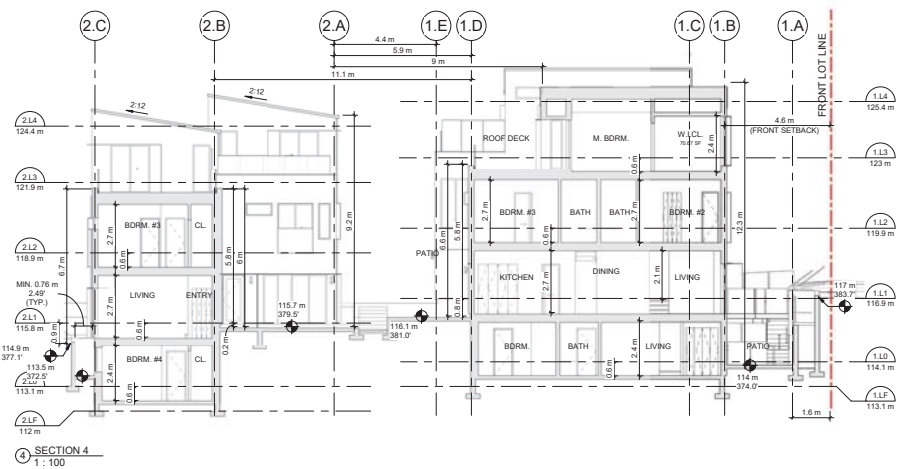
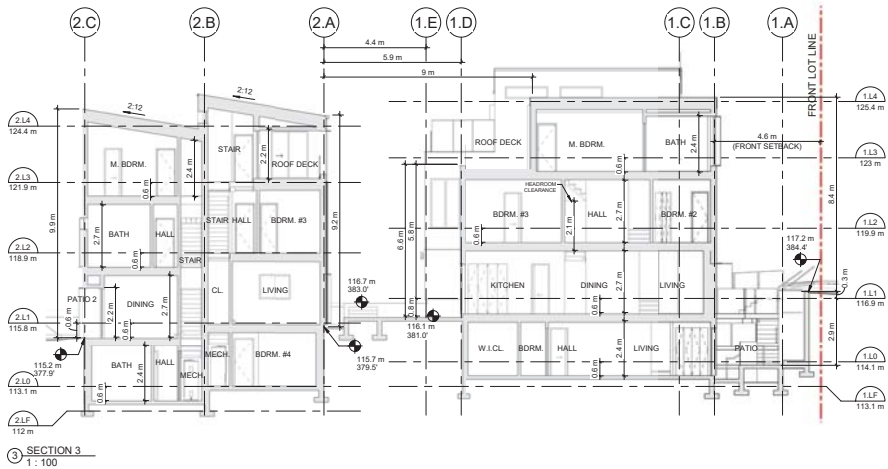
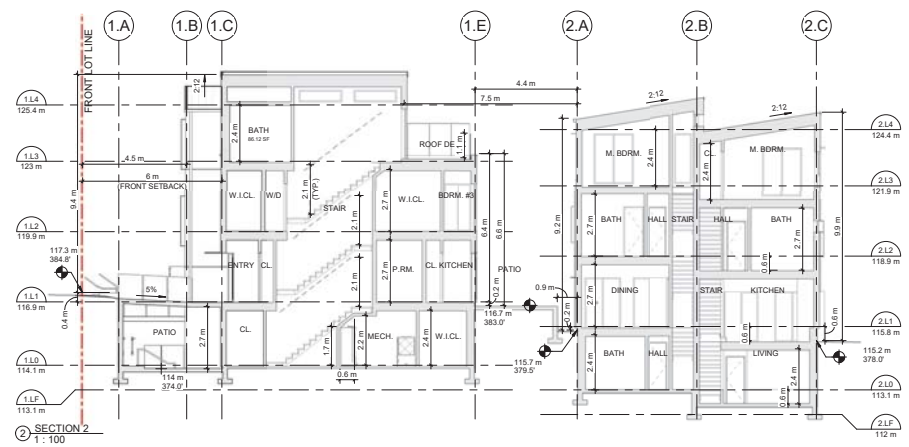
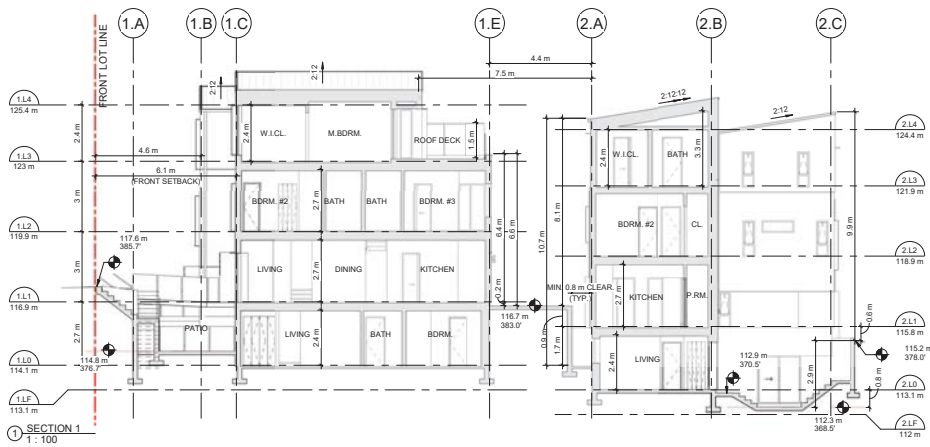


DP RESUBMISSION

REVISIONS No.	DATE	GRIMWOOD ARCHITECTURE
1	2020.09.15	
2	2021.06.24	

ELEVATIONS WESTERN AVENUE DUPLEXES

JUNE 24, 2021
2357 WESTERN AVE. NORTH VANCOUVER, BC



DP RESUBMISSION

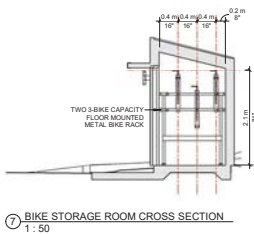
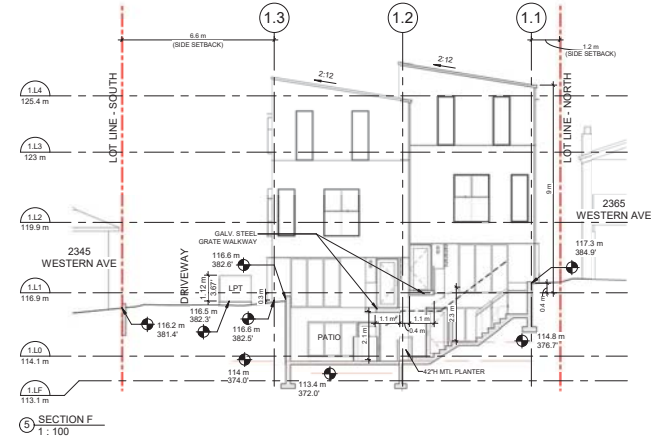
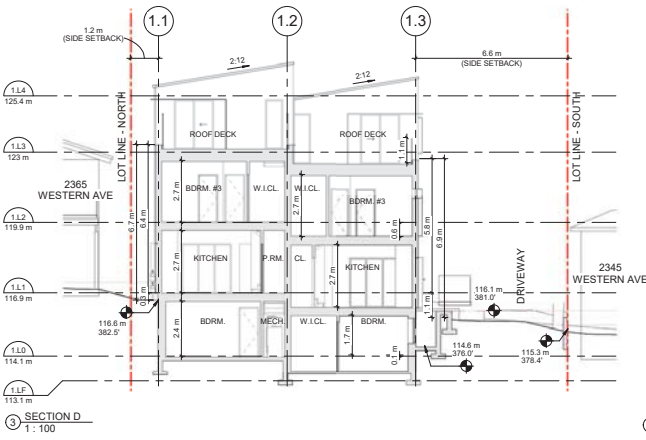
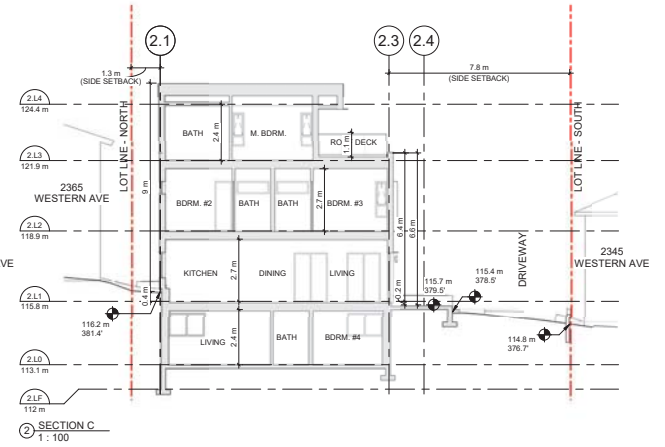
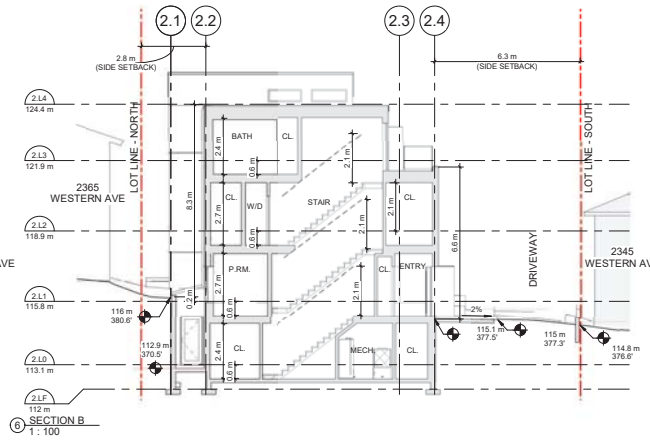
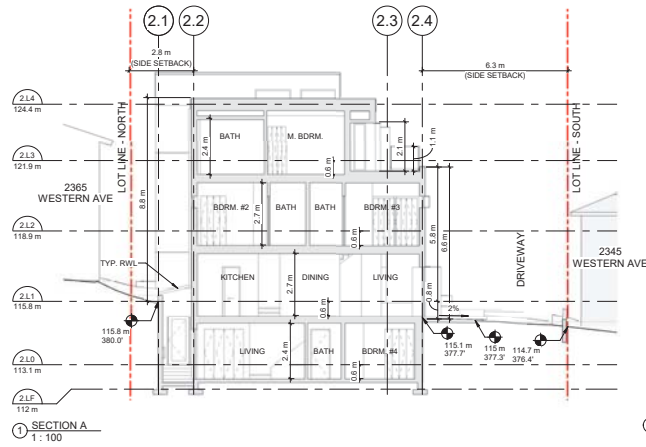
LONGITUDINAL SECTIONS

WESTERN AVENUE DUPLEXES

JUNE 24, 2021
 2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
 No. DATE
 1 2020.09.15

GRIMWOOD
 ARCHITECTURE



DP RESUBMISSION

CROSS SECTIONS

WESTERN AVENUE DUPLEXES

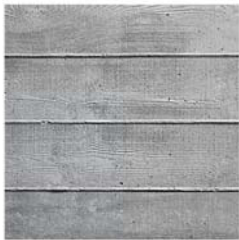
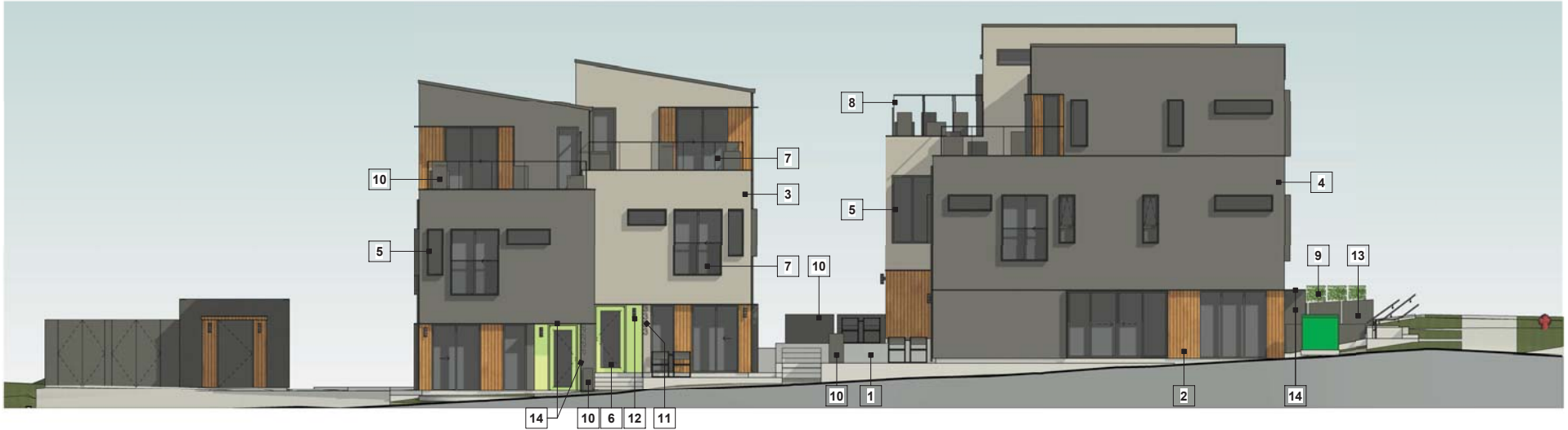
JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
No. DATE
1 2020.09.15

GRIMWOOD
ARCHITECTURE

23



1 CONCRETE WALL - HORIZ. BOARD FORM FINISH



2 NATURAL WOOD SIDING - TREATED



3 BROWN SHINGLES



4 BLACK SHINGLES



5 ALUM. WINDOWS/DOORS - PAINTED BLACK



6 METAL/GLASS MAIN ENTRY DOOR. SEE ELEVS. FOR COLOUR



7 TEMPERED GLASS RAILING - CLEAR FINISH



8 TEMPERED GLASS PRIVACY SCREEN - FROSTED FINISH



9 GREENSCREEN TRELLIS. REFER TO LANDSCAPE DWG'S.



10 FREE-STANDING METAL PLANTERS - COLOUR TO MATCH BLDG.



11 ADDRESS NUMBER - METAL/HALO LED LIGHT - SIDE MOUNTED



12 ENTRY LIGHT FIXTURE - WALL MOUNTED



13 POWDER COATED SOLID STEEL GUARD - COLOUR TO MATCH BLDG. CLADDING



14 POWDER COATED METAL CANOPY/PRIVACY PANEL - COLOUR TO MATCH BLDG. CLADDING

DP RESUBMISSION

MATERIAL BOARD

WESTERN AVENUE DUPLEXES

JUNE 24, 2021

2357 WESTERN AVE. NORTH VANCOUVER, BC

REVISIONS
No. DATE
1 2020.09.15

GRIMWOOD
ARCHITECTURE

general notes

This drawing is an instrument of service, remains the property of considered design inc. and may not be reproduced without the permission of considered design inc.

All information shown on this drawing is for use in this specific project and shall not be used without written consent of considered design inc.

DO NOT SCALE FROM THIS DRAWING

All dimensions are to be verified by the contractor, use figured dimensions only. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work on site.

