



**AGENDA FOR THE REGULAR MEETING OF COUNCIL,
HELD ELECTRONICALLY FROM CITY HALL,
141 WEST 14TH STREET, NORTH VANCOUVER, BC, ON
MONDAY, OCTOBER 26, 2020 AT 5:30 PM**

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

CALL TO ORDER

APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, October 26, 2020

ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, October 19, 2020

PUBLIC INPUT PERIOD

CONSENT AGENDA

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

BYLAWS – ADOPTION

- *3. “Taxation Exemption Bylaw, 2020, No. 8795”
- *4. “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A)

PUBLIC HEARING – 1740 Bewicke Avenue

BYLAWS – THIRD READING

5. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8793”
(Mehrdad Rahbar / Vernacular Design, 1740 Bewicke Avenue, RS-2)
6. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8796”
(Kent Halex, Halex Architecture, 225 East 21st Street, CD-727)
7. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8794”
(Reza Nobari / Disa Design Group, 1348 Forbes Avenue, RS-2)

MOTION

8. Development Variance Permit No. PLN2020-00016 (1348 Forbes Avenue)

REPORT

9. Rezoning Application: 200 West Esplanade (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., CD-729)

BYLAWS – FIRST AND SECOND READINGS

10. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8798” (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., 200 West Esplanade, CD-729)
11. “Housing Agreement Bylaw, 2020, No. 8799” (First Capital (200 West Esplanade) Corporation, 200 West Esplanade, CD-729, Rental Housing Commitments)

REPORT

12. Ridgeway Slow Speed Zone Implementation

BYLAW – FIRST, SECOND AND THIRD READINGS

13. “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2020, No. 8801” (Ridgeway Neighbourhood 30 km per hour Zone)

REPORTS

14. Noise Control Measures and Bylaw Review
15. 2020 Project Plan – Funding Appropriations #2068 – #2075 and Bylaws No. 8803 and No. 8804

BYLAWS – FIRST, SECOND AND THIRD READINGS

16. “Development Cost Charge (Parks) Reserve Fund Bylaw, 2020, No. 8803” (2020 Project Plan Funding)
17. “Development Cost Charge (Transportation) Reserve Fund Bylaw, 2020, No. 8804” (2020 Project Plan Funding)

COVID-19 UPDATE

COUNCIL INQUIRIES / REPORTS

NEW ITEMS OF BUSINESS

NOTICES OF MOTION

ADJOURN

CALL TO ORDER

APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, October 26, 2020

ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, October 19, 2020

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

RECOMMENDATION:

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

START OF CONSENT AGENDA

BYLAWS – ADOPTION

- *3. “Taxation Exemption Bylaw, 2020, No. 8795”

RECOMMENDATION:

THAT “Taxation Exemption Bylaw, 2020, No. 8795” be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

- *4. “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A)

RECOMMENDATION:

THAT “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A) be adopted, signed by the Mayor and Corporate Officer and affixed with the corporate seal.

END OF CONSENT AGENDA

PUBLIC HEARING – 1740 Bewicke Avenue – 5:30 PM

“Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8793” (Mehrdad Rahbar / Vernacular Design, 1740 Bewicke Avenue, RS-2) would rezone the subject property from a One-Unit Residential 1 (RS-1) Zone to a One-Unit Residential 2 (RS-2) Zone to subdivide the property into 2 lots and construct a single family house with a secondary suite on each lot, with 2 parking stalls at the rear of each lot accessed off the lane. Maximum floor area for each primary dwelling is 0.5 times the lot area.

Bylaw No. 8793 to be considered under Item 5.

AGENDA

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

BYLAWS – THIRD READING

5. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8793”
(Mehrdad Rahbar / Vernacular Design, 1740 Bewicke Avenue, RS-2)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8793”
(Mehrdad Rahbar / Vernacular Design, 1740 Bewicke Avenue, RS-2) be given
third reading.

6. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8796”
(Kent Halex, Halex Architecture, 225 East 21st Street, CD-727)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8796” (Kent
Halex, Halex Architecture, 225 East 21st Street, CD-727) be given third reading.

Public Hearing waived.

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

RECOMMENDATION

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8794”
(Reza Nobari / Disa Design Group, 1348 Forbes Avenue, RS-2) be given third
reading.

Public Hearing waived.

Item 8 refers.

MOTION

8. Development Variance Permit No. PLN 2020-00016 (1348 Forbes Avenue)
– File: 08-3400-20-0016/1

RECOMMENDATION:

THAT Development Variance Permit No. PLN2020-00016 (1348 Forbes Avenue)
be issued to Antigoni Pantazis, in accordance with Section 498 of the *Local
Government Act*,

AND THAT the Mayor and Corporate Officer be authorized to sign Development
Variance Permit No. PLN2020-00016, following adoption of “Zoning Bylaw, 1995,
No. 6700, Amendment Bylaw, 2020, No. 8794” (Reza Nobari / Disa Design
Group, 1348 Forbes Avenue, RS-2).

Public Meeting waived.

REPORT

9. Rezoning Application: 200 West Esplanade (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., CD-729) – File: 08-3400-20-0004/1

Report: Planner 1, October 14, 2020

RECOMMENDATION:

PURSUANT to the report of the Planner 1, dated October 14, 2020, entitled “Rezoning Application: 200 West Esplanade (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., CD-729)”:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8798” (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., 200 West Esplanade, CD-729) be considered and referred to a Public Hearing;

THAT “Housing Agreement Bylaw, 2020, No. 8799” (First Capital (200 West Esplanade) Corporation, 200 West Esplanade, CD-729, Rental Housing Commitments) be considered and referred to a Public Hearing;

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

THAT the community benefits listed in the report section “Density Bonus and Community Benefits” be secured through agreements at the applicant’s expense and to the satisfaction of staff;

THAT the Mayor and Corporate Officer be authorized to sign the necessary documentation to give effect to this motion;

AND THAT the Mayor and Corporate Officer be authorized to sign the necessary documents to permit solar shades, which are permanently affixed to the proposed building, as an encroachment over City property.

Items 10 and 11 refer.

BYLAWS – FIRST AND SECOND READINGS

10. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8798” (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., 200 West Esplanade, CD-729)

RECOMMENDATION:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8798” (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., 200 West Esplanade, CD-729) be given first and second readings.

BYLAWS – FIRST AND SECOND READINGS – Continued

11. “Housing Agreement Bylaw, 2020, No. 8799” (First Capital (200 West Esplanade) Corporation, 200 West Esplanade, CD-729, Rental Housing Commitments)

RECOMMENDATION:

THAT “Housing Agreement Bylaw, 2020, No. 8799” (First Capital (200 West Esplanade) Corporation, 200 West Esplanade, CD-729, Rental Housing Commitments) be given first and second readings.

REPORT

12. Ridgeway Slow Speed Zone Implementation – File: 16-8330-04-0001/1

Report: Sustainable Transportation Coordinator, October 14, 2020

RECOMMENDATION:

PURSUANT to the report of the Sustainable Transportation Coordinator, dated October 14, 2020, entitled “Ridgeway Slow Speed Zone Implementation”:

THAT “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2020, No. 8801 (Ridgeway Neighbourhood 30 km per hour Zone)” be considered.

Item 13 refers.

BYLAW – FIRST, SECOND AND THIRD READINGS

13. “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2020, No. 8801” (Ridgeway Neighbourhood 30 km per hour Zone)

RECOMMENDATION:

THAT “Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2020, No. 8801” (Ridgeway Neighbourhood 30 km per hour Zone) be given first, second and third readings.

REPORTS

14. Noise Control Measures and Bylaw Review – File: 09-3900-01-0001/2020

Report: Manager, Bylaw Services, October 16, 2020

RECOMMENDATION:

PURSUANT to the report of the Manager, Bylaw Services, dated October 16, 2020, entitled “Noise Control Measures and Bylaw Review”:

Continued...

REPORTS – Continued

14. Noise Control Measures and Bylaw Review – File: 09-3900-01-0001/2020
– Continued

THAT staff be directed to engage subject matter experts to assist with a comprehensive review of noise issues in the City and report back on the establishment of a Noise Advisory Task Force to consider a long term strategy for managing noise in the City, with funding to be addressed in the 2021 budget;

THAT noise monitoring stations be installed and piloted in areas of the City to monitor noise trends, as described in Proposed Action 1;

THAT staff be directed to prepare a bylaw for Council consideration to amend the Noise Control Bylaw to add the words “talking and singing with” to paragraph 9, Schedule “B”, regarding amplified sound, as described in Proposed Action 2;

THAT the Noise Exemption Permit process, outlined in Part 4 of the Noise Control Bylaw, be reviewed and proposed amendments be included in the bylaw to amend the Noise Control Bylaw, as described in Proposed Action 3;

THAT staff be directed to prepare a bylaw for Council consideration to amend the Noise Control Bylaw to include an assessment of tonal and impulsive content of sound to be considered in any noise complaint assessment, as described in Proposed Action 4;

AND THAT the requirements for noise control construction signage be updated and proposed amendments be included in the bylaw to amend the Noise Control Bylaw, as described in Proposed Action 5.

15. 2020 Project Plan – Funding Appropriations #2068 – #2075 and Bylaws No. 8803 and No. 8804 – File: 05-1705-30-0019/2020

Report: Director, Finance, October 14, 2020

RECOMMENDATION:

PURSUANT to the report of the Director, Finance, dated October 14, 2020, entitled “2020 Project Plan – Funding Appropriations #2068 – #2075 and Bylaws No. 8803 and No. 8804”:

THAT (Funding Appropriation #2068) an amount of \$288,073 be appropriated from the Tax Sale Land Interest Reserve Fund for the purpose of funding the 2020 Project Plan;

Continued...

REPORTS – Continued

15. 2020 Project Plan – Funding Appropriations #2068 – #2075 and Bylaws No. 8803 and No. 8804 – File: 05-1705-30-0019-2020 – Continued

THAT (Funding Appropriation #2069) an amount of \$15,000 be appropriated from the General Building Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2070) an amount of \$47,968 be appropriated from the General Equipment Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2071) an amount of \$39,140 be appropriated from the Justice Administration Building Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2072) an amount of \$1,512,200 be appropriated from the Civic Amenity Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2073) an amount of \$1,387,713 be appropriated from the Annual Budget – Transfer to General Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2074) an amount of \$484,500 be appropriated from the General Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2075) an amount of \$12,500 be appropriated from the Sustainable Transportation Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT “Development Cost Charge (Parks) Reserve Fund Bylaw, 2020, No. 8803” (2020 Project Plan Funding), a Bylaw to appropriate an amount of \$99,000 from the Development Cost Charges (Parks) Reserve Fund to fund the 2020 Project Plan, be considered;

THAT “Development Cost Charge (Transportation) Reserve Fund Bylaw, 2020, No. 8804” (2020 Project Plan Funding), a Bylaw to appropriate an amount of \$118,800 from the Development Cost Charges (Transportation) Reserve Fund to fund the 2020 Project Plan, be considered;

AND THAT should any of the amounts remain unexpended as at December 31, 2023, the unexpended balances shall be returned to the credit of the respective fund.

Items 16 and 17 refer.

BYLAWS – FIRST, SECOND AND THIRD READINGS

16. “Development Cost Charge (Parks) Reserve Fund Bylaw, 2020, No. 8803”
(2020 Project Plan Funding)

RECOMMENDATION:

THAT “Development Cost Charge (Parks) Reserve Fund Bylaw, 2020, No. 8803”
(2020 Project Plan Funding) be given first, second and third readings.

17. “Development Cost Charge (Transportation) Reserve Fund Bylaw, 2020,
No. 8804” (2020 Project Plan Funding)

RECOMMENDATION:

THAT “Development Cost Charge (Transportation) Reserve Fund Bylaw, 2020,
No. 8804” (2020 Project Plan Funding) be given first, second and third readings.

COVID-19 UPDATE

COUNCIL INQUIRIES / REPORTS

NEW ITEMS OF BUSINESS

NOTICES OF MOTION

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, pre-registration is required. The pre-registration form is available on the City's website or speakers can pre-register by contacting the City Clerk'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 to contact all participants and provide them with call-in/online access instructions.

Comments from the public must specifically be related 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 Chair (Mayor) will ask if anyone else from the public has new information to provide. Those persons are asked to phone 604-990-4230 and a Clerk's staff member will provide instructions on how to call into the meeting to add comments.

Everyone shall 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.

Continued...



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

PUBLIC HEARING GUIDELINES FOR ELECTRONIC MEETINGS (continued)

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).



**MINUTES OF THE REGULAR MEETING OF COUNCIL, HELD
ELECTRONICALLY FROM CITY HALL, 141 WEST 14TH STREET, NORTH
VANCOUVER, BC, ON **MONDAY, OCTOBER 19, 2020****

PRESENT

COUNCIL MEMBERS

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

**Participated electronically*

STAFF MEMBERS

L. McCarthy, CAO*
K. Graham, City Clerk
C. Baird, Deputy City Clerk
H. Granger, City Solicitor*
B. Themens, Director, Finance*
M. Epp, Director, Planning and Development*
A. Devlin, Manager, Transportation Planning*
D. Pope, Director, Engineering, Parks and Environment*
J. Hall, Manager, Public Realm Infrastructure*
R. Skene, Director, Community and Partner Engagement*
L. Orr, Deputy Director, Community and Partner Engagement*
P. Duffy, Manager, Bylaw Services*
L. Herman, Coordinator, Community Development*
L. Stirling, Community and Partner Relations Specialist*
M. Kwaterska, Section Manager, Marketing and Programming*
G. Schalk, Fire Chief*

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

APPROVAL OF AGENDA

Moved by Councillor Girard, seconded by Councillor Back

1. Regular Council Meeting Agenda, October 19, 2020

CARRIED UNANIMOUSLY

ADOPTION OF MINUTES

Moved by Councillor Bell, seconded by Councillor Girard

2. Regular Council Meeting Minutes, October 5, 2020

CARRIED UNANIMOUSLY

PROCLAMATION

Mayor Buchanan declared the following proclamation:

Waste Reduction Week – October 19–25, 2020 – read by Councillor Hud

PUBLIC INPUT PERIOD

Nil.

CONSENT AGENDA

Moved by Councillor Bell, seconded by Councillor Valente

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

CARRIED UNANIMOUSLY

START OF CONSENT AGENDA

BYLAWS – ADOPTION

- *3. “Stream and Drainage System Protection Bylaw, 2003, No. 7541, Amendment Bylaw, 2020, No. 8746”

Moved by Councillor Bell, seconded by Councillor Valente

THAT “Stream and Drainage System Protection Bylaw, 2003, No. 7541, Amendment Bylaw, 2020, No. 8746” be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

- *4. “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2020, No. 8760” (Stream and Drainage System Protection)

Moved by Councillor Bell, seconded by Councillor Valente

THAT “Bylaw Notice Enforcement Bylaw, 2018, No. 8675, Amendment Bylaw, 2020, No. 8760” (Stream and Drainage System Protection) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

- *5. “Ticket Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2020, No. 8761” (Stream and Drainage System Protection)

Moved by Councillor Bell, seconded by Councillor Valente

THAT “Ticket Information Utilization Bylaw, 1992, No. 6300, Amendment Bylaw, 2020, No. 8761” (Stream and Drainage System Protection) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

(CARRIED UNANIMOUSLY)

END OF CONSENT AGENDA

PRESENTATION

Balanced Housing Lab – Matt Thomson, Housing Consultant, Urban Matters

Matt Thomson, Housing Consultant, Urban Matters, provided a PowerPoint presentation and he and the Director, Planning and Development responded to questions of Council.

REPORT

6. Balanced Housing Lab Update and Emerging Prototypes – File: 10-5040-20-0002/1

Report: Director, Planning and Development and Planner 1, September 30, 2020

Moved by Councillor Girard, seconded by Mayor Buchanan

PURSUANT to the report of the Director, Planning and Development and the Planner 1, dated September 30, 2020, entitled “Balanced Housing Lab Update and Emerging Prototypes”:

THAT staff be directed to prepare a Request for Expressions of Interest to seek developers to participate in a pilot alternative development approvals process;

AND THAT staff be directed to continue analysis on the feasibility and impacts of the proposed ‘Housing Opportunity Areas’ to streamline the supply of middle-income housing and return to Council with policy options for Council’s consideration.

CARRIED UNANIMOUSLY

Mayor Buchanan left the meeting at 6:58 pm and Councillor McIlroy assumed the role Chair until 7:00 pm.

PRESENTATION

Child Care Action Plan Update – Community Planner

The Community Planner provided a PowerPoint presentation and she and Sandra Menzer, Consultant, Social Planning and Research Council of BC, responded to questions of Council.

PRESENTATION

COVID-19 Quick Adaptation Actions Update and Next Steps – Manager,
Transportation Planning

The Manager, Transportation Planning provided a PowerPoint presentation and he and City staff responded to questions of Council.

REPORTS

7. COVID-19 Quick Adaptation Actions Update and Next Steps
– File: 14-7130-20-0015/1

Report: Manager, Transportation Planning, Manager, Public Realm Infrastructure and Deputy Director, Community and Partner Engagement, October 7, 2020

Moved by Councillor McIlroy, seconded by Councillor Valente

PURSUANT to the report of the Manager, Transportation Planning, the Manager, Public Realm Infrastructure and the Deputy Director, Community and Partner Engagement, dated October 7, 2020, entitled “COVID-19 Quick Adaptation Actions Update and Next Steps”:

THAT Council endorse the continuation of the open streets and public space interventions plan on Lonsdale Avenue to support ongoing business and economic recovery during the fall and winter;

THAT staff be directed to prepare a plan for ongoing street and public space modifications in Central Lonsdale starting in 2021, in consultation with the public, businesses and stakeholders;

THAT Council endorse the opening of Wallace Mews in The Shipyards to people, through to the end of the pandemic and potentially beyond, and staff be directed to work with adjacent businesses and services to improve delivery access;

THAT (Funding Appropriation #2067) an amount of \$190,000 be appropriated from the General Reserve Fund for the purpose of funding the winterization and ongoing maintenance of economic recovery initiatives;

AND THAT should any of the amount remain unexpended as at December 31, 2023, the unexpended balance shall be returned to the credit of the General Reserve Fund.

The vote on the motion was taken separately, as follows:

Moved by Councillor McIlroy, seconded by Councillor Valente

PURSUANT to the report of the Manager, Transportation Planning, the Manager, Public Realm Infrastructure and the Deputy Director, Community and Partner Engagement, dated October 7, 2020, entitled “COVID-19 Quick Adaptation Actions Update and Next Steps”:

THAT Council endorse the continuation of the open streets and public space interventions plan on Lonsdale Avenue to support ongoing business and economic recovery during the fall and winter;

CARRIED

Councillor Bell is recorded as voting contrary to the motion.

REPORTS – Continued

7. COVID-19 Quick Adaptation Actions Update and Next Steps
– File: 14-7130-20-0015/1 – Continued

Moved by Councillor McIlroy, seconded by Councillor Valente

THAT staff be directed to prepare a plan for ongoing street and public space modifications in Central Lonsdale starting in 2021, in consultation with the public, businesses and stakeholders;

THAT Council endorse extending the opening of Wallace Mews in The Shipyards to people, through to the end of the pandemic and potentially beyond, and staff be directed to work with adjacent businesses and services to improve delivery access;

THAT (Funding Appropriation #2067) an amount of \$190,000 be appropriated from the General Reserve Fund for the purpose of funding the winterization and ongoing maintenance of economic recovery initiatives;

AND THAT should any of the amount remain unexpended as at December 31, 2023, the unexpended balance shall be returned to the credit of the General Reserve Fund.

CARRIED UNANIMOUSLY

8. Development Variance Permit Application: 366 East 3rd Street – Rooftop Antennas (Freedom Mobile) – File: 08-3400-20-0029/1

Report: Planner 1, October 7, 2020

Moved by Councillor Valente, seconded by Councillor Hu

PURSUANT to the report of the Planner 1, dated October 7, 2020, entitled “Development Variance Permit Application: 366 East 3rd Street – Rooftop Antennas (Freedom Mobile)”:

THAT Development Variance Permit No. PLN2020-00013 and Development Permit No. DPA2018-00005 be considered for issuance under Sections 498 and 489 of the *Local Government Act* and the Public Meeting be waived;

AND 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.

CARRIED

Councillor Bell is recorded as voting contrary to the motion.

REPORTS – Continued

9. Rezoning Application: Black Kettle Brewing Inc., 720 Copping Street
– File: 08-3360-20-0504/1

Report: Planner 1, October 7, 2020

Moved by Councillor McIlroy, seconded by Councillor Back

PURSUANT to the report of the Planner 1, dated October 7, 2020, entitled “Rezoning Application: Black Kettle Brewing Inc., 720 Copping Street”:

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8700” (Bryan Lockhart / Black Kettle Brewing Inc., 720 Copping Street, CD-728) be considered and the Public Hearing be waived;

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

CARRIED UNANIMOUSLY

BYLAW – FIRST AND SECOND READINGS

10. “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8700” (Bryan Lockhart / Black Kettle Brewing Inc., 720 Copping Street, CD-728)

Moved by Councillor McIlroy, seconded by Councillor Back

THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8700” (Bryan Lockhart / Black Kettle Brewing Inc., 720 Copping Street, CD-728) be given first and second readings.

CARRIED UNANIMOUSLY

REPORT

11. 2021 Permissive Tax Exemption Bylaw – File: 05-1970-07-0001/2020

Report: Director, Finance, October 7, 2020

Moved by Councillor Girard, seconded by Mayor Buchanan

PURSUANT to the report of the Director, Finance, dated October 7, 2020, entitled “2021 Permissive Tax Exemption Bylaw”:

THAT “Taxation Exemption Bylaw, 2020, No. 8795” be considered.

CARRIED UNANIMOUSLY

BYLAW – FIRST, SECOND AND THIRD READINGS

12. “Taxation Exemption Bylaw, 2020, No. 8795”

Moved by Councillor Girard, seconded by Mayor Buchanan

THAT “Taxation Exemption Bylaw, 2020, No. 8795” be given first and second readings.

CARRIED UNANIMOUSLY

Moved by Councillor Girard, seconded by Mayor Buchanan

THAT “Taxation Exemption Bylaw, 2020, No. 8795” be given third reading.

CARRIED UNANIMOUSLY

REPORT

13. Consumption of Liquor in Public Places Bylaw Review – File: 09-3900-02-0001/2020

Report: Manager, Bylaw Services, October 7, 2020

Moved by Mayor Buchanan, seconded by Councillor Back

PURSUANT to the report of the Manager, Bylaw Services, dated October 7, 2020, entitled “Consumption of Liquor in Public Places Bylaw Review”:

THAT “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A) be considered.

CARRIED UNANIMOUSLY

BYLAW – FIRST, SECOND AND THIRD READINGS

14. “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A)

Moved by Mayor Buchanan, seconded by Councillor Back

THAT “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A) be given first and second readings.

CARRIED UNANIMOUSLY

Moved by Mayor Buchanan, seconded by Councillor Back

THAT “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A) be given third reading.

CARRIED UNANIMOUSLY

COVID-19 UPDATE

Nil.

COUNCIL INQUIRIES / REPORTS

Nil.

NEW ITEMS OF BUSINESS

Nil.

NOTICES OF MOTION

Nil.

CITY CLERK'S RECOMMENDATION

Moved by Councillor Back, seconded by Councillor McIlroy

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

CARRIED UNANIMOUSLY

The meeting recessed to the Committee of the Whole, Closed session, at 10:10 pm and reconvened at 10:56 pm.

REPORT OF THE COMMITTEE OF THE WHOLE (CLOSED SESSION)

15. Land Matter / Legal Matter – File: 08-3200-01-0001/2020

Report: Property Valuator – Negotiator, October 6, 2020

Moved by Councillor McIlroy, seconded by Councillor Valente

PURSUANT to the report of the Property Valuator – Negotiator, dated October 6, 2020, 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 report of the Property Valuator, dated October 6, 2020, remain in the Closed session.

CARRIED UNANIMOUSLY

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

16. Childcare BC New Spaces Grant Program – Update and Direction on New Application
– File: 10-4750-10-0001/2020

Report: Community Planner and Manager, Parks and Environment, October 7, 2020

Moved by Councillor McIlroy, seconded by Councillor Valente

PURSUANT to the report of the Community Planner and the Manager, Parks and Environment, dated October 7, 2020, entitled “Childcare BC New Spaces Grant Program – Update and Direction on New Application”:

THAT staff be directed to submit an application to the Childcare BC New Spaces Fund for “Mahon Park Combined 37 Space Child Care and Park Facility”, as outlined in Option 1 of the report;

THAT Council support the project and commit to the City’s share (\$2,500,000) of the child care component of the “Mahon Park Combined 37 Space Child Care and Park Facility” project;

AND THAT staff be directed to include a project sheet for \$1,500,000 for the Parks and Community component of the “Mahon Park Combined 37 Space Child Care and Park Facility” project for consideration in the 2021 Project Plan.

CARRIED UNANIMOUSLY

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

Report: Chief Administrative Officer, October 12, 2020

Moved by Councillor McIlroy, seconded by Councillor Back

PURSUANT to the report of the Chief Administrative Officer, dated October 12, 2020, regarding an employee relations matter:

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

AND THAT the wording of the recommendation and the report of the Chief Administrative Officer, dated October 12, 2020, remain in the Closed session.

CARRIED UNANIMOUSLY

ADJOURN

Moved by Councillor Back, seconded by Councillor Hu

THAT the meeting adjourn.

CARRIED UNANIMOUSLY

The meeting adjourned at 10:57 pm.

“Certified Correct by the City Clerk”

CITY CLERK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8795

A Bylaw to exempt certain lands and improvements in the City of North Vancouver from taxation for the year 2021

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 “**Taxation Exemption Bylaw, 2020, No. 8795**”.
2. Tax exemptions under section 224 of the *Community Charter*.