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR IFC

issue	date
COMMENT	08.05.2019
DE APPLICATION	05.05.2019
DE PRIOR TO REVIEW	07.09.2020
DE PRIOR TO COORDINATION	14.09.2020
DE PRIOR TO SUBMISSION	15.09.2020
DE PRIOR TO SIGNATURE	24.06.2021

revision	date
A	08.05.2019
B	07.09.2020
C	14.09.2020
D	24.06.2021

project
 2357 WESTERN AVENUE, NORTH VANCOUVER

legal
 PLAN OF LOT C OF LOT A BLOCK 215 DISTRICT
 LOT 645 GROUP 1 NWD PLAN 15993

drawing
 LANDSCAPE GENERAL ARRANGEMENT

scale

1 : 100 METRIC

drawn

JP

checked

JP

reference

2017_06_01 L1

number

L1

DATE OF SIGNATURE

6/11

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611

PROFESSIONAL APPROVAL

LANDSCAPE ARCHITECT

611



1 LANDSCAPE GENERAL ARRANGEMENT PLAN
 Scale: 1:100

- DRAWING KEY
- A 6" HIGH EVERGREEN HEDGE EG. TAXUS SP.
 - B AQUAPAVE BCM CHARCOAL CONCRETE PAVERS 45° HERRINGBONE
 - C AQUAPAVE BCM RED CONCRETE PAVERS TO DELINEATE PARKING BAYS
 - D PERMEABLE 3/4" MINUS CRUSHED COMPACTED BASALT
 - E 6" HIGH EVERGREEN HEDGE EG. TAXUS SP.
 - F 12" SQ FLAME TEXTURED GRANITE PAVING
 - G 4" HIGH PIC ALUMINIUM PICKET GATE
 - H 6" HIGH PIC GREENSCREEN TRELLIS / EVERGREEN VINE PLANTING & 2" DEEP INSITU CONC. PLANTER
 - I 4" HIGH PIC ALUMINIUM PICKET GATE
 - J LAYERED 4" HIGH EVERGREEN HEDGE / HERBACIOUS SHRUB GRASS AND SMALL SPECIMEN TREE PLANTING
 - K TEMPORARY DISPOSAL AREA (GARBAGE DAY ONLY)
 - L SPLIT FACED 4" SQ GRANITE SETT RUMBLE STRIP
 - M LIGHT BROOM FINISH PIGMENT DYED (CHARCOAL GREY) INSITU CONCRETE PAVING / SAW CUT CONTROL JOINTS
 - N PERMEABLE DRIVEABLE GRASS GRID BY LANDSCAPE SUPPLY OR SIMILAR AS APPROVED
http://www.landscapesupply.com/catalog/product.php?cat_spl=10&id=8044
 - O LIGHT BOLLARD EG. STRUCTURA SPAR LED BOLLARD 48" HIGH OR SIMILAR AS APPROVED
 - P 6" HIGH EVERGREEN HEDGE EG. TAXUS SP.
 - R #2 24" HIGH POWDER COATED ALUMINIUM PLANTERS WITH HEDGE EG. TAXUS SP.
 - S #3 18"X22"X36" HIGH POWDER COATED ALUMINIUM PLANTERS WITH GRASS PLANTING
 - T BLACK STAINED CLOSE BOARDED SW TIMBER 6" HIGH FENCE SITE BOUNDARY TO THE REAR OF THE FRONT FACE OF THE FRONT BUILDING

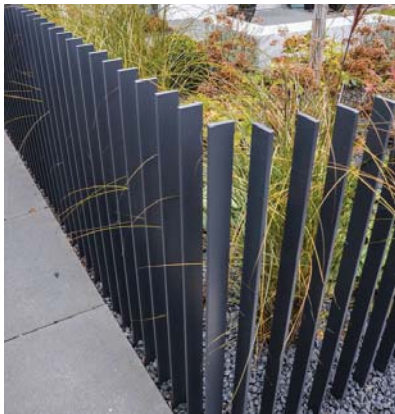
NOTES:

OFF-SITE IRRIGATION SYSTEM IS REQUIRED AND INSTALLED AT DEVELOPER'S COST. CONVEYANCES WILL INSTALL AN IRRIGATION LEAD AND BOX FROM ALINE BROUGHT OUT TO THE BOULEVARD FROM THE PROPOSED BUILDING. THE LOCATION OF THE IRRIGATION BOX IS TO BE DETERMINED AT THE BUILDING PERMIT DESIGN STAGE. ALL BEDS AND TREES INCLUDING STREET TREES ARE TO HAVE AUTOMATIC IRRIGATION.

UPON ACCEPTANCE BY THE COVY, ALL NEW LANDSCAPE WORKS TO BE PLACED ON A TWO YEAR MAINTENANCE/WARRANTY PERIOD TO ENSURE ESTABLISHMENT.

STREET TREES TO BE COMPLETED WITH STRUCTURAL AOK UNDER THE BOULEVARD AND SIDEWALK WITH SOIL CELL TECHNOLOGY & MINIMUM OF 15m3 SOIL VOLUME IS REQUIRED PER TREE, WITH A CONTINUOUS SOIL TRENCH PLACED BETWEEN THE TREES.





general notes
 This drawing is an instrument of service, remains the property of considered design inc and may not be reproduced without the permission of considered design inc.
 All information shown on this drawing is for use in the specific project and shall not be used without written consent of considered design inc.
 DO NOT SCALE FROM THIS DRAWING
 All dimensions are to be verified by the contractor, use figured dimensions only. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work on site.
 THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR IPC

issue	date
02 APPLICATION DE PRIOR TO REVIEW	10.03.2019
05 PRIOR TO SUBMISSION DE PRIOR TO SUBMISSION	07.09.2020
	14.08.2020
	24.06.2021

revision	date
A	07.09.2020
B	24.06.2021

project
 2357 WESTERN AVENUE, NORTH VANCOUVER

legal
 PLAN OF LOT C OF LOT A BLOCK 215 DISTRICT LOT 545 GROUP 1 NWD PLAN 15993

drawing
 LANDSCAPE PLANTING PLAN

seal



scale
 1:100 METRIC

drawn
 JP

checked
 JP

reference
 2017.06_01.L1

number

L4

ALL PLANTS TO BE NURSERY GROWN, ALL PLANT MATERIALS AND LABOUR TO CONFORM TO CANADIAN LANDSCAPE STANDARDS CURRENT EDITION.

ALL PLANT MATERIAL TO BE INSPECTED PRIOR TO DELIVERY ON SITE. CONTRACTOR TO ARRANGE FOR INSPECTION AND MATERIAL TO ASSEMBLED IN ONE LOCATION FOR REVIEW.

GENERAL

ALL WORK, INCLUDING PLANNING, DESIGN, INSTALLATION AND MAINTENANCE SHALL CONFORM TO CANADIAN LANDSCAPE STANDARDS, INDUSTRY REQUIREMENTS, NATIONAL STANDARDS, CODES AND REGULATIONS. ALL DIMENSIONS SHALL BE TO THE FACE UNLESS OTHERWISE SPECIFIED BY THE CSA, CMAA, CMAA NATIONAL MASTER SPECIFICATION OR OTHER APPLICABLE TRADE ASSOCIATIONS.
 THE CONTRACTOR SHALL INSPECT THE SITE PRIOR TO STARTING WORK TO VERIFY THAT ALL SURFACES ARE PROPERLY PREPARED AND GRADED. UPON DISCOVERY ANY DISCREPANCIES SHALL BE REPORTED TO THE AUTHORITY. CONTRACTOR TO ASCERTAIN THE SIZE AND LOCATION OF ALL EXISTING SERVICES AND SUR GRADERS OVER THE WORK.
 NO LANDSCAPE WORK SHALL BE CARRIED OUT IN AREAS OR OVER SURFACES THAT HAVE NOT BEEN PROPERLY PREPARED AND GRADED, AND THAT DUE TO CLIMATE WOULD BE AT RISK OF UNNECESSARY DISTURBANCE.

IRRIGATION

THE IRRIGATION INDUSTRY ASSOCIATION HAS DEVELOPED THE STANDARDS FOR LANDSCAPE IRRIGATION SYSTEMS. CMAA AND CMAA SUPPORT THESE STANDARDS. ALL IRRIGATION WORK SHALL BE DONE BY A SUITABLY EXPERIENCED AND QUALIFIED IRRIGATION CONTRACTOR.
 ALL PLANTED AREAS TO HAVE PERMANENT HIGH EFFICIENCY IRRIGATION SYSTEM (EG. RAISED OR SIMILAR AS APPROVED). ALL PLOTS TO HAVE A HEDGERIB LOCATION.
 AN IRRIGATION SYSTEM MUST APPLY A CONSISTENT, UNIFORM MEASURABLE AMOUNT OF WATER TO THE LANDSCAPE OVER A PERIOD OF TIME TO PROMOTE DEEP ROOT ZONE DEVELOPMENT.

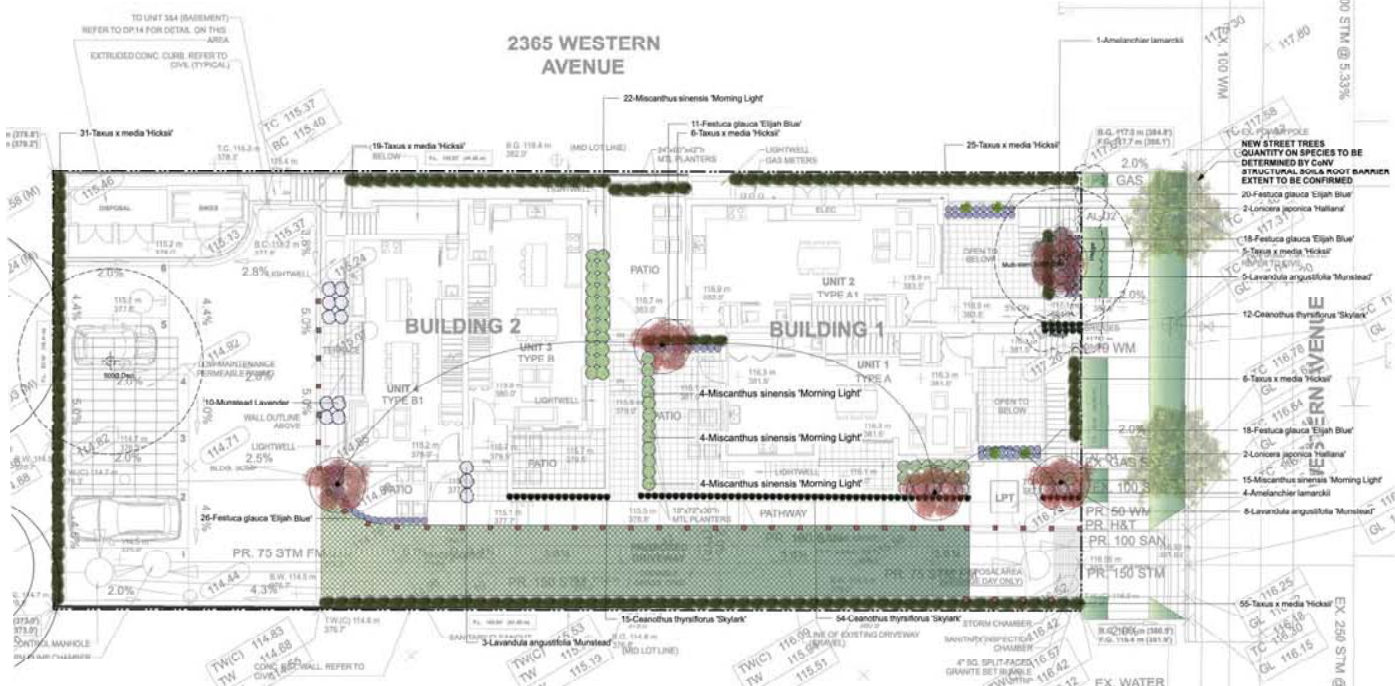
GROUNDING MEDIUM

GROWING MEDIA SHALL BE SUBSTANTIALLY FREE OF PLANTS OR THEIR ROOTS, BUILDING MATERIALS, INVASIVE OR NOXIOUS PLANTS AND THEIR REPRODUCTIVE PARTS, SOIL, COMPOSTED WOOD, WASTE, ASBESTOS, PESTS, PLANT PATHOGENS, SOIL SALTS, CHEMICAL POLLUTANTS OR SUBSTANCES AT LEVELS TOXIC TO PLANTS, AND OTHER EXTRANEOUS MATERIALS THAT DETRACT FROM THE DESIRABLE PHYSICAL AND CHEMICAL PROPERTIES REQUIRED FOR LANDSCAPING PURPOSES.
 WHERE IMPORTED GROWING MEDIUM IS TO BE USED, THE CONTRACTOR SHALL TEST OR HAVE THE SOIL SUPER TEST THE PROPOSED SOIL AND PROVIDE IT TO LANDSCAPE ARCHITECT'S 3 WEEKS PRIOR TO DELIVERY ON-SITE.
 FAILURE TO TEST AND PROVIDE APPROPRIATE DOCUMENTATION OF TEST RESULTS MAY BE CONSIDERED GROUNDS FOR REJECTION OF A PROPOSED GROWING MEDIUM AND MAY RESULT IN THE REMOVAL OF REJECTED MATERIAL AT THE CONTRACTOR'S EXPENSE.
 GROWING MEDIA SHALL MEET THE NUTRIENT LEVELS AS SET OUT IN SECTION 3.7. GROWING MEDIUM NUTRIENTS, GROWING MEDIA SHOULD BE FOR FOR LEVEL 1 "WELL-GROOMED" AREA- TABLE 14.3.1.1 AND CONFORM TO TABLE 14.3.1.5 PROPERTIES OF GROWING MEDIA FOR LEVEL 1 "WELL-GROOMED" AREAS.
 GROWING MEDIUM MINIMUM DEPTHS SHOULD CONFORM TO TABLE 14.3.1.5 MINIMUM DEPTHS OF GROWING MEDIA.

LANDSCAPE SOIL

CLASS 1 AREA LANS WITH LEVEL 1 MAINTENANCE UNLESS OTHERWISE SPECIFIED. APPROVAL OF SITE PREPARATION SHOULD BE OBTAINED PRIOR TO COMMENCEMENT OF PLACEMENT OF SOIL. SOIL TO BE NO. 1 PREMIUM OR NO. 2 STANDARD AND SUITED TO ITS REGIONAL REQUIREMENTS AND ITS INTENDED USE.
PLANTS & MULCH
 THE REQUIREMENTS OF THE CANADIAN STANDARDS FOR NURSERY STOCK SHALL APPLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL PLANTS AND MULCH COMPLY WITH THE CONTRACT DOCUMENTS. THERE SHALL BE NO SUBSTITUTION OF PLANTS WITHOUT THE CONSULTANT'S PRIOR WRITTEN APPROVAL.
 ROOTBALLS AND GROWING MEDIUM IN CONTAINERS SHALL BE FREE OF INVASIVE AND NOXIOUS PLANTS.
 NURSERY-GROWN PLANTS SHALL BE AS A MINIMUM, COMPLY WITH THE CANADIAN NURSERY LANDSCAPE ASSOCIATION, CANADIAN STANDARDS FOR NURSERY STOCK, AND SECTION 12. CONTAINER GROWN PLANTS, WITH RESPECT TO SOIL GROWING MEDIA QUALITY.
 IN THE CASE OF ANY DISCREPANCY BETWEEN ANY COPIES ON PLANT LABELS AND ANY OTHERS, THE CONTRACTOR SHALL TAKE PRECEDENCE. THE CONTRACTOR IS TO VERIFY ALL PLANT COUNTS AND NOTIFY CONSULTANT OF ANY DISCREPANCY.
 PLANT MATERIAL SHALL BE IRRIGATED IMMEDIATELY AFTER PLANTING TO THE DEPTH OF THEIR ROOT SYSTEMS.
 MULCHING MATERIALS SHALL BE SUBSTANTIALLY FREE OF INVASIVE AND NOXIOUS SEEDS AND REPRODUCTIVE PARTS, SOIL, STONES, SALTS OR OTHER HARMFUL, CHEMICALS, OR OTHER EXTRANEOUS MATTER THAT WOULD PROHIBIT SEED GERMINATION OR THE HEALTHY DEVELOPMENT OF PLANT MATERIAL.
 BEDS TO HAVE 2" MULCH LAYER CONSISTING OF ORGANIC DARK COMPOSTED BARK.
GREENROOFS
 GROWING MEDIUM MINIMUM DEPTHS SHOULD CONFORM TO TABLE 14.1.1.1. MINIMUM GROWING MEDIUM DEPTHS AFTER SETTLEMENT FOR ON-SLAB APPLICATIONS, INCLUDING ROOF DECKS AND INTERIOR BEDS.
 GROWING MEDIA SHOULD BE SPECIFIED BY A QUALIFIED SPECIALIST WITH EXPERIENCE IN TYPICAL MEDIA FOR LANDSCAPES OVER STRUCTURES. GROWING MEDIA FOR ROOF SLABS AND CONTAINED PLANTERS SHALL BE DESIGNED TO ADDITIONAL WEIGHTS. THE DESIGNER SHALL BE RESPONSIBLE TO ADVISE THE CONTRACTOR OF ANY ADDITIONAL WEIGHTS (DLTs AND CLDs).
MAINTENANCE
 SITE TO BE MAINTAINED TO LEVEL 1 "WELL-GROOMED" AS SET OUT IN TABLE 14.1.1. MAINTENANCE LEVELS- LEVEL 1 "WELL-GROOMED"
 CONTRACTOR TO PROVIDE MAINTENANCE FOR PERIOD OF 65 DAYS FOLLOWING SUBSTANTIAL COMPLETION OF THE PROJECT. CONTRACTOR TO PROVIDE 1 YEAR WARRANTY ON ALL MATERIAL.
 CONTRACTOR TO PROVIDE WRITTEN 1 YEAR WARRANTY ON SOIL SPECIFICATIONS. AN INDEPENDENT SOIL TEST TO BE PROVIDED 1 WEEK PRIOR TO END OF 1 YEAR WARRANTY PERIOD. CONTRACTOR TO PROVIDE SOIL SAMPLES TO BE TESTED FOR SOIL UP TO QUALITY RECOMMENDED IN SOILS REPORT.
 MUNICIPAL AND LOCAL AUTHORITY LEGISLATION AND REQUIREMENTS. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL LEGISLATION AND REQUIREMENTS WHICH MAY RESTRICT OR PROHIBIT CERTAIN ACTIVITIES SUCH AS APPLICATION OF PESTICIDES, HERBICIDES, AND INSECTICIDES.

NOTES:
 OFF-SITE IRRIGATION SYSTEM IS REQUIRED AND INSTALLED AT DEVELOPER'S COST. CIVIL FORCES WILL INSTALL AN IRRIGATION LEAD AND BOX FROM A LINE BROUGHT OUT TO THE BOULEVARD FROM THE PROPOSED BUILDING. THE LOCATION OF THE IRRIGATION BOX IS TO BE DETERMINED AT THE BUILDING PERMIT DESIGN STAGE. ALL SEWER AND TREE EXISTING STREET TREES ARE TO HAVE AUTOMATIC IRRIGATION.
 UPON ACCEPTANCE BY THE CIVIL, ALL NEW LANDSCAPE WORKS TO BE PLACED ON A TWO YEAR MAINTENANCE WARRANTY PERIOD TO ENSURE ESTABLISHMENT.
 STREET TREES TO BE COMPLETE WITH STRUCTURAL SOIL UNDER THE ROADWAY AND SURVEILLANT WITH SOIL CELL TECHNOLOGY. A MINIMUM OF 15m³ SOIL VOLUME IS REQUIRED PER TREE, WITH A CONTINUOUS SOIL TRENCH PLACED BETWEEN THE TREES.
 TREES TO BE CONFIRMED BY CIVIL. HYDRO LINE MAY BE IN CONFLICT WITH STREET TREES.



ID	Qty	Botanical Name	Common Name	Scheduled Size	Remarks
Amel	6	Amelanchier lamarckii	Lamarck Serviceberry	3-3.5m M/S	Full crown, min 3 Leaders.
CIS	81	Ceanothus thymifolius 'Skyline'	California Lilac	#3 Cont.	Full & Bushy
FELI	93	Festuca glauca 'Elijah Blue'	Elijah Blue Fescue	#1 Cont.	Full & Bushy
LaM	26	Lavandula angustifolia 'Munstead'	Munstead Lavender	#1 Cont.	Full and bushy plants.
Lon Jap	4	Lonicera japonica 'Halliana'	Hall's Japanese Honeysuckle	#5 Cont.	Vine, full vigorous growth
Misc Sin 'ML'	34	Miscanthus sinensis 'Morning Light'	Morning Light Maiden Grass	#1 Cont.	Full and bushy plants
Tm	124	Taxus x media 'Hicks'	Hicks x Yew	4 B&B	Full and bushy plants

LANDSCAPE PLANTING PLAN
 Scale: 1:100

general notes
 This drawing is an instrument of service, remains the property of considered design inc and may not be reproduced without the permission of considered design inc.
 All information shown on this drawing is for use in the specific project and shall not be used without written consent of considered design inc.
 DO NOT SCALE FROM THIS DRAWING
 All dimensions are to be verified by the contractor using figured dimensions only. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work on site.
 THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR IFC

issue	date
DE APPLICATION	10.05.2019
DE PROOF TO REVIEW	07.09.2020
DE PROOF TO REVIEW	24.06.2021

revision	date
A	07.09.2020
B	24.06.2021

project
 2357 WESTERN AVENUE, NORTH VANCOUVER

legal
 PLAN OF LOT C OF LOT A BLOCK 215 DISTRICT LOT 545 GROUP 1 NWD PLAN 15963

drawing
 LANDSCAPE HARDSCAPE PLAN

seal



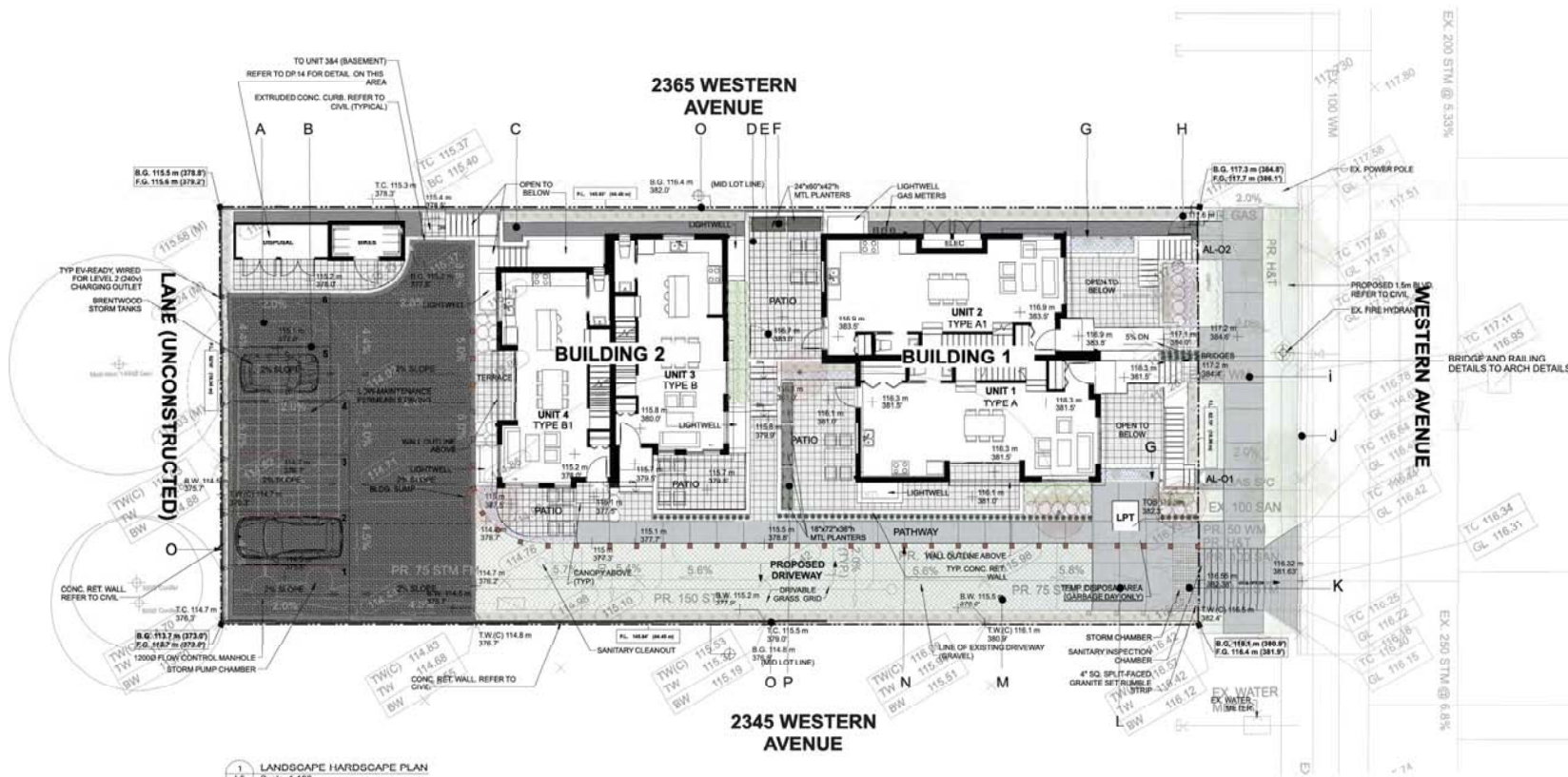
scale
 1 : 100 METRIC

drawn
 JP

checked
 JP

reference
 2017.06_01 L5

number
L5



LANDSCAPE HARDSCAPE PLAN
 Scale: 1:100

DETAIL REFERENCE	DRAWING FILE
1 L6	A AQUAPAVE 8CM CHARCOAL CONCRETE PAVERS 45° HERRINGBONE
3 L6	B AQUAPAVE 8CM RED CONCRETE PAVERS TO DELINEATE PARKING BAYS
4 L6	C PERMEABLE 3/4" MINUS CRUSHED COMPACTED BASALT
5 L6	D 12'SQ FLAME TEXTURED GRANITE PAVING
6 L6	E 4" HIGH PFC ALUMINUM POCKET GATE AND FENCE
7 L6	F #2 24" HIGH POWDER COATED ALUMINUM PLANTERS WITH HEDGE EG. TAXUS SP.
8 L6	G 8" HIGH PFC GREENING TRELLIS / EVERGREEN VINE PLANTING & 2" DEEP PFC ALUMINUM PLANTER
9 L6	H 4" HIGH PFC ALUMINUM POCKET GATE
10 L6	I NEW INSITU CONCRETE SIDEWALK TO DNV ENG. STANDARD
11 L6	J NEW CURBS AND GUTTER TO DNV ENG. STANDARD
12 L6	K 4" SQ SPLIT FACED / SAWN SIDES AND BOTTOM GRANITE SETTS 1/4" ROMEX JOINTS, ROMEX TRASSSED BASE COURSE
13 L6	L LIGHT BROOM FINISH PIGMENT DYED INSITU CONCRETE PAVING SAW CUT CONTROL JOINTS AS SHOWN
14 L6	M PERMEABLE DRIVEABLE GRASS GRID BY LANDSCAPE SUPPLY OR SIMILAR AS APPROVED. https://www.landscape-supply.com/catalog/product.php?cat_id=610&pid=8044
15 L6.1	N LIGHT BOLLARD EG. STRUCTURA SPAR LED BOLLARD 48" HIGH OR SIMILAR AS APPROVED
16 L6.1	O BLACK STAINED CLOSE BOARDED SAW TIMBER 4" HIGH FENCE SITE BOUNDARY TO THE REAR OF THE FRONT BUILDING
17 L6.1	P #3 18'X72'X36" HIGH POWDER COATED ALUMINUM PLANTERS WITH GRASS PLANTING.

general notes

This drawing is an instrument of service, remains the property of considered design inc and may not be reproduced without the permission of considered design inc.

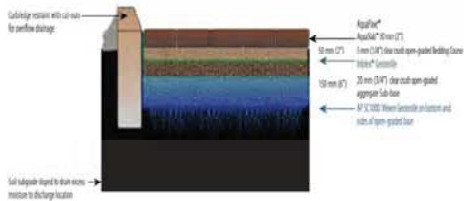
All information shown on this drawing is for use in this specific project and shall not be used without written consent of considered design inc.

DO NOT SCALE FROM THIS DRAWING

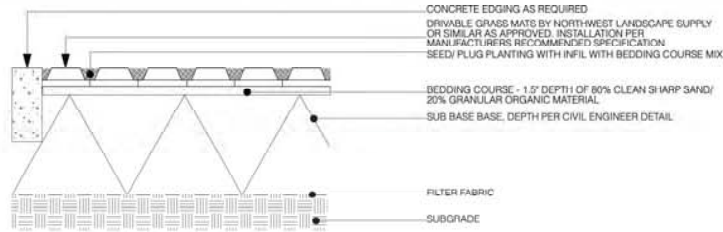
All dimensions are to be verified by the contractor, use figured dimensions only. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work on site.

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR IFC.