The following lands situated, lying and being in the Corporation of the City of North Vancouver, Province of British Columbia, and any and all improvements thereon are hereby exempt from taxation imposed by the Corporation of the City of North Vancouver under section 224 of the *Community Charter* for the year 2021:

A. land or improvements that:

- i. are owned or held by a charitable, philanthropic or other not for profit corporation; and
- ii. the council considers are used for a purpose that is directly related to the purposes of the corporation:
 1. Anavets Senior Citizens' Housing, District Lot 274 Block 142 Lot 1 Plan BCP48496, PID: 028-616-260, 245 East 3rd Street, registered in the name of Anavets Senior Citizens' Housing Society, Roll # 142001.100;
 2. Army, Navy Air Force Veterans in Canada, Unit 45, District Lot 274 Block 141 Lot 11 Plan 878, PID: 015-077-179, 119 East 3rd Street, registered in the name of Army, Navy Air Force Veterans in Canada, Roll # 141011.000;
 3. The Cascadia Society for Social Working, District Lot 547 Block 4 Lot G 3846, PID: 012-111-902, 348 West 19th Street, registered in the name of The Cascadia Society for Social Working, Roll # 004081.000;
 4. The Cascadia Society for Social Working, District Lot 547 Block 21 Lot H Plan 20988, PID: 005-163-064, 325 West 19th Street, registered in the name of The Cascadia Society for Social Working, Roll # 021010.001;
 5. The Cascadia Society for Social Working, District Lot 547 Block 21 Lot F Plan 20141, PID: 003-683-702, 351 West 19th Street, registered in the name of The Cascadia Society for Social Working, Roll # 021004.001;
 6. Fraternal Order of Eagles, North-West Aerie 2638, District Lot 274 Lot 1 Plan BCS2790, PID: 027-428-613, 170 West 3rd Street, registered in the name of Fraternal Order of Eagles, North-West Aerie 2638, Roll # 992790.001;

7. Fraternal Order of Eagles, North-West Aerie 2638, District Lot 274 Lot 2 Plan BCS2790, PID: 027-428-621, 168 West 3rd Street, registered in the name of Fraternal Order of Eagles, North-West Aerie 2638, Roll # 992790.002;
8. Fraternal Order of Eagles, North-West Aerie 2638, District Lot 274 Lot 3 Plan BCS2790, PID: 027-428-630, 166 West 3rd Street, registered in the name of Fraternal Order of Eagles, North-West Aerie 2638, Roll # 992790.003;
9. Fraternal Order of Eagles, North-West Aerie 2638, District Lot 274 Lot 4 Plan BCS2790 PID: 027-428-648, 164 West 3rd Street, registered in the name of Fraternal Order of Eagles, North-West Aerie 2638, Roll # 992790.004;
10. Fraternal Order of Eagles, North-West Aerie 2638, District Lot 274 Lot 5 Plan BCS2790 PID: 027-428-656, 162 West 3rd Street, registered in the name of Fraternal Order of Eagles, North-West Aerie 2638, Roll # 992790.005;
11. HYAD Society (Housing for Young Adults with Disabilities), District Lot 545 Block 206 Lot C Plan BCP44933, PID: 028-231-619, 2130 Chesterfield Avenue, registered in the name Provincial Rental Housing Corporation leased to HYAD Society, Roll # 206011.400;
12. Kiwanis Senior Citizens Homes Ltd., District Lot 271 Block 139 Lot D Plan 13604, PID: 008-538-191, 170 West 2nd Street, registered in the name of Kiwanis Senior Citizens Homes Ltd., Roll # 139026.000;
13. Kiwanis Care Homes Ltd., District Lot 550 Block 52 Lot 1 PI BCP23494 PID: 026-683-211, 1480 St. Andrews, registered in the name of Kiwanis Senior Citizens Homes Ltd., Roll # 052100.100;
14. Lighthouse Harbour Ministries, District Lot 274 SL1 Plan VR786, PID: 005-892-244, 1 - 260 East Esplanade, registered in the name of Lighthouse Harbour Ministries, Roll # 980786.001;
15. North Shore Connexions Society, District Lot 547 Block 4 Lot 2 Plan 14515, PID: 007-780-591, 1924 Jones Avenue, registered in the name of North Shore Connexions Society, Roll # 004045.000;
16. North Shore Disability Resource Centre Association, District Lot 616 Block B Lot 218 Plan 20292, PID: 006-672-728, 2412 Wilding Way, registered in the name of North Shore Disability Resource Centre Association, Roll # 950001.218;
17. North Shore Multicultural Society, Portion of District Lot 549 Block 50 Lot B Plan 15169, PID: 007-671-032, 123 East 15th Street, Units 100, 202, 203, 204, 204A, 205, 207, 301, 302, 303, 304, 305 only, registered in the name of Horizon Square Properties Ltd. leased to North Shore Multicultural Society, Roll # 050010.000;
18. North Vancouver Chamber of Commerce, District Lot 274 Block 274 SL2 Plan LMS4443, PID: 025-073-591, 102-124 West 1st Street, registered in the name of North Vancouver Chamber of Commerce, Roll # 994443.002;

19. North Vancouver Masonic Temple Association Ltd, Portion of District Lot 549 Block 85 Lot 4 Plan 750, excluding the land and improvement assessment relating to business class (06), PID: CNV-000-120, 1140 - 1144 Lonsdale Avenue, registered in the name of North Vancouver Masonic Temple Association Ltd., Roll # 085007.000;
20. Royal Canadian Legion Branch 118, District Lot 548 Strata Lot 1 Plan LMS4102, PID: 024-750-638, 123 West 15th Street, registered in the name of Royal Canadian Legion Branch 118, Roll # 994102.001;
21. Royal Canadian Legion Branch 118, District Lot 548 Strata Lot 2 Plan LMS4102, PID: 024-750-646, 121 West 15th Street, registered in the name of Royal Canadian Legion Branch 118, Roll # 994102.002;
22. Silver Harbour Seniors' Activity Centre, District Lot 545 Block 207 Lot C Plan 15014, PID: 007-711-280, 144 East 22nd Street, registered in the name of Silver Harbour Seniors' Activity Centre, Roll # 207050.000;
23. St. Edmund's Parish, District Lot 271 Block 71 Lot B Plan 8415, PID: 010-087-460, 613 Mahon Avenue, registered in the name of the Roman Catholic Archbishop of Vancouver-St. Edmund's Parish, Roll # 071009.000;
24. St Leonard's Society of North Vancouver, District Lot 547 Block 67 Lot 26 Plan 750, PID: 015-141-926, 312 Bewicke Avenue, registered in the name of St Leonard's Society of North Vancouver, Roll # 067027.000;
25. Family Services of the North Shore, Portion of District Lot 548/549 Block 86 Lot G Plan LMP29334, PID: 023-499-486, Suite 203 and 206, 1111 Lonsdale Avenue, registered in the name of Djavad Mowafaghian Foundation leased to Family Services of the North Shore, Roll # 086015.100;
26. The Auxiliary to the Lions Gate Hospital, (Thrift Shop), Portion of District Lot 548 Block 38 Lot E Plan 18002, PID: 007-233-540, 128 15th Street West, registered in the name of The Kenneth L Ronalds and P.M.R. Holdings Corporation leased to The Auxiliary to the Lions Gate Hospital, Roll # 038029.000;
27. Canadian Mental Health Association North and West Vancouver Branch, Portion of District Lot 548/549 Lot A Plan EPP22742, excluding 2,223 sq. ft. of the subleased rental office space of the total 3,596 sq. ft. leased space, PID 028-911-237, 300-1835 Lonsdale Avenue, registered in the name of Solitude Investments Ltd. leased to Canadian Mental Health Association, North and West Vancouver Branch Roll #019033.100;
28. The British Columbia Photography and Media Arts Society, Portion of District Lot 271 Lot A Plan EPP30712, and excluding the commercial retail space, PID 029-093-554, 101 Carrie Cates Court, registered in the name of the Corporation of the City of North Vancouver and leased to The British Columbia Photography and Media Arts Society, Roll # 177035.301;

29. Young Women's Christian Association (YWCA), District Lot 549, Block 61, Lot Air Space Parcel 5, Plan EPP68325, PID 030-180-741, 125 East 14th Street, Units 203, 204, 401, 402, 403, 404, 405, 406, 407 and 408, registered in the name of Young Women's Christian Association, Roll # 061011.600;
30. Girl Guides of Canada District Lot 271, Lot 220, Plan EPS4482, PID 030-250-218, Unit 107-252 Esplanade W, registered in the name of Girl Guides of Canada, Roll #994482.220;
31. Girl Guides of Canada District Lot 271, Lot 221, Plan EPS4482, PID 030-250-226, Unit 108-252 Esplanade W, registered in the name of Girl Guides of Canada, Roll #994482.221;
32. Girl Guides of Canada District Lot 271, Lot 222, Plan EPS4482, PID 030-250-234, Unit 109-252 Esplanade W, registered in the name of Girl Guides of Canada, Roll #994482.222;
33. Girl Guides of Canada District Lot 271, Lot 229, Plan EPS4482, PID 030-250-307, Unit 207-252 Esplanade W, registered in the name of Girl Guides of Canada, Roll #994482.229;
34. Girl Guides of Canada District Lot 271, Lot 230, Plan EPS4482, PID 030-250-315, Unit 208-252 Esplanade W, registered in the name of Girl Guides of Canada, Roll #994482.230;
35. Girl Guides of Canada District Lot 271, Lot 231, Plan EPS4482, PID 030-250-323, Unit 209-252 Esplanade W, registered in the name of Girl Guides of Canada, Roll #994482.231;

B. land or improvements that:

- i. are owned or held by a municipality, regional district or other local authority; and,
- ii. the council considers are used for a purpose of the local authority:
 1. Presentation House Cultural Society, District Lot 274 Block 134 Lot 15 & 16 Plan 735 and District Lot 247 Block 134 Lots 12 to 21 Plan 735, 333 Chesterfield Avenue, registered in the name of the Corporation of the City of North Vancouver leased to Presentation House Cultural Society, Roll # 134013.000;
 2. The Pipe Shop, District Lot 274 Block 176 Lot 4 Plan BCP 39824, PID: 027-842-215, 115 Victory Ship Way, registered in the name of 366466 BC LTD, leased to the Corporation of the City of North Vancouver, operated by Quay Property Management Corp., Roll # 175100.400;
 3. The Shipyard Commons, District Lot 274, Block 176, Portion of Lot 5, Plan BCP 39824, PID 027-842-223, 125 Victory Ship Way, registered in the name of the Corporation of the City of North Vancouver leased to Shipyards Development Ltd, includes 1,317 ft² Office Space and 6,290 ft² Public Support Space and 28,310 ft² Public Plaza SRW leased back to the Corporation of the City of North Vancouver, Roll # 175100.500;

4. North Vancouver Museum and Archives, District Lot 271 Lot 131 Plan ELSP6231, PID: 030-942-667, 115 Esplanade W, registered in the name of the Corporation of the City of North Vancouver, leased by the North Vancouver Museum and Archives Commission, Roll# 996231.131;
- C. land or improvements that the council considers would otherwise qualify for exemption under section 220 [general statutory exemptions] were it not for a secondary use:
1. The Lonsdale Creek Daycare Centre Society, operating in Lonsdale Annex Elementary School, Portion of District Lot 545 Block 205 Lot 8/14 Plan 3181, PID: 013-068-831, 230 West 21st Street, registered in the name of North Vancouver School District #44, leased to Lonsdale Creek Daycare Centre Society, Roll # 205008.000;
- D. the interest of a public authority, local authority or any other corporation or organization in land or improvements that are used or occupied by the corporation or organization if:
- i. the land or improvements are owned by a public authority or local authority; and,
 - ii. the land or improvements are used by the corporation or organization for a purpose in relation to which an exemption under this Division or Division 6 of this Part would apply or could be provided if the land or improvements were owned by that corporation or organization:
1. Hollyburn Family Services Society, District Lot 548 Lot 4 Plan BCS4407 PID: 028-810-317, 104-210 West 13th Street, registered in the name of the Corporation of the City of North Vancouver and leased to Hollyburn Family Services Society, Roll # 994407.004;
 2. Hollyburn Family Services Society, District Lot 548 Lot 6 Plan BCS4407, PID: 028-810-333, 106-210 West 13th Street, registered in the name of the Corporation of the City of North Vancouver leased to Hollyburn Family Services Society, Roll # 994407.006;
 3. Hollyburn Family Services Society, District Lot 548 Lot 7 Plan BCS4407, PID: 028-810-341, 107-210 West 13th Street, registered in the name of the Corporation of the City of North Vancouver leased to Hollyburn Family Services Society, Roll # 994407.007;
 4. Hollyburn Family Services Society, District Lot 548 Lot 13 Plan BCS4407, PID: 028-810-406, 205-210 West 13th Street, registered in the name the Corporation of the City of North Vancouver leased to of Hollyburn Family Services Society, Roll # 994407.013;
 5. Hollyburn Family Services Society, District Lot 548 Lot 14 Plan BCS4407, PID: 028-810-414, 206-210 West 13th Street, registered in the name of the Corporation of the City of North Vancouver leased to Hollyburn Family Services Society, Roll # 994407.014;

6. Hollyburn Family Services Society, District Lot 548 Lot 15 Plan BCS4407, PID: 028-810-422, 207-210 West 13th Street, registered in the name of the Corporation of the City of North Vancouver leased to Hollyburn Family Services Society, Roll # 994407.015;
 7. Lookout Emergency Aid Society, NS Shelter, District Lot 265 Lot 2 Plan BCP8797, PID: 025-819-828, 705 West 2nd Street, registered in the name of the Corporation of the City of North Vancouver, leased to Lookout Emergency Aid Society, Roll # 510061.300;
 8. North Shore Neighbourhood House, District Lot 274 Block 154 Lot M Plan 22039, PID: 012-590-975, 225 East 2nd Street, registered in the name of the Corporation of the City of North Vancouver leased to North Shore Neighbourhood House, Roll # 154001.002;
 9. North Shore Neighbourhood House (Community Garden), District Lot 274 Block 154 Lot L Plan 22039, PID: 012-590-924, 207 East 2nd Street, registered in the name of the Corporation of the City of North Vancouver leased to North Shore Neighbourhood House, Roll # 154001.001;
 10. North Shore Neighbourhood House, District Lot 274, Lot 63, Plan EPS 1235, PID 029-140-676, 113 East 3rd Street, registered in the name of the Corporation of the City of North Vancouver licenced to use by North Shore Neighbourhood House, Roll # 991235.063;
 11. North Shore Neighbourhood House (Centreview Childcare Centre), District Lot 549, Block 61, Lot Air Space Parcel 4, Plan EPP68325, PID 030-180-732, 143 East 14th Street, registered in the name of the City of North Vancouver, leased to North Shore Neighbourhood House, Roll # 061011.500;
 12. Margaret Fulton Adult Day Centre, District Lot 547 Lot A Plan LMP42825, PID: 024-562-874, 1601 Forbes Avenue, registered in the name of the Corporation of the City of North Vancouver leased to Vancouver Coastal Health Authority, subleased to Margaret Fulton Adult Day Centre Roll, # 003002.100;
 13. Navy League of Canada, District Lot 547, Block 27, Lot 27, Plan 12205, PID 008-935-629, 1555 Forbes Avenue, registered in the name of the City of North Vancouver leased to the Navy League of Canada, Roll #003004.000;
- E. the interest of a public authority, local authority or any other corporation or organization in land or improvements that are used or occupied by the corporation or organization if:
- i. the land or improvements are owned by a person who is providing a municipal service under a partnering agreement;
 - ii. an exemption under section 225 [partnering and other special tax exemption authority] would be available for the land or improvements in relation to the partnering agreement if they were used in relation to the service;
 - iii. the partnering agreement expressly contemplates that the council may provide an exemption under this provision; and,

- iv. the land or improvements are used by the corporation or organization for a purpose in relation to which an exemption under this Division or Division 6 of this Part would apply or could be provided if the land or improvements were owned by that corporation or organization:

NIL

F. in relation to property that is exempt under section 220 (1) (h) [buildings for public worship]:

- i. an area of land surrounding the exempt building;
- ii. a hall that the council considers is necessary to the exempt building and the land on which the hall stands; and,
- iii. an area of land surrounding a hall that is exempt under subparagraph (ii):
 - 1. North Shore Bethel Christian Mennonite Brethren Church, District Lot 274 Block 114 Lot 19 Plan 878, PID: 015-069-141, 185 East Keith Road, registered in the name of The B. C. Conference of the Mennonite Brethren Churches, Roll # 114025.000;
 - 2. Holy Trinity Catholic Church. District Lot 545 Block 239 Lot 3 Plan BCP45481, PID: 028-295-943, 2705 Lonsdale Avenue, registered in the name Roman Catholic Archbishop of Vancouver, Roll # 239066.100;
 - 3. North Shore Alliance Church, District Lot 545 Block 208 Lot 1 Plan 20958, PID: 005-061-563, 201 East 23rd Street, registered in the name of Christian and Missionary Alliance (Canadian Pacific District), Roll # 208001.001;
 - 4. North Shore Alliance Church, District Lot 545/546 Block 208 Lot 2 Plan 20958, PID: 005-061-571, 201 East 23rd Street, registered in the name of Christian and Missionary Alliance (Canadian Pacific District), Roll # 208001.002;
 - 5. King's Temple Missionary Society (N S Christian Centre), District Lot 616 Block 12 Lot C Plan 21170, PID: 006-853-838, 1400 Sutherland Avenue, registered in the name of King's Temple Missionary Society (N S Christian Centre), Roll # 912009.001;
 - 6. Parish of St. Agnes Anglican Church of Canada, District Lot 550 Block 78 Lot A Plan LMP40523, PID: 024-355-712, 530 East 12th Street, registered in the name of Synod of the Diocese of New Westminster, Roll # 078014.100;
 - 7. Parish of St. John The Evangelist Anglican Church, District Lot 548 Block 72 Plan 20861, PID: 004-364-970, 209 West 13th Street, registered in the name of Parish of St. John The Evangelist Anglican Church, Roll # 072001.001;
 - 8. Salvation Army North Vancouver Community Church, District Lot 548/549 Block 86 Lot C Plan 1464, PID: 014-606-950, 105 West 12th Street, registered in the name of The Governing Council of the Salvation Army of Canada, Roll # 086009.001;

9. St. Andrew's & St. Stephen's Presbyterian Church, District Lot 545 Block 227A Lot A Plan 2836, PID: 013-252-409, 2641 Chesterfield Avenue, registered in the name of Congregation of St. Andrew's & St. Stephen's Presbyterian Church, Roll # 227100.000;
 10. St. Andrew's United Church, District Lot 549 Block 88 Lot B Plan 750 PID: 015-136-931, 1046 St. Georges Avenue, registered in the name of The Trustees of the Congregation of St. Andrew's United Church, Roll # 088003.000;
 11. St. Andrew's United Church, District Lot 549 Block 88 Lot 27/28/29 Plan 4328, PID: 011-642-483, PID:011-642-475, PID:011-642-491, 1044 St. Georges Avenue, registered in the name of The Trustees of the Congregation of St. Andrew's United Church, Roll # 088038.000;
 12. Sutherland Church, District Lot 550 Block 12 Lot C Plan 9445, PID: 009-653-309, 630 East 19th Street, registered in the name of Sutherland Bible Chapel, Roll # 012028.000;
- G. land or improvements used or occupied by a religious organization, as tenant or licensee, for the purpose of public worship or for the purposes of a hall that the council considers is necessary to land or improvements so used or occupied:
- NIL
- H. in relation to property that is exempt under section 220 (1) (i) [seniors' homes], (j) [hospitals] or (l) [private schools], any area of land surrounding the exempt building:
- NIL
- I. land or improvements owned or held by an athletic or service club or association and used as a public park or recreation ground or for public athletic or recreational purposes:
- NIL
- J. land or improvements owned or held by a person or organization and operated as a licensed community care facility and registered assisted living residence under the Community Care and Assisted Living Act:
1. Marineview Housing Society, District Lot 548 Block E.48 Lot A Plan 12729 PID: 008-811-946, excluding land and improvement portions relating to market rental units #202 and #204, 1415 Chesterfield Avenue, registered in the name of Marineview Housing Society, Roll # 048019.000;
 2. Marineview Housing Society, District Lot 272 Block 5 Lot 12 Plan 3875 PID: 005-751-390, 1057 Cloverley Street, registered in the name of Marineview Housing Society, Roll # 605012.000;

3. Magnolia House Residential Mental Health Facility, District Lot 616 Block 6 Lot 73 Plan 1763, PID: 004-276-914, 720 East 17th Street, registered of in the name of Provincial Rental Housing Corporation leased to Vancouver Coastal Health Authority, subleased to Magnolia House Residential Mental Health Facility, Roll # 906073.000;
 4. Community Living Society, District Lot 274 Block 116 Lot 4 Plan 878, PID: 015-131-548, 317 & 319 East Keith Road, registered in the name of Community Living Society, Roll # 116003.000;
 5. Community Living Society, District Lot 544 SL21 Plan LMS531, PID: 017-957-826, 1003-555 West 28th Street, registered in the name of Community Living Society, Roll # 990531.021;
 6. Marineview Housing Society, District Lot 550, Block 91, Lot 8, Plan 1647, PID 005-751-454, 1053 Grand Boulevard, registered in the name of Marineview Housing Society, Roll #091008.000;
- K. land or improvements for which a grant has been made, after March 31, 1974, under the Housing Construction (Elderly Citizens) Act before its repeal:

NIL

3. Effective Date

The effective date of this bylaw is January 1, 2021 to December 31, 2021.

READ a first time on the 19th day of October, 2020.

READ a second time on the 19th day of October, 2020.

READ a third time on the 19th day of October, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8802

A Bylaw to amend “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781”

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 **“Consumption of Liquor in Public Places Bylaw, 2020, No. 8781, Amendment Bylaw, 2020, No. 8802” (Text Amendments and Schedule A)**.
2. “Consumption of Liquor in Public Places Bylaw, 2020, No. 8781” is amended as follows:
 - A. In Part 2: Definitions, by:
 - (1) deleting the definitions for “Boulevard”, “Bylaw Enforcement Officer”, “Bylaw Notice Enforcement Bylaw”, “Peace Officer” and “Sidewalk” in their entirety;
 - (2) adding the following definition:

““Dusk” means astronomical dusk, being the dark part of twilight, when the daylight has almost gone but it is not yet completely dark”;
 - (3) deleting the definition for “Highway” and replacing with the following:

““Highway” has the meaning ascribed to it in the “Street and Traffic Bylaw, 1991, No. 6234” and, for greater certainty, includes lanes, boulevards, sidewalks and roadways, as those terms are defined in the “Street and Traffic Bylaw, 1991, No. 6234”; and
 - (4) deleting the definition for “Permitted Space” and replacing with the following:

““Permitted Space” means a Public Place or part of a Public Place that is City Property and has been designated by Council by this Bylaw as a place where Liquor may be consumed, but does not include a building, structure, vehicle or other installation (except for City-installed parklets) within the Public Place unless that has been specifically designated by Council in this Bylaw.”
 - B. In Part 3: Designation of Permitted Spaces / Hours, Section B, by deleting the words “11:00am to 9:00pm” and replacing with “11:00am to Dusk”.
 - C. In Part 4: Sign Specifications, Section B (1), by deleting the words “be a consistent size of 24 inches by 36 inches” and replacing with “be at least 12 inches by 24 inches in size”.
 - D. By deleting Part 6: Offences and Penalties in its entirety.

E. In Schedule A, by:

- (1) removing the map identifying the area of “14th St Civic Plaza”, PID: 028-163-745, in its entirety, so that this area is no longer designated as a Permitted Space;
- (2) removing the map identifying the area of “100 Block Lonsdale Ave (West Side)”, in its entirety, so that this area is no longer designated as a Permitted Space; and
- (3) removing the map identifying the area(s) of “Lonsdale Ave (East Side 13th Street to 18th Street)” and “Lonsdale Ave (West Side 14th Street to 18th Street)” in its entirety, so that this area is no longer designated as a Permitted Space.

READ a first time on the 19th day of October, 2020.

READ a second time on the 19th day of October, 2020.




READ a third time on the 19th day of October, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK



 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: David Johnson, Development Planner

Subject: REZONING APPLICATION: 1740 BEWICKE AVENUE (MEHRDAD RAHBAR / VERNACULAR DESIGN)

Date: September 23, 2020 File No: 08-3400-20-0020/1

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

RECOMMENDATION

PURSUANT to the report of the Development Planner, dated September 23, 2020, entitled "Rezoning Application: 1740 Bewicke Avenue (Mehrdad Rahbar / Vernacular Design)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8793" (Mehrdad Rahbar / Vernacular Design, 1740 Bewicke Avenue, RS-2) be considered and referred to a Public Hearing;

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

ATTACHMENTS

1. Context Map (CityDoc [#1938863](#))
2. Project Summary Sheet (CityDoc [#1941861](#))
3. Architectural and Landscape Plans, dated February 2020 (CityDoc [#1898190](#))
4. Public Consultation Summary (CityDoc [#1949362](#))
5. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8793" (CityDoc [#1940973](#))

PURPOSE

The purpose of this report is to present, for Council's consideration, a Development Application to rezone 1740 Bewicke Avenue (Attachment #1) from One-Unit Residential 1 (RS-1) to One Unit Residential 2 (RS-2) to support the subdivision of the existing one

lot into two, with the intent of developing one Single Detached Dwelling with a Secondary Suite and detached garage on each lot.

BACKGROUND

<i>Applicant:</i>	Mehrdad Rahbar
<i>Designer:</i>	Vernacular Design
<i>Official Community Plan Designation:</i>	Residential Level 1 (R1)
<i>Existing Zoning:</i>	One-Unit Residential 1 (RS-1)
<i>Applicable Guidelines:</i>	None

DISCUSSION

Project Description

The subject site is a single residential lot approximately 15.2 metres (50.0 feet) wide by 45.5 metres (149.3 feet) deep, on a relatively flat lot.

The proposal is for the lot to be subdivided into two 7.6 metre (25 foot) wide lots for the purpose of building a new single detached dwelling with secondary suites and a detached garage at the rear of each lot. The proposed development conforms to proposed One-Unit Residential Level 2 (RS-2) Zone, and no further variances are required. This is the first lot in the immediate area to apply for a subdivision to this size of lot (Attachment #3).

Site Context and Surrounding Use

The subject site is located on the eastern side of Bewicke Avenue, just north of Larson Road (Attachment #1). The area consists of mainly one and two level single detached homes on mainly 15.2 metre (50 foot) wide lots on the east side of Bewicke Avenue, and 21.8 metre (71.5 foot) wide lots on the west side.

The buildings and uses immediately surrounding the subject site are described in Table 1 below.

Table 1. Surrounding Uses

Direction	Address	Description	Zoning
North	1748 Bewicke Avenue	One Level Single Detached Dwelling	RS-1
South	1732 Bewicke Avenue	Two Level Single Detached Dwelling	RS-1
East Across rear lane	1737 Larson Road	Two Level Single Detached Dwelling	RS-1
West Across Bewicke Avenue	1737 Bewicke Avenue	Split-level Single Detached Dwelling	RS-1

A mixed-use development consisting of six townhouses over some commercial space at the northeast corner of Larson Road and Bewicke Avenue (1705 Larson Road) is currently under construction. The site is also located near to several community amenities, including a public transit route and a separated bike route along Larson Road, Mosquito Creek Park and Westview Elementary School. The site is also located within walking distance (550 metres) from a transit stop for the recently operational RapidBus service.

PLANNING ANALYSIS

Policy Context

2014 Official Community Plan

The land use designation of the subject site is Residential Level One (R1) in 'Schedule A' of the Official Community Plan (OCP). The designation allows for ground-orientated housing with non-strata accessory uses. Detached single family dwellings with secondary suites/coach houses are supported in this designation.

The application is in keeping with the following goals and objectives of the OCP:

- 1.1.1 Plan for growth in the City's population, dwelling units and employment in keeping with the projections in Metro Vancouver's Regional Growth Strategy;
- 1.1.2 Align growth with the development of community amenities and infrastructure;
- 1.2.1 Ensure the location, density design and durability of developments and their infrastructure are informed by the best available science on climate change impacts;
- 1.3.1 Ensure that new development is compatible with the established urban form of the City, reflecting the primacy of the Lonsdale Regional City centre and the transition through mid- and low-rise buildings to lower-density residential neighbourhoods;
- 1.3.5 Encourage design excellence in developments through carefully considered, high quality architecture and landscaping, with varied designs which are interesting, sensitive and reflective of their surroundings; and
- 1.5.1 Provide opportunities for a range of housing densities, diversified in type, size and location.

The proposal as presented will not require an amendment to the OCP.

Zoning Bylaw 1995, No. 6700

The property is currently zoned One-Unit Residential 1 (RS-1) and supports single detached homes on lots no less than 10 metres (32.8 feet) wide. It also allows the option of secondary dwellings within the primary building. The existing zoning supports a coach house.

The proposal as presented (Attachment #3) will require a Zoning Bylaw Amendment (Attachment #5) to rezone the property from One-Unit Residential 1 (RS-1) Zone to One-Unit Residential 2 (RS-2) Zone to permit the proposed subdivision from one 15.2 metre (50 foot) wide lot, into two 7.6 metre (25 foot) wide lots. The minimum lot width requirement for the RS-2 Zone is 7.5 metres (24.5 feet) and the proposal meets this requirement (Attachment #2). Coach Houses are not permitted on lots less than 10 metres (32.8 feet) wide.

On July 23, 2018, Council amended the City's Zoning Bylaw to improve the design and functionality of ground-oriented housing forms like single family dwellings, accessory secondary suites and coach houses, duplexes and accessory dwelling units. One such change was to create a clearer small lot designation-- the One-Unit Residential 2 (RS-2) Zone-- which permits a lot minimum lot width of 7.5 metres (24.5 feet) in width. The proposal meets this requirement.

As part of the report (dated June 20, 2018) that outlined the Zoning Bylaw amendments, it was stated that staff would undertake a study that would identify areas of the City that may be appropriate for RS-2 zoning. This study has yet to be completed.

The location of the subject site – in particular its proximity to active transportation and transit options, a public park, and Westview Elementary school – is a suitable location for additional low-density residential dwelling units.

COMMUNITY CONSULTATION

The applicant was beginning to organize their Development Information Session (DIS) for early March when the COVID-19 pandemic restrictions caused them to put their plans on hold. As a result, the applicant took it upon themselves to undertake their own notification of the proposal to the neighbourhood to introduce the proposal and invite feedback. The notification was done in accordance with the standard procedures of the City with the exception of holding an open house session. As the review of the project and request for community feedback occurred prior to the preparation of the City's Virtual DIS guidelines, the applicant has relied on written communication to answer resident questions and to receive comments from interested parties. Staff received 20 responses to the notification. A summary of feedback received is included in Attachment #4.

Overall the response was mixed with those opposed to the application having concerns over the increased number of units, parking and traffic concerns, and the proposed subdivision resulting on buildings that are out of character with the neighbourhood. Those in support of the proposal like the modern design and the affordability of smaller houses with rental opportunities such as the basement suite.

The neighbourhood is not listed as a Development Permit area, nor are any design guidelines in place. As the main use is for Single Detached Dwellings, it is not subject to review of the Advisory Design Panel. With Council direction a Public Hearing will be scheduled to provide the public an additional opportunity to provide input on the proposal.

Should Council wish to waive the Public Hearing, the second active clause of the resolution should be substituted with the following:

“THAT “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8748” (Mehrdad Rahbar / Vernacular Design, 1740 Bewicke Avenue, RS-2) be considered and the Public Hearing be waived.”

COMMUNITY BENEFITS

The proposal will also undertake community benefits for off-site improvements such as wider sidewalks with grassed and treed boulevards on the street front to enhance the pedestrian experience along this part of Bewicke Avenue. The applicant is aware of these items and will be secured by the City's Subdivision and Development Control Bylaw.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

This project supports the Strategic Plan vision and priority to be a City for People by using an existing site to provide a variety of dwelling types within a lower density neighbourhood.

CONCLUSION

The proposal represents good planning as it is utilizing the potential of an existing property by adding a variety of dwelling types. The location is within walking distance of a rapid transit corridor and is in close proximity to a public transit route, a bike route, as well as Westview Elementary school and Mosquito Creek Park. The subject site can support the small increase in number of dwelling units to the area.