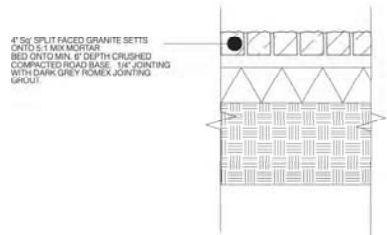
issue	date
DE APPLICATION	10.05.2019
DE PRIOR TO SUBMISSION	24.06.2021



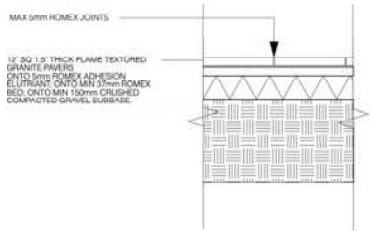
1 L6 AQUAPAVE PAVING DETAIL
 NTS



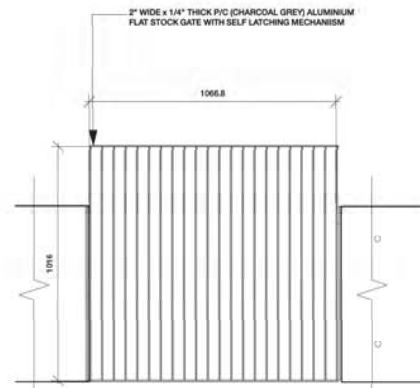
6 L6 LIVIVABLE GRASS MATS
 Scale: 1:10



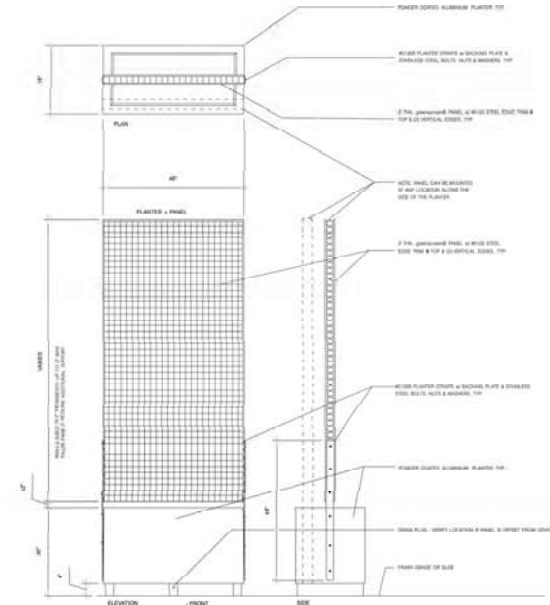
2 L6 SPLIT FACED GRANITE / ROMEX DRIVEWAY
 Scale: 1:10



3 L6 FLAME TEXTURED GRANITE PAVERS ONTO PEDESTRIAN SUBBASE
 Scale: 1:10



4 L6 TYPICAL PEDESTRIAN GATE
 Scale: 1:10



5 L6 TYPICAL GREENSCREEN DETAILS
 Scale: 1:20

revision	date
A	24.06.2021

project
 2357 WESTERN AVENUE, NORTH VANCOUVER

legal
 PLAN OF LOT C OF LOT A BLOCK 215 DISTRICT LOT 545 GROUP 1 NWD PLAN 15993

drawing
 TYPICAL DETAILS

seal



scale
 AS SHOWN

drawn
 JP

checked
 JP

reference
 2017.06_01 L6

number

L6

general notes

This drawing is an instrument of service, remains the property of considered design inc and may not be reproduced without the permission of considered design inc.

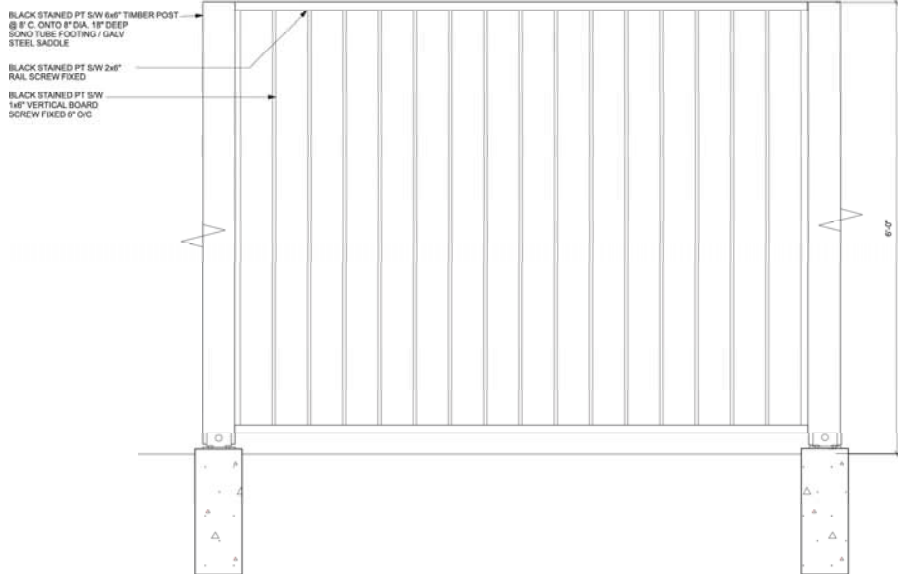
All information shown on this drawing is for use in this specific project and shall not be used without written consent of considered design inc.

DO NOT SCALE FROM THIS DRAWING

All dimensions are to be verified by the contractor. Use figured dimensions only. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work on site.

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR IFC

issue	date
DE APPLICATION	10.05.2019
DE PRIOR TO SUBMISSION	24.06.2021



1 CLOSE BOARDED S/W TIMBER FENCE
 Scale: 1:10

project
 2507 WESTERN AVENUE, NORTH VANCOUVER

legal
 PLAN OF LOT C OF LOT A, BLOCK 215 DISTRICT
 LOT 545 GRCLIP 1 NWD PLAN 159923

drawing
 TYPICAL DETAILS

seal



scale
 AS SHOWN

drawn
 JP

checked
 JP

reference
 2017_06_01 L6.1

number

L6.1

general notes
 This drawing is an instrument of service, remains the property of considered design inc. and may not be reproduced without the permission of considered design inc.

All information shown on this drawing is for use in this specific project and shall not be used without written consent of considered design inc.

DO NOT SCALE FROM THIS DRAWING

All dimensions are to be verified by the contractor, user figured dimensions only. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work on site.

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNTIL ISSUED FOR IFC

ISSUE	DATE
DATE APPLICATION	12-04-2019
DATE PRIOR TO REVIEW	07-09-2020
DATE PRIOR TO SUBMISSION	15-08-2020
DATE PRIOR TO SUBMISSION	24-06-2021

revision	date

project
 2357 WESTERN AVENUE, NORTH VANCOUVER

legal
 PLAN OF LOT C OF LOT A BLOCK 215 DISTRICT LOT 645 GROUP 1 NWD PLAN 16993

drawing
 LANDSCAPE TREE PROTECTION / REMOVAL

seal



scale
 1: 100 METRIC

drawn
 JP

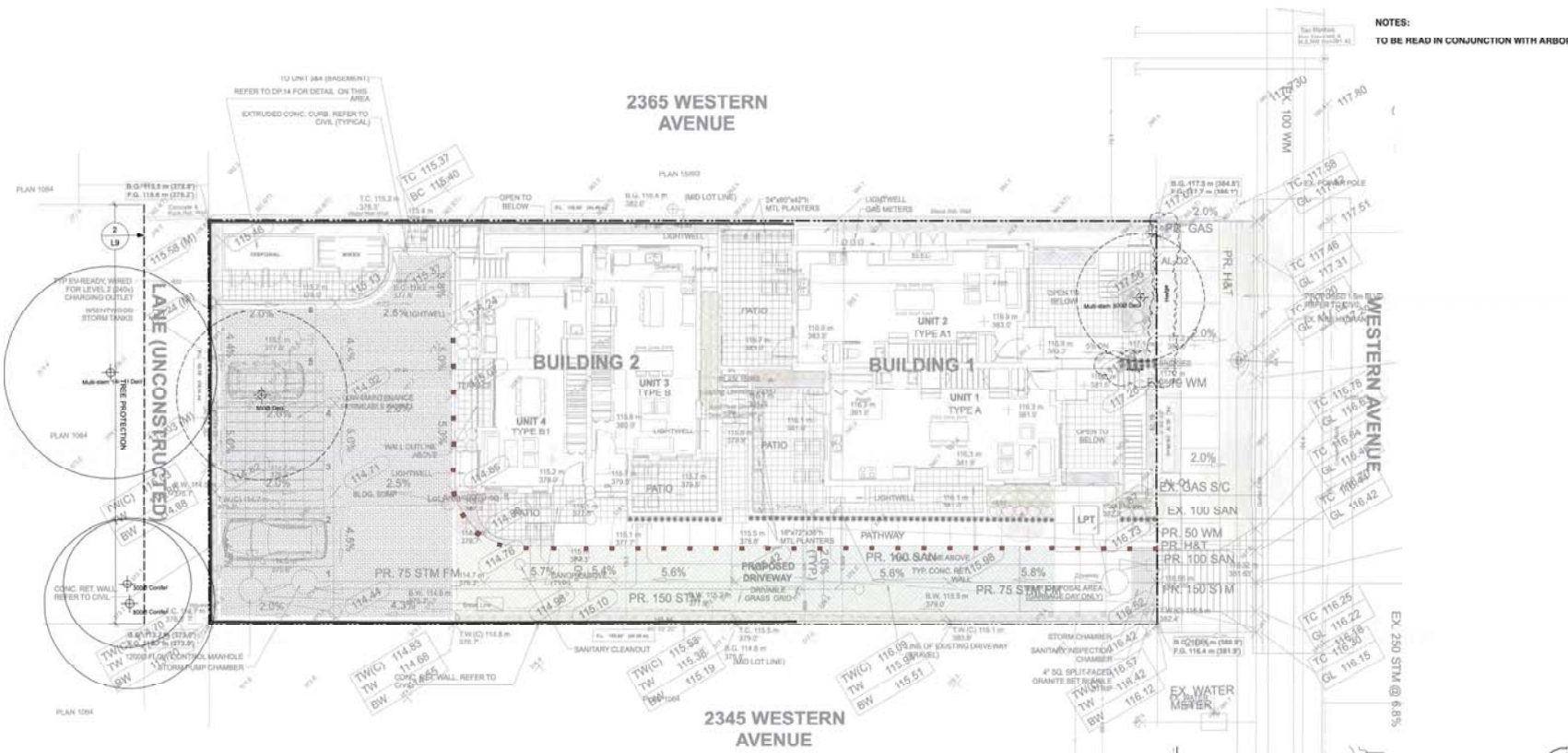
checked
 JP

reference
 2017_08_01 L9

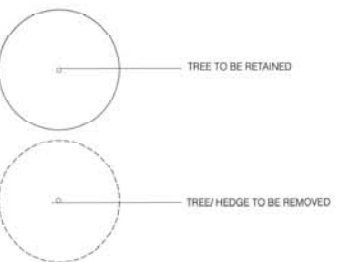
number

L9

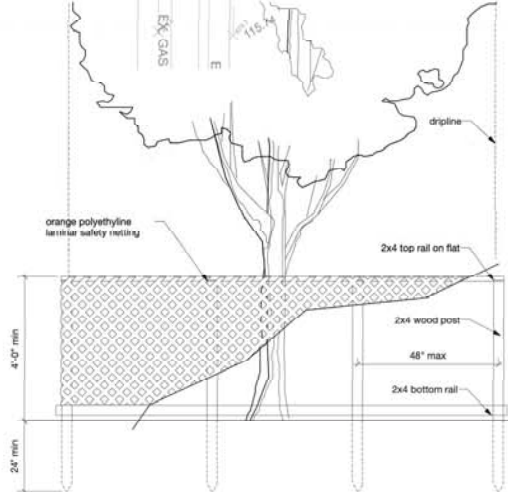
NOTES:
 TO BE READ IN CONJUNCTION WITH ARBORIST REPORT

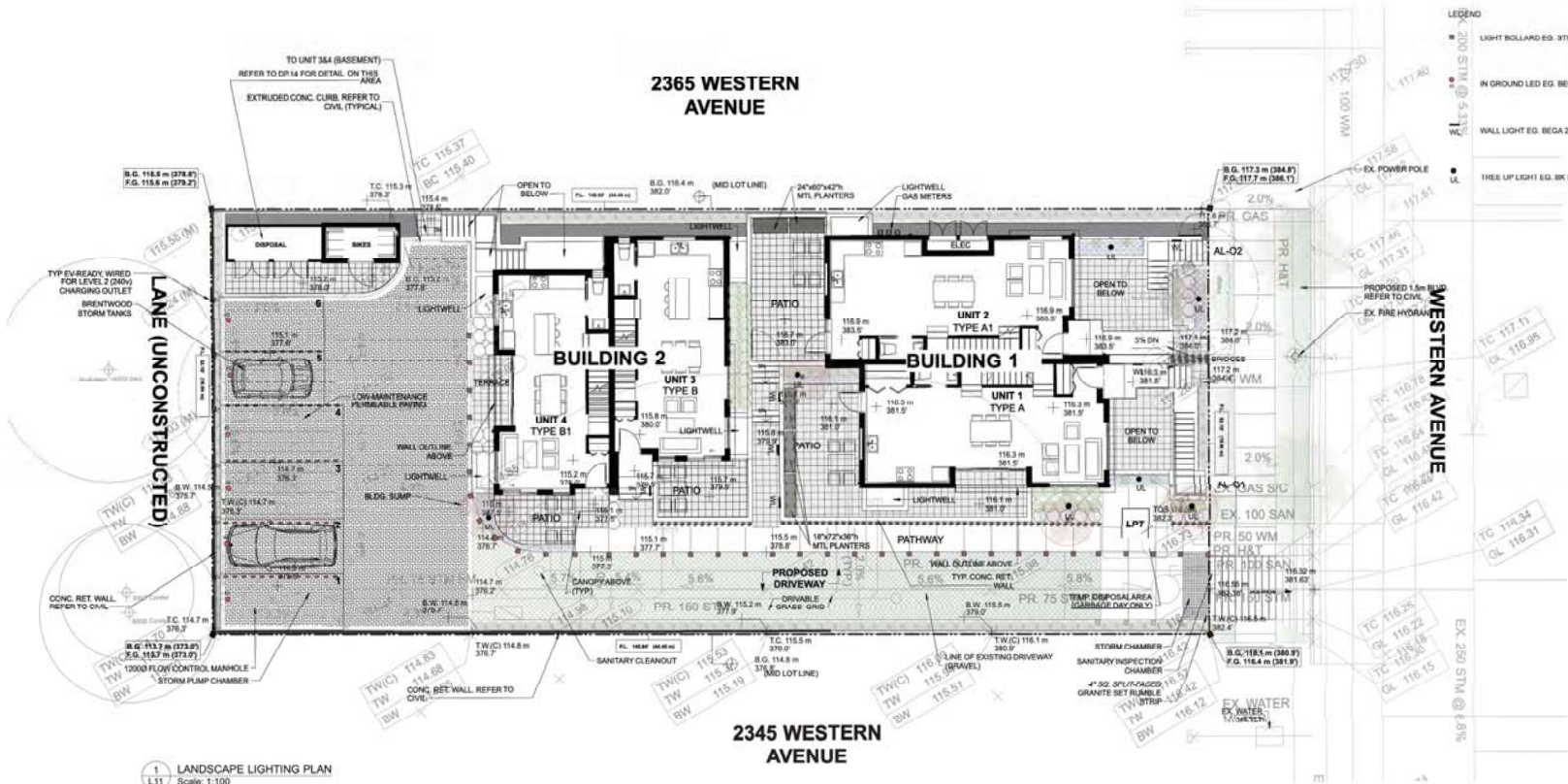


1 TREES TO BE RETAINED/ REMOVED.
 Scale: 1:100



2 TREE PROTECTION FENCE
 Scale: 1:20





- LEGEND**
- 200 STM @ 5.13%
 - IN GROUND LED EG. BEGA IN GROUND FLOODLIGHT
 - WALL LIGHT EG. BEGA 22281 LED SURFACE WALL MOUNT
 - TREE UP LIGHT EG. BK NITE STAR

considered design inc

775 206 4114
 info@weareconsidered.com
 www.weareconsidered.com

general notes
 This drawing is an instrument of service, remains the property of considered design inc and may not be reproduced without the permission of considered design inc.
 All information shown on this drawing is for use in the specific project and shall not be used without written consent of considered design inc.

DO NOT SCALE FROM THIS DRAWING
 All dimensions are to be verified by the contractor, use figured dimensions only. Any discrepancies shall be brought to the attention of the Landscape Architect prior to the commencement of work on site.
 THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS ISSUED FOR IFC

issue	date
DE APPLICATION	16.05.2019
DE PRIOR TO REVIEW	07.09.2020
DE PRIOR TO SUBMISSION	15.09.2020
DE PRIOR TO SUBMISSION	24.06.2021

revision	date
A	07.09.2020
B	24.06.2021

project
 2365 WESTERN AVENUE, NORTH VANCOUVER

legal
 PLAN OF LOT C OF LOT A BLOCK 215 DISTRICT LOT 545 GROUP 1 NWD PLAN 15993

drawing
 LANDSCAPE LIGHTING PLAN

seal



scale
 1 : 100 METRIC

drawn
 JP

checked
 JP

reference
 2017.06_01.L11

number

L11

1 LANDSCAPE LIGHTING PLAN
 Scale: 1:100

2357 Western Avenue, City of North Vancouver

Developer's Information Session Summary Report

Event Date: September 18, 2019
Time: 6:00 PM – 8:00 PM
Location: North Vancouver City Library, 120 West 14th St, North Vancouver
Attendance: 13 members of the public signed in.
Comments: 11 comment sheets and 1 e-mail were submitted.

Meeting Purpose:

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

Notification:

In accordance with the City of North Vancouver (City) policies:

Invitation Brochures

Invitations and informational packages were delivered on September 5th, 2019 to 40 addresses within a 100m 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 Friday, September 11, 2019 and Sunday, September 13, 2019. A copy of the ad is included in Appendix A: Notification.

Notification Signs

A sign was posted on the property on September 5, 2019.

Attendance:

13 members of the public signed in for the meeting. A copy of the redacted sign-in sheet is included in Appendix B.

The following City staff and project team members were in attendance:

City of North Vancouver:

- Mike Friesen, Planner

Project Team presenters included:

- Thomas Grimwood, Architect
- Arash Tavakoli, Developer
- Ardeshir Behmardi, Developer

Overview:

The meeting was held in a preliminary Developer's Information Meeting format. Meeting participants could browse the display boards and engage with the project team directly, during which time an informal question and answer period took place.

The participants were invited to submit written comments to the municipal planner. The comment period remained open from the night of the meeting, September 18, 2019 to October 2, 2019. 13 community members signed in at the meeting. 11 comment sheets and one e-mail were submitted to the municipal planner.

The main discussion of the evening centered on the anticipated impacts of project construction and a sense of development fatigue, particularly related to the recent 18-unit townhouse project across the street that was under construction for more than two years. Participants were concerned about increased vehicle traffic and anticipate a loss of on-street parking during and after project construction. Neighbours in the townhouse project across the street acknowledged that they often park on the street instead of in their designated underground parking stalls, as a result of a challenging turning radius in the underground parkade.

Overall, the comments received were mixed, with seven respondents in support of the project and five opposed. There is support for increasing housing choice in the City of North Vancouver through the addition of the proposed four-plex housing form. The two lock-off units were supported as a means for increasing rental housing options in the area. The suggestion was made that there should be a lock-off unit for each of the four homes to assist with affordability and to increase the City's supply of rental housing. There is support for the architectural design of the project and for the affordability of these homes relative to single-family homes. There is concern over the impacts of construction. Concern over the potential for noise, and the loss of sunlight and/or views was raised by the neighbour to the north of the site and across the street from the site. There is concern about the loss of on-street parking and the increase in traffic on Western Ave, a one-way cul-de-sac road.

Public Dialogue:

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

- Q1 What will the duration of construction be for the project be?
 - A1 The construction will take approximately 14-16 months.

- C2 Concern about the creation of additional traffic on a small dead-end street with no cul-de-sac.
 - A2 The City is reviewing the intersection of Western Ave and 23rd Ave.

- C3 Concern there will not be street parking available during the day or night due to the creation of four units with two lock off suites.
 - A3 The applicant is exceeding the required number of parking stalls for this proposal, which is four stalls, by providing five on-site parking stalls including one accessible stall. Based

on concerns regarding parking, the applicant has explored converting the accessible stall into two standard vehicle stalls, which would be possible.

C4 Concern about vehicle circulation on Western, specifically garbage trucks reversing back onto Western.

C5 Concern about contributing further to traffic congestion at intersection of Western and 23rd which is already quite bad.

A5 This site consists of two adjacent lots, which currently have two single-family homes with the potential for two lock-off suites, or a total of four units. The proposal will not impact traffic on Western Ave as compared to the single-family home alternative.

C6 Suggestion that it would make more sense to develop the entire block at once rather than in stages. The ongoing construction creates headaches and disruption to the residents of the street.

A6 This proposal adheres to the allowable height and density in the OCP, which permits a density on the west side of the street of 0.75 FSR. The proposal meets the objectives of the OCP for this area, offering a ground-oriented, four-plex housing form. In order for a land assembly to be economically feasible, the density of the sites would need to be significantly increased. The property south of 2357 and the site in question were both on market for approximately 6 months with no pursuit of a land assembly.

C7 Desire for existing landscaping to remain during construction as much as possible.

C8 Desire that no trees be removed on the back lane.

A8 No trees will be removed on the back lane. Per the arborist report, one tree on the back of the property will be removed.

C9 Concern that there will be noise from the driveway, specifically for the resident to the south of the property where the driveway is located.

A9 The applicant spoke with the neighbour to the south and discussed the proposed cedar hedges that will act as a sound buffer and will provide privacy to both properties.

C10 Suggestion there should be a geotechnical investigation to evaluate the retaining wall along the north property line prior to construction to avoid a negative impact to neighboring yards that share a retaining wall. The neighbours to the north and south are concerned that the proposed grading will impact the slope of their backyard. The neighbours to the north have requested to keep their existing retaining wall as-is.

A10 Should the project be approved, thorough consultation with a geotechnical engineer will be conducted to ensure no negative impacts to the neighbouring properties will occur as a result of construction.

- C11 Concern that the City of North Vancouver noise bylaw won't be respected during construction.
- A11 The applicant has significant development and construction experience building homes across Metro Vancouver, including 9 projects on the North Shore. They will adhere to all noise by-laws for the City and will endeavor to minimize the impacts of construction on neighbours as much as possible.
- C12 Concern that the new built form on the property will block sunlight, specifically for the neighbor to the immediate north of the property.
- A12 The applicant has committed to exploring the built form in more detail to ascertain the impact of the proposal on the property to the north. The proposal will not impact the sunlight on any other neighbouring properties because of its orientation.
- C13 Request that the garbage staging area be kept inside property lines.
- A13 The garbage staging area will be kept within property lines.
- C14 Concern for parking during construction.
- A14 All efforts will be made to minimize the number of vehicles parking on Western Ave during project construction.
- C15 Desire that the back lane doesn't open in the future.
- A15 The applicant explored the possibility of opening the back lane for two years, including conversations with the City and with the neighbour who owns part of the lane, and determined it would not be possible at this time.

Comment Sheet and Email Summary

Participants were invited to submit comments for a two-week response period after the meeting. 11 comment sheets were submitted, as well as 1 e-mail.

The main themes from the all of the comments received include:

- Support for the project design.
- Support for the proposed three-bedroom, family-oriented housing types at this location – near the highway, public transit, and a school.
- Support for increased housing choice and increased supply of four-plex homes in the City of North Vancouver.
- Support for the lock-off suites to improve affordability, suggestion to provide a lock-off suite for each unit.
- Concern over the building height from a resident of the townhouse project across the street.
- Concern that five parking stalls are not enough for four homes with two lock off suites.

- Concern over the loss of on-street parking during and after construction.
- Development fatigue related to the recently completed townhouse project across the street, that was under construction for more than two years and caused significant burden to the neighbours.
- Concern over impacts to the north and south neighbouring properties, including sloping and drainage of the soil.
- Suggestion to wait until the entire block can be redeveloped as part of a land assembly.
- Suggestion to obtain access to the back lane for ease of vehicle traffic and garbage removal.
- Suggestion to retain forestation and landscaping facing the back lane for noise and pollution control.

Conclusion

The purpose of this public information meeting was to present to neighbours the proposed rezoning application and the residential development concept, and to provide them with an opportunity to ask clarifying questions and comment on the proposal. 40 invitations were distributed by hand to the surrounding community, and 13 community members signed in. Two newspaper ads notified the community of the meeting, and a sign was posted on the property. 11 comment forms were submitted as well as 1 e-mail to the municipal planner.

The public could participate in this process in these ways:

- browsing boards
- talking to the project team and City Planner
- participating in an informal question and answer period
- submitting written comments.

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. Participants asked the development team and City planner a variety of specific questions, mostly related to traffic circulation, parking allocation, the impacts of construction activity, and relayed a sense of development fatigue. The community members that spoke at the meeting expressed concerns of the proposal at this stage, primarily due to the impacts to the neighbouring properties, or their ability to park on the road during and after project construction. Neighbours from the townhouse development across the street acknowledged that they often park on the road instead of in their dedicated parking stalls, as a result of a challenging underground parkade design, including a limited turning radius, in the building. This increases the demand for on-street parking.

The comment forms indicated that there is desire for, and a current lack of, this type of four-plex housing form in the area. There was support for the architectural design as well as for the lock-off suites to increase the affordability of the homes with their potential for rental income. The project, as proposed, adheres to the height and density as intended for this block in the OCP. The proposal responds to the community's desire for low-density, ground-oriented housing forms as an alternative to single-family or higher-density options. The community was given ample opportunity to express their views of the proposal.

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8884

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, 2021, No. 8884” (Ardeshir Behmerdi / 2357 Western Holdings Ltd., 2357 Western Avenue, CD-742)**.
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 CD-742 (Comprehensive Development 742 Zone):

Lots	Block	D.L.	Plan	
C of Lot A	215	545	15993	from RS-1

3. Part 11 of Division V: Comprehensive Development Regulations of Document “A” of “Zoning Bylaw, 1995, No. 6700” is hereby amended by:
 - A. Adding the following section to Section 1100, thereof, after the designation “CD-741 Comprehensive Development 741 Zone”:

“CD-742 Comprehensive Development 742 Zone”
 - B. Adding the following to Section 1101, thereof, after the “CD-741 Comprehensive Development 741 Zone”:

“CD-742 Comprehensive Development 742 Zone”

In the CD-742 Zone, permitted Uses, regulations for permitted Uses, regulations for the size, shape and siting of Buildings and Structures and required Off-Street Parking shall be as in the RG-2 Zone, except that:

- (1) Section 562(1) Purpose and (5) Density shall not apply and are replaced with the following:

Gross Floor Area shall not exceed 0.75 FSR;

- (2) Siting shall be as in the RG-2 Zone, except that:
- (a) Principal Buildings shall not be sited less than 1.2 metres (4.0 feet) from the Interior Side Lot Line;
 - (b) Accessory Buildings shall be sited not less than 0.6 metres (2.0 feet) from the Rear Lot Line.

READ a first time on the <> day of <>, 2021.

READ a second time on the <> day of <>, 2021.

READ a third time on the <> day of <>, 2021.

ADOPTED on the <> day of <>, 2021.

MAYOR

CORPORATE OFFICER



 Department Manager	 Director	 CAO
--	---	--

The Corporation of **THE CITY OF NORTH VANCOUVER**
FINANCE DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Larry Sawrenko, Chief Financial Officer and Director of Finance

Subject: LONSDALE ENERGY CORPORATION LOAN REQUEST

Date: November 17, 2021 File No: 05-1610-01-0001/2021

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

RECOMMENDATION

PURSUANT to the report of the Chief Financial Officer and Director of Finance, dated November 17, 2021, entitled "LONSDALE ENERGY CORPORATION LOAN REQUEST":

THAT Lonsdale Energy Corporation be authorized to borrow up to \$720,000 in additional funding from the City of North Vancouver under the same terms and conditions of the existing August 1, 2018 Loan;

AND THAT Council supports Lonsdale Energy Corporation proposed repayment schedule and confirms that a twelve month notice will be provided to Lonsdale Energy Corporation if the City of North Vancouver wishes to request loan reimbursements prior to the planned schedule.

ATTACHMENTS

1. Report of the Chief Executive Officer of Lonsdale Energy Corporation, dated November 9, 2021, entitled "City Loan Reimbursement Schedule and Funding Requests"

PURPOSE

Lonsdale Energy Corporation (“LEC”) has the opportunity to secure 3 new customers in 2022, and has requested additional capital to invest in new connecting infrastructure. This report recommends that the City of North Vancouver (1) lends \$720,000 of additional funds to LEC, (2) supports LEC’s repayment schedule, and (3) reaffirms previous assurances that it will provide LEC with 1 year notice of demand for payment.

BACKGROUND

LEC is a wholly owned government business enterprise 100% owned by the City of North Vancouver (“CNV”) whose significant capital expansions to date have primarily been financed through loans from CNV. As noted in Attachment 1, LEC has not fully drawn loan financing at levels specified in promissory notes previously approved by Council and, subject to Council’s further approval, could draw additional funds totaling \$6,031,000 under the promissory notes currently in place.

LEC has now requested an additional \$720,000 of loan financing to enable it to connect its utility system to 3 new buildings, which would position these buildings to benefit from future low carbon energy sources as LEC increasingly transitions its energy system to these new sources over time.

LEC has also asked CNV for a renewed assurance that it will provide LEC with 1 year notice of demand for payment to support its ability to demonstrate to its auditors that LEC can continue to operate as a going concern.

Further details are included in LEC’s report included as Attachment 1 to this report.

DISCUSSION

An analysis of LEC’s financial capacity shows that it is currently generating sufficient cashflow to service its debt up to the full amount authorized by Council. LEC’s 2020 cash flow (defined as Earnings before Interest, Taxes, Depreciation, and Amortization or “EBITDA”) is approximately 5 times higher than LEC’s 2020 interest costs and, assuming LEC fully draws down funding to the maximum levels specified in its CNV promissory notes, its EBITDA to interest ratio would remain at approximately 4:1. This ratio is considered strong by CNV Finance.

A cash flow analysis shows that CNV has the ability to lend LEC the requested funds, accept repayment according to LEC’s proposed schedule, and provide assurance that it will not demand repayment without providing 1 year of advance notice.

CNV's fixed income investment portfolio is currently yielding 2.48%. Interest under LEC's demand notes accrues at 2.65%, so the LEC loan provides CNV with a competitive return relative to its existing investments.