RESPECTFULLY SUBMITTED:



David Johnson
Development Planner





PROJECT SUMMARY SHEET

DEVELOPMENT APPLICATION

1740 Bewicke Avenue



SITE CHARACTERISTICS			
OCP Designation	Residential Level 1 (R1)		
Existing Zoning	One-Unit Residential 1 (RS-1)		
Site Area	Current	Proposed North Lot	Proposed South Lot
	692.5 sq. m (7,454 sq. ft.)	346.7 sq. m (3,732 sq. ft.)	345.8 sq. m (3,722 sq. ft.)
	RS-1 Zone	Proposed North Lot (RS-2)	Proposed South Lot (RS-2)
Lot Width	10.0 m (32.8 ft.) (min.)	7.62 m (25.0 ft.)	7.62 m (25.0 ft.)
Floor Area (max.)	300.6 m ² (3,236 ft ²)	173.4m ² (1,866 ft ²)	172.9 m ² (1,861 ft ²)
Lot Coverage	30% (max.)	26.3%	25.6%
Building Height	10.1 m (33.1 feet)	8.02 m (26.3 feet)	8.47 m (27.8 feet)
Vehicle Parking	1 for Single Family Unit and 1 for Secondary Suite	2 stalls	2 stalls



STREET ELEVATIONS (BEWICKE AVENUE)

SUBDIVISION & REZONING APPLICATION

HOMES ON BEWICKE

1740 BEWICKE AVE., North Vancouver

Legal Address: LOT 10 OF LOT A, BLK 24, DL 547, GROUP 1

PID: 014-885-298

OWNER: Naderi & Babaei

ISSUED FOR: DEVELOPMENT PERMIT

February 2020

DRAWING INDEX:

PROJECT RATIONALE

- R-01 PROJECT SUMMARY
- R-02 SITE CONTEXT
- R-03 CONTEXT PHOTOS-1
- R-04 CONTEXT PHOTOS-2
- R-05 PROJECT DESIGN RATIONALE-1
- R-06 PROJECT DESIGN RATIONALE-2
- R-07 MATERIALS & COLOUR PALETTES
- R-08 STREET ELEVATIONS
- L-01 LANDSCAPE PLAN FOR BOTH HOUSES

ARCHITECTURAL DRAWINGS

NORTH LOT

- A-01 SITE PLAN FOR BOTH LOTS
- A-02 FLOOR PLANS - BASEMENT & MAIN
- A-03 FLOOR PLANS - UPPER & ROOF PLAN
- A-04 FRONT & REAR ELEVATIONS
- A-05 EAST & WEST ELEVATIONS
- A-06 BUILDING SECTIONS
- A-07 GARAGE DETAILS
- A-08 REFLECTED WINDOWS OF ADJACENT BUILDINGS
- A-09 STREET ELEVATIONS
- L-01 LANDSCAPE PLAN FOR BOTH HOUSES

SOUTH LOT

- A-01 SITE PLAN FOR BOTH LOTS
- A-02 FLOOR PLANS-BASEMENT & MAIN
- A-03 FLOOR PLANS - UPPER & ROOF PLAN
- A-04 FRONT & REAR ELEVATIONS
- A-05 EAST & WEST ELEVATIONS
- A-06 BUILDING SECTIONS
- A-07 GARAGE DETAILS
- A-08 REFLECTED WINDOWS OF ADJACENT BUILDINGS
- A-09 STREET ELEVATIONS
- L-01 LANDSCAPE PLAN FOR BOTH HOUSES

SURVEY PLAN



PROJECT SYNOPSIS

Current Lot Area:	15.24M x 45.45M = 692.50 SM (49.92' X 149.30' = 7,454 SF)
Current Zoning	RS1
Proposed Zoning	RS2 (with minimum lot size relaxation) As minimum lot size is 334.45 SM (3,600 SF) lot area. Ref. Bylaw 506 (1)d
Proposed FSR Subdivision:	0.50 for each lot From one lot to two lots of 15.24 M. (25 FT) wide

PROPOSED PROJECT SUMMARY FOR SUBDIVISION AND REZONING FOR EACH LOT

Lot A (NORTH)

Lot Area	7.61 X 45.56 = 346.71 SM 24.97' X 149.46' = 3,732.0 SF	
FSR Allowed (0.50)	346.71 X 0.5 = 173.35 SM	1,866 SF.
FSR Proposed	173.25 SM	1,866 SF.
Main Floor	86.86 SM	935.0 SF
Upper	86.49 SM	931.0 SF
Basement	(86.86 SM)	(935.0 SF)
Total Lot A	173.35 SM.	1,866.0 SF
SETBACKS:	ALLOWED	PROPOSED
FRONT	4.57 M (15')	5.24 M (17.20')
REAR: 35% LOT DEPTH	15.9 M (52.10')	18.64 M (61.18')
NORTH SIDE:	1.2 M (4')	1.2 M (4')
SOUTH:	1.2 M (4')	1.2 M (4')
House to Garage:	3.0 M. (10')	11.33 M (37.18')
Lot Coverage:	30%	30%
Parking:	2	2
SECONDARY SUITE	40% (746.0 SF)	37% (694.0 SF)
Parking	One car pad allocated for the Secondary Suite	
Bike	2 Enclosed	

Lot B (SOUTH)

Lot Area	7.61 X 45.44 = 345.78 SM 24.97' X 149.10' = 3,722 SF	
T		
FSR Allowed (.50)	346.50 X 0.5 = 172.89 SM	1,861.0 SF.
FSR Proposed	172.89 SM	1,861.0 SF.
Main Floor	88.25 SM	950.0 SF
Upper	84.63 SM	911.0 SF
Basement	(88.25 SM)	(950.0 SF)
Total Lot A	172.88 SM.	1,861.0 SF.
SETBACKS:	ALLOWED	PROPOSED
FRONT	4.57 M (15')	6.47 M (21.25')
REAR: 35% LOT DEPTH	15.9 M (52.1')	17.53 M (57.54')
NORTH SIDE:	1.2 M (4')	1.2 M (4')
SOUTH:	1.2 M (4')	1.2 M (4')
House to Garage:	3.0 M. (10')	10.22 M (33.54')
Lot Coverage:	30%	28%
Parking:	2	2
SECONDARY SUITE	40% (744.40 SF)	30% (570 SF)
Parking	One car pad allocated for the Secondary Suite	
Bike	2 Enclosed	



CONTEXT MAPS / SITE CONTEXT



City of North Vancouver-GIS Map

Close up Map

Area Map

SITE CONTEXT

The site measures approximately 50 ft X 149 ft. (15.24 M X 45.44 M) located on East side of Bewicke Avenue and bounded with Single Family housing to the north, east, south and west. The property is a block away from Westview Elementary, Mosquito Creek Park, walking distance to shopping districts and public transit.

Topography

The site slopes approximately 2.8 feet from east to west over its depth and 3.5 feet across its width from north to south.



PROPOSAL FOR SUBDIVISION & REZONING
1740 BEWICKE AVE.

CONTEXT PHOTOS-1



1808 & 1798 BEWICKE NORTH OF SUBJECT SITE



1760 BEWICKE – NORTH OF SUBJECT SITE



1748 BEWICKE – ADJACENT TO THE NORTH OF SUBJECT SITE



1740 BEWICKE – SUBJECT SITE



1748 BEWICKE – ADJACENT TO THE SOUTH OF SUBJECT SITE



1705 BEWICKE – CORNER OF LARSON
A Mixed-use development on this site is underway





BEWICKE AVE, STREET CONDITION - LOOKING SOUTH



BEWICKE AVE, STREET CONDITION - LOOKING NORTH-EAST



BEWICKE LANEWAY CONDITION – LOOKING NORTH



PROPOSAL FOR SUBDIVISION & REZONING 1740 BEWICKE AVE.

PROJECT RATIONALE-1

THE PROPOSAL



This application intends to apply for a Rezoning and Subdivision of 1740 Bewicke Ave. from a lot in a Single-Family zone (RS1) to two Single-Family lots to construct two Single-Family houses under RS2 with an accessory Secondary Suites for each new property.

BACKGROUND

In 2018 Mahsoo Naderi and Nima Babaei purchased the subject property with the intent to build two homes for their families. The two owners are professionals in their 30s and have young children, currently residing in West Vancouver. They are hoping to build their first family home where they can raise their young families. Concurrent with this desire was the fact that their new houses need to accommodate for a more long term housing option as their children grow older.

After several meetings and communications with the Planning Department, the two Owners contacted us and discussed their plan. Considering our firm's past experience with design and development of many narrow front houses in the City, we thought we could help them to take this application to the next phase. In August 2019 we submitted a Pre-Consultation application in order to receive feedback regarding a subdivision and rezoning application. In September 2019 we received a positive feedback from the staff to move forward with the application.

Since 2009 our firm has successfully done number of successful rezoning for narrow front houses. These projects include 241 West 5th, & 212-214 West 5th, each with three detached Triplex units; 1314 & 1317 Jones Ave., two Single-Family narrow front (2 X 25' frontage) houses, completed in 2016. In addition we have two active applications both approved by Council at 523 East 5th St. and 416 East 16th St of the same typology.

We believe that some of the housing challenge can be met with the small lot subdivisions while providing a flexible and relatively affordable housing solution for young and professional families, the downsizers and empty-nesters who desire to stay in their community.



15' wide houses, 241 West 5th, St.-2010



15' wide houses, 1413 Mahon Ave. - 2016



15' wide house, 212-214 West 5th St.-2018



ARCHITECTURAL DESIGN

In response to the onsite conditions, current market, and the clients wish we are proposing to create two unique and distinct Modern style houses for each family yet harmonious with each other in style, massing and use of cladding materials. Hence, the homes were designed based upon the following criterion:

The Architectural style of the proposed houses will be Modern on the exterior with flat roof and a mixture of fiber cement boards and vertical or horizontal cedar sidings.

We have included some samples of narrow front houses done by our firm in the past in the previous page.

The design features include:

- create two distinct Modern homes with identifiable facades.
- provide three bedrooms and a Secondary Suite for each house
- maximize and enhance outdoor living spaces in the rear yards and a patios for the Basement Suites
- create flexible floor plans that can accommodate the needs of future growth of families

MATERIALITY

For wall cladding of both houses we are proposing to use fiber cement siding, fiber cement boards, natural cedar strips as accents for the front entrances. For soffits and Fascias painted fiber cement board is also proposed. (colour palettes are presented in page A-07 of this document)



Interior of a 15-foot wide house
by our firm



Interior of a 15-foot wide house
by our firm

AFFORDABILITY

As the price of land increases, the developing community and the City of North Vancouver are under tremendous pressure to make housing more affordable. This proposal intends to subdivide a 50 feet wide lot in to two smaller lots to construct two new single-Family houses each with a Secondary Suite. The Secondary Suites intend to provide two a ground oriented rental units in the area as well as being a "mortgage helper" for the owners.

In terms of affordability, all that can be done at this time is to build smaller homes and gently increase the density within the current residential zonings such as in the low density and medium density areas. Increasing number of small Single-Family houses, duplex, triplex and Infill units are alternative approaches to provide "relative" affordability with the current zoning and OCP. Following meetings with the Planning department and hearing their concerns for the rezoning we still believe this housing form is a viable housing typology in the City of North Vancouver and can offer more affordable housing options compare to the larger Single-Family models on the typical 50' wide lots. Adding a Secondary Suite further helps the owners to recover part of their mortgage or have an extended family member living with them.

SUSTAINABILITY

The proposal seeks to increase the density within the existing RS1 zoning where the current density is low. The owners wish to construct two new Single-Family homes with minimum interruption on the existing density. As a gentle densification approach the proposal will add two "relatively" affordable rental suites and an additional small home within the municipal infrastructure.

The application aims to achieve and incorporate following sustainable components:

- Achieve Step 3 energy code
- "Energy Star" windows and doors
- Double or Triple pane windows based on Energy requirements
- "Energy Star" appliances shall be installed in the new Infill unit
- Garages to be pre-wired for electric vehicles
- Dual flush toilets and low flow fixtures shall be installed
- Low VOC emitting paint and flooring materials shall be specified
- Hot water piping shall meet minimum insulation requirements
- Heat recovery ventilators shall be installed
- Indigenous plant or plant materials with low water requirements shall be planted
- Stormwater Management system for storm water

ACTIVE LIFE STYLE

- Provide bicycle storage
- Provide outdoor patio for the Secondary Suite residents outdoor activities

LANDSCAPE DESIGN

- The landscape design envisions featuring a good percentage native or drought resistant species of plant material in the front and rear yards.



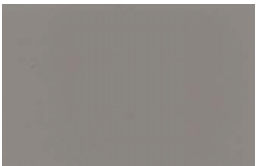


STREET ELEVATION (WEST)

MATERIALS

- | | | |
|----|--------------------|---------------------------------------|
| 1 | Roof | Membrane |
| 2 | Wind. Door trims | 1.5" X1.5" stained-match cedar siding |
| 3 | Fascia Board | 2X8 painted cedar, Dark Charcoal |
| 4 | Flashing on Fascia | 2X4 painted cedar, Limesickle |
| 5 | Fascia + Gutter | Pre-painted Dark Charcoal |
| 6 | Cedar board siding | 3.5" wide clear stained |
| 7 | Flat board Siding | .25" thick. Fiber cement boards |
| 8 | Wooden Door | Clear stained solid cedar or Fir |
| 9 | Wind. Ledge | 1.5"X3" clear cedar |
| 10 | Windows | Painted dark Charcoal sash |
| 11 | Columns | Stained Clear Gluelam posts |
| 12 | Exposed beams | Stained Clear Gluelam beams |

COLOURS



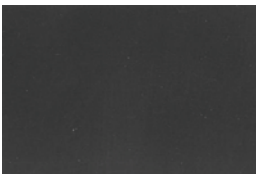
NORTH HOUSE- MAIN HOUSE and GARAGE – Fiber cement panels (Stone –BM)



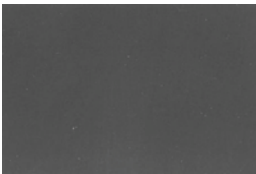
SOUTH HOUSE - MAIN HOUSE and GARAGE – Fiber cement panels (Iron Mountain –BM)



BOTH HOUSES – CEDAR SIDING SOFFITS, SOLID LUMBER & FRONT DOORS – Cedar (BM)

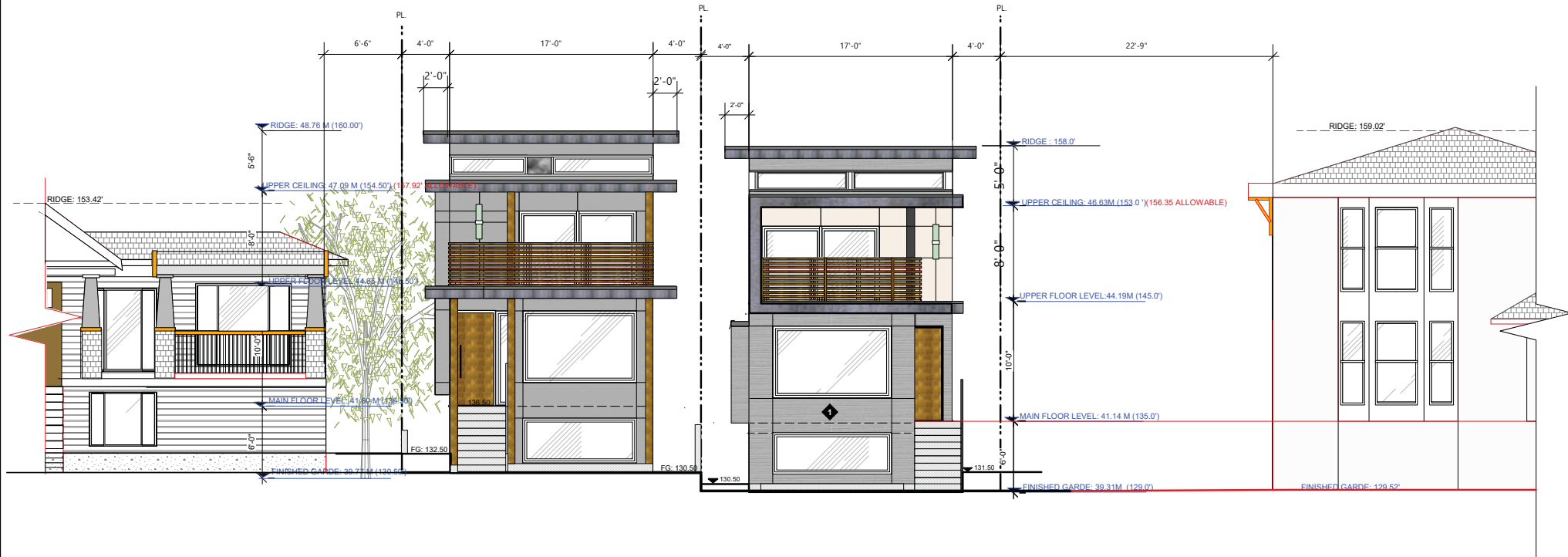


BOTH HOUSES - WINDOW SASH & STL. COLUMNS – powder coated Dark Charcoal



BOTH HOUSES – FASCIA, FLASHING – Dark Charcoal (to match Iron Mountain-B.M.)





STREET ELEVATION-RENDERING

Vernacular
design



200-120 Lonsdale Ave
North Vancouver, B.C.
V7M 2E8
Phone: (604)990-6662
Web: vernaculardesign.ca

REVISION:		
6	B.P.	
5		
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3		
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1	D.P. SUB.	FEB 10 2020
No.	Issue for	DATE

**STREET ELEVATION
/RENDERING**

PROJECT:

**1740 BEWICKE AVE,
NORTH VANCOUVER**

DATE:
JUNE 2019

DRAWN BY:

CHECKED BY:
-M.R.

-R.CH

SCALE:

DRAWING NO.:

A-08

A-09

CONSULTANTS:

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GENERAL NOTES:
THIS DRAWING MUST NOT BE SCALED. THE
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DIMENSIONS AND LEVELS PRIOR TO
COMMENCEMENT OF WORK. ALL
ERRORS AND OMISSIONS SHALL BE REPORTED
IMMEDIATELY TO VERNACULAR DESIGN INC.

LEGEND:

- FINISH ELEV.
- POWER VENT
- FLOOR DRAIN
- SMOKE ALARM



REVISION:	B.P.
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Rev.	Issue Ref
	DATE

PROJECT: PREAPP

1740 BEWICKE AVE, NORTH VANCOUVER

DRAWING TITLE:

SITE PLAN

DATE: JUNE 2019

DRAWN BY: G.A.

CHECKED BY: M.R.

-R CH

SCALE: 1/8"

L-01

SAN MH
RIM=131.06[15.25 M]
N INV = 119.77[36.50 M]
NW INV = 119.77[36.50 M]
S INV = 119.74[36.49 M]

ROAD CENTRELINE
BEWICKE AVENUE

6" DI WATER

2" SAN



1740 BEWICKE, NORTH VANCOUVER PLANTING LIST

Type	Code	Common Name	Scientific Name	Size	Qty	Origin
TREES						
Street Trees	kr	Katsura 'Red Fox'	Cercidiphyllum japonicum Rotfuchs	5 cm. Cal	2	non-native
Tree	pm	palmate maple	Acer japonicum	5 cm. Cal	2	non-native
Tree	jm	Japanese red maple	Acer rubrum	5 cm. Cal	2	non-native
SHRUBS						
Shrub	sc	Sweet box	Sarcococca	#2 pot	40	non-native
Shrub	sl	Strawberry tree	Arbutus unedo	#3 pot	4	native
Shrub	lv	English Lavender	Lavandula	#2	30	non-native
Shrub	mo	Mexican orange	Mexican orange	#2	20	native
Shrub	jaf	Japanese skimmia(Female)	Skimmia japonica	#2 pot	20	non-native
Shrub	jsm	Japanese skimmia(Male)	Skimmia japonica	#2 pot	20	non-native
Shrub	ey	English yew	Taxus baccata	#3 pot	34	non-native
Shrub	hb	Heavenly bamboo	Nandina domestica	#2 pot	20	non-native
GROUND COVERS						
Ground covers	df	Deer fern	Blechnum spicant	#1 pot	20	native
Ground covers	sf	Sword fern	Polystichum munilum	#1 pot	20	native
Ground covers	ogm	Muhly grass	Muhlenbergia capillaris	#1 pot	10	non-native
Ground covers	ogp	Purple fountain grass	Pennisetum setaceum	#1 pot	10	non-native

LIGHTING LEGEND:

- STEP LIGHT
- PATH LIGHT
- UPLIGHT
- MOTION SENSOR LIGHT

NOTES:

1- PROVIDE ELECTRICAL DEDICATED PLUGS FOR
ELECTRIC CARS FOR CARPAD AND GARAGE

STORM
RIM=131.14[39.97 M]
N INV = 127.37[36.82 M]
NE INV = 127.70[36.92 M]
S INV = 127.40[36.85 M]

STORM MH
RIM=136.25[41.52 M]
SW INV = 130.86[39.96 M]



Vernacular d e s i g n Inc.

June 24, 2020

David Johnson, Community Planner
Community Development
City of North Vancouver

RE.: Summary of the DIS for 1740 Bewicke

Hello David,

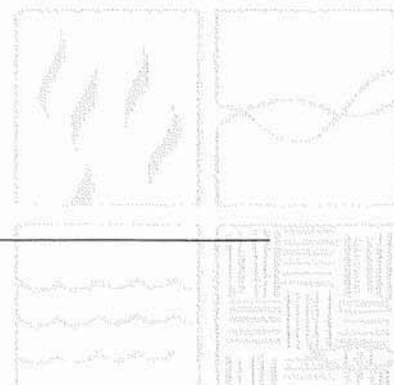
Following the distribution of the DIS package within 40 meters radius, we have received 12 responses, attached to this letter.

During this period, I received several telephone calls for inquiries and met one neighbour in person. In all cases I explained the application intent, the rationale and the design of the proposal. I refrained from answering to any questions regarding Zoning and CNV policies and referred them to you, David Johnson at the City for further explanation.

On June 13, 2020, I visited to Joel Van Hove at his request. He resides at 1748, immediately to the north of the North Lot. We met for about an hour in his backyard and discussed his concerns about why the City is allowing such rezoning application and some privacy of his backyard. I did explain to him about the zonings and about our intent. In conclusion I offered to eliminate one of the North facing windows and install a privacy screen on the Balcony of the second floor of the North Lot. Please see attached North Elevation of the North Lot in the Resubmission set.

Other negative comments we've received are mainly concerned about the Zoning and lack of street parking due to Westview traffic and the new development at the corner, which I mentioned both are out of our control. I also eluded that we have followed and complied with the CNV's policy and procedures for RS1 and RS2 zoning in our Development Permit and Rezoning application.

Kind regards,
Mehrdad Rahbar, Applicant and Designer
604-720 0891



1740 Bewicke Avenue

Zoning Amendment Bylaw #8793

Presented October 26, 2020
Development Planning



Introduction

- To rezone the property from RS-1 to RS-2 to support the subdivision of the property into two separate 7.6 metre (25 foot) wide residential lots.
- The purpose is to permit the development of one single detached dwelling with a secondary suite on each lot.

Subject Site – 1740 Bewicke Avenue



- Located on the west side of Bewicke Avenue, just north of Larson Road.
- OCP designation is R1.
- Located near a elementary school, public transit, Mosquito Creek Park and a mixed use development (under construction).

Context



- The area comprises mainly of low density single family houses.
- A six-unit townhouse with ground floor commercial is under construction at the corner of Larson Road and Bewicke Avenue.

Proposal



- The application is to rezone to allow the subdivision of the property into two 7.6 metre (25 foot) wide lots.
- Each property is proposed to have a single detached dwelling with a secondary suite.
- A single car garage at the rear of each of the subdivided lot.

Analysis

Official Community Plan (OCP)

- Site is designated R1 that allows detached residential housing that supports secondary suites and detached coach houses.
- The application meets the R1 criteria and does not require an amendment to the OCP.

Analysis

Zoning Bylaw

Property is currently Zoned RS-1, but the proposal does require the bylaw to be amended to RS-2 to support the proposed subdivision into two 7.6 metre (25 foot) wide lots. The RS-1 Zone has a minimum lot width requirement of 10.0 metres (33 feet).

Analysis

- When Council amended the Zoning Bylaw to allow 7.6 metre (25 foot) wide lots in 2018, staff would undertake a study to where in the City would these size of lots would be appropriate. This has not yet been completed.
- Staff is supportive of this proposal due to the close proximity to public transit, a public elementary school, a public park and the mixed use building at the corner of Bewicke Avenue and Larson Road.

Analysis

Council Strategic Plan

- The proposal supports the Strategic Plan as a City for People by using an existing site to provide a variety of dwelling types within a lower density neighbourhood.

Community Consultation

- The applicant was organizing their Developer Information Session in mid-March when the COVID-19 pandemic put a halt to public meetings.
- The applicant undertook an adaptive consultation process by sending out notifications to the local area to inform them of the proposal and to invite feedback. Notification was done in accordance with the standard procedures of the City with the exception of holding an in-person meeting.

Community Consultation

- Staff received 20 responses to the notification.
- Support: Respondents liked the variety of unit types.
- Concerns: Respondents stated that the number of units would result in traffic and parking issues, and that the design was out of character with the neighbourhood.

Consultation Feedback



- The proposed design of the buildings are modern.
- The subject site is not within a Development Permit area and is not subject to design controls.

Conclusion

- The proposal conforms with the OCP and supports Council's Strategic Plan.
- Amendments to the Zoning Bylaw are to accommodate a variety of residential unit types in close proximity to local amenities.



Thank you.

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVENUE



PROPOSED STREET ELEVATIONS

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVENUE



BEWICKE AVENUE EXISTING CONDITION (LOOKING NORTH)

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVENUE



BEWICKE AVENUE EXISTING CONDITION (LOOKING SOUTH)

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVENUE



BEWICKE AVE. CURRENT CONDITION LOOKING SOUTH

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVENUE



1705 BEWICKE AVE. @ CORNER OF LARSON
A MIXED-USE DEVELOPMENT UNDER CONSTRUCTION

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVENUE



BEWICKE AVE, EXISTING LANEWAY CONDITION

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation

1740 BEWICKE AVENUE

Lot A (NORTH)				Lot B (SOUTH)			
Lot Area	→	→	→	Lot Area	→	→	→
→	→	→	→	→	→	→	→
→	→	→	→	→	→	→	→
FSR Allowed (0.50)	→	→	→	FSR Allowed (0.50)	→	→	→
FSR Proposed	→	→	→	FSR Proposed	→	→	→
→	→	→	→	→	→	→	→
Main Floor	→	→	→	Main Floor	→	→	→
→	→	→	→	→	→	→	→
Upper	→	→	→	Upper	→	→	→
→	→	→	→	→	→	→	→
Basement	→	→	→	Basement	→	→	→
→	→	→	→	→	→	→	→
Total Lot A	→	→	→	Total Lot B	→	→	→
→	→	→	→	→	→	→	→
SETBACKS	→	→	→	SETBACKS	→	→	→
→	→	→	→	→	→	→	→
FRONT	→	→	→	FRONT	→	→	→
→	→	→	→	→	→	→	→
REAR-36% LOT DEPTH	→	→	→	REAR-36% LOT DEPTH	→	→	→
→	→	→	→	→	→	→	→
NORTH SIDE	→	→	→	NORTH SIDE	→	→	→
→	→	→	→	→	→	→	→
SOUTH	→	→	→	SOUTH	→	→	→
→	→	→	→	→	→	→	→
House to Garage	→	→	→	House to Garage	→	→	→
→	→	→	→	→	→	→	→
Lot Coverage	→	→	→	Lot Coverage	→	→	→
→	→	→	→	→	→	→	→
Parking	→	→	→	Parking	→	→	→
→	→	→	→	→	→	→	→
SECONDARY SUITE	→	→	→	SECONDARY SUITE	→	→	→
→	→	→	→	→	→	→	→
Parking	→	→	→	Parking	→	→	→
→	→	→	→	→	→	→	→
Bike	→	→	→	Bike	→	→	→
→	→	→	→	→	→	→	→

ZONING SUMMARY PROJECT SYNOPSIS

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.



1740 BEWICKE AVENUE SUBJECT PROPERTY

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.



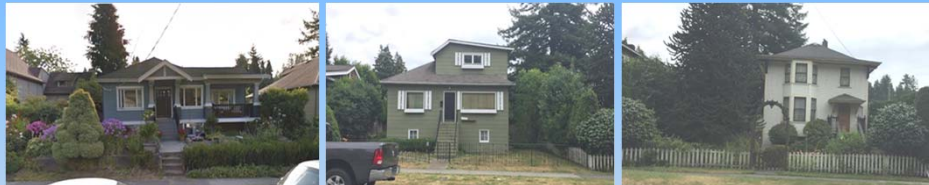
1732 BEWICKE AVENUE ADJACENT SOUTHERLY PROPERTY

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.



1748 BEWICKE AVENUE ADJACENT NORTHERLY PROPERTY

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.



EXISTING STREETScape - EAST(With two adjacent properties)

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.



1732 BEWICKE – ADJACENT PROPERTY (to the South)

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.



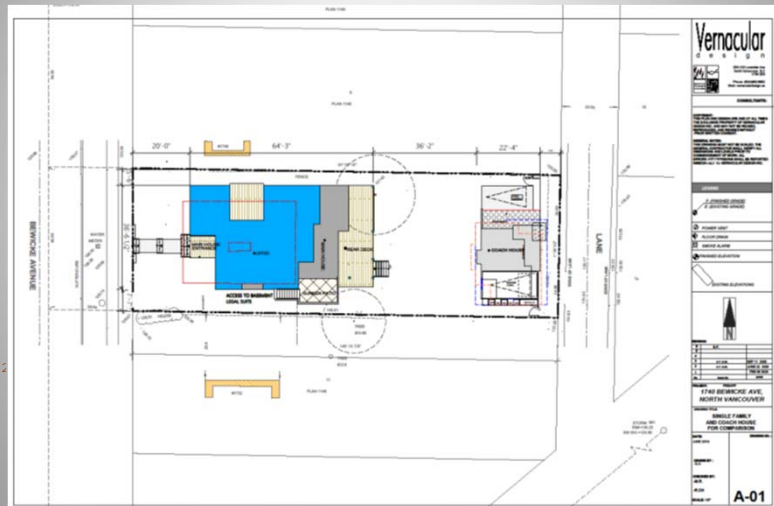
BEWICKE AVE. EXISTING SIDEWALK CONDITION (LOOKING NORTH)

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE. (LANDSCAPE PLAN)



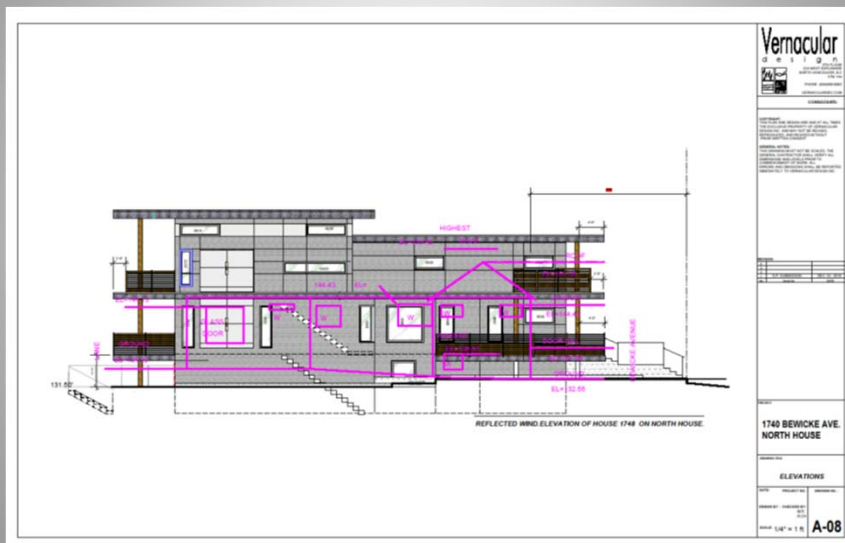
REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.