CNV and LEC have made changes to LEC's governance to promote LEC's ability to operate as a stand-alone entity. LEC's current promissory notes with CNV mature Aug 1, 2023 and, in advance of that maturity, CNV Finance plans to examine LEC's ability to obtain financing from commercial lenders on reasonable terms and further LEC's independence.

FINANCIAL IMPLICATIONS

Financial implications are addressed throughout this report.

INTER-DEPARTMENTAL IMPLICATIONS

This report as was developed in co-operation with LEC.

STRATEGIC PLAN, OCP, OR POLICY IMPLICATIONS

CNV's OCP includes Objective 4.1.2 (d) to:

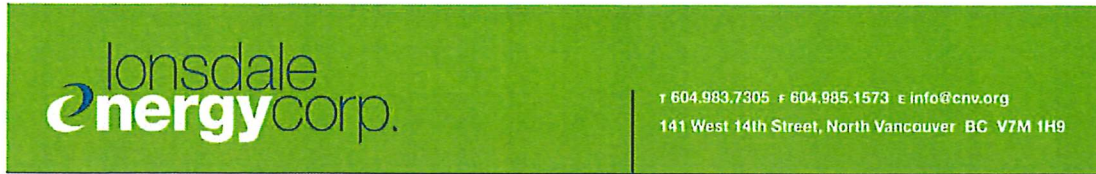
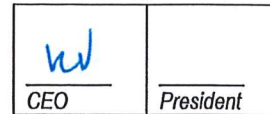
"Encourage the transition to sustainable energy sources by ... Supporting the Lonsdale Energy Corporation (LEC) in the development and implementation of a Sustainable Energy Strategy"

The recommended LEC loan financing provides financial support to LEC to enable it to connect to new buildings and position them to benefit from LEC's move to low carbon energy sources over time.

RESPECTFULLY SUBMITTED:



Larry Sawrenko
Chief Financial Officer and Director of
Finance



REPORT

To: Mayor Linda Buchanan and Members of Council

From: Karsten Veng, Chief Executive Officer, LEC

SUBJECT: CITY LOAN REIMBURSEMENT SCHEDULE AND FUNDING REQUESTS

Date: November 9, 2021

RECOMMENDATION:

PURSUANT to the report of the Chief Executive Officer of Lonsdale Energy Corp., dated November 9, 2021, entitled "City Loan Reimbursement Schedule":

THAT Council supports Lonsdale Energy Corp. proposed repayment schedule and confirms that a twelve-month notice will be provided to Lonsdale Energy Corp. if the City of North Vancouver wishes to request loan reimbursements prior to the planned schedule.

THAT Lonsdale Energy Corp. be authorized to borrow up to \$720,000 in additional funding from the City of North Vancouver under the same terms and conditions of the existing August 1, 2018 City loan.

ATTACHMENT:

1. Loans from the City of North Vancouver as at August 31, 2021
2. Report of the Director, Lonsdale Energy Corp., dated July 11, 2018, entitled "Lonsdale Energy Corp. – Review of City Loan Terms"
3. Loan Reimbursement Schedule as at August 31, 2021

PURPOSE

This report provides an overview of the balance and payments of principal and interest of Lonsdale Energy Corp.'s (LEC) loans outstanding to the City of North Vancouver (the City) and requests an additional loan to fund the expansion of the district energy system in 2022.

This report also seeks Council's support of Lonsdale Energy Corp.'s (LEC) proposed loan reimbursement schedule and confirmation that a twelve-month notice will be provided if reimbursement of the loan balance is requested prior to the proposed schedule.

BACKGROUND

On December 16, 2013 the City converted its amount due from LEC into a five-year demand term loan maturing on December 16, 2018 and bearing interest at 2.10% per annum. Previously incurred expenses from the City for the construction of LEC's distribution network were converted into debt and LEC was authorized to borrow up to a total of \$12 million (inclusive of these expenses). This funding facilitated the growth of the district energy system from 2009 to 2015. In the subsequent years LEC made additional funding requests and provided the specific purpose of each request which is summarized in **Attachment 1**. On August 1, 2018 all of these authorized amounts were consolidated into a new five-year demand term loan maturing on August 1, 2023 and bearing an interest rate of 2.65% per annum. One more small funding request was made in 2019 bearing the same terms as the consolidated loan.

On June 29, 2012, the City received a loan of \$2,000,000 under the Green Municipal Investment Fund Project Loan through the Municipal Finance Authority (MFA) to finance eligible capital costs related to LEC infrastructure. Funding was transferred to LEC who took responsibility for principal and interest payments as per the schedule provided by MFA. As of August 31, 2021, LEC has an outstanding balance of \$298,495 which includes an actuarial adjustment and the final principal payment to be made on June 29, 2022 retiring the loan.

As at August 31, 2021 the loans from the City of North Vancouver, including the MFA loan, can be summarized as follows:

Amount Authorized by Council	Amount Disbursed to LEC	Balance Available	Amount Reimbursed	Amount Outstanding to the City
\$37,342,966	\$31,311,966	\$6,031,000	\$3,760,385	\$27,551,581

In the report to council dated June 6, 2017 titled "2017-2018 LEC Construction Program Financing" (**Attachment 2**), LEC informed Council of its intention to cease using operating revenues for the purpose of funding capital expansions and major upgrades of the district energy system. This practice provides transparency to Council as the funds for significant capital projects are requested along with their purpose. Despite the challenges of the COVID-19 pandemic LEC exceeded the scheduled amount of \$1.33

million for interest and principal payments in 2020 through payments of \$692,885 in interest and \$659,210 in principal payments.

DISCUSSION

Twelve-Month Notice

The terms of the existing loans to LEC were discussed with Council in July 2018 as part of the execution of new term loans for a second five-year period ending August 1, 2023. Except for consolidating the individual promissory notes into one note and increasing the interest rate, the terms of the loan remained mostly unchanged. Notably, the terms refer to the loan as a 5-year demand term loan, which was the case when the first loan was issued in 2013. The fact that the loan is callable on demand did not create any issues until last year's audit of LEC's financial statements. It was understood that principal payments would follow the provided reimbursement schedule and if the loan was called outside of this schedule LEC would need time to arrange alternative funding.

The economic effects of the COVID-19 pandemic increased operational and liquidity risks across all sectors. The change in risk increased the auditors' concerns about the callability of the loan and the possibility of securing alternative funding in a short time period. Previously the auditor had accepted the reimbursement schedule and LEC's history of meeting its obligations as sufficient evidence against these risks, however the external factors brought on by COVID-19 required them to seek additional assurance. In order to mitigate risk and address the going concern (the accounting assumption that a company has the necessary resources to operate indefinitely) of LEC, staff brought a report to council requesting that the City provide twelve-month notice to LEC for any requests of payment exceeding the reimbursement schedule. This requirement allows LEC to continue classifying the loans as non-current liability and provides assurance to the auditor that the company would have sufficient time to secure alternative funding if the loan was called. Council endorsed the schedule and requirement of twelve-month notice on June 22, 2020.

Funding Requests

Loans from the City have been to fund expansion of the district energy system to meet the demand of new customers. This has ensured that new developments can be serviced by sustainable energy sources in the future and has expanded LEC's footprint in the City allowing for future connections. On its own LEC would not have had the necessary capital to connect all its current customers, and any missed new developments would likely have installed natural gas boiler systems. The rapid customer growth facilitated by the loans has also helped LEC achieve positive financial results: LEC was able to eliminate its deficit in 2018; earn significant profits over the past four years (2017-2020); and exceeded its scheduled principal payments by approximately \$150,000 over the past five years. In addition to system expansion, loans have also increased the sustainability of the district energy system. Most recently the expansion of cooling services for heat recovery at MP5 to service the Shipyards Precinct. Heat recovery from the precinct has provided 2,044 MWh of energy to date this year which has supplemented heat that would have otherwise been generated by natural gas boilers. Additionally, LEC has already secured funding from the City for an energy source that will significantly lower carbon emissions in the community: the North Shore Waste Water Treatment Plant (NSWWTP). Once connected

it is expected that the heat recovered from the NSWWTP will provide 20,000-30,000 MWh of low-carbon energy and displace 7,200 tonnes of carbon emissions per year.

LEC would like to request a loan to fund the following major expansions in 2022. The loan will carry the same terms and conditions as the August 1, 2018 City loan.

Purpose	Amount
East 1 st Street – Ridgeway Ave. to 520 E 1 st . St.	\$290,000
East 6 th Street – 160 E 6 th St. to 151 E Keith Rd.	240,000
East 2 nd Street – Ridgeway Ave. to 650 E 2 nd St.	190,000
Total	\$720,000

These projects facilitate the connection of three new customers in 2022 where customer connections requires longer and more expensive stretches of piping. Other buildings being connected in 2022 already have pipes in the adjacent streets or piping is nearby. The use of internal funds for these projects would have a negative impact on LEC’s operating cash flow and would not follow the previously discussed practice of requesting funding from council for significant capital projects. Staff have projected the amounts based on similar construction projects that were recently completed by the company with small contingencies for unforeseen expenses. LEC often draws on loans from the City in installments to reduce interest costs to the company. This practice also allows staff to only draw the approximate funds necessary to complete a project if it is completed for less than the funding requested.

In recent years LEC has made its funding requests as part of its annual update to Council on the status of the loans and the reimbursement schedule. During these years most funding requests were predictable and planned based on expansion of the distribution piping network to connect to a growing customer base or expansion of the existing plant generating infrastructure to meet the demand of the customer base. Currently LEC is at various stages of investigation for numerous low carbon energy sources for its district energy system. These options include server heat recovery, sewage heat recovery, renewable natural gas, thermal energy storage and ocean source heating. The feasibility and cost of these projects is still being determined and due to these uncertainties LEC is unable to make funding requests at this time. However, staff would like to make Council aware of possible funding requests that could occur in late 2021 or 2022 outside of the requests made in this report. These requests will be made if a project (or projects) is determined to be viable.

Reimbursement Schedule

An updated reimbursement schedule for the loans outstanding to the City, as well as an adjusted schedule that considers the funds requested in this report can be seen in **Attachment 3**. LEC expects to retire its current debt obligations to the City by 2036 or in 2037 if the additional loan is approved. To date LEC has made a total of \$3.76 million in principal payments to the City and met or exceeded all of the scheduled principal payment obligations. Additionally, LEC has paid approximately \$3.65 million in interest to the City on these loans.

LEC endeavors to provide a return on investment to the City and increase sustainability within the community. The financing provided by the City to LEC has allowed LEC to grow at a rapid rate providing a return on investment to the City. Funding has also been used and will increasingly be used towards introducing low carbon energy sources to the district energy system in order to decrease carbon emissions within the City of North Vancouver.

FINANCIAL IMPLICATIONS:


The financial implications are addressed throughout this report.

STRATEGIC PLAN IMPLICATIONS:

LEC aligns with the 2018-2022 Council Strategic Plan, more specifically, Council's Livable City goal stating:

Further develop a renewable energy strategy to transition the City-owned Lonsdale Energy Corporation district energy system to incorporate low carbon energy sources and minimize the use of natural gas, including exploring a compost/waste to energy facility and other strategic opportunities

RESPECTFULLY SUBMITTED BY:



Karsten Veng, P.Eng., PMP
Chief Executive Officer, LEC

MINUTES OF THE REGULAR MEETING OF COUNCIL HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14th STREET, NORTH VANCOUVER, BC, ON MONDAY, JULY 16, 2018.

REPORTS OF COMMITTEES, COUNCIL REPRESENTATIVES AND STAFF

21. Lonsdale Energy Corp. – Review of City Loan Terms – File: 11-5500-06-0001/1

Report: Director, Lonsdale Energy Corp., July 11, 2018

Moved by Councillor Clark, seconded by Councillor Bell

PURSUANT to the report of the Director, Lonsdale Energy Corp., dated July 11, 2018, entitled “Lonsdale Energy Corp. – Review of City Loan Terms”:

THAT the loans currently outstanding and authorized by the City of North Vancouver be renewed on a 5-year demand term and interest rate of 2.65% compounded quarterly as of August 1, 2018;

THAT Lonsdale Energy Corp. be authorized to borrow up to \$4,200,000 in additional funding from the City of North Vancouver under the same terms and conditions of the renewed loan;

THAT Lonsdale Energy Corp. pay to the shareholder, on an annual basis, a dividend of 5% of the amount of capital reimbursed to the City during the year;

AND THAT Lonsdale Energy Corp. provide an annual report on the balance and payments of principal and interest of the loan, as well as on construction activities impacting borrowing and loan repayment.

CARRIED UNANIMOUSLY

2018 – 2020 Project Funding Requests

1. St Georges Ave. – 160 E 6th Street to E 3rd Street & NTS2 \$1,600,000

This project includes distribution system construction and network transfer station (NTS) to inter-connect the Lower Lonsdale and Central Lonsdale service areas.

The project is planned for fall 2018 to allow the provision of heat from Central Lonsdale to Lower Lonsdale during 2018-2019 winter to meet peak demand. Central Lonsdale currently has excess heating capacity and the inter-connection will avoid the installation of additional boilers in Lower Lonsdale where demand is significantly increasing due to servicing of the Moodyville area.

This project will also allow the transfer of recovered heat from the shipyard precinct's district cooling system to other heating service areas during summer. In 2019, the completion of the Lot 5 building will require for all three heating service areas to be inter-connected in order to adequately distribute the recovered heat generated by the cooling process during peak cooling demand periods (without the need for temporary heat rejection equipment and to avoid overheating).

2. Construction of MP-9 at Harbourside Concert Properties \$1,200,000

The Harbourside Concert Properties project has entered the design phase. The project includes an LEC mini-plant room. LEC will install heating equipment at this location and will initially provide heat to the development from this facility. The connection of this development to the other service areas will occur once demand in this neighbourhood has sufficiently increased. The connection of the area will require the crossing of the CN railway and could take a number of years to complete.

3. E 15th Street – St. Georges Ave. to 250 E 15th Street & LGH \$450,000



A significant residential project is being planned at 250 East 15th Street. The Lions Gate Hospital is currently serviced from 13th Street at the south. The extension of the heating distribution system to this block will serve the proposed development and more importantly will provide the hospital with heating service connection redundancy from the north.

4. Chesterfield Ave. – W Keith Road to W 3rd Street \$950,000

This project will be coordinated with the connection of a building currently in the rezoning process at 173-181 West 6th Street. The purpose of the project is to provide a redundant connection between the Lower Lonsdale and Central Lonsdale service areas as well as a direct connection between the Marine Drive and Lower Lonsdale service areas.

Attachment 1

Without this connection, the Marine Drive and Lower Lonsdale service areas will be inter-connected indirectly via the Central Lonsdale service area. Due to the Central Lonsdale service area's elevation, network transfer stations are required to separate the operating pressure between the Central Lonsdale and the other service areas. This means that thermal energy from the North Shore Wastewater Treatment Plant would need to be exchanged through two network transfer stations to reach Lower Lonsdale including Moodyville. Due to some unavoidable thermal inefficiency of heat exchangers, the overall system efficiency is impacted by the size and complexity of distribution system piping and equipment including heat exchangers. This connection will allow the bypass of the two energy transfer stations and provide a direct connection between areas located at an approximate elevation of 72 meters or less, thereby eliminating unnecessary thermal energy loss and additional pumping energy.

 Director	 President
---	--

**REPORT**

To: Mayor Darrell Mussatto and Members of Council

From: Ben Themens, Director, LEC

SUBJECT: LONSDALE ENERGY CORP. – REVIEW OF CITY LOAN TERMS

Date: July 11, 2018

RECOMMENDATION

PURSUANT to the report of the Director of Lonsdale Energy Corp., dated July 11, 2018 entitled "Lonsdale Energy Corp. – Review of City Loan Terms":

THAT the loans currently outstanding and authorized by the City of North Vancouver be renewed on a 5 year demand term and interest rate of 2.65% compounded quarterly as of August 1, 2018;

THAT Lonsdale Energy Corp. be authorized to borrow up to \$4,200,000 in additional funding from the City of North Vancouver under the same terms and conditions than the renewed loan;

THAT Lonsdale Energy Corp. pay to the shareholder, on an annual basis, a dividend of 5% of the amount of capital reimbursed to the City during the year;

AND THAT Lonsdale Energy Corp. provide an annual report on the balance and payments of principal and interest of the loan, as well as on construction activities impacting borrowing and loan repayment.

ATTACHMENTS

1. 2018 – 2020 Project Funding Requests
2. Loan Reimbursement Schedule

PURPOSE

This report provides an overview of the financial position of Lonsdale Energy Corp (LEC), a detailed review of LEC's outstanding City of North Vancouver (the City) loans, a request for additional loan authorization to fund 2018-2020 projects, a history and projection of loan reimbursements, and recommendations for a renewal of the term for the outstanding five-year demand term loans expiring December 16, 2018 and the instauration of dividend payments to the City.

BACKGROUND

The City owned district energy utility, LEC, has been in operation since 2004 following the enactment of Bylaw 7575, creating the energy service. To date, LEC provides heating and cooling services to 75 buildings, totaling more than 5.25 million square feet of building area. LEC operates in three separate service areas (Lower Lonsdale, Central Lonsdale and Harbourside / Marine Drive) and is in the process of connecting the Moodyville area. LEC provides thermal energy to these service areas through nearly 10 trenched kilometers of underground distribution piping connected to 8 Mini-Plants.

LEC's district energy system has seen rapid growth over the past five years. Over this period LEC has connected approximately 30 customers and added approximately 6 km of trenched pipe to its distribution network. This growth is a result of development within the City and the desire to incorporate alternative energy sources to LEC's heating generation capacity. LEC's rapid expansion over this period has been facilitated by funding from the City. This provided the City with an opportunity to make a long-term investment in LEC while earning competitive return on investment via quarterly interest payments. City funding has facilitated the integration of alternative energy sources including heat recovery from cooling services in Lower Lonsdale and heat recovery from the impending North Shore Waste Water Treatment Plant (NSWWTP) currently under construction. These sustainable energy sources are in addition to other alternative sources that were already in use: hydronic solar panel arrays on the roof of the Library, and geo-exchange field under the School District 44 head office in conjunction with building waste heat recovery in that building as well as at the Shipyards precinct. All of these sources are used in priority whenever they are available.

DISCUSSION

LEC's Financial Position

In 2017 LEC achieved its highest net income since commencing operations: \$799,595. This amount is considerably larger than any previous years. The substantial increase in profit in 2017 is a combination of multiple factors:

- The addition of new customers including the Centreview development at Lonsdale and 13th Street, LEC's largest customer to date (by area and heating capacity)
- Increased overall system efficiency from plant control optimization and automation upgrades
- A rate increase introduced November 30, 2016
- A revision of the application fee to 0.15% of assigned construction value

- Continued enhancement of selective natural gas purchases
- Lower operating costs as a result of increased capital activities in 2017

LEC's revenue grew by 37% from \$2,838,793 to \$3,900,077 in 2017. While such an increase is not sustainable, LEC has averaged a revenue growth of 19% over the past five years as a result of the consistent addition of new customers to LEC's network. Many of these new customers are located next to or near existing LEC piping, allowing for relatively lower costs of system extensions for new service connections. LEC expects to generate a significant profit again in 2018. Excess revenue generated by LEC is used to make interest payments to the City and reimburse the principal of outstanding loans.

Loans Outstanding to the City

The following table provides a summary of LEC's outstanding loans to the City as of June 30, 2018:

Lonsdale Energy Corp. - Status of Outstanding Loans
as of June 30, 2018

Date Authorized by Council	Amount Authorized by Council	Amount Disbursed to LEC	Available Balance	Amount Reimbursed by LEC	Amount Outstanding	Loan Purpose
19-Jun-12	\$2,000,000	\$2,000,000	\$0	\$1,104,933	\$895,067	FCM GMI \$2million Loan through the City
16-Dec-13	\$12,000,000	\$12,000,000	\$0	\$683,000	\$11,317,000	Distribution system construction & working capital
13-Jul-15	\$2,000,000	\$2,000,000	\$0	\$0	\$2,000,000	Corix Agreement Expiration Settlement
2-Nov-15	\$611,966	\$611,966	\$0	\$0	\$611,966	Corix Agreement Expiration Settlement
25-Jan-16	\$1,600,000	\$1,205,000	\$395,000	\$0	\$1,205,000	Construction of mini-plant 8
4-Apr-16	\$2,300,000	\$1,165,000	\$1,135,000	\$0	\$1,165,000	Connection of Moodyville
4-Apr-16	\$600,000	\$600,000	\$0	\$0	\$600,000	Connection of 160 East 6th
12-Sep-16	\$3,250,000	\$2,550,000	\$700,000	\$0	\$2,550,000	Marine Drive - Central Lonsdale connection
12-Jun-17	\$2,300,000	\$775,000	\$1,525,000	\$0	\$775,000	2017-2018 LEC Construction Program Financing
24-Jul-17	\$3,600,000	\$0	\$3,600,000	\$0	\$0	Heat Recovery from the NSWWTP
18-Sep-17	\$1,200,000	\$535,000	\$665,000	\$0	\$535,000	Cooling Services Lot 5
	<u>\$31,461,966</u>	<u>\$23,441,966</u>	<u>\$8,020,000</u>	<u>\$1,787,933</u>	<u>\$21,654,033</u>	

On June 29, 2012, the City received a loan of \$2,000,000 under the Green Municipal Investment Fund Project Loan through the Municipal Finance Authority ("MFA") to finance Eligible Costs incurred related to the capital projects undertaken by LEC. The loan bears interest at the ten year Government of Canada bond yield rate in effect at the date of request of the disbursement less 1.5% (effective interest rate of 0.3%), is payable semiannually, and matures on the tenth anniversary of the loan date. The City assumed this loan on behalf of LEC. The City then loaned the proceeds of the loan to LEC with terms consistent with the MFA. The principal payments of this loan are made by LEC directly to the MFA, which results in the reduction to the amounts owed by LEC to the City.

In December of 2013, LEC's existing amount due to the City (approximately \$6,664,000) was formalized into a loan. This amount was comprised of construction and engineering costs for the construction of LEC's underground distribution system from 2009 to 2013. The loan allowed further borrowing up to a maximum of \$12 million and is comprised of a five-year demand term loan maturing on December 16, 2018, bearing interest at 2.1% per annum.

Following the expiry of a lease agreement with Corix and the resulting arbitration proceedings, loans of \$2,000,000 and \$611,966 were required in 2015 to fund the

settlement of the agreement and resulting non-recurring expenses. These loans are subject to the same interest rate (2.1% per annum) and conditions of the \$12 million loan approved by Council on December 16, 2013.

In 2016 and 2017 the City provided an additional seven loans to LEC for the continued expansion of the district energy system and to fund alternative energy sources. Among other things, this funding will allow LEC to connect 23 customers between 2016 and 2018. LEC had 60 customer buildings at the beginning of 2016 and is expecting to have 83 by the end of 2018, a 38% increase. In addition to this, funding has been provided to increase Lower Lonsdale cooling capacity to allow heat recovery from cooling services to the Polygon Gallery and Shipyards Lots 3 to 5, as well as to recover heat from the North Shore Waste Water Treatment Plant (NSWWTP) effluent. The heat recovery from the NSWWTP is expected to reduce the region's GHG emissions by 7,200 annually and provide 20,000-30,000 MWh of energy to LEC per year by 2021. These loans are also subject to the same interest rate (2.1% per annum) and conditions of the original 2013 City loan.

Reimbursement of Outstanding Loans

LEC has reimbursed \$1,787,933 of its debt obligation to date and intends to make an additional payment of \$215,000 to the City in 2018. LEC has also paid over 1.1 million in interest to the City over the past five year (2013-2017). Up until 2017, LEC reinvested its operating revenue to fund some of its capital projects; however, in 2017 LEC deferred this practice in an effort to increase transparency around its capital investments and loan repayments to the City. LEC intends to continue securing new loans for significant capital projects and allocate operating revenues to the repayment of outstanding loans that funded older assets.

In addition to these authorized loans, LEC is planning to complete four additional significant projects over the course of the next two years totaling \$4,200,000. LEC is making a funding request for the purpose of funding the following projects:

1. St Georges Ave. – 160 E 6 th Street to E 3 rd Street & NTS2	\$1,600,000
2. Construction of MP-9 at Harbourside Concert Properties	1,200,000
3. E 15 th Street – St. Georges Ave. to 250 E 15 th Street & LGH	450,000
4. Chesterfield Ave. – W Keith Road to W 3 rd Street	<u>950,000</u>
	\$4,200,000

Attachment 1 provides the rationale for each project.

The additional funding would increase the total amount authorized by Council to \$33,874,033 net of reimbursements to date, and including future authorized project disbursements of \$12,220,000. Previous financial modeling predicted complete reimbursement of City loans by 2034. Based on LEC's updated loan reimbursement schedule (**Attachment 2**), it is expected that LEC would reimburse its current debt obligation including the above funding request, if approved, by 2036.

Loan Term and Interest Rate

The current City loan provides an annual return of 2.1% to the City. This rate is stipulated in the December 16, 2013, Council resolution that authorized the loan. This rate has been advantageous to the City. While market lending rates have recently

increased, they were lower for a number of years between 2013 and 2018 and LEC continued paying a return rate of 2.1% to the City.

The proposed loan is for a five-year term, identical to the original 2013 loan. Staff have reviewed various sources in order to determine an annual rate of return that is fair to both organizations. The Municipal Finance Authority of BC website indicates that its spring 2018 5-year borrowing issue and current lending rate for analytical purposes is 2.65%. LEC proposes that this rate be used for the proposed loan. Using this rate of interest, LEC's financial model still anticipates that full repaid by 2036.

LEC has paid interest of \$1,143,629 to the City for the five years ending December 31, 2017. As shown in the loan reimbursement schedule (**Attachment 2**), under the current proposal assuming an interest rate of 2.65% until complete repayment of the loan, LEC will pay approximately \$11.2 million in interest to the City between 2018 and 2036.

It is important to note that increases in LEC's interest payments delay the repayment of loan capital. As they are considered as an expense, interest payments also reduce LEC's net income each year.

Dividend Payments

The City invested an amount of \$2 million in LEC in 2006 by purchasing LEC's common shares which increased the book value of the City equity in LEC to \$2,000,010. However, the accumulated losses and profits of the company since its start of operation reduced the value of the investment below its book value. Given the profits made by LEC over the past two years and the profits anticipated in 2018, LEC anticipates that the City equity will exceed its book value for the first time.

As the sole owner of LEC, the City is entitled to reinvest LEC's net income in the company which would increase the City's equity or receive a portion of the income under the form of dividends.

Staff believe that it would be opportune to start paying dividends to the City as a return on its equity investment. LEC proposes that starting this year a dividend payment calculated on the basis of 5% of City loan capital repayment be implemented.

Anticipated dividend payments are shown in the right column of **Attachment 2**. LEC expects paying more than \$25,000 in dividends in 2018.

Dividend payment is a significant step toward enabling the City to diversify its funding sources to achieve its goal of reducing reliance on property taxes.

FINANCIAL IMPLICATIONS

The financial implications are addressed throughout the report.

STRATEGIC PLAN IMPLICATIONS

The district energy system implemented by LEC is consistent with the goals of the City Strategic Plan concerning the enhancement of the natural and built environment and the City Official Community Plan.

RESPECTFULLY SUBMITTED BY:



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

Loan Reimbursement Schedule

Debt obligation allocation increase (2018-2026): 10%
 Debt obligation allocation increase (2027-2036): 5%
 Interest Rate used in Forecast: 2.65%

Year	Capacity Charge Revenue		Future disbursements		Interest	Annual Reimbursement	Dividend
	Allocated to Debt Obligation	Outstanding Loan	from available Loan Balance				
Actual 2013		\$ 11,411,018			\$ 14,817	\$ 166,582	
Actual 2014		\$ 12,324,620			\$ 214,870	\$ 173,245	
Actual 2015		\$ 15,130,982			\$ 253,282	\$ 180,175	
Actual 2016		\$ 15,907,770			\$ 302,870	\$ 187,382	
Actual 2017		\$ 20,339,665			\$ 357,790	\$ 644,877	
Forecast 2018	\$ 1,100,000	\$ 22,089,705	\$ 3,480,000	\$ 591,377	\$ 508,623	\$ 25,431	
Forecast 2019	\$ 1,210,000	\$ 25,061,082	\$ 5,740,000	\$ 670,119	\$ 539,881	\$ 26,994	
Forecast 2020	\$ 1,331,000	\$ 30,261,201	\$ 3,000,000	\$ 807,922	\$ 523,078	\$ 26,154	
Forecast 2021	\$ 1,464,100	\$ 32,738,123		\$ 873,560	\$ 590,540	\$ 29,527	
Forecast 2022	\$ 1,610,510	\$ 32,147,583		\$ 857,911	\$ 752,599	\$ 37,630	
Forecast 2023	\$ 1,771,561	\$ 31,394,984		\$ 831,967	\$ 939,594	\$ 46,980	
Forecast 2024	\$ 1,948,717	\$ 30,455,390		\$ 807,068	\$ 1,141,649	\$ 57,082	
Forecast 2025	\$ 2,143,589	\$ 29,313,741		\$ 776,814	\$ 1,366,775	\$ 68,339	
Forecast 2026	\$ 2,357,948	\$ 27,946,966		\$ 740,595	\$ 1,617,353	\$ 80,868	
Forecast 2027	\$ 2,475,845	\$ 26,329,613		\$ 697,735	\$ 1,778,110	\$ 88,906	
Forecast 2028	\$ 2,599,637	\$ 24,551,503		\$ 650,615	\$ 1,949,023	\$ 97,451	
Forecast 2029	\$ 2,729,619	\$ 22,602,480		\$ 598,966	\$ 2,130,653	\$ 106,533	
Forecast 2030	\$ 2,866,100	\$ 20,471,827		\$ 542,503	\$ 2,323,597	\$ 116,180	
Forecast 2031	\$ 3,009,405	\$ 18,148,230		\$ 480,928	\$ 2,528,477	\$ 126,424	
Forecast 2032	\$ 3,159,875	\$ 15,619,753		\$ 413,923	\$ 2,745,952	\$ 137,298	
Forecast 2033	\$ 3,317,869	\$ 12,873,801		\$ 341,156	\$ 2,976,713	\$ 148,836	
Forecast 2034	\$ 3,483,763	\$ 9,897,087		\$ 262,273	\$ 3,221,490	\$ 161,074	
Forecast 2035	\$ 3,657,951	\$ 6,675,597		\$ 176,903	\$ 3,481,047	\$ 174,052	
Forecast 2036	\$ 3,840,848	\$ 3,194,550		\$ 84,656	\$ 3,194,550	\$ 159,728	
Forecast 2037	\$ -	\$ -		\$ -	\$ -	\$ -	
Future Disbursements			\$ 12,220,000				