RS1 ~ ALTERNATIVE



REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation

1740 BEWICKE AVENUE – (Reflected windows-North)



REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation

1740 BEWICKE AVENUE – (Reflected windows-South)



REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation

1740 BEWICKE AVENUE – COLOUR PALETTES

PROPOSAL FOR SUBDIVISION & REZONING
1740 BEWICKE AVE.

MATERIALS & COLOUR PALETTES



MATERIALS

- | | |
|----------------------|---------------------------------------|
| 1 Roof | Membrane |
| 2 Wind. Door trim | 1.5" X1.5" stained match cedar siding |
| 3 Fascia Board | 2X8 painted cedar, Dark Charcoal |
| 4 Flashing on fascia | 2X4 painted cedar, Unfinished |
| 5 Fascia + Gutter | Pre-painted Dark Charcoal |
| 6 Cedar board siding | 3.5" wide clear stained |
| 7 Flat board Siding | .25" Back, Fiber cement boards |
| 8 Wooden Door | Clear stained solid cedar or fir |
| 9 Wind. Ledge | 1.5"X3" clear cedar |
| 10 Windows | Painted dark Charcoal sash |
| 11 Columns | Stained Clear Gluekum posts |
| 12 Exposed beams | Stained Clear Gluekum beams |

COLOURS

- | | |
|--|--|
| | NORTH HOUSE - MAIN HOUSE and GARAGE - Fiber cement panels (Stone - BM) |
| | SOUTH HOUSE - MAIN HOUSE and GARAGE - Fiber cement panels (Iron Mountain - BM) |
| | BOTH HOUSES - CEDAR SIDING SOFFITS, SOLID LUMBER & FRONT DOORS - Cedar (BM) |
| | BOTH HOUSES - WINDOW SASH & STL. COLUMNS - powder coated Dark Charcoal |
| | BOTH HOUSES - FASCIA, FLASHING - Dark Charcoal (to match Iron Mountain-B.M.) |

VERNACULAR DESIGN INC

07

REZONING & SUBDIVISION APPLICATION, OCTOBER 2020
City of North Vancouver Council Presentation
1740 BEWICKE AVE.

SUMMARY

1- CONFORMING WITH CNV ZONING BYLAW FOR RS2

2- CONFORMING WITH THE OCP

3- CONFORMING TO THE REGIONAL GROWTH STRATEGY

4- ADDING 1 MORE TAX BASE TO THE CITY

From: Hassan H <>
Sent: October-15-20 7:16 PM
To: Submissions
Subject: 1740 Bewicke Ave

Hello,

I, Hassan Hamoni from 1845 Westview Drive, am emailing in regards to 1740 Bewicke Avenue - opposing the sub division on the property. The back streets are way too busy for such a sub division.

Another household, 1817 Westview drive, also opposes the subdivision.

Hassan Hamoni
1845 Westview Drive

WHO: Vernacular Design
WHAT: Zoning Bylaw, 1995, No. 6700,
 Amendment Bylaw, 2020, No. 8793
WHERE: 1740 Bewicke Avenue
WHEN: Monday, October 26, 2020 at 5:30 pm
HOW: View the meeting online at
cnv.org/LiveStreaming



Notice is hereby given that Council will consider:

Zoning Amendment Bylaw, 2020, No. 8793

to rezone the subject property from a One-Unit Residential 1 (RS-1) Zone to a One-Unit Residential 2 (RS-2) Zone to subdivide the property into 2 lots and construct a single family house with a secondary suite on each lot, with 2 parking stalls at the rear of each lot accessed off the lane. Maximum floor area for each primary dwelling is 0.5 times the lot area.

As City Hall remains closed to the public, 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. To ensure all submissions are available for Council at the Public Hearing, certain deadlines have been implemented.

For email submissions (preferred):
 include your name and address and send to
input@cnv.org **no later than 12:00 noon on
 Monday, October 26, 2020.**

For written submissions:
 include your name and address and mail or deposit
 into a drop-box at City Hall **no later than 4:00 pm
 on Friday, October 23, 2020.** Written submissions
 are subject to a 24-hour quarantine period before
 being opened due to COVID-19.

To speak at the Public Hearing, pre-registration is
 required by completing an online form at [cnv.org/
 PublicHearings](http://cnv.org/PublicHearings). Persons can also pre-register by
 phoning Julie Peters at 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,
 October 26, 2020.**

In order to accommodate any last minute speakers
 with new information to provide, please phone
 604-990-4230 and a staff member will provide
 instructions on how to call in to add comments.

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

The proposed Zoning Amendment Bylaw,
 background material and presentations of staff and
 the applicant will be available for viewing online at
cnv.org/PublicHearings on Friday, October 16, 2020.

Please direct any inquiries to David Johnson,
 Development Planner, at djohnson@cnv.org or
 604-990-4219.

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8793

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, 2020, No. 8793” (Mehrddad Rahbar / Vernacular Design, 1740 Bewicke Avenue, RS-2).**
2. Division VI: Zoning Map of Document “A” of “Zoning Bylaw, 1995, No. 6700” is hereby amended by reclassifying the following lots as henceforth being transferred, added to and forming part of RS-2 (One-Unit Residential 2 Zone):

Lots	Block	D.L.	Plan	
10 of Lot A	24	547	1148	from RS-1

READ a first time on the 5th day of October, 2020.

READ a second time on the 5th day of October, 2020.

RECEIVED APPROVAL FROM THE
MINISTRY OF TRANSPORTATION ON THE
<> DAY OF <>, 2020.

READ a third time on the <> day of <>, 2020.




ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

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 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Mike Friesen, Interim Manager, Development Planning

Subject: REZONING APPLICATION: 225 EAST 21ST STREET (KENT HALEX,
HALEX ARCHITECTURE, CD-727)

Date: September 23, 2020 File No: 08-3360-20-0473/1

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

RECOMMENDATION

PURSUANT to the report of the Interim Manager, Development Planning, dated September 23, 2020, entitled "Rezoning Application: 225 East 21st Street (Kent Halex, Halex Architecture, CD-727)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8796" (Kent Halex, Halex Architecture, 225 East 21st Street, CD-727) be considered and the Public Hearing be waived;

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

ATTACHMENTS

1. Context Map (Doc# [1949326](#))
2. Condensed Architectural and Landscape Plans, dated September 2020 (Doc# [1949410](#))
3. Developer Information Session Summary (Doc# [1949325](#))
4. Zoning Amendment Bylaw No. 8796 (Doc# [1949313](#))

PROJECT DESCRIPTION

The project, located at 225 East 21st Street, consists of one two-storey duplex building and one two-storey infill building, with a two car garage and one additional unenclosed parking space; no accessory dwelling units are being proposed. The subject site currently hosts a single family dwelling, constructed in 1952, that will be demolished. The requested changes to the Zoning Bylaw to permit this development are identified in Table 1 below. Additionally, Attachment #4 has the amending bylaw with the proposed changes.

Table 1. Requested Changes to the Zoning By-law

Consideration	Current Designation/Regulation	Proposed Designation/Regulation
Zone	RT-1	CD-727
502: Uses in Two-Unit Residential Zones	Maximum of two principal dwelling units and two accessory dwelling units (total of four)	Permit three principal dwelling units only
509A 1: Principal Buildings	Limited to 1 per lot	Permit a 2nd principal building to accommodate the infill unit
509A 2: Gross Floor Area	Shall not exceed the lesser of 0.35 times the Lot Area plus 92.9 square metres (1000 square feet) or 0.5 times the Lot Area	Shall not exceed 0.5 times the Lot Area
509A 3: Lot Coverage	Shall not exceed a Lot Coverage of 35%	Shall not exceed a Lot Coverage of 40%
509A 5 B: Rear Lot Line Setback	15.5 metres (50.74 feet)	Reduced to 11 metres (36.25 feet) to accommodate the infill unit
509A 4 C: Building Height	Elevation of principal buildings must be 0.76 metres (2.5 feet) above reference grade	Requirement eliminated for infill building in order to permit better response to natural topography.
514 5 C: Accessory Building siting	Accessory buildings must be sited a minimum of 6.1 metres (20') from a principal building	Reduced to 2.2 metres (7.5 feet) to accommodate the infill unit

POLICY FRAMEWORK

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

Metro 2040	
Goal 1 Create a Compact Urban Area	Intensifying this site with infill that is consistent and scaled to the surrounding neighbourhood, will ensure the highest and best use of the land promoting a compact urban area.
Goal 2 Support a Sustainable Economy	Infill on this site promotes housing forms that can support a diversity of income levels and ensure people live close to where they work.

<p><i>Goal 4</i> Develop Complete Communities</p>	<p>The proposed development ensures the neighbourhood will have a diversity of housing stock that will promote the ability to age-in-place allowing people to stay in their neighbourhood throughout all of their lifecycles.</p>
<p><i>Goal 5</i> Support Sustainable Transportation Choices</p>	<p>Intensification of this site will support future transit investments along Lonsdale Avenue and is nearby to the City's existing Green Necklace active transportation infrastructure. The site is proximate to community and commercial amenities and is well situated to provide the occupants with a variety of transportation choices across the North Shore and the greater region.</p>

Official Community Plan	
<p><i>Policy 1.1.2</i> Align growth with the development community amenities and infrastructure</p>	<p>Intensification of the site supports the Central Lonsdale Area and future rapid transit infrastructure and community amenity investment.</p>
<p><i>Policy 1.3.1</i> Ensure that new development is compatible with the established urban form of the City, reflecting the primacy of the Lonsdale Regional City Centre and the transition through mid- and low-rise buildings to lower-density residential neighbourhoods</p>	<p>The proposed development on the site is appropriately scaled to the neighbourhood and supports the primacy of the Lonsdale Regional City Centre. The duplex form of the front units will be consistent with the neighbourhood that has recently seen several new duplexes constructed and the infill unit has been oriented to minimize impact on existing neighbours.</p>
<p><i>Policy 1.3.5</i> Encourage design excellence in developments through carefully considered, high quality architecture and landscaping, with varied designs which are interesting, sensitive and reflective of their surroundings</p>	<p>The proposed building is consistent with the neighbourhood character, while landscape elements have been designed to improve privacy for adjacent properties. The materiality and scale of the new dwelling is consistent with the surrounding neighbourhood.</p>
<p><i>Policy 1.3.6</i> Encourage architecture that responds to the unique context of the City in a sensitive, sustainable, and aesthetically compatible manner</p>	<p>The proposed architecture and building materials of the new dwelling are consistent with the surrounding urban form and the local context.</p>
<p><i>Policy 1.3.9</i> Explore ways to activate laneways in the City including opportunities for varied uses, pedestrian and cycling activity as well as storm water management and urban agriculture.</p>	<p>The development presents an attractive landscape element along the rear lane while accommodating required parking. Connection from the street to the lane is supported by a common rear yard that promotes natural surveillance and will support future activation of the laneway.</p>

<p><i>Policy 1.5.1</i> Provide opportunities for a range of housing densities, diversified in type, size and location.</p>	<p>The proposed infill development provides a smaller housing form that assists in units for a broader range of incomes. This form will help to provide more diverse housing in a neighbourhood that is accessible to the City's Lonsdale core area. Due to a lack of space to achieve Zoning Bylaw requirements for parking, the applicants cannot integrate accessory dwelling units into their proposed development.</p>
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Housing Action Plan	
<p><i>Action #6</i> To increase the diversity of homeownership options in lower density neighbourhoods.</p>	<p>By splitting the density between three primary dwelling units (as opposed to a duplex that splits density between 2 units), the project reduces the size and the cost of the new, family friendly (3+ bedrooms) units.</p>

Sustainable Development Guidelines	
<p><i>Natural Systems</i> The ability of natural systems, both global and local, to support life. Parks and green spaces help regulate the climate, clean and filter water and air, and provide recreational and aesthetic benefits. Maintaining healthy natural systems will reduce strain on municipal infrastructure, support local wildlife and enhance quality of life for community members.</p>	<p>All trees that are being removed to support redevelopment are being replaced on-site.</p> <p>Requirement to protect and preserve the trees on adjacent properties through the development process.</p>
<p><i>Physical Structures/Infrastructure</i> The ability to effectively deliver basic services, shelter and physical amenities required to sustain the health and well-being of the community. This includes water supply, sanitary sewer, stormwater drainage, solid waste management, roads, telecommunications, and energy efficiency and conservation including district energy. As well, this category includes attractive streetscapes, durable buildings, provision of a range of housing types and adequate community amenities.</p>	<p>The project will achieve Step 3 of the BC Building Code Step Code, one step greater than the requirements at the time of application.</p>

PLANNING ANALYSIS

Site Context

The surrounding land uses are identified in Table 2 below.

Table 2. Surrounding Uses

Direction	Address	Description	Zoning
North (across East 21 st Street)	222-224 & 228-230 E 21 st Street	Duplex dwellings	RT-1
East	231 East 21 st Street	Single family dwelling	RT-1
South	216 & 218 E 20 th Street	Single family dwellings	RT-1
South	224-226 East 20 th Street	Duplex dwelling	RT-1
West	219-221 East 21 st Street	Duplex dwelling	RT-1

Generally, the surrounding neighbourhood is made up of duplexes and single family homes. The area has been rezoned for duplex development and many of the surrounding homes have been redeveloped over the past decade.

The subject site is located approximately 315 metres away from Lonsdale Avenue and is located near to existing (Green Necklace) and proposed (St. Andrews Avenue) All Ages and Abilities cycling facilities.

Use

The policy framework applicable to the subject site supports the proposed three dwellings as residential use. The site is located in close proximity to transit as well as Central Lonsdale's commercial and social amenities. Additionally, the units will provide greater diversity of housing stock in the area, providing an alternative to traditional duplex development.

Intensity

The proposed intensification on the site is appropriate for the neighbourhood given the surrounding density and the land use designation. The Residential Level 2 designation permits the development of triplexes, and the proposal builds off of the City's coach house policy to develop a site plan for multiple buildings on a single site. The proposal provides three parking spaces, accessed from the rear lane, two of which are located in a garage and one of which is provided as a covered carport. Bicycle parking and storage areas are included in the parking structure. The proposed parking meets the requirements of the City's zoning bylaw, but is inadequate to support accessory dwelling units on site. Basements are not provided with exterior access to mitigate the likelihood of installation of illegal suites by future owners.

With regard to environmental standards, the proposed development will achieve Step 3 of the BC Building Code Step Code. Level 2 electric vehicle charging capacity will be provided for each of the parking spaces. Storm water will be addressed through natural infiltration, as well as on-site retention tanks to mitigate more significant storm events.

Form

The urban form proposed for the site satisfies the policy intent of ensuring new development is consistent with the character of the surrounding neighbourhood. The form of the

development will conform generally to the attached drawings (Attachment 2: Condensed Architectural and Landscape Plans, dated May 2019). From the street the project resembles a traditional duplex development, with massing that is sympathetic to neighbouring units, and exhibits architectural details and materials that are reminiscent of traditional West Coast Modern design typology. The infill unit conforms to the changing grade and utilizes landscape features - common walkways, new tree plantings - to provide opportunities for future residents to interact, while ensuring privacy for the proposed units as well as neighbours. The orientation of units and landscape treatment approaching the lane will support passive surveillance of public areas as well as future activation of the lane. The front duplex building conforms to setbacks and heights stipulated by the Two-Unit Residential 1 (RT-1) zone, the variances identified above provided to support a livable and contextually sensitive infill unit.

COMMUNITY CONSULTATION

A Developer Information Session (DIS) was held June 27, 2019 at Mickey McDougall Community Centre Gym, located several blocks from the proposed development location. Two members of the public attended the session and one comment form was received. The applicant has provided a summary of the event (Attachment 3: Developer Information Session Summary)

Response to the application at the DIS was positive, and staff have received no concerns from the community through the development process. Given the feedback from the community concerning the proposed project staff are recommending the Public Hearing be waived. Should Council wish to hold the Public Hearing, the second active clause of the resolution should be substituted with the following:

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8796" (Kent Halex, Halex Architecture, 225 East 21st Street, CD-727) be considered and referred to a Public Hearing;

ADVISORY BODY INPUT

The application was directed to the Advisory Design Panel on April 3rd, 2019. The Panel recommended the approval of the project subject to addressing the following issues to the satisfaction of the Development Planner assigned to the file:

- Consider reconfiguring the placement of the garages to allow for more open space for Unit C and to mitigate CPTED concerns;
- Further resolve the space between Unit C and the garages with regard to planting, grades and CPTED concerns;
- Include a gate at the rear for the two lanes and the carport;
- Consider ways to mediate overlook issues in certain areas;
- Ensure the existing trees on the north west corner of the property are maintained and consider moving the path to protect them;
- Ensure glazing on the south facing windows is addressed; and
- Consider irrigation for the site.

The applicant revised their application to satisfy the recommendations identified in the Panel's resolution including: redesign of the garage to better address the lane and site

planning concerns; better consideration for the preservation of the northwest trees; and addressing glazing and overlook concerns.

CORPORATE PLAN AND/OR POLICY IMPLICATIONS


Although the application was submitted in advance of the endorsement of Council's Strategic Plan, the plan is consistent with the priorities identified by Council.

Council Strategic Plan	
A City for People	Gentle density to support a range of options along the housing continuum.
A Liveable City	On-site retention and use of rainwater; replacement of removed trees; step 3 of the BCBC Step Code; electric vehicle charging stations.
A Vibrant City	Architectural form that is responsive to existing neighbourhood character.
A Connected City	Proximity to major transit routes and planned investments; proximity to planned and existing AAA cycling network infrastructure; near to shops and services of the Lonsdale City Centre.
A Prosperous City	Location of additional density supports the viability of the Lonsdale commercial core and the ongoing development of Lonsdale Avenue as a high street.

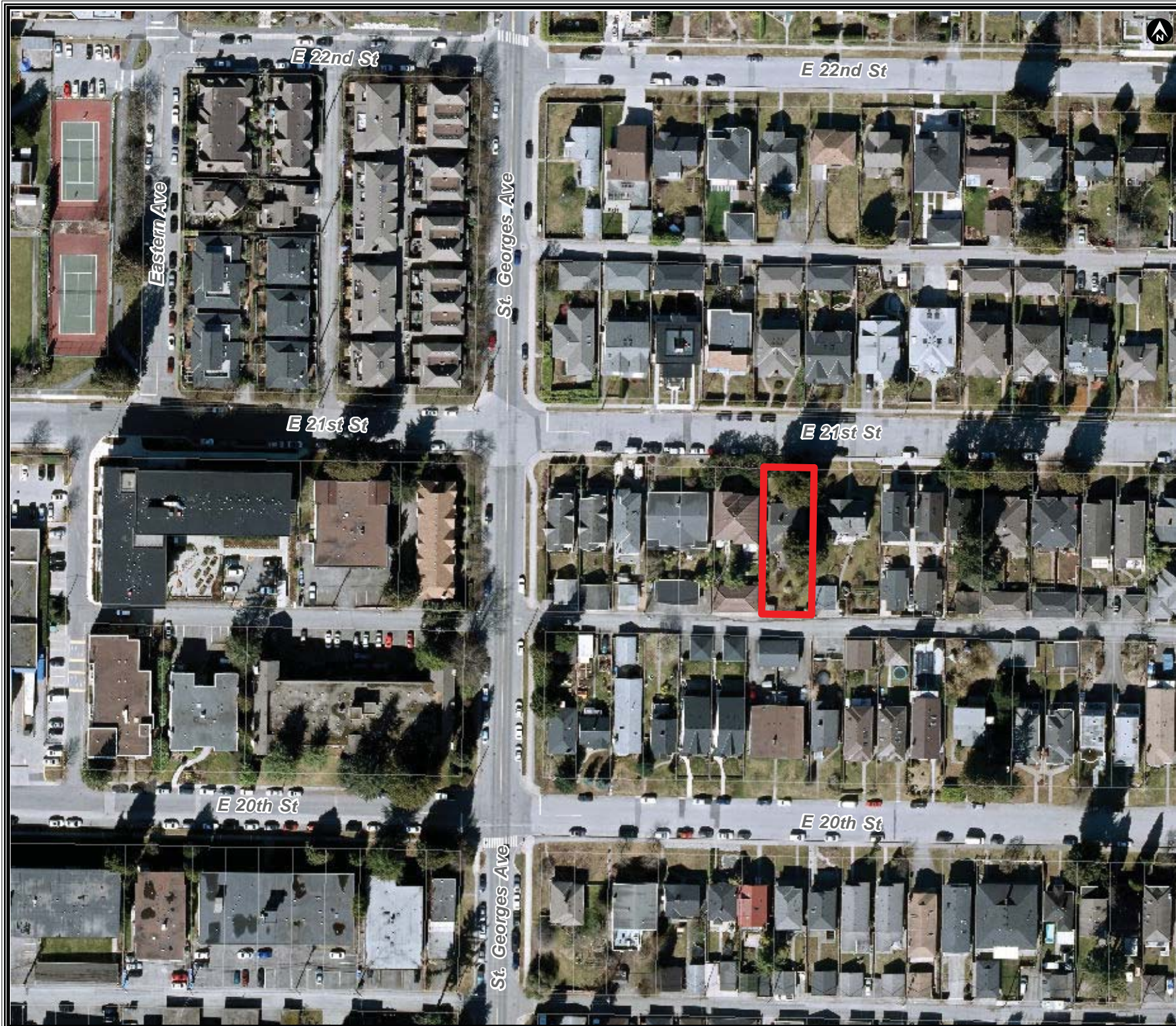
CONCLUSION

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

RESPECTFULLY SUBMITTED:




Mike Friesen
Interim Manager, Development Planning



City of North Vancouver
Context Map - 225 East 21st Street

Legend

 Subject Site

0 5 10 20
Meters
1:1,500

DISCLAIMER

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

GIS Division, Information Technology,
City of North Vancouver

city
of north
vancouver

DRAWINGS LIST:

ARCHITECTURAL

DP1	Site Plan & Project Data
DP2	Overall Elevations & Spatial Separation Calculation
DP3	Perspectives
DP4	Streetscape
DP5	Streetscape
DP6	Streetscape
DP7	Streetscape & Landscape with Proposed Buildings
DP8	Shadow Impact Study
DP9	Cellar Floor Plan & Main Floor Plan - Unit A&B
DP10	Second Floor Plan & Roof Plan - Unit A&B
DP11	Floor Plans - Unit C
DP12	Garage Floor Plan & Roof Plan & Neighbouring Bldgs Relationship
DP13	Elevations - Unit A&B
DP14	Elevations - Unit A&B
DP15	Elevations - Unit C
DP16	Elevations & Sections - Garage
DP17	Sections - Unit A&B
DP18	Sections - Unit C
DP19	Area Diagrams

LANDSCAPE

L10f4	Site Plan and Grading
L20f4	Planting Plan
L30f4	Sections Plan
L40f4	Tree Management Plan

CIVIL

KEY	COVER SHEET
BG	KEY PLAN
ESC	BUILDING GRADES
SMP	EROSION & SEDIMENT CONTROL
SERV	STORMWATER MANAGEMENT
GRAD	SERVICING
DET	GRADING
	STANDARD DETAILS

SURVEY

- Survey plan



PROPOSED 3 UNIT RESIDENTIAL DEVELOPMENT

225 E 21st Street, North Vancouver, B.C.

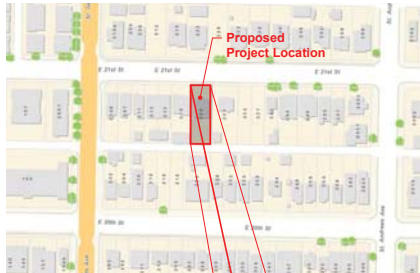
Re-issued for DP Submission - September 22, 2020

List of Consultants:

Halax Architecture 348 E 20th St., North Vancouver Phone: (604) 983-9000 Email: Ken@halaxarchitecture.com Web: Kghar@halax.com	Architect
Forma Design Inc. 200-628 Glenview Ave., North Vancouver, BC Phone: (604) 989-1153	Landscape Architect
Creus Engineering 8200- 907 18th St. West, North Vancouver Phone: (604) 987-6070	Civil Engineer
Hobbs, Winter & Mac Donald 113-828 Hallsborough Drive, North Vancouver Phone: (604) 986-1271	Surveyor
Amataak Design Studio 5621 Joyce St., Vancouver Phone: (604) 710-6447 Email: Amataakds@gmail.com	Drafter

Wedgewood
VENTURES LIMITED

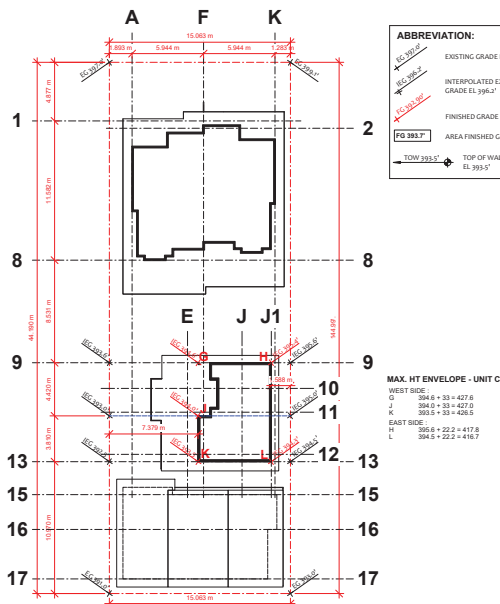
Halex Architecture
731 East 10th Street North Vancouver BC V6L 3K6
604.951.0099
www.halexarchitecture.com



Location Plan

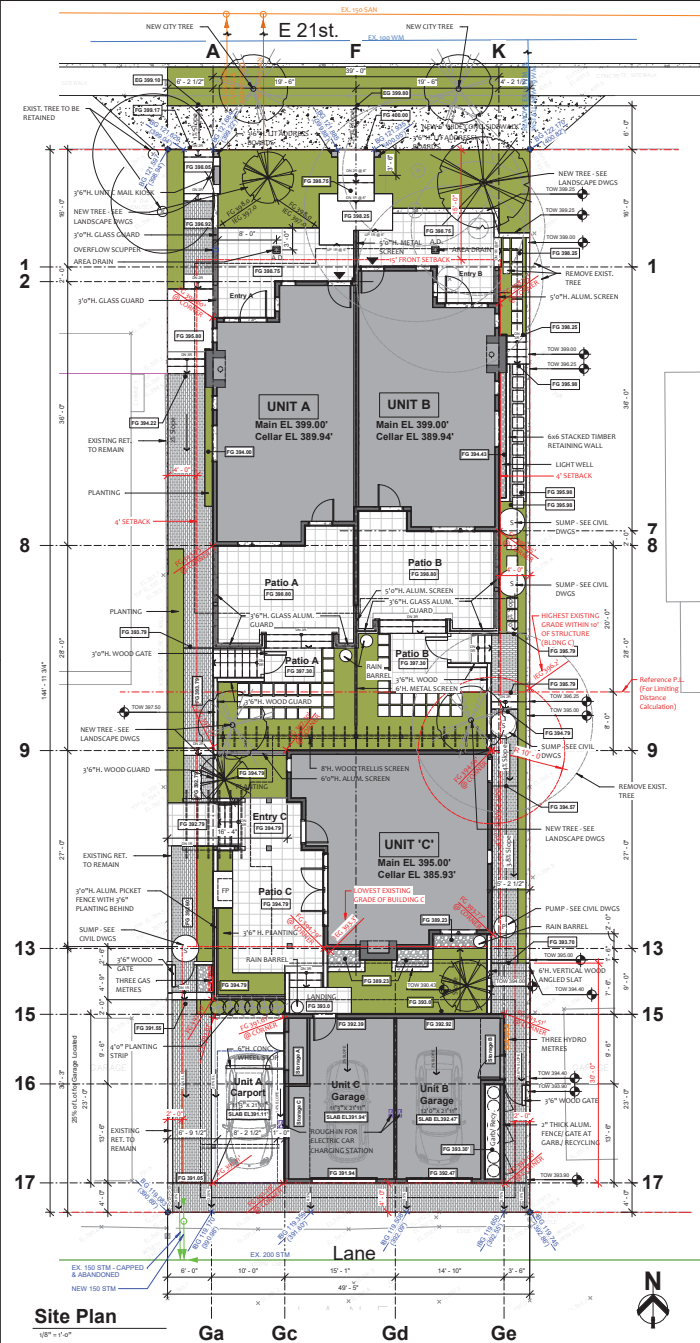


Key Plan



Height Envelope Calculation

1/8" = 1'-0"



PROJECT

Legal Description: Amended Lot 8 (see 255023), Bldg 8, DL 549, Plan 1028, P.D. 015-033-457
 Civic Address: 225 E 21st St North Vancouver
 Existing Zoning: RS-1
 Proposed Zoning: CD Residential Level 2 Low Density duplex with unit at rear of lot
 A Building A/B/C are Sprinklered, Garage A, B and Carport C are not Sprinklered

LOT

LOT SIZE: 40.42' x (144.98' + 144.97') = 7165 sf (865.64 sqm)

ALLOWABLE (80%)	PROPOSED (80.1%)
7165 sf ± 0.5' x 3882.6 sf	(Main House A/B & C, Covered Patio A/B & C) 2728.6 sf

FSR

MAX. ALLOWABLE (80%)	PROPOSED (80%)
7165 sf ± 0.5' x 3882.6 sf	1224 sf ± 1224 sf ± 1134 sf ± 3882 sf (See Areas Detail Sheet)

DWELLINGS:

Areas

Unit	Floor Area	Wall Roof Area	Unenclosed Area
Unit A	640 sf	584 sf	128.25 sf (42.9%)
Unit B	640 sf	584 sf	128.25 sf (42.9%)
Unit C	640 sf	584 sf	128.25 sf (42.9%)
Unit D	640 sf	584 sf	128.25 sf (42.9%)
Unit E	640 sf	584 sf	128.25 sf (42.9%)
Unit F	640 sf	584 sf	128.25 sf (42.9%)
Unit G	640 sf	584 sf	128.25 sf (42.9%)
Unit H	640 sf	584 sf	128.25 sf (42.9%)
Unit I	640 sf	584 sf	128.25 sf (42.9%)
Unit J	640 sf	584 sf	128.25 sf (42.9%)
Unit K	640 sf	584 sf	128.25 sf (42.9%)
Unit L	640 sf	584 sf	128.25 sf (42.9%)
Unit M	640 sf	584 sf	128.25 sf (42.9%)
Unit N	640 sf	584 sf	128.25 sf (42.9%)
Unit O	640 sf	584 sf	128.25 sf (42.9%)
Unit P	640 sf	584 sf	128.25 sf (42.9%)
Unit Q	640 sf	584 sf	128.25 sf (42.9%)
Unit R	640 sf	584 sf	128.25 sf (42.9%)
Unit S	640 sf	584 sf	128.25 sf (42.9%)
Unit T	640 sf	584 sf	128.25 sf (42.9%)
Unit U	640 sf	584 sf	128.25 sf (42.9%)
Unit V	640 sf	584 sf	128.25 sf (42.9%)
Unit W	640 sf	584 sf	128.25 sf (42.9%)
Unit X	640 sf	584 sf	128.25 sf (42.9%)
Unit Y	640 sf	584 sf	128.25 sf (42.9%)
Unit Z	640 sf	584 sf	128.25 sf (42.9%)

SETBACKS:

REQUIRED:
 FRONT (NORTH)
 REAR (SOUTH)
 SIDE
 15'-0"
 Min. 20'-0" (Between Buildings)
 4'-0"

PROPOSED:

UNIT:	A	B	C
North (Front for A/B)	18.0'	16.0'	23.98'
West	6.21'	0 (Party Wall)	16.34'
East	0 (Party Wall)	4.27'	5.21'
South (Rear for A/B)	27.98'	26.98'	9.0' (to Garage B North Wall) 7.0' (to Garage B South Wall)

HEIGHT BUILDING A/B:

Reference Grade Calculation for Building A/B:
 Front = 387.0' + 393.1' + 398.05' = 1178.15'
 Rear = 387.0' + 393.1' + 393.0' = 1173.1'

Reference Grade = Front = (Rear - Front) x 0.4 + 398.05' = 1178.15' x 0.4 + 398.05' = 471.26' + 398.05' = 869.31'

Allowable: 25.24' to Top of Plate from Reference Grade 395.63' + 26.24' = 421.87'

Proposed: 421.87'

421.87' (Top of Highest Plate of Building A/B - See Section 20P17)
 421.90' (Top of Chertory Plate of Building A/B - See Section 20P17)

HEIGHT BUILDING C:

Average Grade Calculation for Building C:
 Highest finished grade within 10' ± lowest finished grade at perimeter of building divided by 2
 (396.2' + 393.1') ÷ 2 = 394.65'

Allowable: 17'-0" at property lines, then 45 degrees to max height of 33'-0"

Proposed: Conforming - See Height Calculations Sheet DP1

Unit C

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REVISIONS

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Site Plan & Project Data

DP1

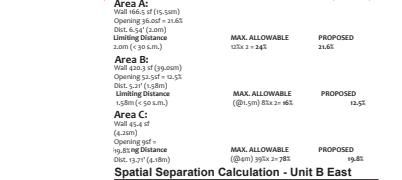
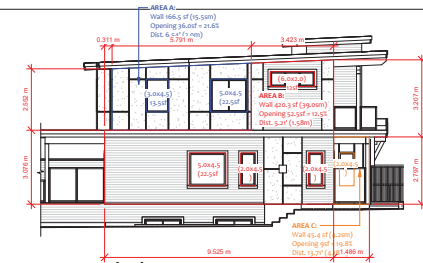
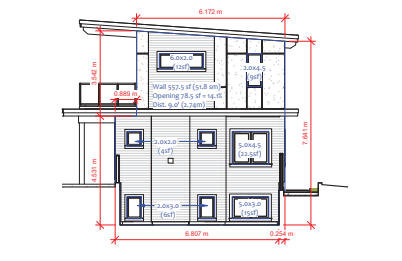
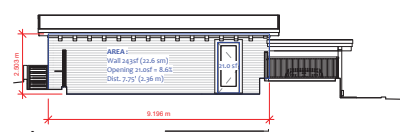
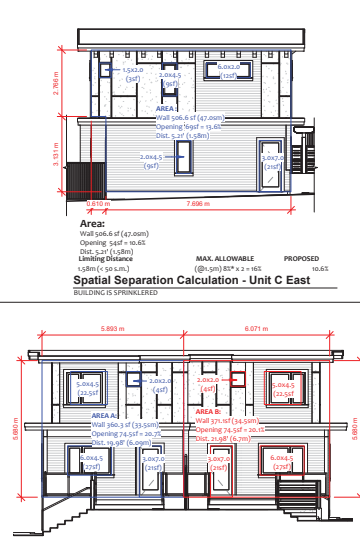
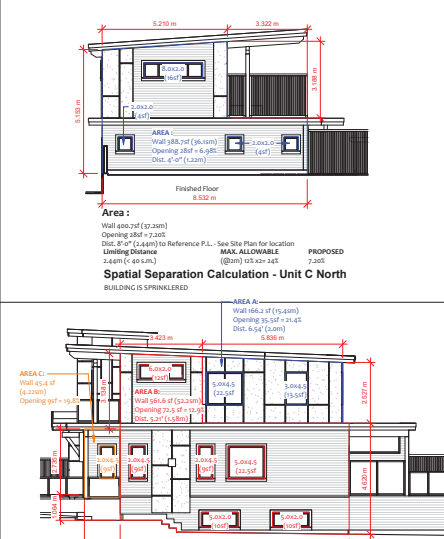
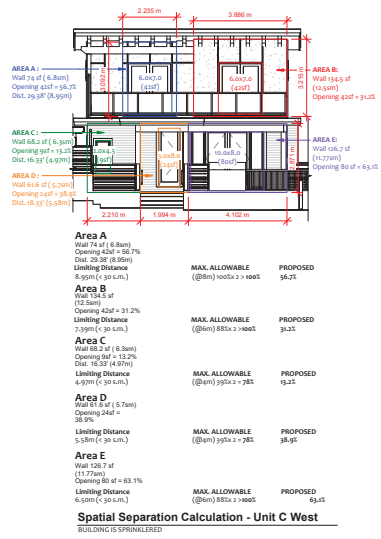
REV No.



1 East - Overall Elevation
1/8" = 1'-0"



2 West - Overall Elevation
1/8" = 1'-0"



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No.	Revision Notes
1	Issue

No.	Issue description	Date
1	Issue description	Date
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5	Issue description	Date
6	Issue description	Date

WedgeWood ARCHITECTURE LIMITED

HALEX Architecture
1000 West 10th Avenue
Vancouver, BC V6H 1A6
Tel: 604.681.1111
www.halexarchitecture.com

Amatak Design Studio
225 E 21st Street, North Vancouver, BC
Mar. 12, 2018
1/8" = 1'-0"

STC
KH
Overall Elevations & Spatial Separation Calculation

DP2

REV No.



① NE Perspective
12" = 1'-0"



④ SE Perspective
12" = 1'-0"



② NW Perspective
NTS



⑤ SW Perspective
12" = 1'-0"

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Amatak Design Studio

Residential Development

225 E 21st Street, North Vancouver, BC

Mar. 12, 2018 12" = 1'-0"

STC

KH

Perspectives

DP3

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E 21ST ST -SOUTH ELEVATION A



E 21ST ST -SOUTH ELEVATION B

E 21ST ST



E 21ST ST -SOUTH ELEVATION C



BLOCK ELEVATION KEY PLAN

No	Issue description	Date
1	Issue 1: Initial Design	December 12, 2018
2	Issue 2: Initial Design	January 10, 2019
3	Issue 3: Initial Design	January 10, 2019
4	Issue 4: Initial Design	January 10, 2019
5	Issue 5: Initial Design	January 10, 2019
6	Issue 6: Initial Design	January 10, 2019
7	Issue 7: Initial Design	January 10, 2019
8	Issue 8: Initial Design	January 10, 2019
9	Issue 9: Initial Design	January 10, 2019
10	Issue 10: Initial Design	January 10, 2019



Amatak Design Studio
200 Bldg E 21 St
North Vancouver, BC

Residential Development

225 E 21st Street, North Vancouver, BC

Mar. 12, 2018

KH/DO

KH

Approved By:

200 Bldg E 21 St.

Streetscape South Side

DP4

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No.	Revision Notes
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No.	Issue description	Date
1	Initial Design	December 12, 2018
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3	Initial Design	January 10, 2019
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18	Initial Design	January 10, 2019
19	Initial Design	January 10, 2019
20	Initial Design	January 10, 2019



Amatak Design Studio
 225 E 21st Street, North Vancouver, BC

Residential Development

Mar. 12, 2018

KHDO

KH

Streetscape North Side

DP5

REV No.



2048 St Georges 207 211 215-213 219-221
E 21ST ST SOUTH LANEWAY -NORTH ELEVATION A



Subject Property -225 E 21st St 231 235 237 243
E 21ST ST SOUTH LANEWAY -NORTH ELEVATION B



245-247 249-251 255 257
E 21ST ST SOUTH LANEWAY -NORTH ELEVATION C



2053 St Andrews
E 21ST ST SOUTH LANEWAY -NORTH ELEVATION D

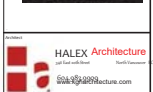


BLOCK ELEVATION KEY PLAN

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No	Revision Notes
1234	

No	Issue description	Date
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2	Amatak Design Studio	January 10, 2019
3	Amatak Design Studio	January 10, 2019
4	Amatak Design Studio	January 10, 2019
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6	Amatak Design Studio	January 10, 2019
7	Amatak Design Studio	January 10, 2019
8	Amatak Design Studio	January 10, 2019
9	Amatak Design Studio	January 10, 2019
10	Amatak Design Studio	January 10, 2019



Amatak Design Studio
Project Architect
Amatak Design Studio

Residential Development

225 E 21st Street, North Vancouver, BC

Mar. 12, 2018

KH/DO

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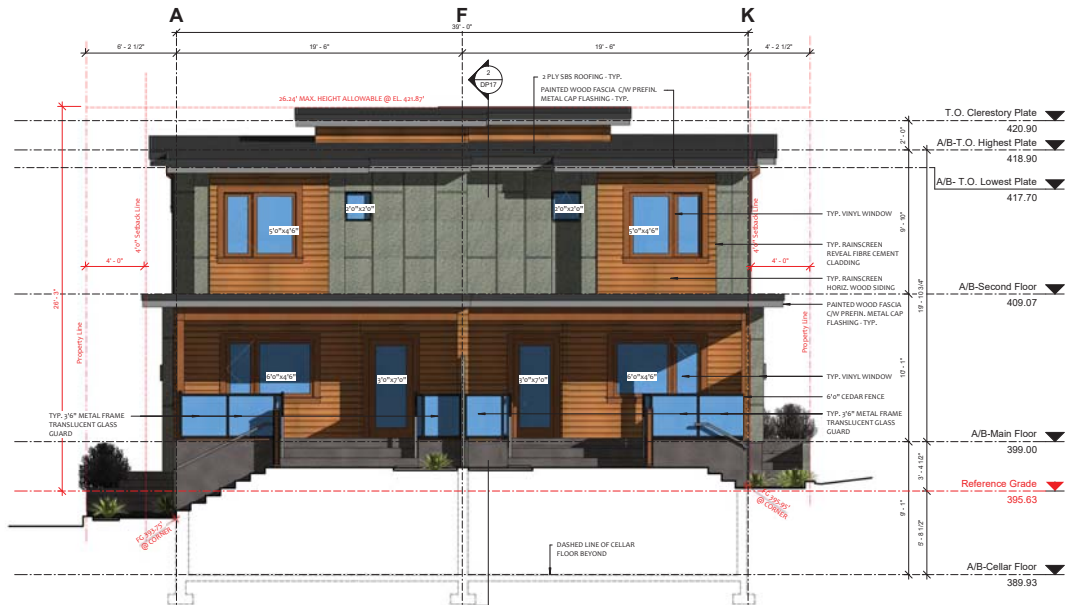
Amatak Design Studio

Lanescape

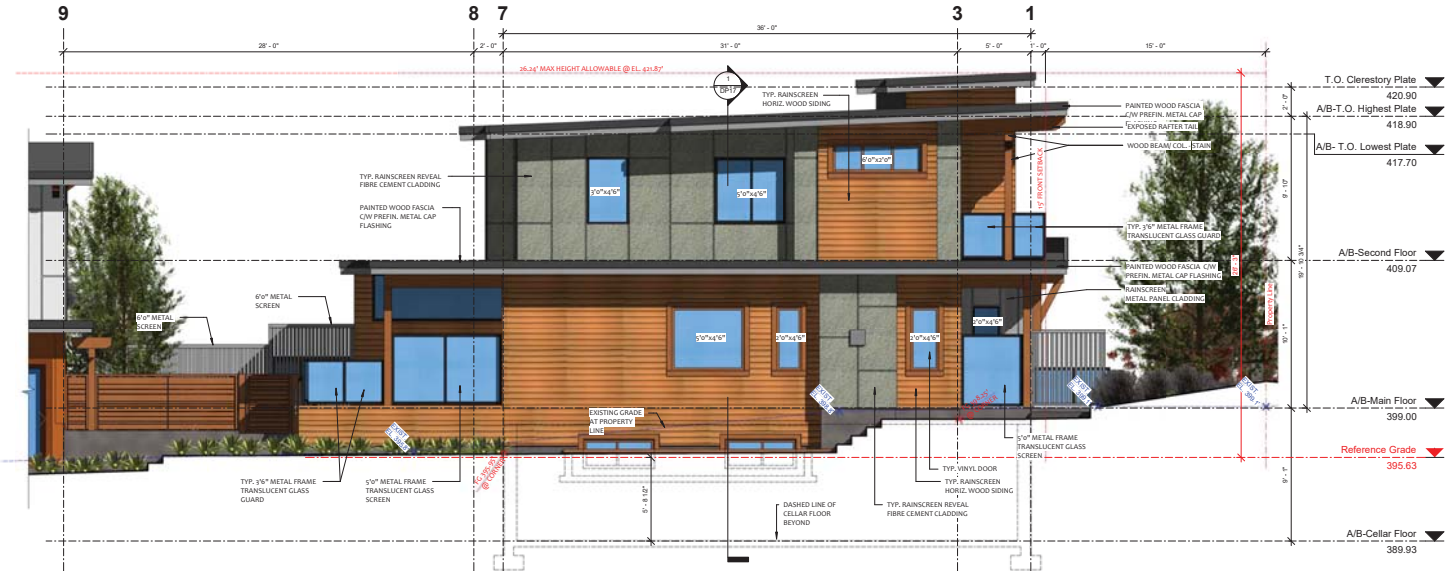
DP6

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① South Elevation - Unit A/B
1/4" = 1'-0"



② East Elevation - Unit B
1/4" = 1'-0"

No	Revision Notes
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No	Issue description	Date
1	Issue description	Date
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Amatak Design Studio

Residential Development

225 E 21st Street, North Vancouver, BC

Mar. 12, 2018 1/4" = 1'-0"

STC

KH

Elevations - Unit A&B

DP14

REV No.



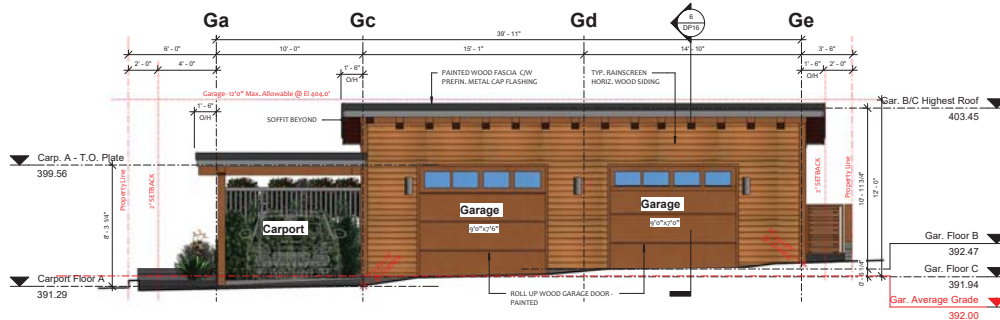
Revision Notes		
No	Revision Notes	Date
1	Issue description	Date
2	Issue description	Date
3	Issue description	Date
4	Issue description	Date
5	Issue description	Date
6	Issue description	Date
7	Issue description	Date
8	Issue description	Date
9	Issue description	Date
10	Issue description	Date
11	Issue description	Date
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14	Issue description	Date
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100	Issue description	Date

WedgeWood
 ARCHITECTURE

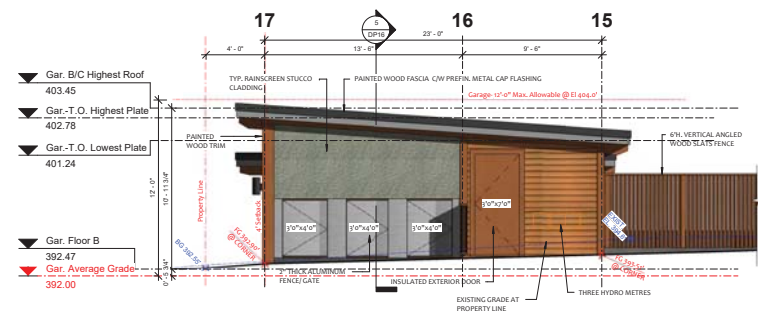
HALEX Architecture
 ARCHITECTURE

Amatak Design Studio
 ARCHITECTURE

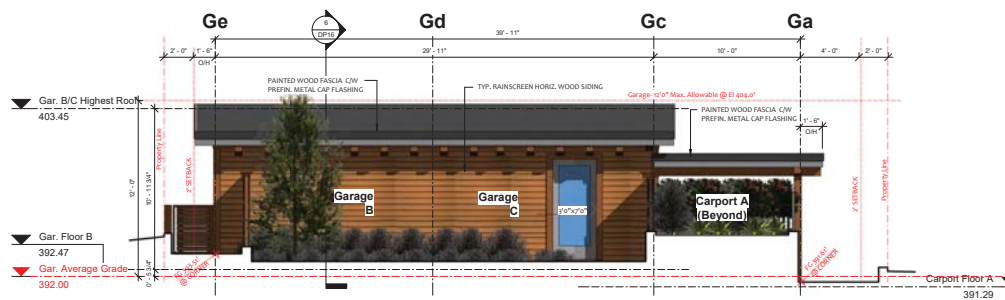
Residential Development
 225 E 21st Street, North Vancouver, BC
 Mar. 12, 2018
 1/4" = 1'-0"
 STC
 KH
 Elevations - Unit C
 DP15
 REV No.



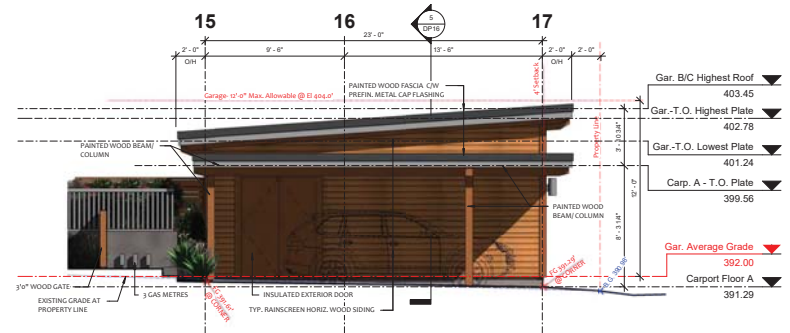
1 South Elevation - Garage
1/4" = 1'-0"



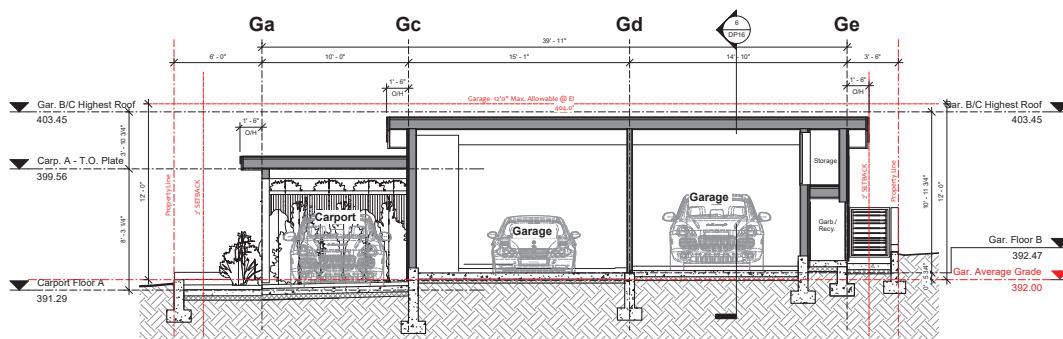
2 East Elevation - Garage
1/4" = 1'-0"



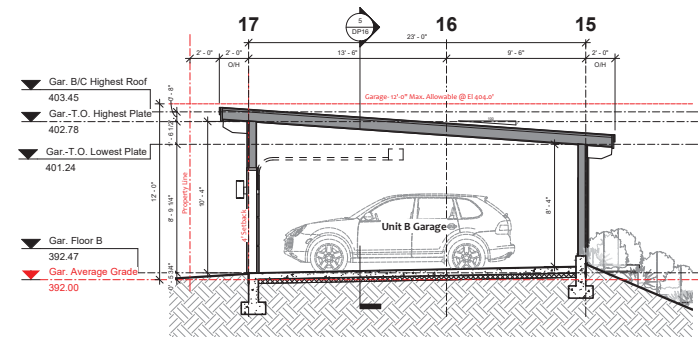
3 North Elevation - Garage
1/4" = 1'-0"



4 West Elevation - Garage
1/4" = 1'-0"



5 Section @ Garage A/B/C
1/4" = 1'-0"



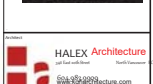
6 Section @ Garage B
1/4" = 1'-0"

ALL DIMENSIONS SHOWN ARE IN FEET AND INCHES. THE ARCHITECT ASSURES THAT THE DIMENSIONS SHOWN ON THESE PLANS ARE CORRECT AND ACCURATE TO THE BEST OF HIS KNOWLEDGE AND BELIEF. THE ARCHITECT DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREON. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN OF THE BUILDING AND ITS STRUCTURAL ELEMENTS. THE ARCHITECT DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREON. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN OF THE BUILDING AND ITS STRUCTURAL ELEMENTS.

No.	Revision Notes
1	Issue description

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6	Issue description	Date

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3	Issue description	Date
4	Issue description	Date
5	Issue description	Date
6	Issue description	Date



Amatak Design Studio

Residential Development

225 E 21st Street, North Vancouver, BC

Mar.12, 2018 1/4" = 1'-0"

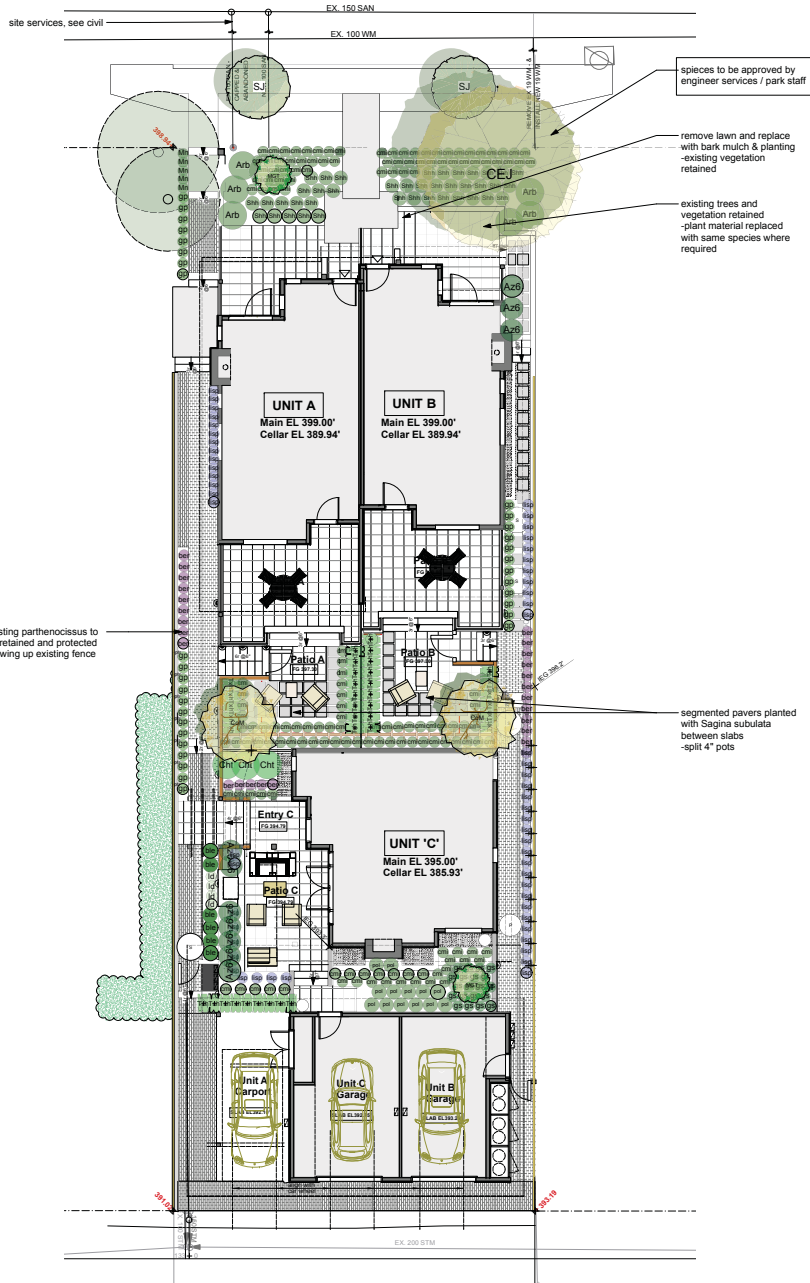
STC

KH

Elevations & Sections - Garage

DP16

REV No.



Trees:



Magnolia Galaxy



Syringa japonica



Cornus mas

Groundcovers:



Bergenia cordifolia



Carex morrowii 'Ice Dance'



Gaultheria shallon



Liriope spicata



Mahonia nervosa

PLANT LIST - ONSITE				
ID	Latin Name	Common Name	Quantity	Scheduled Size
TREES (DECIDUOUS & CONIFEROUS)				
CEJ	Carodaphnum japonicum	Katsura Tree	1	6cm cal.
Com	Cornus mas	Cornelian Cherry	2	#20
MG	Magnolia grandiflora "Teddy Bear"	Teddy Bear Magnolia	3	2.75m
SJ	Styrax japonicus	Japanese Snowbell Tree	2	5cm cal.
SHRUBS				
Arb	Arbutus unedo "Compacta"	Compact Strawberry Bush	6	#3 pot
Cht	Choisya ternata	Mexican Orange Blossom	3	#5 pot
ap	Gaultheria procumbens	Creeping Wintergreen	33	#1 pot
as	Gaultheria shallon	Salal	20	#1 pot
Mn	Mahonia nervosa	Dwarf Oregon Grape	5	#3 pot
Azb	Rhododendron ramapo	Rhododendron Ramapo	10	#2 pot
Sh	Sarcococca hookeriana var. humilis	Sweet Box	40	#3 pot
Tsh	Taxus x media "Hicksii"	Hick's Yew	37	4" ht 848
PERENNIALS & GROUNDCOVERS				
ber	Bergenia cordifolia "Purpurea"	Heartleaf Bergenia	26	#1 pot
ble	Blechnum spicant	Deer Fern	6	#1 pot
ld	Lupinus dentata	Biological Lupinus	4	#1 pot
lsp	Liriope spicata	Creeping Lily Turf	57	#1 pot
pol	Polystichum munitum	Western sword fern	13	#1 pot
ORNAMENTAL GRASSES & BAMBOOS				
cmi	Carex morrowii "Ice Dance"	Ice Dance Japanese Sedge	154	#1 pot
VINES				
ptr	Parthenocissus tricuspidata	Boston Ivy	20	#1 pot

PLANT LIST - OFFSITE				
ID	Latin Name	Common Name	Quantity	Scheduled Size
TREES (DECIDUOUS & CONIFEROUS)				
SJ	Styrax japonicus	Japanese Snowbell Tree	2	5cm cal.
SHRUBS				
Azb	Rhododendron ramapo	Rhododendron Ramapo	13	#5 pot
PERENNIALS & GROUNDCOVERS				
lsp	Liriope spicata	Creeping Lily Turf	50	#1 pot
ORNAMENTAL GRASSES & BAMBOOS				
VINES				

Planting Notes

- All materials and execution of landscape works shall conform to the CLS/B.C.N.L.A. Landscape standard. Refer to written specifications for complete landscape documentation.
- The Landscape Contractor shall ensure that the on-site planting medium/soil meets the specification & recommendations of the soil analysis taken at the time of Substantial Completion. All recommendations of the soil analysis shall be executed prior to Final Acceptance of the landscape works by the Consultant and the municipal authorities.
- Minimum planting medium depths:
 - lawn - 6"/150mm
 - groundcover - 12"/300 mm
 - shrubs - 18"/450 mm
 - trees - 24"/300 mm (around & beneath rootball)
- All plant material shall meet minimum size requirements as indicated in plant list. Quality of plant material and grading of site to conform to the B.C.N.T.A. standard for container grown stock.
- All plant material to be supplied on the job site must be obtained from a nursery participating in the BCLNA Phytophthora ramorum Certification Program. Plant material provided by the contractor found to be carrying Pr will be removed, disposed of and replaced at the contractor's expense.
- Tree Protection Measures

Where construction, demolition, or excavation is to take place within 4m of the drip line of a tree to be retained, a protection barrier at least 4'0" (1.2m) in height must be installed around the tree or group of trees to be retained. The diameter of the barrier shall be no smaller than the drip line of the tree(s). The barrier must be constructed of snow fencing staked every 3' (1m), plywood sheets fastened to wooden stakes or of another form approved by the municipality. The barrier shall be constructed prior to any site work and remain intact until all construction is complete. The barrier shall clearly display all-weather signage indicating that the area is a protected zone. Any work which must be done within the protection zone is to be done by hand. No burning is to take place close enough for the flames or heat to damage any tree to be retained.