Loans from the City of North Vancouver
as at August 31, 2021

Date Authorized by Council	Loan Purpose	Amount Authorized by Council	Amount Disbursed to LEC	Balance Available	Amount Reimbursed	Amount Outstanding (Due to City)
2012-06-19	Green Municipal Investment Fund Project Loan - Loan through the City	\$ 2,000,000	\$ 2,000,000	\$ -	(1,701,505)	\$ 298,495
2013-12-16	Distribution System Construction & Working Capital	12,000,000	\$ 12,000,000	-	(2,058,880)	9,941,120
2015-06-13	Corix Agreement Expiration Settlement	2,000,000	\$ 2,000,000	-	-	2,000,000
2015-11-02	Corix Agreement Expiration Settlement	611,966	\$ 611,966	-	-	611,966
2016-01-25	Construction of Mini-Plant 8	1,600,000	\$ 1,205,000	395,000	-	1,205,000
2016-04-04	Connection of 160 E 6th	600,000	\$ 600,000	-	-	600,000
2016-04-04	Connection of Moodyville	2,300,000	\$ 2,300,000	-	-	2,300,000
2016-09-12	W Keith Road Financing & NTS1 & BPS1	3,250,000	\$ 3,185,000	65,000	-	3,185,000
2017-06-12	2017-18 Construction Financing - E 18th St - Lonsdale to 154 E 18th	360,000	\$ 345,000	15,000	-	345,000
2017-06-12	2017-18 Construction Financing - Chesterfield Ave - 15th to 1549 Chesterfield	220,000	\$ 220,000	-	-	220,000
2017-06-12	2017-18 Construction Financing - Chesterfield Ave - 1549 to 1730 Chesterfield	400,000	\$ 400,000	-	-	400,000
2017-06-12	2017-18 Construction Financing - E 15th St - Lonsdale to 1441 & 1549 St Georges	620,000	\$ 620,000	-	-	620,000
2017-06-12	2017-18 Construction Financing - Mahon Ave - Ext. to 63 Mahon (Alcuin College)	75,000	\$ 75,000	-	-	75,000
2017-06-12	2017-18 Construction Financing - Controls Replacement & Upgrade: MP4,6, & 7	325,000	\$ 290,000	35,000	-	290,000
2017-06-12	2017-18 Construction Financing - MP5 Capacity Increase	100,000	\$ 100,000	-	-	100,000
2017-06-12	2017-18 Construction Financing - Carrie Gates Court - Cost Overrun	200,000	\$ 200,000	-	-	200,000
2017-07-24	Heat Recovery from the NSWWTP	3,600,000	\$ -	3,600,000	-	-
2017-09-18	Cooling Services at Lot 5	1,200,000	\$ 1,150,000	50,000	-	1,150,000
2018-07-16	St. Georges Ave - 160 E 6th Street to E 3rd Street & NTS2	1,600,000	\$ 1,455,000	145,000	-	1,455,000
2018-07-16	Construction of MP9 at Harbourside Concert Properties	1,200,000	\$ -	1,200,000	-	-
2018-07-16	E 15th Street - St. Georges Ave to 250 E 15th Street & LGH	450,000	\$ -	450,000	-	-
2018-07-16	Chesterfield Ave - W Keith Road to W 3rd Street	950,000	\$ 950,000	-	-	950,000
2019-07-15	Bewicke Ave - 14th Street to 715 W 15th St. (HE220)	130,000	\$ 130,000	-	-	130,000
2019-07-15	Ridgeway Ave - 3rd to 1st St. (Trails phased connections)	375,000	\$ 370,000	5,000	-	370,000
2019-07-15	MP2 Boiler Addition	286,000	\$ 265,000	21,000	-	265,000
2019-07-15	E 8th St. - St. Georges Ave. to 128 E 8th St. (HE133)	150,000	\$ 150,000	-	-	150,000
2019-07-15	Booster Pump Station 2 at 366 E 3rd Street	100,000	\$ 50,000	50,000	-	50,000
2019-07-15	E 17th St. - Lonsdale to 143 E 17th St. (HE135)	260,000	\$ 260,000	-	-	260,000
2019-07-15	E 12th St. - St. Georges Ave. to 127 E 12th St. (HE136)	230,000	\$ 230,000	-	-	230,000
2019-07-15	E 20th St. - Lonsdale Ave. to 125 E 20th St. (HE137)	150,000	\$ 150,000	-	-	150,000
TOTAL		\$ 37,342,966	\$ 31,311,966	\$ 6,031,000	\$ (3,760,385)	\$ 27,551,581

Loan Reimbursement Schedule
as at August 31, 2021

Debt obligation allocation increase (2017-2026): 10%
Debt obligation allocation increase (2027-2036): 5%
Interest Rate used in Forecast: 2.65%

Status	Year	Forecasted	Additional	Total Actual	Outstanding	Future	Interest	Annual	Dividends
		Capacity Charge Revenue Allocated to Debt Obligation		Allocation to Debt Obligation					
Actual	2013	\$ 181,399	N/A	\$ 181,399	\$ 11,411,018		\$ 14,817	\$ 166,582	
Actual	2014	\$ 388,115	N/A	\$ 388,115	\$ 12,324,620		\$ 214,870	\$ 173,245	
Actual	2015	\$ 433,457	N/A	\$ 433,457	\$ 15,130,982		\$ 253,282	\$ 180,175	
Actual	2016	\$ 490,252	N/A	\$ 490,252	\$ 15,907,770		\$ 302,870	\$ 187,382	
Actual	2017	\$ 1,000,000	\$ 2,667	\$ 1,002,667	\$ 21,691,926		\$ 357,790	\$ 644,877	
*Actual	2018	\$ 1,100,000	\$ -	\$ 1,100,000	\$ 24,188,992		\$ 498,448	\$ 601,552	
Actual	2019	\$ 1,210,000	\$ 125,556	\$ 1,335,556	\$ 26,307,373		\$ 654,777	\$ 680,779	\$ 30,100
Actual	2020	\$ 1,331,000	\$ 27,095	\$ 1,358,095	\$ 26,518,086		\$ 698,885	\$ 659,210	\$ 34,000
**Forecast	2021	\$ 1,464,100		\$ 1,464,100	\$ 27,551,581	\$ 445,000	\$ 736,117	\$ 727,983	\$ 33,000
Forecast	2022	\$ 1,610,510		\$ 1,610,510	\$ 27,268,598	\$ 515,000	\$ 728,618	\$ 881,892	\$ 36,400
Forecast	2023	\$ 1,771,561		\$ 1,771,561	\$ 26,901,706	\$ 4,800,000	\$ 712,895	\$ 1,058,666	\$ 44,100
Forecast	2024	\$ 1,948,717		\$ 1,948,717	\$ 30,643,040		\$ 812,041	\$ 1,136,677	\$ 52,900
Forecast	2025	\$ 2,143,589		\$ 2,143,589	\$ 29,506,363		\$ 781,919	\$ 1,361,670	\$ 56,800
Forecast	2026	\$ 2,357,948		\$ 2,357,948	\$ 28,144,693		\$ 745,834	\$ 1,612,113	\$ 68,100
Forecast	2027	\$ 2,475,845		\$ 2,475,845	\$ 26,532,580		\$ 703,113	\$ 1,772,732	\$ 80,600
Forecast	2028	\$ 2,599,637		\$ 2,599,637	\$ 24,759,848		\$ 656,136	\$ 1,943,501	\$ 88,600
Forecast	2029	\$ 2,729,619		\$ 2,729,619	\$ 22,816,347		\$ 604,633	\$ 2,124,986	\$ 97,200
Forecast	2030	\$ 2,866,100		\$ 2,866,100	\$ 20,691,361		\$ 548,321	\$ 2,317,779	\$ 106,200
Forecast	2031	\$ 3,009,405		\$ 3,009,405	\$ 18,373,582		\$ 486,900	\$ 2,522,505	\$ 115,900
Forecast	2032	\$ 3,159,875		\$ 3,159,875	\$ 15,851,076		\$ 420,054	\$ 2,739,822	\$ 126,100
Forecast	2033	\$ 3,317,869		\$ 3,317,869	\$ 13,111,255		\$ 347,448	\$ 2,970,421	\$ 137,000
Forecast	2034	\$ 3,483,763		\$ 3,483,763	\$ 10,140,834		\$ 268,732	\$ 3,215,031	\$ 148,500
Forecast	2035	\$ 3,657,951		\$ 3,657,951	\$ 6,925,803		\$ 183,534	\$ 3,474,417	\$ 160,800
Forecast	2036	\$ 3,840,848		\$ 3,840,848	\$ 3,451,386		\$ 91,462	\$ 3,451,386	\$ 173,700
Forecast	2037	\$ 4,032,891		\$ -	\$ -		\$ -	\$ -	\$ 172,600
						Future Disbursements	\$ 5,760,000		
						Unused funds on completed projects	271,000		
						Loan balance available at August 31, 2021	\$ 6,031,000		

* The Annual Principal Payment Amount includes a payment made on March 21, 2019. This payment was scheduled to be made in December 2018, however was deferred as to provide contingency cash flow in response to increased natural gas prices due to the rupture of the Enbridge pipeline on October 9, 2018.

** The Outstanding Loan amount is the actual amount as of August 31, 2021.

**Loan Reimbursement Schedule with Consideration for 2022 Loan Requests
as at August 31, 2021**

Debt obligation allocation increase (2017-2026): 10%
Debt obligation allocation increase (2027-2036): 5%
Interest Rate used in Forecast: 2.65%

Status	Year	Forecasted Capacity Charge Revenue Allocated to Debt Obligation	Additional Allocation to Debt Obligation	Total Actual Payment / Forecasted Allocation to Debt Obligation	Outstanding Loan Balance	Future Disbursements of Loans Authorized by Council	Interest Payments	Annual Principal Payment Amount	Dividends (5% of previous year Principal Payment)
Actual	2013	\$ 181,399	N/A	\$ 181,399	\$ 11,411,018		\$ 14,817	\$ 166,582	
Actual	2014	\$ 388,115	N/A	\$ 388,115	\$ 12,324,620		\$ 214,870	\$ 173,245	
Actual	2015	\$ 433,457	N/A	\$ 433,457	\$ 15,130,982		\$ 253,282	\$ 180,175	
Actual	2016	\$ 490,252	N/A	\$ 490,252	\$ 15,907,770		\$ 302,870	\$ 187,382	
Actual	2017	\$ 1,000,000	\$ 2,667	\$ 1,002,667	\$ 21,691,926		\$ 357,790	\$ 644,877	
*Actual	2018	\$ 1,100,000	\$ -	\$ 1,100,000	\$ 24,188,992		\$ 498,448	\$ 601,552	
Actual	2019	\$ 1,210,000	\$ 125,556	\$ 1,335,556	\$ 26,307,373		\$ 654,777	\$ 680,779	\$ 30,100
Actual	2020	\$ 1,331,000	\$ 27,095	\$ 1,358,095	\$ 26,518,086		\$ 698,885	\$ 659,210	\$ 34,000
**Forecast	2021	\$ 1,464,100		\$ 1,464,100	\$ 27,551,581	\$ 445,000	\$ 736,117	\$ 727,983	\$ 33,000
Forecast	2022	\$ 1,610,510		\$ 1,610,510	\$ 27,268,598	\$ 1,235,000	\$ 728,618	\$ 881,892	\$ 36,400
Forecast	2023	\$ 1,771,561		\$ 1,771,561	\$ 27,621,706	\$ 4,800,000	\$ 731,975	\$ 1,039,586	\$ 44,100
Forecast	2024	\$ 1,948,717		\$ 1,948,717	\$ 31,382,120		\$ 831,626	\$ 1,117,091	\$ 52,000
Forecast	2025	\$ 2,143,589		\$ 2,143,589	\$ 30,265,029		\$ 802,023	\$ 1,341,566	\$ 55,900
Forecast	2026	\$ 2,357,948		\$ 2,357,948	\$ 28,923,463		\$ 766,472	\$ 1,591,476	\$ 67,100
Forecast	2027	\$ 2,475,845		\$ 2,475,845	\$ 27,331,988		\$ 724,298	\$ 1,751,547	\$ 79,600
Forecast	2028	\$ 2,599,637		\$ 2,599,637	\$ 25,580,440		\$ 677,882	\$ 1,921,756	\$ 87,600
Forecast	2029	\$ 2,729,619		\$ 2,729,619	\$ 23,658,685		\$ 626,955	\$ 2,102,664	\$ 96,100
Forecast	2030	\$ 2,866,100		\$ 2,866,100	\$ 21,556,020		\$ 571,235	\$ 2,294,866	\$ 105,100
Forecast	2031	\$ 3,009,405		\$ 3,009,405	\$ 19,261,155		\$ 510,421	\$ 2,498,985	\$ 114,700
Forecast	2032	\$ 3,159,875		\$ 3,159,875	\$ 16,762,170		\$ 444,198	\$ 2,715,678	\$ 124,900
Forecast	2033	\$ 3,317,869		\$ 3,317,869	\$ 14,046,492		\$ 372,232	\$ 2,945,637	\$ 135,800
Forecast	2034	\$ 3,483,763		\$ 3,483,763	\$ 11,100,855		\$ 294,173	\$ 3,189,590	\$ 147,300
Forecast	2035	\$ 3,657,951		\$ 3,657,951	\$ 7,911,265		\$ 209,649	\$ 3,448,302	\$ 159,500
Forecast	2036	\$ 3,840,848		\$ 3,840,848	\$ 4,462,963		\$ 118,269	\$ 3,722,580	\$ 172,400
Forecast	2037	\$ 4,032,891		\$ 4,032,891	\$ 740,383		\$ 19,620	\$ 740,383	\$ 186,100
Forecast	2038	\$ 4,234,535		\$ -	\$ -		\$ -	\$ -	\$ 37,000
Future Disbursements						\$ 6,480,000			
Unused funds on completed projects						<u>271,000</u>			
Loan balance available at August 31, 2021						\$ 6,751,000			

* The Annual Principal Payment Amount includes a payment made on March 21, 2019. This payment was scheduled to be made in December 2018, however was deferred as to provide contingency cash flow in response to increased natural gas prices due to the rupture of the Enbridge pipeline on October 9, 2018.
** The Outstanding Loan amount is the actual amount as of August 31, 2021.