FORMA DESIGN INC.
www.formadesign.ca

209-828 Harbourside Dr.
North Vancouver
British Columbia
Canada V7P 3P9
tel 604-886-9193
fax 604-986-7325

Revisions:

- Issued for Client Review - January 19, 2018
- Submitted for DP - November, 2018
- Revised for DP - June 24, 2019
- Issued for DP - April, October 21, 2019

Consultants:

Halex Architecture
Creus Engineers



Project:

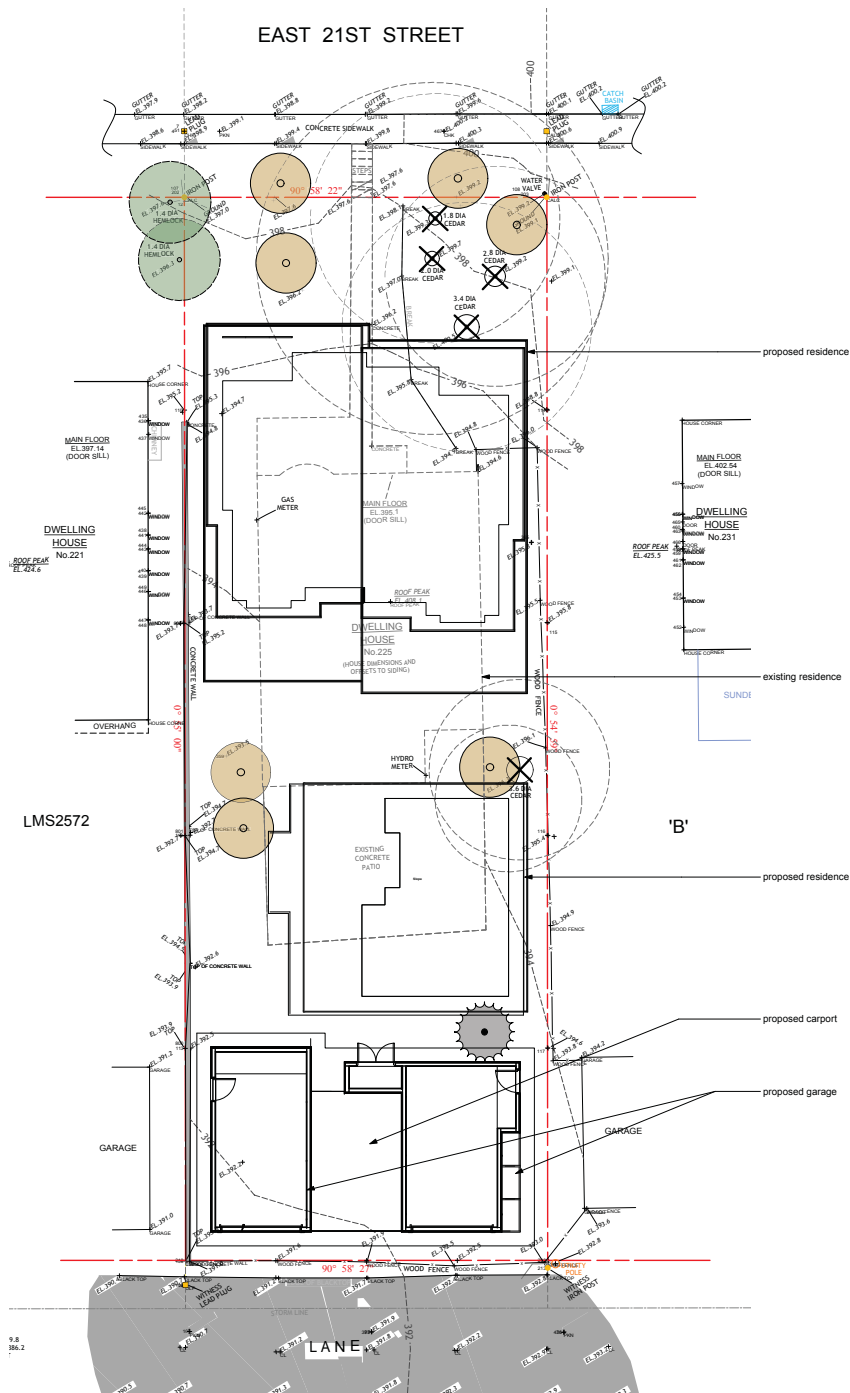
228 East 21st St.
North Vancouver, BC

Title:

Planting Plan

Scale: 1/8"=1'-0"

Project No: 17.045
Sheet No: L2 of 4



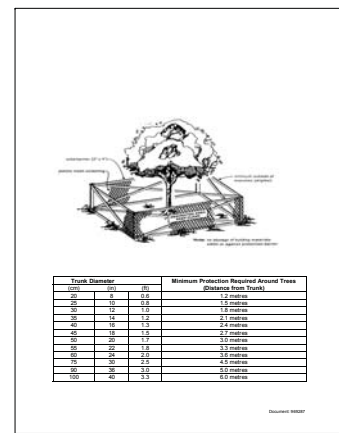
Tree removal in quantity of total 7
Onsite: 5
Offsite: 0

Compensation plan: Total 10
Onsite: 6
Offsite: 2

REFER TO ARBOURIST REPORT FOR DETAILS

LEGEND

- tree to be removed
- trees to be retained
- proposed replacement trees:
- deciduous
- coniferous
- tree protection fence, DNV standard
- environmental fence, DNV standard
- environmental setback
- 10m wildfire buffer



Tree Protection Detail



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259-828 Harbourside Dr.
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3. Revised for DP - June 24, 2019
4. Issued for DP - October 21, 2019

Consultants:
 Halex Architecture
 Creus Engineers

Project:
 228 East 21st St.
 North Vancouver, BC

Title:
 Tree Management Plan

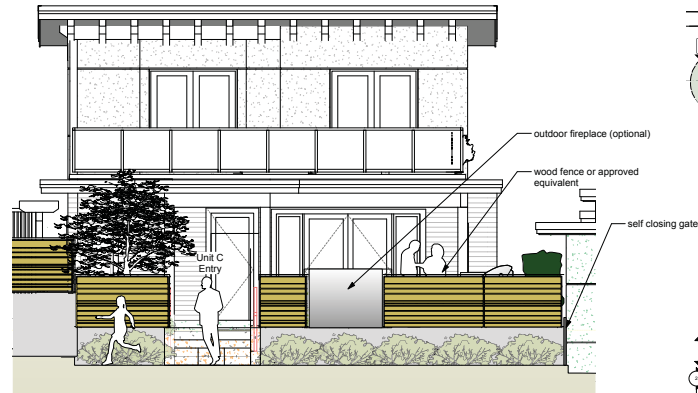
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 1/8"=1'-0"

Project No:
 17.045

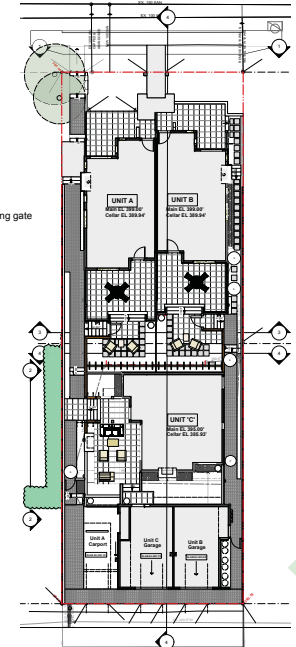
Sheet No:
 L3 of 4



1 Front Entry Elevation
Scale: 1/4" = 1'-0"



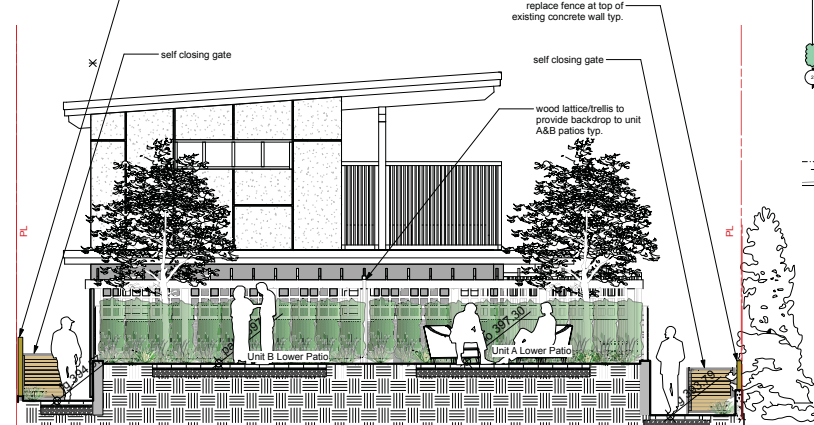
2 Section/Elevation
Scale: 1/4" = 1'-0"
proposed 4' ht wood fence at PL



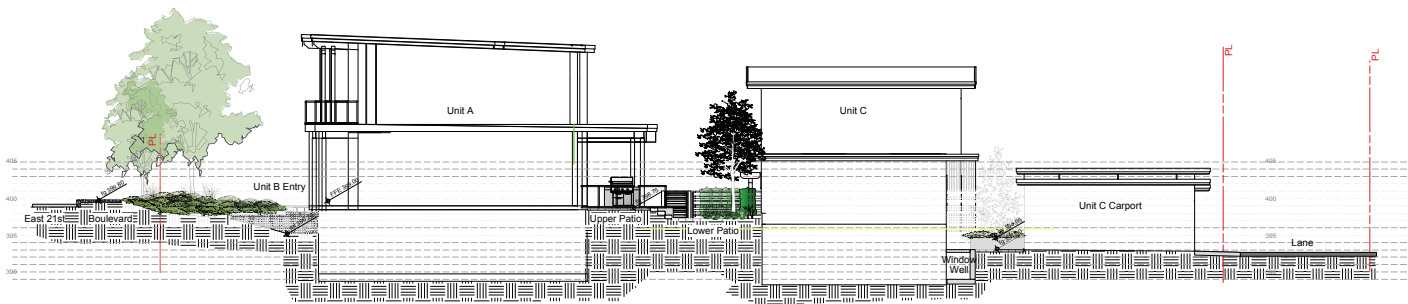
Keyplan
Scale: NTS



3 Unit A & B Elevation
Scale: 1/4" = 1'-0"



4 Unit C Elevation
Scale: 1/4" = 1'-0"



5 Site Section
Scale: 1/8" = 1'-0"



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www.formadesign.ca

209-828 Harbourside Dr.
North Vancouver
British Columbia
Canada V7P 3P9
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fax 604 986 7329

Revisions:
1. Issued for Client Review - January 19, 2018
2. Submitted for DP November, 2018
3. Revised for DP - June 24, 2019
4. Issued for DP final, October 23, 2019

Consultants:
Halex Architecture
Creus Engineers
Woodward

Project:
229 East 21st St.
North Vancouver, BC

Title:

Sections Plan

Scale:
as shown

Project No:
17.045

Sheet No:
L4 of 4



HALEXARCHITECTURE

346 E 20th St
North Vancouver, BC
V7L 3A7

604 983 9909

WEB
www.kgharchitecture.com

July 05, 2019

Report on Developer Information Session
225 E 21st St, North Vancouver

Index:

P 1-2	Summary
P 2	Feedback and Commentary
P 3-4	Appendix A -DIS attendees (sign in)
P 5-6	Appendix B -Comment sheets

Meeting Date: Thurs June 27, 2019 7:00-9:00 pm
Present: James Fox -Wedgewood Ventures (Developer)

Kent Halex, Halex Architecture
Mike Friesen -City of North Vancouver Planning Dept
Krister Naab -City of North Vancouver Engineering Dept
Members of the general public (See appendix A)

Summary:

The meeting began at 7:00 pm, ran until 8:45 pm and was attended by 2 members of the public. (See Appendix A) There was 1 comment form filled out.

Discussions revealed that the two attendees were from the 200 block of east 21st St, with only one household from the 200 Block of E 9th.

The project was represented at the meeting by a full display of proposed plans, elevations, sections and perspectives. These displayed drawings included those that were submitted to the City for Development Permit and an additional set displaying changes that have been made post Advisory Design Panel.

No formal presentation was made. The applicants answered questions posed to them by the public and engaged in conversation re the proposal.

Below is a general summary of the support and feedback as interpreted from the submitted comment forms during the DIS.

	Yes	No	Didn't respond	Total
1. Support	1	0	1	2

2. Favourable aspects

-Liked the design the most about the proposed project

3. Concerns and comments

-None

Overall feedback and commentary

The overall verbal feedback was overwhelmingly positive.

There were no concerns mentioned

Conclusions

In our experience relatively low neighbourhood turnout is usually indicative of low levels of neighbourhood concern for projects that conform to the OCP and municipal bylaws. There were no issues that arose that had not been mentioned by the ADP. These comments along with those of the ADP are addressed in the applicants formal response to the City's ADP resolution summary.



Kent Halex -Principal

Halex Architecture

From: Richard and Patricia <>
Sent: October-18-20 12:46 PM
To: Submissions; David Johnson
Subject: 225 E 21st Street

The City of North Vancouver with the rest of the Country and the rest of the world is in a health emergency. The proven way to slow down the spread is physical distancing and yet the City and Developers want to jam and cram more people in buildings. The water restrictions have been posted. The Hospital, Medical, Police and other services are overwhelmed with wait times placing any one in need on more physical and mental harm. The pretense of affordable housing is untrue or affordable for whom? The pretense that more buildings hence more income keeps taxes down is UNTRUE. Being "green" but limited parking is NOT TRUE. This proposed redevelopment is unnesseccasy.

Patricia Walden
626 W 23rd Street
North Vancouver BC

NOTICE OF PUBLIC HEARING (WAIVED)

WHO: Halex Architecture
WHAT: Zoning Bylaw, 1995, No. 6700,
 Amendment Bylaw, 2020, No. 8796
WHERE: **225 East 21st Street**
WHEN: Monday, October 26, 2020 at 5:30 pm
HOW: View the meeting online at
cnv.org/LiveStreaming



Notice is hereby given that Council will consider:

Zoning Amendment Bylaw, 2020, No. 8796
 to rezone the subject property from a Two-Unit Residential 1 (RT-1) Zone to a Comprehensive Development 727 (CD-727) Zone to permit a total of 3 dwelling units consisting of a duplex plus an infill building. The permitted density is 0.5 times the lot area (FSR) and the permitted maximum building height is 33.1 feet (10.1 metres). The proposed development includes 3 parking spaces accessed from the lane and does not propose secondary suites.

As City Hall remains closed to the public, the Regular Council Meeting 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 be heard by email or written submission. To ensure all submissions are available for Council at the meeting, certain deadlines have been implemented.

For email submissions (preferred):
 include your name and address and send to input@cnv.org **no later than 12:00 noon on Monday, October 26, 2020.**

For written submissions:
 include your name and address and mail or deposit into a drop-box at City Hall **no later than 4:00 pm on Friday, October 23, 2020.** Written submissions are subject to a 24-hour quarantine period before being opened due to COVID-19.

No further information or submissions can be considered by Council after third reading of the bylaw.

The proposed Zoning Amendment Bylaw and background material will be available for viewing online at cnv.org/PublicHearings on Friday, October 16, 2020.

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

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8796

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, 2020, No. 8796**” (Kent Halex, Halex Architecture, 225 East 21st Street, CD-727).
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-727 (Comprehensive Development 727 Zone):

Lots	Block	D.L.	Plan	
8	8	549	1028	from RT-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-726 Comprehensive Development 726 Zone”:

“CD-727 Comprehensive Development 727 Zone”

- B. Adding the following to Section 1101, thereof, after the “CD-726 Comprehensive Development 726 Zone”:

“CD-727 Comprehensive Development 727 Zone”

In the CD-727 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 RT-1 Zone, except that:

- (1) Two Principal Buildings shall be permitted on one Lot;
- (2) Three primary dwelling units shall be permitted on the Lot;
- (3) The Principal Buildings shall not exceed a combined Gross Floor Area of 0.50 times the lot area;
- (4) The Principal Buildings shall not exceed a Lot Coverage of 40 percent;
- (5) Principal Buildings shall be sited as in the RT-1 zone, except that:
 - (a) The Principal Buildings shall be sited not less than 11 metres (36.25 feet) from the rear lot line;

- (6) Section 509 (4) (c) shall not apply to the southernmost Principal Building;
- (7) Accessory Buildings shall be sited as per section 514 (5) (c), except that:
 - (a) Accessory Buildings shall not be sited less than 2.2 metres (7.5 feet) from a Principal Building.

READ a first time on the 5th day of October, 2020.

READ a second time on the 5th day of October, 2020.

RECEIVED APPROVAL FROM THE
MINISTRY OF TRANSPORTATION ON THE
<> DAY OF <>, 2020.




READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK



 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: David Johnson, Development Planner

Subject: REZONING APPLICATION: 1348 FORBES AVENUE (REZA NOBARI / DISA DESIGN GROUP)

Date: September 16, 2020 File No: 08-3400-20-0016/1

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

RECOMMENDATION

PURSUANT to the report of the Development Planner, dated September 16, 2020, entitled "Rezoning Application: 1348 Forbes Avenue (Reza Nobari / Disa Design Group)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8794" (Reza Nobari / Disa Design Group, 1348 Forbes Avenue, RS-2) be considered and the Public Hearing be waived;

THAT Development Variance Permit No. PLN2020-00016 (Reza Nobari / Disa Design Group) be considered for issuance under Section 498 of the *Local Government Act* and the Public Meeting be waived;

THAT the community benefits listed in the report be secured through agreements at the applicant's expense and to the satisfaction of staff;

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

ATTACHMENTS

1. Context Map (Doc #[1938855](#))
2. Project Summary Sheet (Doc #[1941862](#))
3. Architectural and Landscape Plans, dated September 30, 2019 (Doc #[1946613](#))
4. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8794" (Doc #[1936859](#))
5. Development Variance Permit (Doc #[1941682](#))

PURPOSE

The purpose of this report is to present, for Council's consideration, a Development Application to rezone 1348 Forbes Avenue (Attachment #1) from One-Unit Residential 1 (RS-1) to One Unit Residential 2 (RS-2) to support the subdivision of the existing one lot into two, with the intent of developing one Single Detached Dwelling with a Secondary Suite and detached garage on each lot.

BACKGROUND

<i>Applicant:</i>	Reza Narobi
<i>Architect:</i>	Disa Design Group
<i>Official Community Plan Designation:</i>	Residential Level 1 (R1)
<i>Existing Zoning:</i>	One Unit Residential 1 (RS-1)
<i>Applicable Guidelines:</i>	None

DISCUSSION

Project Description

The subject site is a single residential lot approximately 18.3 metres (60.0 feet) wide by 42.6 metres (140.0 feet) deep, with slopes mainly along the front of the property down to Forbes Avenue and from the front of the property to the rear.

The proposal is for the lot to be subdivided into two 9.14 metre (30 foot) wide lots for the purpose of building a new single detached dwelling with a secondary suite and a detached garage at the rear of each lot.

The scale of the proposal is in keeping with the neighbourhood's character while implementing a modern building appearance.

Site Context and Surrounding Use

The subject site is located at the southeast corner of Forbes Avenue and West 14th Street in the Mahon neighbourhood of the City (Attachment #1). The area consists primarily of one and two level, single detached homes on lots ranging in width from approximately 9.14 metres (30 feet) to 18.3 metres (60 feet).

The area has seen some recent redevelopment with the property across from Forbes Avenue (1345 Forbes Avenue) being subdivided in the manner similar as this proposal, as well as a recent rezoning of 1420 Forbes Avenue to the north (across West 14th Street).

The subject site is one block north of a transit corridor along West Keith Road.

The buildings and uses immediately surrounding the subject site are described in Table 1 below.

Table 1. Surrounding Uses

Direction	Address	Description	Zoning
North Across West 14 th Street	1420 Forbes Avenue	Vacant lot (approved for a two-lot subdivision with a new Single Detached Dwelling with Secondary Suites on each lot)	RS-2
South Across rear lane	1308 Forbes Avenue and 462 West Keith Road	Single two level Duplex with Accessory Dwelling Units in each Duplex unit	RT-1
East	457 West 14 th Street	One level Single Detached Dwelling	RS-1
West Across Forbes Avenue	1345 Forbes Avenue	Two level Single Detached Dwelling with Secondary Suite	RS-2

PLANNING ANALYSIS

Policy Context

2014 Official Community Plan

The land use designation of the subject site is Residential Level One (R1) in 'Schedule A' of the Official Community Plan (OCP). The designation allows for ground-orientated housing with non-strata accessory uses. Detached single family dwellings with secondary suites/coach houses are supported in this designation.

The application is in keeping with the following goals and objectives of the Official Community Plan:

- 1.1.1 Plan for growth in the City's population, dwelling units and employment in keeping with the projections in Metro Vancouver's Regional Growth Strategy;
- 1.1.2 Align growth with the development of community amenities and infrastructure;
- 1.2.1 Ensure the location, density design and durability of developments and their infrastructure are informed by the best available science on climate change impacts;
- 1.3.1 Ensure that new development is compatible with the established urban form of the City, reflecting the primacy of the Lonsdale Regional City centre and the transition through mid- and low-rise buildings to lower-density residential neighbourhoods;

- 1.3.5 Encourage design excellence in developments through carefully considered, high quality architecture and landscaping, with varied designs which are interesting, sensitive and reflective of their surroundings; and
- 1.5.1 Provide opportunities for a range of housing densities, diversified in type, size and location.

The proposal as presented will not require an amendment to the OCP.

Zoning Bylaw 1995, No. 6700

The property is currently zoned One-Unit Residential 1 (RS-1) and supports single detached homes on lots no less than 10 metres (32.8 feet) wide. It also allows the option of secondary dwellings within the primary building.

The proposal as presented will require a Zoning Bylaw Amendment (Attachment #4) to support the proposal by rezoning the property from One-Unit Residential 1 (RS-1) Zone to One-Unit Residential 2 (RS-2) Zone to permit the proposed subdivision from one 18.3 metre (60 foot) wide lot, into two 9.14 metre (30 foot) wide lots.

A Development Variance Permit (Attachment #5) will also be required to permit exterior side lot line setback relaxations to the primary and accessory buildings that face Forbes Avenue on the proposed Lot A. The setback relaxation for the primary building allows it to be located no less than 1.22 metres (4.0 feet) from the exterior property line instead of the required 1.52 metres (5.0 feet). The setback relaxation from the exterior property line for the proposed accessory building allows a setback of no less than 2.18 metres (7.17 feet) instead of the required 3.05 metres (10 feet). Both variances are considered minor and will use the site efficiently to improve the Forbes Avenue street front and the private amenity space.

A synopsis of the proposal can be seen in Attachment #2.

COMMUNITY CONSULTATION

The applicant held their Development Information Session (DIS) on February 20, 2020 where three people attended. Most of the 20 comments received were in support of the proposal, citing the design and a more affordable option of home ownership. Concern from one person was about the retention of on-site trees. In reviewing this, one tree in the front yard has a good retention value and would add value to the project. Other on-site trees are within the development footprint area and would not be salvageable. The applicant is proposing in their landscaping plan to add several new trees to their plans.

The neighbourhood is not listed as a Development Permit area, nor does it have any design guidelines to be followed. As the main use is for Single Detached Dwellings, it is not subject to review of the Advisory Design Panel.

Given the nature of the proposed subdivision, recent redevelopment of a similar typology on adjacent lots and the public feedback is generally supportive, staff is recommending the Public Hearing be waived. Should Council wish to hold the Public

Hearing, the second active clause of the resolution should be substituted with the following:

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8794" (Reza Nobari / Disa Design Group, 1348 Forbes Avenue, RS-2) be considered and referred to a Public Hearing;

Should the Public Hearing not be waived, the third active clause of the resolution should be substituted with the following:

THAT Development Variance Permit No. PLN2020-00016 (Reza Nobari / Disa Design Group) be considered for issuance under Section 498 of the *Local Government Act* and referred to a Public Meeting;

COMMUNITY BENEFITS

The proposal will provide off-site and on-site improvements such as:

- Wider sidewalks with grassed and treed boulevards on both street fronts;
- Off-site storm main upgrades and extensions to service the lot;
- Fresh pavement of full width of lane with speed bump closer to Forbes Avenue with lane throat improvements;
- Corner improvements to enhance the pedestrian experience in the neighbourhood; and
- Tree retention at the front of the property.

These community benefits will be secured by a Development Agreement and a Servicing Agreement, including Section 219 Covenants and statutory right of way, which will be executed by the applicant prior to final adoption of the rezoning bylaw and subsequently registered on title to the subject lands with priority given to the City over all financial charges.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

This project supports the Strategic Plan vision and priority to be a City for People by using an existing site to provide a variety of dwelling types within a lower density neighbourhood.

CONCLUSION

The proposal represents good planning as it is utilizing the potential of the existing property by adding a variety of dwelling types in a manner that is consistent with the existing character of the neighbourhood. The required off-site works to be undertaken on both street fronts will enhance the pedestrian experience of the area.

RESPECTFULLY SUBMITTED:



David Johnson
Development Planner

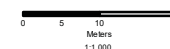
Legend

-  Subject Site
 Legal_Parcels

Aerial 2019

RGB

-  Red: Band_1
 Green: Band_2
 Blue: Band_3



DISCLAIMER

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

GIS Division, Information Technology,
City of North Vancouver

city
of north
vancouver





PROJECT SUMMARY SHEET

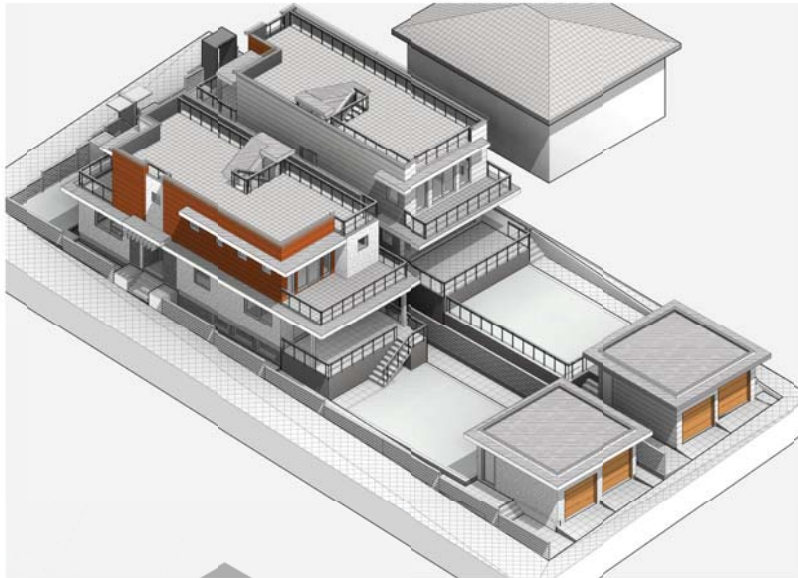
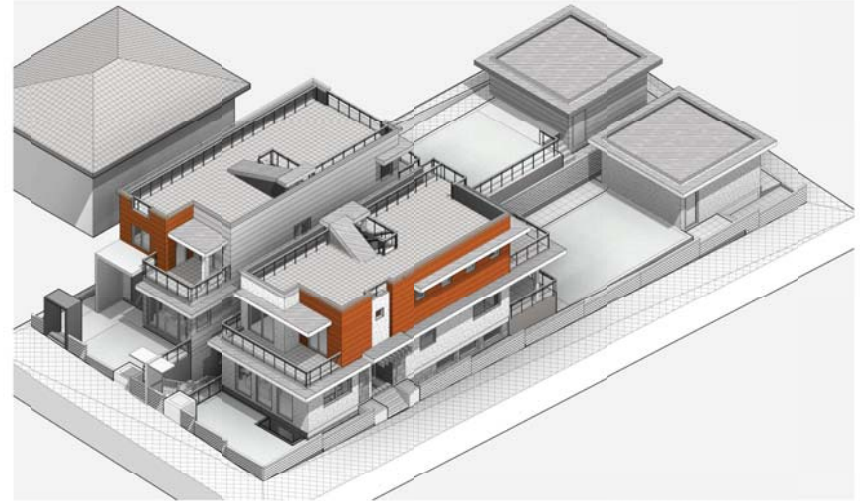
DEVELOPMENT APPLICATION

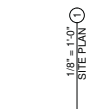
1348 Forbes Avenue



SITE CHARACTERISTICS			
OCP Designation	Residential Level 1 (R1)		
Existing Zoning	One-Unit Residential 1 (RS-1)		
Site Area	Current	Proposed West Lot (Lot A)	Proposed East Lot (Lot B)
	779.7 sq. m (8,393 sq. ft.)	389.87 sq. m (4,196 sq. ft.)	389.87 sq. m (4,196 sq. ft.)
	RS-2 Zone	Proposed West Lot (Lot A)	Proposed East Lot (Lot B)
Lot Width	10.0 m (32.8 ft.) (max.)	9.14 m (30.0 ft.)	9.14 m (30.0 ft.)
Floor Area (max.)	326.8 m ² (3,518 ft ²)	194.9m ² (2,098 ft ²)	194.9m ² (2,098 ft ²)
Lot Coverage	30% (max.)	26.0%	25.6%
Building Height	10.1 m (33.1 feet)	8.26 m (27.1 feet)	8.47 m (27.8 feet)
Vehicle Parking	1 for a Single Detached Dwelling and 1 for a Secondary Suite	2 Stalls	2 Stalls
Setbacks (Primary Building)	RS-2 Zone (min.)	Proposed West Lot (Lot A)	Proposed East Lot (Lot B)
Forbes Avenue (exterior)	1.52 m (5.0 feet)	1.22 m (4.0 feet)	N/A
West 14th Street	4.57 m (15.0 feet)	4.57 m (15.0 feet)	4.57 m (15.0 feet)
South (Lane)	14.92 m (48.96 feet)	22.17 m (72.75 feet)	22.17 m (72.75 feet)
West	1.22 m (4.0 feet)	N/A	1.28 m (4.19 feet)
East	1.22 m (4.0 feet)	1.22 m (4.0 feet)	1.27 m (4.17 feet)
Setbacks (Accessory Building)	RS-2 Zone (min.)	Proposed West Lot (Lot A)	Proposed East Lot (Lot B)
Forbes Avenue (exterior)	3.05 m (10.0 feet).	2.18 m (7.17 feet)	N/A
South (Lane)	1.22 m (4.0 feet)	1.26 m (4.16 feet)	1.22 m (4.0 feet)
West	0.61 m (2.0 feet)	N/A	1.84 m (6.1 feet)
East	0.61 m (2.0 feet)	0.65 m (2.15 feet)	0.92 m (3.03 feet)

1348 FORBES SUBDIVISION PROPOSAL





LOT A

LOT B

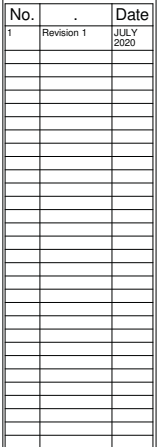
WEST 14TH STREET

[illegible]

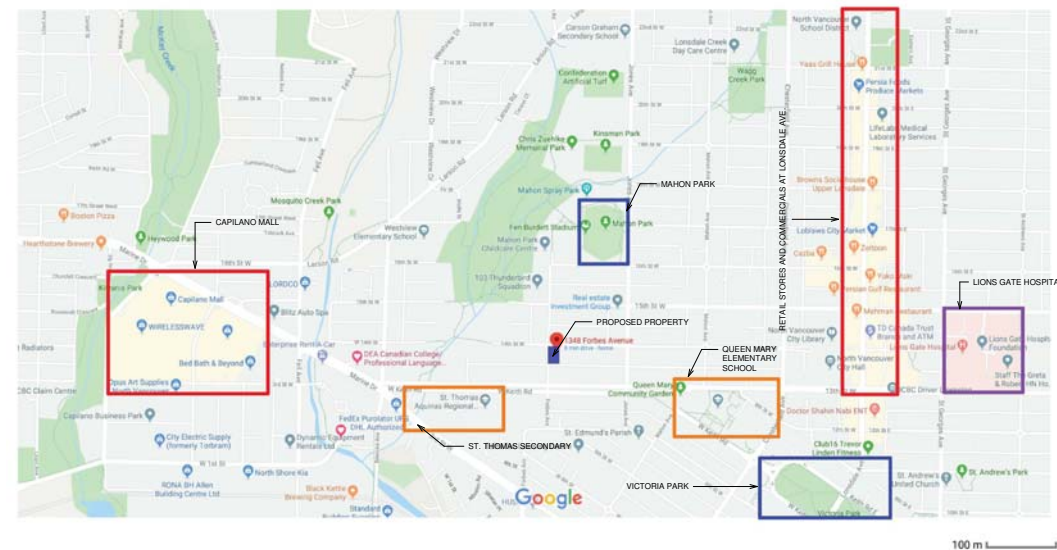
LANE

PLANT SCHEDULE		
NO	BOTANIC NAME	COMMON NAME
1	THUJA OCCIDENTALIS	CEDAR 1-5 FT
2	PHORMIUM TENUIFOLIUM	NEW SELAND FLAX
3	PITTSOPORIUM TENUIFOLIUM	PITTSOPORIUM (SILVER SHEEN)
4	ROSA GRANDIFLORA (CHERISH)	ROSE (CHERISH)
5	ROSA GRANDIFLORA (HONEY DION)	ROSE (HONEY DION)
6	ROSA HYBRID	BUSH ROSE (RED)
7	MAGNOLIA GRANDIFLORA	EVERGREEN MAGNOLIA
8	-	HANGING SEASONAL FLOOR TABLE
9	TAXUS MEDIA HICKSLI	HICKS YEW
10	HOSTA CLAUUSA	HOSTA
11	HOSTA LAEVIGATA	HOSTA
12	-	RAIN GARDEN SHRUBS AND PERNNIALS
13	RHODODENDRON SPP	RHODODENDRON ROSE TREE
14	RHODODENDRON ARBOREUM	TREE RHODODENDRON
15	RHODODENDRON HISTRUM	ALPINE ROSE

ALL EXISTING TREES TO BE REMOVED

[illegible]

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PROJECT:	
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1348 Forbes
Avenue.

DRAWN BY: A.A T.N

CHECKED BY: A.A.T.N

SCALE:

DATE: 2019-09-30

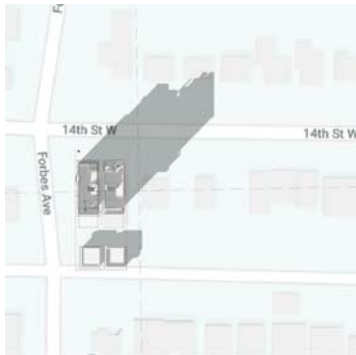
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STREETSCAPE

SHEET NO:

P-1.1

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[illegible]

PROJECT:

1348 Forbes
Avenue.

DRAWN BY: A.A T.N

CHECKED BY: A.A T.N

SCALE:

DATE: 2019-09-30

TITLE:

SHADOW
STUDY

SHEET NO:

P-1.2

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1348 FORBES LOT-A

APPLICATION SUMMARY - PROPOSED DEVELOPMENT - 1348 forbes- LOT A

ADDRESS: 1348 Forbes Ave
North Vancouver, BC V7M 2Y1
PROPOSED: ONE SINGLE FAMILY AND A LEGAL SUITE
LEGAL DESCRIPTION: LOT:1 Block: 65 DL: 271 Plan: 750
LOT 1
BLOCK 2
DISTRICT LOT 547
PLAN 9285
PID 015-142-396
EXISTING ZONING: RS-1
PROPOSED ZONING: RS-2
OCP DESIGNATION: Residential Level 1 (Low Density)
UNCONSOLIDATED LOTS AREA: 8393 SQ.FT. 779.73 sq.m.
PROPOSED LOT SUBDIVISION 4196.5 SQ.FT. 389.87 sq.m.

UNITS=IMPERIAL	PERMITTED /REQUIRED BASED ON RS-2	PROPOSED
MAX. RIDGE LEVEL	189.09	183.21
MAX. TOP PLATE LEVEL	182.29	181.17
FSR : LESSER OF (.5XLOT AREA) or(0.3 lot area+1000sqft)	2098.25	2073
LOT COVERAGE(.3XLOT AREA=MAIN BLDG.) NOT MORE THAN 40% TOTAL	1678.6	1091.09
FRONT YARD	15 FT.	15
REAR YARD	48.55 FT.(0.35XLOT DEPTH)	72.67
SIDE YARDS	5 FT.	4.17,4.4
ACCESSORY BUILDING (0.1lot area if <600sqft)	419.65	418
PARKING	2 STALLS	2 STALLS

A(NE)	157.70	158.65	FRONT
B(WW)	159.60		
C(SW)	154.30	152.25	REAR
D(SE)	150.00		

156.09	REFERENCE
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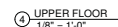
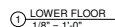
MIN. ALLOWED MAIN FLOOR LEVEL	158.59	159	PROPOSED
MAX. ALLOWED TOP PLATE LEVEL	182.29	181.17	PROPOSED
MAX. ALLOWED RIDGE LEVEL	189.09	183.21	PROPOSED

NAME	AREA	FAR	
UPPER FLOOR	988	988	INCLUDED
MAIN FLOOR	1085	1085	INCLUDED
GARAGE	410	0	EXCLUDED
LOWER FLOOR	1112	0	EXCLUDED
SECONDARY SUITE	953	0	IN LOWER- EXCLUDED
GROSS BUILDING AREA	4348	2073	TOTAL FAR

PROJECT:

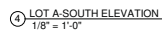
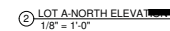
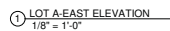
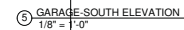
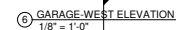
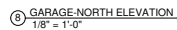
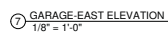
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9 GARAGE FLOOR PLAN
 1/8" = 1'-0"

The diagram is a detailed floor plan of a garage. It features a central rectangular area divided into two sections by a vertical line. The left section is labeled '15'-0" x 19'-0" and the right section is labeled '15'-0" x 19'-0". The overall width of the garage is 30'-0" (15'-0" + 15'-0"). The overall depth is 30'-0" (15'-0" + 15'-0"). The plan includes various structural details such as walls, doors, and windows, all dimensioned in feet and inches. A north arrow is located at the top center of the plan. The plan is titled '9 GARAGE FLOOR PLAN' with a scale of '1/8" = 1'-0" below it.

[illegible]

1348 Forbes
Avenue.-LOT A

DRAWN BY: A.A.T.N

CHECKED BY: A.A.T.N

SCALE: As indicated

DATE: 2019-09-30

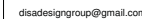
TITLE:

ELEVATIONS

SHEET NO:

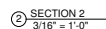
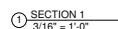
A-3.1

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PROJECT:

SHEET NO:

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1348 FORBES- LOT B

APPLICATION SUMMARY - PROPOSED DEVELOPMENT - 1348 Forbes- LOT B

1348 Forbes Ave
North Vancouver, BC V7M 2Y1

ADDRESS: ONE SINGLE FAMILY AND A LEGAL SUITE
PROPOSED: LOT:1 Block: 65 DL: 271 Plan: 750

LEGAL DESCRIPTION: LOT 1
BLOCK 2
DISTRIC LOT 547
PLAN 9285
PID 015-142-396

EXISTING ZONING: RS-1
PROPOSED ZONING: RS-2

OCF DESIGNATION: Residential Level 1 (Low Density)

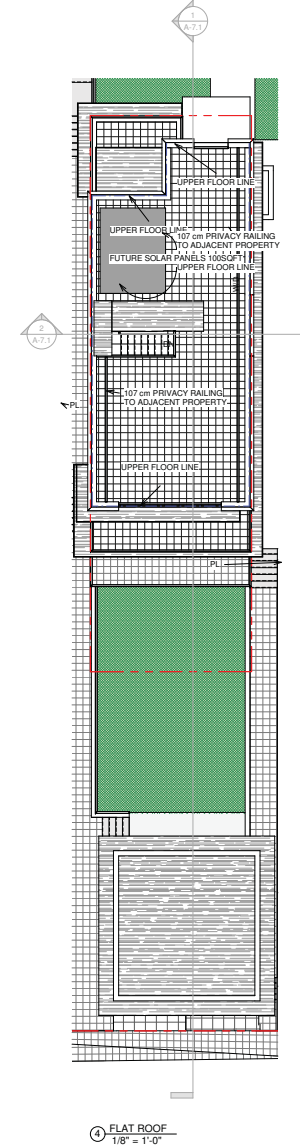
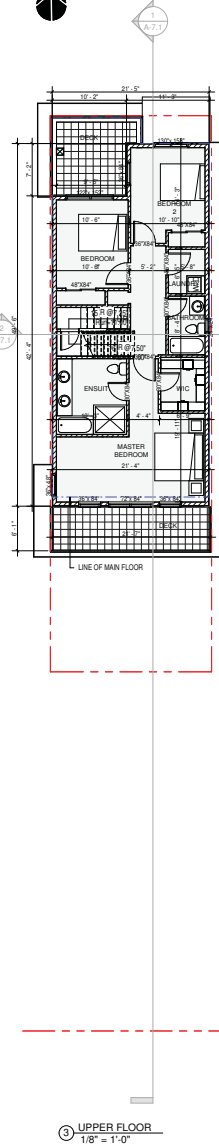
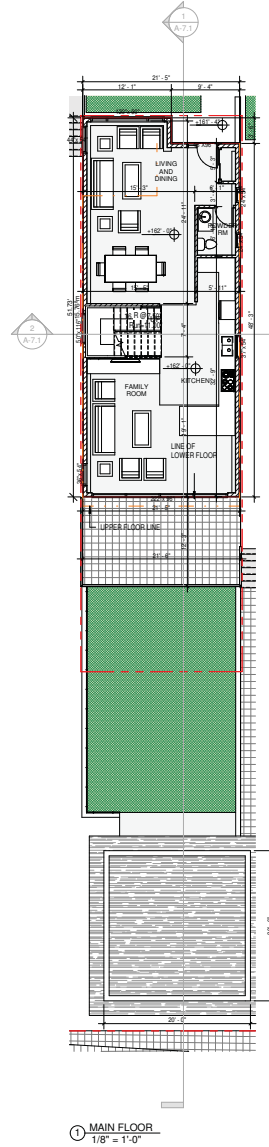
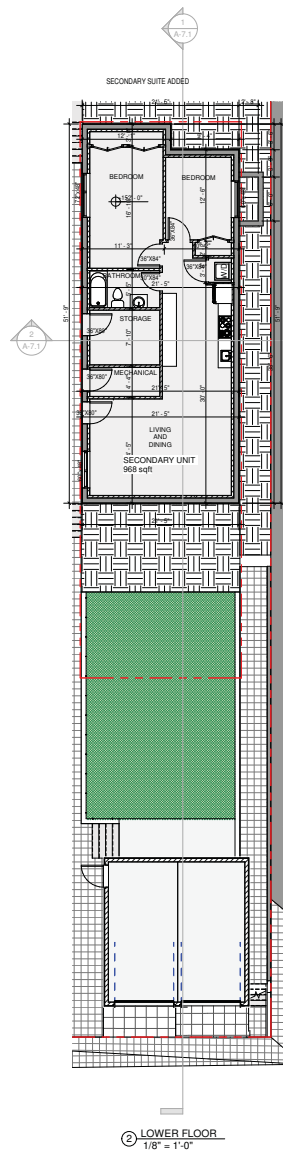
UNCONSOLIDATED LOTS AREA: 8393 SQ.FT. 779.73 sq.m.
PROPOSED LOT SUBDIVISION 4196.5 SQ.FT. 389.87 sq.m.

	PERMITTED /REQUIRED BASED ON RS-2	PROPOSED
MAX. RIDGE LEVEL	191.53	186.5
MAX. TOP PLATE LEVEL	184.73	184.17
FSR : LESSER OF (.5XLOT AREA) or(0.3 lot area+1000sqft)	2098.25	2098
LOT COVERAGE(.3XLOT AREA+MAIN BLDG) NOT MORE THAN 40%	1678.6	26.50%
FRONT YARD	15 FT.	15.17
REAR YARD	48.95 FT.(0.35XLOT DEPTH)	72.17
SIDE YARDS	5 FT.	4.17
ACCESSORY BUILDING (0.1lot area if <600sqft)	419.65	42m
PARKING	2 STALLS	2 STALLS

A(NW) 159.60	160.55	FRONT	158.53	REFERENCE
B(NE) 161.50				
C(SE) 156.50	155.5	REAR		
D(SW) 154.50				

MIN. ALLOWED MAIN FLOOR LEVEL	161.03	162.00	PROPOSED
MAX. ALLOWED TOP PLATE LEVEL	184.73	184.17	PROPOSED
MAX. ALLOWED RIDGE LEVEL	191.53	186.5	PROPOSED

NAME	AREA	FAR	
UPPER FLOOR	1005	1005	INCLUDED
MAIN FLOOR	1093	1093	INCLUDED
GARAGE	410	0	EXCLUDED
LOWER FLOOR INCL. SECONDARY SUITE	1075	0	EXCLUDED
SECONDARY SUITE	942	0	IN LOWER- EXCLUDED

[illegible]

PROJECT:	
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1348 Forbes
Avenue.-LOT B

DRAWN BY: T.N A.A

CHECKED BY: T.N A.A

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

DATE: 2019-09-30

TITLE:

FLOOR PLANS

SHEET NO:

A-5.1

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Figure 10 is a cross-section diagram of a garage structure. It shows a concrete foundation wall on the left and a brick wall on the right. The garage floor is at an elevation of 155.50'. The garage top plate is at an elevation of 154.50'. The garage roof ridge is at an elevation of 159.00'. A circular callout 'A' is located on the brick wall above the garage door.

Figure 1 is an elevation view of the garage structure. It shows a cross-section of the building with a sloped roof and a vertical wall. The roof is labeled '168.00" GARAGE ROOF RIDE'. The top plate is labeled '164.50" GARAGE TOP PLATE'. The floor is labeled '155.50" GARAGE FLOOR'. The structure is shown in a light blue color, and the ground is indicated by a dashed line.

166.00' GARAGE ROOF RIDGE
 164.50' GARAGE TOP PLATE
 155.50' GARAGE FLOOR

The drawing shows a side elevation of a garage. The roof is gabled, and the main wall is covered in horizontal siding. A door is visible on the left side of the main wall. A circular callout 'A' is located on the right side of the main wall. The drawing is set against a background of a grid pattern.

[illegible]

Architectural elevation drawing of a building facade. The drawing includes a vertical dimension line on the left with the following labels:

- 186.50' TOP OF ROOF
- 184.17' TOP PLATE
- 181.87' FLAT ROOF
- 180.50' TOP OF PLATE
- 179.39' UPPER FLOOR HEADER
- 172.00' UPPER FLOOR
- 170.00' MAIN FLOOR HEADER
- 162.00' MAIN FLOOR
- 159.00' LOWER FLOOR HEADER
- 158.39' REFERENCE

The building facade shows a flat roof, a main floor with a large window, and an upper floor with three smaller windows. A circular marker 'A' is located on the upper floor, and a circular marker 'B' is located on the main floor.

Architectural elevation drawing of a building facade. The drawing includes the following annotations:

- 186.50' TOP OF ROOF
- 184.17' TOP PLATE
- 181.67' FLAT ROOF
- 180.60' TOP OF PLATE
- 178.50' UPPER FLOOR HEADER
- 172.00' UPPER FLOOR
- 170.00' MAIN FLOOR HEADER
- 162.00' MAIN FLOOR
- 159.00' LOWER FLOOR HEADER
- 150.00' LOWER FLOOR

The drawing shows a two-story building with a flat roof. The upper floor has a large window and a door. The main floor has a large window and a door. The lower floor has a large window and a door. A vertical section cut is shown on the right side of the building, revealing the interior structure. The drawing is labeled "PL" at the top and bottom.

Architectural elevation drawing of a building facade. The drawing includes the following dimensions and callouts:

- 188.50' TOP OF ROOF
- 188.17' TOP PLATE
- 181.67' FLAT ROOF
- 180.50' TOP OF PLATE
- 179.50' UPPER FLOOR HEADER
- 172.00' UPPER FLOOR
- 170.00' MAIN FLOOR HEADER
- 162.00' MAIN FLOOR
- 159.00' LOWER FLOOR HEADER
- 150.00' LOWER FLOOR

The facade features a central entrance with a door labeled "48'3\" x 81\"". To the right of the entrance is a large window labeled "120'3\" x 80\"". Above the entrance is a smaller window labeled "58'3\" x 51\"". To the right of the upper floor is a window labeled "70'3\" x 81\"". The drawing also includes callouts A, B, C, and D.

Architectural drawing of the exterior elevation of the proposed building. The drawing includes the following dimensions and details:

- Vertical Dimensions (Left Side):**
 - 186.52' TOP OF ROOF
 - 184.17' TOP PLATE
 - 181.67' FLAT ROOF
 - 180.59' TOP OF PLATE
 - 179.07' TOP OF FLOOR HEADS
 - 172.00' UPPER FLOOR
 - 173.00' MAIN FLOOR HEADER
 - 162.00' MAIN FLOOR
 - 159.00' TOWER FLOOR HEADER
 - 158.33' REFERENCE
 - 163.00' TOWER FLOOR
- Horizontal Dimensions (Bottom):**
 - 52' x 110'
 - 44' x 54'
 - 72' x 48'
 - 36' x 80'
 - 34' x 80'
 - 34' x 80'
 - 60' x 48'
 - 36' x 84'
 - 36' x 48'
 - 36' x 54'
 - 36' x 84'
 - 100' x 150'
- Structural Details:**
 - 45 MIN FIRE RATED DOOR (indicated by arrows pointing to the bottom of the main structure)
 - 186.00' GARAGE ROOF RIDGE
 - 184.50' GARAGE TOP PLATE
 - 163.00' GARAGE FLOOR



A-6.1

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



PROJECT:	
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DRAWN BY: T.N A.A

CHECKED BY: T.N A.A

SCALE: $3/16" = 1'-0"$

DATE: 2019-09-30

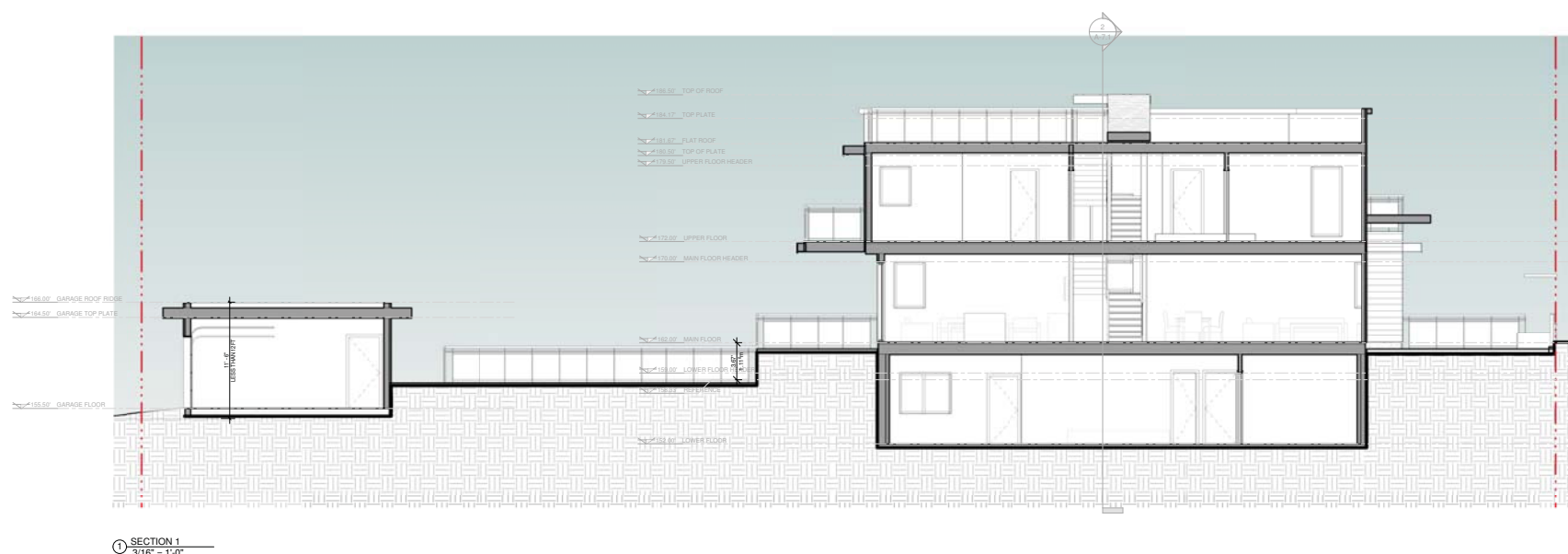
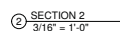
TITLE:

SECTIONS

SHEET NO:

A-7.1

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NOTICE OF PUBLIC HEARING (WAIVED) and PUBLIC MEETING (WAIVED)

WHO: Disa Design Group
WHAT: Zoning Bylaw, 1995, No. 6700,
 Amendment Bylaw, 2020, No. 8794
 Development Variance Permit
 No. PLN2020-00016
WHERE: 1348 Forbes Avenue
WHEN: Monday, October 26, 2020 at 5:30 pm
HOW: View the meeting online at
cnv.org/LiveStreaming



Notice is hereby given that Council will consider:

**Zoning Amendment Bylaw, 2020, No. 8794 and
 Development Variance Permit No. PLN2020-00016**

to rezone the subject property from a One-Unit Residential 1 (RS-1) Zone to a One-Unit Residential 2 (RS-2) Zone to subdivide the property into 2 lots and construct a single family house with a secondary suite on each lot, with 2 parking stalls at the rear of each lot accessed off the lane. Maximum floor area for each primary dwelling is 0.5 times the lot area. The Development Variance Permit is to support a relaxation to the building setback along Forbes Avenue for both the primary building and the detached garage.

As City Hall remains closed to the public, the Regular Council Meeting will be held electronically via "WebEx". All persons who believe their interest in property may be affected by the proposed bylaw or permit will be afforded an opportunity to be heard by email or written submission. To ensure all submissions are available for Council at the meeting, certain deadlines have been implemented.

For email submissions (preferred):
 include your name and address and send to input@cnv.org **no later than 12:00 noon on Monday, October 26, 2020.**

For written submissions:
 include your name and address and mail or deposit into a drop-box at City Hall **no later than 4:00 pm on Friday, October 23, 2020.** Written submissions are subject to a 24-hour quarantine period before being opened due to COVID-19.

No further information or submissions can be considered by Council after third reading of the bylaw.

The proposed Zoning Amendment Bylaw, Development Variance Permit and background material will be available for viewing online at cnv.org/PublicHearings on Friday, October 16, 2020.

Please direct any inquiries to David Johnson, Development Planner, at djohnson@cnv.org or 604-990-4219.

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8794

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, 2020, No. 8794” (Reza Nobari / Disa Design Group, 1348 Forbes Avenue, RS-2).**
2. Division VI: Zoning Map of Document “A” of “Zoning Bylaw, 1995, No. 6700” is hereby amended by reclassifying the following lots as henceforth being transferred, added to and forming part of RS-2 (One-Unit Residential 2 Zone):

Lot	Block	D.L.	Plan	
1	65	271	750	from RS-1

READ a first time on the 28th day of September, 2020.

READ a second time on the 28th day of September, 2020.

READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER
DEVELOPMENT VARIANCE PERMIT

Permit No. PLN2020-00016

File: 08-3400-20-0032/1

Issued to owner(s): **Antigoni Pantazis**

Respecting the lands located at **1348 Forbes Avenue**, North Vancouver, BC, legally described as:

LOT 1 BLOCK 65 DL 271 PLAN 750 PID: 015-142-396

(the “**Lands**”)

List of Attachments:

Schedule “A”: List of Plans

Authority to Issue:

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

Bylaws Supplemented or Varied:

2. The provisions of the City of North Vancouver “Zoning Bylaw, 1995, No. 6700” are hereby varied as follows:
 - A. Section 509(5)(d) be varied to permit the Principal Building to be sited no less than 1.22 meters (4.0 feet) from the Exterior Side Lot Line on Lot A (west lot);
 - B. Section 514(5)(b) be waived to permit the Accessory Building to be sited no less than 2.18 meters (7.17 feet) from the Exterior Side Lot Line on Lot A (west lot);
-

Special Terms and Conditions of Use:

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

General Terms and Conditions:

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

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

Authorized by Council: _____
Year / Month / Day

Linda C. Buchanan, Mayor

Karla Graham, City Clerk

Date Signed: _____
Year / Month / Day

Note: As required by Section 503 of the *Local Government Act*, the City of North Vancouver shall file a notice of this permit in the Land Title Office stating that the land described in this Permit is subject to Development Variance Permit No. PLN2020-00016.




Notice filed the _____ day of _____, 20____.

THIS IS NOT A BUILDING PERMIT

Schedule A
List of Plans – 1348 Forbes Avenue

Designer	Project Name	Sheet Description	Sheet No.	Sheet Date	CityDocs File Number
Disa Design Group Inc.	1348 Forbes Avenue Subdivision Proposal	Cover Sheet			1946217
Disa Design Group Inc.	1348 Forbes	Site Plan	A-1.1	July 2020	1946217
Disa Design Group Inc.	1348 Forbes	Landscaping	L-1.1	July 2020	1946217
Disa Design Group Inc.	1348 Forbes	Streetscape	P-1.1	July, 2020	1946217
Disa Design Group Inc.	1348 Forbes	Shadow Study	P-1.2	September 30, 2019	1946217
Disa Design Group Inc.	1348 Forbes – Lot A	Application Summary			1946217
Disa Design Group Inc.	1348 Forbes – Lot A	Floor Plans	A-2.1	June 2020	1946217
Disa Design Group Inc.	1348 Forbes – Lot A	Elevations	A-3.1	September 30, 2019	1946217
Disa Design Group Inc.	1348 Forbes – Lot A	Sections	A-4.1	September 30, 2019	1946217
Disa Design Group Inc.	1348 Forbes – Lot B	Application Summary			1946217
Disa Design Group Inc.	1348 Forbes – Lot B	Floor Plans	A-2.1	September 30, 2019	1946217
Disa Design Group Inc.	1348 Forbes – Lot B	Elevations	A-3.1	September 30, 2019	1946217
Disa Design Group Inc.	1348 Forbes – Lot B	Sections	A-4.1	September 30, 2019	1946217



 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Emily Macdonald, Planner 1

Subject: REZONING APPLICATION: 200 WEST ESPLANADE (FIRST CAPITAL
(200 WEST ESPLANADE) CORPORATION / RAFII ARCHITECTS INC.,
CD-729)

Date: October 14, 2020 File No: 08-3400-20-0004/1

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 14, 2020, entitled "Rezoning Application: 200 West Esplanade (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., CD-729)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8798" (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., 200 West Esplanade, CD-729) be considered and referred to a Public Hearing;

THAT "Housing Agreement Bylaw, 2020, No. 8799" (First Capital (200 West Esplanade) Corporation, 200 West Esplanade, CD-729, Rental Housing Commitments) be considered and referred to a Public Hearing;

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

THAT the community benefits listed in the report section "Density Bonus and Community Benefits" be secured through agreements at the applicant's expense and to the satisfaction of staff;

THAT the Mayor and City Clerk be authorized to sign the necessary documentation to give effect to this motion;

AND THAT the Mayor and City Clerk be authorized to sign the necessary documents to permit solar shades, which are permanently affixed to the proposed building, as an encroachment over City property.

ATTACHMENTS:

1. Context Map (Doc# [1951605](#))
2. Architectural and Landscape Plans, dated October 9, 2020 (Doc# [1966861](#))
3. Advisory Design Panel Resolution, dated September 18, 2019 (Doc# [1829939](#))
4. Integrated Transportation Committee Resolution, dated September 4, 2019 (Doc# [1825988](#))
5. Developer's Information Session Summary (Doc# [1946890](#))
6. Zoning Bylaw Amendment Bylaw No. 8798 (Doc# [1839822](#))
7. Housing Agreement Bylaw No. 8799 (Doc# [1840021](#))

PROJECT DESCRIPTION

The application proposes to rezone 200 West Esplanade to permit the development of a new nine-storey mixed-use building with commercial retail units at grade and market rental units above. A total FSR of 3.6 is proposed, which includes bonus density of 1.0 FSR, achieved through the provision of Market Rental and Mid-Market Rental Units, to be secured through a Housing Agreement. A total of 75 rental units are proposed, 8 of which would be provided as Mid-Market Units for the life of the building. The breakdown of units by type is as follows:

- | | | |
|--------------|----------|--|
| ▪ Studio: | 23 units | (39.7 to 48.8 sq. m. / 427 to 525 sq. ft.) |
| ▪ 1-bedroom: | 28 units | (49.1 to 64.2 sq. m. / 529 to 691 sq. ft.) |
| ▪ 2-bedroom: | 16 units | (74.2 to 86.8 sq. m. / 799 to 934 sq. ft.) |
| ▪ 3-bedroom: | 8 units | (102 to 104.8 sq. m. / 1098 to 1128 sq. ft.) |

In accordance with the Zoning Bylaw, 25% of the units will be designed to meet Adaptable Dwelling Unit Level 2 standards and the remaining units will be designed to meet Level 1 standards.

The proposal includes both indoor and outdoor amenity areas at Level 2. The indoor amenity area includes a gym and a separate lounge area. The outdoor amenity space is accessed directly through the lounge and includes planter beds, a play area, a gazebo and a tool shed. Washer and dryer units are provided in each suite. Storage lockers are provided on Level 0.

Commercial units are proposed along the ground floor (level 0) of the West Esplanade frontage as well as one commercial unit on level 1, accessed from Chesterfield, for a total of 813 square metres. This equates to an FSR of approximately 0.5.

The subject site is approximately 310 metres (a 2-4 minutes walking trip) to the SeaBus terminal. A parking reduction of 18 stalls is proposed. The required and proposed parking is summarized below.

Vehicle Parking Summary:

- Residential (75 rental units):
 - Bylaw Standard: 45 spaces, including 5 visitor spaces
 - Proposed: 22 spaces, including 2 visitor spaces.
- Commercial:
 - Bylaw Standard: 11 spaces
 - Proposed: 8 spaces
- Two car-share parking spaces are proposed which would be accessible to the public as well as all tenants.

The two proposed car share spaces may be considered equivalent to four parking spaces each, as per the Zoning Bylaw Alternative Parking Provision. Total proposed parking is equivalent to 38 parking spaces.

The building features well-designed, secure bicycle parking facilities for both the residential and commercial uses. Residential secure bike spaces are proposed as individual, opaque lockers for improved security. Access to the secure bike parking is provided from the front of the building with a doorway next to the commercial units on West Esplanade rather than through the vehicle parking area.

The proposal includes the installation of a new protected bike lane along the north side of West Esplanade for the full block to Semisch Avenue. Protected bike lanes would also be provided adjacent to the site on both sides of Chesterfield. The design of the bike lane and other street design elements on Esplanade would be determined through the Esplanade Complete Street project.

The requested zone change and variances to the Zoning Bylaw to permit the proposed development are identified in Table #1.

Table #1. Requested Variances from base zone (C-1A)

	Base Zone Requirements	Proposal
Zoning	C-1A Zone	CD-729
Permitted Uses	Residential and commercial uses	Residential and commercial uses
Maximum Density	2.6 Floor Space Ratio (FSR)	3.6 Floor Space Ratio (FSR)
Maximum Height	24.4 metres (80 feet)	23 metres (75.5 feet) (OCP maximum)
Setbacks	Front: 0 m/ft. Exterior Side: 0 m/ft. Rear: 3-6 m / 10-20 ft. Interior Side: 0 m/ft.	Front: 0.31 m (1 ft.) Exterior Side: 0 m/ft. Rear: 0 m/ft. Interior Side: 0 m/ft.
Lot Coverage	Maximum 90 percent	94 percent
Minimum Parking	56 spaces	38 spaces

POLICY FRAMEWORK

The subject site is designated Mixed Use Level 4A (High Density) in the Official Community Plan (OCP). This designation allows for a mix of commercial and residential uses with a maximum density of 3.6 FSR (including 1.0 bonus FSR). A maximum height of 23 metres (75.4 feet) is permitted, in accordance with OCP Schedule A Land Use map.

Official Community Plan	
Policy 1.1.2 <i>Align growth with the development of community amenities and infrastructure</i>	Intensification of the site supports the use of existing amenities, including transit, Spirit Trail, Shipyards and Waterfront Park.
Policy 1.1.5 <i>Provide space for commercial uses in mixed-use developments to support employment and economic development;</i>	The proposal includes 813 square metres (.5 FSR) of commercial floor area, currently shown as five separate commercial units.
Policy 1.3.1 <i>Ensure that new development is compatible with the established urban form of the City, reflecting the primacy of the Lonsdale Regional City Centre and the transition through mid- and low-rise buildings to lower-density residential neighbourhoods</i>	The proposed development on the site is appropriately scaled to the neighbourhood and supports the primacy of the Lonsdale Regional City Centre.
Policy 1.3.5 <i>Encourage design excellence in developments through carefully considered, high quality architecture and landscaping, with varied designs which are interesting, sensitive and reflective of their surroundings</i>	The proposal includes high-quality materials and design along the two street frontages. Landscaping, a public plaza and public art will contribute to a high-quality and engaging public realm.
Policy 1.3.6 <i>Encourage architecture that responds to the unique context of the City in a sensitive, sustainable, and aesthetically compatible manner</i>	Design and materials are consistent with those found in the local context. Landscaping utilizes native plant species.
Policy 1.3.8 <i>Ensure that developments along commercial streets contribute to the active and pedestrian-friendly character of the area</i>	The proposed streetscape elements of this project will enhance the public realm along West Esplanade and Chesterfield with new street trees and benches in the right of way and a new plaza, landscaping and public art within the site.
Policy 1.3.10 <i>Encourage active, healthy lifestyles and the opportunity for more social connections through planning and active design principles that encourage physical activity and contribute to enhanced walkability and active streets, sidewalks and public spaces.</i>	The high-quality secure bike storage with access directly to West Esplanade will help to make cycling a more appealing mode of transportation for residents and employees. The pedestrian environment adjacent to the site will see improvements which will help to encourage walking.
Policy 1.4.1 <i>Consider the needs of households with children in the design of multi-family developments;</i>	An outdoor play area is provided and is incorporated into an overall outdoor amenity area plan that allows for multiple uses and activities within the same space.
Policy 1.4.4 <i>Incorporate active-design principles in new development that encourage physical</i>	The residential lobby design makes use of a highly visible open stairway, with elevators not directly visible from the main entry. This encourages active circulation and social interactions between

<i>movement and social interaction thereby contributing to a healthier community;</i>	residents. Planter beds for gardening and a communal gym also encourage social interaction.
Policy 1.5.1 <i>Provide opportunities for a range of housing densities, diversified in type, size and location</i>	The project will provide 75 new rental units with a range of unit types and sizes, from 427 to 1128 sq. ft. A third of the units will have two or more bedrooms.
Policy 1.5.4 <i>Prioritize the development and revitalization of affordable rental housing and use density bonusing and density transfers to incentivize the retention, renewal and/or replacement of rental units as a public benefit;</i>	The proposed 75 rental units, including 8 mid-market units, will be secured for the life of the building as a public benefit.
Policy 1.5.6 <i>Ensure a sufficient number of new apartment building provide accessible units and that these accessible units are represented across various unit sizes;</i>	The proposal includes 25% of units as Adaptable Level 2, the distribution of which will reflect the overall unit-mix, and the remaining units will be Adaptable Level 1.
Policy 2.1.1 <i>Invest in cycling and pedestrian networks and facilities to make these more attractive, safer, and convenient transportation choices for all ages and abilities with an aim to increase these ways of travelling over single-occupant vehicle use;</i>	The project includes a new protected bike lane along the north site of West Esplanade from Chesterfield Avenue to Semisch Avenue.
Policy 2.1.3 <i>Invest in public realm improvements and locate public art in public places, trails and greenways to enhance the character of the walking and cycling environment;</i>	The project includes a small art installation and public plaza at the corner of Chesterfield Avenue and West Esplanade.
Policy 2.2.2 <i>Strategically manage on-street and off-street transportation facilities to prioritize more sustainable forms of transportation through a variety of measures (e.g. providing bicycle end-of-trip facilities and pedestrian-level lighting, reducing parking requirements in developments in close proximity to transit, on-street pay parking, electric vehicle charging stations, and parking spaces for car-share, carpool and low-emission vehicles);</i>	The project includes several transportation demand management elements including two car share vehicles, secure bike parking, reduced vehicle parking, and improvements to the pedestrian realm.
Policy 3.4.2 <i>Consider the potential for food production on public and private land including rooftops, community gardens, micro gardens, composting, urban farming, orchards, beehives and edible landscaping on residential boulevards, park land and rights-of-way;</i>	The project includes garden planters for tenants' use within the outdoor amenity area.
Policy 3.5.1 <i>Ensure the implementation of design features in new developments, and in overall community planning that will facilitate the ability of older community members to age in place;</i>	25% of units will be designed to meet Level 2 Adaptable Design requirements, the remaining units will be designed to meet Level 1 requirements. This will help to reduce costs associated with making the units accessible for tenants should they have or develop a need for such supports.
Policy 4.2.6	The existing site provides no permeable surface area. The proposed development will result in a net

<i>Increase the ratio of productive, permeable green space to hard impermeable surface areas as redevelopment occurs;</i>	increase of green, permeable area through the use of a green roof located above the podium.
Policy 6.1.4 <i>Incorporate public art that relates to the City's natural, social and built environment into both public and private sector development and projects through the City's Public Art Program;</i>	The proposal includes a small public art installation at the corner of West Esplanade and Chesterfield Avenue.
Policy 7.1.2 <i>Seek a strong balance of employment to resident labour force as generating more jobs close to home makes for shorter average commutes;</i>	The project includes five commercial units, which will support employment for the local labour force.
Housing Action Plan	
Action #3: <i>Mid-Market Rental Units</i>	The project will provide 8 mid-market units, to be secured for the life of the building.
Action #4 <i>Family-Friendly Housing</i>	The project includes 8 three-bedroom units.
Action #9 <i>Zero Parking Residential Building</i>	A parking ratio of .3 spaces per unit is proposed for the residential use. While this is not a complete reduction, it will allow for monitoring of parking utilization to evaluate the potential of this and similar sites to enable and encourage car-free living.
Sustainable Development Guidelines	
Natural Systems <i>The ability of natural systems, both global and local, to support life. Parks and green spaces help regulate the climate, clean and filter water and air, and provide recreational and aesthetic benefits. Maintaining healthy natural systems will reduce strain on municipal infrastructure, support local wildlife and enhance quality of life for community members</i>	The proposal includes a green roof above the podium and landscaping and garden beds in the outdoor amenity area. The planting plan includes a number of native species.
Physical Structures/Infrastructure: <i>The ability to effectively deliver basic services, shelter and physical amenities required to sustain the health and well being of the community. This includes water supply, sanitary sewer, stormwater drainage, solid waste management, roads, telecommunications, and energy efficiency and conservation including district energy. As well, this category includes attractive streetscapes, durable buildings, provision of a range of housing types and adequate community amenities.</i>	The project will use high-performance and environmentally-friendly building materials and will achieve Step 3 of the Step Code. Energy Star and water-efficient appliances will be installed in the dwelling units. 100% of vehicle stalls will be EV ready.
Local Economy: <i>The ability to maintain and grow a healthy local economy. A strong economy brings employment and a solid tax base to support services without compromising other areas of capacity. A stronger economy has been shown to support healthier lifestyles for community members and</i>	The project provides new small-scale commercial units.

greater opportunities for personal fulfillment and overall quality of life.	
Human Potential: <i>The ability of our local community to support our residents in their pursuit of individual livelihood objectives including access to education, healthy food, active transportation and affordable housing. Meeting these basic needs is essential for the maintenance and growth of human capacity.</i>	The development provides Market Rental and Mid-Market Rental housing at a range of unit types and sizes.
Social Connections: <i>The ability of our community to foster communication, interaction and networks to respond effectively to community issues. These may include supporting community members with low incomes, lone-parent families, and matters specific to children, youth, seniors and people with disabilities.</i>	The project includes both indoor and outdoor amenity areas that are well-programmed with multiple opportunities for activities.
Cultural Diversity: <i>The ability of our community to support and celebrate a diversity of cultural backgrounds. This includes recognition of the traditions of the Squamish Nation and the many cultures of residents who make the City their home. With both tangible and intangible elements, cultural capacity has economic implications and is strongly connected to social traditions. Manifestations of cultural practices can range from spiritual practices to heritage buildings.</i>	The proposed design includes various informal gathering spaces for tenants and in the public realm, provides streetscape improvements and public art.
Active Design Guidelines	
Primary and Secondary Stairs	The project includes primary and secondary stairs that are located and designed to encourage active circulation throughout the building.
Indoor Amenity	The indoor amenity areas include a gym and separate lounge area that is directly connected to the outdoor amenity area.
Outdoor Recreation and Gardens	The outdoor amenity area is designed to allow various activities, with a children's play area, gardening beds and outdoor seating.
Enhanced bicycle facilities	Bike facilities in the building include a bicycle pump/repair stand and tools. Automatic door openers and design of bicycle access from the street enhance the ease of access to bicycle parking for residents and employees.

PLANNING ANALYSIS

Site Context and Surrounding Use

The site is located on the northwest corner of the intersection at West Esplanade and Chesterfield, on the site of the former Empire Theatres cinema. It is located on both transit and bike routes and is approximately 300 metres from the SeaBus Terminal. Buildings near the site are primarily commercial and mixed-use on West Esplanade and West 1st Street, with more residential buildings on Chesterfield north of West 1st Street.

The buildings and uses immediately surrounding the subject site are outlined in Table #3.

Table #3. Surrounding Uses

Direction	Address	Description	Zoning	OCP Land Use Designation / Height Maximum
North – across lane	201 West 1 st Street / 83 Chesterfield Avenue	5-storey rental apartment with retail at grade	CD-589	Mixed-Use Level 4A (High Density) / 6 Storeys
North – across lane	211-219 West 1 st Street	5-storey rental apartment with retail at grade	CD-382	Mixed-Use Level 4A (High Density) / 6 Storeys
South – across West Esplanade	211 West Esplanade	6-storey commercial building	CD-024	Mixed-Use Level 4A (High Density) / 23 metres
East – across Chesterfield Avenue	180 West Esplanade / 88 Chesterfield Avenue	2-storey commercial building	CD-549	Mixed-Use Level 4A (High Density) / 40 metres
West	214-236 West Esplanade / 60 Semisch Avenue	6-storey commercial building	Service Industrial (M-1) / Land Use Contract	Mixed-Use Level 4A (High Density) / 23 metres

The site is located at a significant intersection in terms of active transportation infrastructure and traffic. The proposed improvements to West Esplanade in particular must be considered in the context of overall plans for Esplanade. According to the proposed timeline for the Esplanade Complete Street project, the overall design for the street will be ready for implementation ahead of the likely construction period for 200 West Esplanade. Off-site improvements that are to be provided in connection with the proposal for 200 West Esplanade will be designed and constructed in accordance with the outcomes of the Complete Street project.

Use

The proposal would replace an existing commercial building with new commercial units and 75 rental units. Rental housing provides a form of affordable housing at the middle and higher ends of the affordability spectrum. Because there is no rental housing currently on the site, the applicant is not required to provide the residential units as rental, however, they have opted to provide market rental and mid-market rental units to achieve the allowable 1.0 FSR bonus density for the site.

The proposed amount of commercial area for the project provides an activated street frontage along Chesterfield Avenue and West Esplanade. Standard zoning requirements for the C-1A Zone would result in a greater portion of the building being commercial due to residential uses being permitted only above the second storey, however, site constraints resulting from a significant slope and the need for enclosed on-site parking presents some challenges in achieving two levels of commercial use.

The site is well-suited for rental dwelling units and a reduction in the number of dwelling units to support above-grade commercial is not recommended.

Intensity

The OCP permits the proposed density of 3.6 FSR, and the proposed height of 23 metres. The site is well-suited to accommodate rental dwelling units due to the number of amenities, services, and commercial uses nearby, including Waterfront Park and the John Braithwaite Community Centre, multiple transit routes, and essential destinations such as multiple grocery stores and pharmacies.

The project achieves several goals of the Housing Action Plan. It is meeting requirements for a minimum of 10 percent of units to be provided as mid-market units in perpetuity, as well as a minimum of 10 percent of units to have three or more bedrooms. Action 9 of the Housing Action Plan has also been considered for this project. This action calls for a project with zero residential parking on a site within 400 metres of the SeaBus terminal, and includes two sub-actions:

- a. Encourage and support a new residential building within a 400-metre radius of the SeaBus Terminal to provide zero parking spaces as an innovative pilot project; and,*
- b. Monitor parking utilization rates and evaluate if additional Zero Parking Residential Buildings are supportable within a 400-metre radius of the SeaBus Terminal.*

The combination of car share vehicles, convenient and secure bike storage, high-quality transit and active transportation infrastructure results in multiple mode options for tenants and supports tenants' ability to forego car-ownership. This has positive impacts on traffic in the region and can also result in significant savings on household transportation costs. Improvements to cycling facilities on Chesterfield and West Esplanade will also help to make cycling trips more attractive. Direct access to bicycle parking that is separate from vehicle parking areas makes cycling more appealing for residents and employees of the commercial units.

The proposed building will achieve Step 3 of the Step Code. Solar shades have been proposed to help reduce the need for air conditioning. The solar shades on the east side are shown projecting over the east property line and require permission to encroach over City property (see last clause in the recommendation). A green roof is proposed above the podium level of the building to help with storm water management for the site. The outdoor amenity area also includes trees and planters, which will also serve to retain storm water.

Form

The proposed form is consistent with the character of the neighbourhood, having a podium and tower form that is consistent with zoning requirements for building dimensions with the exception of lot coverage at the lower floor levels which is

exceeded partly due to the provision of a canopy over the public plaza. The proposed height is similar to the existing zoning requirement (74.4 ft.) and complies with the OCP. The building is harmonious with the transition from taller developments directly across Chesterfield to the east, and lower developments to the west. It has an engaging frontage along West Esplanade that includes a pedestrian plaza area with a future public art installation.

DENSITY BONUS AND COMMUNITY BENEFITS

The project proposes market rental units, to be secured by covenant, as per the Density Bonus and Community Benefits Policy. If the project did not include rental units, but strata instead, the following density bonus contribution calculation would apply.

Table 4. *Estimated Value of Community Benefits through Density Bonusing*

Density Value Calculation	Value
Density Bonus to Max Density OCP Density (898.8 square feet @ \$25 / sq. ft.)	\$22,470
Density Bonus to Max Bonus OCP Density (17,984 square feet @ \$190 / sq. ft.)	\$3,416,960
Total Value of Community Benefits	\$3,439,430

In addition to the Market Rental and Mid-Market Rental Units to be provided, the following items are to be completed with the project:

- Design and construction of a bike lane facility and sidewalk, including street lighting and landscaping from the development site to Semisch Avenue.
- Design and construction of Chesterfield Avenue (east side) from West Esplanade to the lane north including separated bicycle lanes, a left turn lane at West Esplanade, and all necessary transitions.
- Upgrade the traffic signal at West Esplanade and Chesterfield Avenue as required to accommodate the development and redesigned roadways.
- Full depth reconstruction of the north half of the lane north of West Esplanade adjacent to the development site.
- Design and construction of concrete pedestrian lane crossing (north half) including curb letdowns.
- A public art installation, with a value of \$25,000, and public right of way over the plaza will also be provided with the development.

COMMUNITY CONSULTATION

A Developer's Information Session was held on September 19, 2019 and was attended by 23 people. A total of 10 comment forms were submitted and four emails were received; one indicated support for the project, seven provided conditional support and

six were opposed. The main concerns for the project design were regarding the height and traffic. A summary of the public consultation, as prepared by the applicant, is available in Attachment #5. Given that there were several concerns raised, staff are recommending that a Public Hearing be held.

ADVISORY BODY INPUT

On September 18, 2019, the Advisory Design Panel reviewed and approved the proposal with several recommendations that included improvements to the street and lane frontages, energy efficiency and functional elements of the building interior. Most of the recommendations were incorporated into the revised drawings with the exception of the recommendation to consider achieving Step 4 of the Step Code. The applicant has proposed Step 3, which is considered acceptable by Staff, in accordance with minimum policy requirements.

INTEGRATED TRANSPORTATION COMMITTEE

On September 4, 2019, the Integrated Transportation Committee reviewed and approved the application with the condition that transportation demand management measures be incorporated into the project. In response to this condition, individual secure bike parking has been proposed, and two car share vehicles and parking spaces are to be provided.

CONCLUSION

This proposal represents good planning principles and is in line with the Official Community Plan. The subject site's proximity to existing amenities, commercial areas, and transit and active transportation facilities make it an appropriate site for the proposed new 75 rental units and commercial retail units. The Housing Action Plan encourages consideration of a zero-parking development, and although some parking is proposed, the project will be a helpful example of a low-parking development that can be assessed to evaluate the potential for success for reducing parking developments in this and other areas with high-quality transportation alternatives.

RESPECTFULLY SUBMITTED:



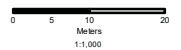
Emily Macdonald
Planner 1



City of North Vancouver
Context Map

Legend

- Subject Site
- Legal_Parcels
- Aerial 2019



DISCLAIMER

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GIS Division, Information Technology,
City of North Vancouver

city
of north
vancouver

CLIENT

Cressey Development Group

#200-555 West 8th Avenue,
Vancouver BC V5Z 1C6
tel: 604-683-7690

email: gbrewster@cressey.com
contact: Graham Brewster

ARCHITECT

Rafii Architects Inc.

#1-1600 Howe Street,
Vancouver BC V6Z 2L9
tel: 604-688-3655

email: foad@rafiiaarchitects.com
contact: Foad Rafii

STRUCTURAL

BMZ Structural Engineering

#700-609 West Hastings Street,
Vancouver BC V6B 4W4
tel: 604-685-9533

email: jmarkulin@bmzse.com
contact: John Markulin

MECHANICAL

Smith + Andersen

300 - 6400 Roberts Street
Burnaby, BC V5G 4C9
tel: 604-294-8414

email:
raymond.cho@smithandandersen.com
contact: Raymond Cho

CIVIL

McElhanney

#200-858 Beatty Street,
Vancouver BC V6B 1C1
tel: 604-683-8521

email: llopez@mcelhanney.com
contact: Luis Lopez

ELECTRICAL

Smith + Andersen

300 - 6400 Roberts Street
Burnaby, BC V5G 4C9
tel: 604-294-8414

email:
jeff.chen@smithandandersen.com
contact: Jeff Chen

LANDSCAPE ARCHITECT

McElhanney

710 Laval Crescent
Kamloops BC V2C 5P3
tel: 250-374-2200

email:
jschooling@mcelhanney.com
contact: Julie Schooling

BUILDING CODE

Thorson McAuley CP

#116-119 West Pender Street,
Vancouver BC V6B 1S5
tel: 604-442-6903

email: kai@thorsonmcauley.ca
contact: Kai Mikkelsen

LAND SURVEYOR

McElhanney

#200-858 Beatty Street,
Vancouver BC V6B 1C1
tel: 604-683-8521

email: llopez@mcelhanney.com
contact: Luis Lopez

BUILDING ENVELOPE

Morrison Hershfield

#300-4321 Still Creek Drive,
Burnaby BC V5C 6S7
tel: 604-454-0402

email:
dgronross@morrisonhershfield.com
contact: Dan Gronross



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Drawing Issue Date

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5	2020-10-01	DEPT. REVIEW - RESPONSE 3
6	2020-10-09	RESUBMITTED FOR FIRST READING

RAFII ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiiaarchitects.com
WWW
rafiiaarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

Members of Architectural Institute of B.C.

Client
 **CRESSEY**
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
COVER

Date: Issue Date	Project No. 18-60
Scale	Drawing No. A000
Drawn By: Author	Rev:
File name:	



BUILDING LEVELS		
L0 COMMERCIAL		8.05 m
L1 LOBBY/ PARKING		11.80 m
LEVEL 2		15.20 m
LEVEL 3		17.99 m
LEVEL 4		20.78 m
LEVEL 5		23.57 m
LEVEL 6		26.36 m
LEVEL 7		29.15 m
LEVEL 8		31.94 m
LEVEL 9/ ROOF		34.73 m

TOTAL BIKE LOCKERS			
	H	V	TOTAL
ROOM #1	16	4	20
ROOM #2	21	3	24
ROOM #3	7	17	24
ROOM #4	21	3	24
ROOM #5	9	13	22
END OF TRIP BIKE ROOM	4	0	4
	78	40	118
40V/118 = 33.9%			

COMMERCIAL PARKING COUNT					
LEVEL 1	VIS.	R	SC	HC	TOTAL
	0	6	2	0	8

RESIDENTIAL PARKING COUNT						
LEVEL 1	VIS.	R	SC	HC	CAR SHARE	TOTAL
	2	15	3	2	2 (8)	30

MECHANICAL ROOM

L0 - CRU	SERVICE/STRATA	61.95 m²
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ELECTRICAL ROOM

L0 - CRU	SERVICE/STRATA	91.48 m²
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GARBAGE/RECYCLING		
Level	Name	Area

L1 - LOBBY	RES. GARBAGE	44.89 m²
L0 - CRU	CRU GARBAGE	36.81 m²

GROSS FLOOR AREAS		
Level	Area	Comments

L0 - CRU	1,419.07 m²	
L1 - LOBBY	1,363.88 m²	
Level 2	1,062.21 m²	
Level 3	944.78 m²	
Level 4	687.84 m²	
Level 5	687.84 m²	
Level 6	687.84 m²	
Level 7	687.84 m²	
Level 8	687.31 m²	
L9 ROOF	58.58 m²	
Grand total	8,287.19 m²	

UNIT AREAS - LEVEL 2				
Level	Number	Name	Comments	Area
Level 2	209	UNIT D1	2 BDRM	74.18 m²
Level 2	210	UNIT B2	1 BDRM (AD)	55.20 m²
Level 2	211	UNIT F1	3 BDRM + DEN (AD)	104.83 m²
Level 2	212	UNIT B1	1 BDRM	49.15 m²
Level 2	213	UNIT B1	1 BDRM	49.15 m²
Level 2	214	UNIT A2	STUDIO (AD)	45.40 m²
Level 2	215	UNIT A1	STUDIO	39.73 m²
Level 2	216	UNIT A1	STUDIO	39.73 m²
Level 2	217	UNIT A1	STUDIO	39.73 m²
Level 2	218	UNIT A1	STUDIO	39.73 m²
Level 2	219	UNIT A1	STUDIO	43.29 m²
Level 2	220	UNIT C1	1 BDRM + DEN (AD)	63.33 m²
Level 2	221	UNIT A1	STUDIO	39.73 m²
Level 2	222	UNIT A1	STUDIO	39.73 m²
Level 2	223	UNIT A1*	STUDIO	39.73 m²

UNIT AREAS - LEVEL 3				
Level	Number	Name	Comments	Area
Level 3	304	UNIT D1*	2 BDRM	85.51 m²
Level 3	305	UNIT B2	1 BDRM (AD)	55.20 m²
Level 3	306	UNIT F1	3 BDRM + DEN (AD)	104.83 m²
Level 3	307	UNIT B1	1 BDRM	49.15 m²
Level 3	308	UNIT B1	1 BDRM	49.15 m²
Level 3	309	UNIT A2	STUDIO (AD)	45.39 m²
Level 3	310	UNIT A1	STUDIO	39.73 m²
Level 3	311	UNIT A1	STUDIO	39.73 m²
Level 3	312	UNIT A1	STUDIO	39.73 m²
Level 3	313	UNIT A1	STUDIO	39.73 m²
Level 3	314	UNIT A1	STUDIO	43.29 m²
Level 3	315	UNIT C1	1 BDRM + DEN (AD)	63.33 m²
Level 3	316	UNIT A1	STUDIO	39.73 m²
Level 3	317	UNIT A1	STUDIO	39.73 m²
Level 3	318	UNIT B3	1 BDRM	61.73 m²

ARCH DRAWING LIST	
Sheet Number	Sheet Name

A000	COVER
A001	SUMMARY STATISTICS
A002	PROJECT DATA
A003	SPACE PLANNING GROSS BLDG AREA L1, L2, L3, L4
A004	SPACE PLANNING GROSS BLDG AREA L4 - L8, L9 ROOF
A005	LEVEL 0 - CRU (FSR AREA)
A006	LEVEL 1 - LOBBY / PARKING (FSR AREA)
A007	LEVEL 2 FLOOR PLAN (FSR AREA)
A008	LEVEL 3 FLOOR PLAN (FSR AREAS)
A009	LEVEL 4 - 8 & L9 ROOF (FSR AREAS)
A100	SITE PLAN
A100-LC	LOT COVERAGE OVERLAY
A101	L0 COMMERCIAL GRADE LEVEL
A102	L1 PARKING & RESIDENTIAL LOBBY
A103	L2 RESIDENTIAL FLOOR LEVEL
A104	L3 PODIUM FLOOR
A105	L4 TOWER LEVEL
A106	L5 TYPICAL TOWER FLOOR + L8 PH
A107	L9 ROOF & TOP ROOF PLAN
A301	SOUTH ELEVATION
A302	EAST ELEVATION
A303	NORTH ELEVATION
A304	WEST ELEVATION
A401	SECTION AA
A402	SECTION BB
A403	SECTION CC
A404	SECTION DD
A501	UNIT PLANS A1, A2, A3, A4, B1, B2, C1
A502	UNIT PLANS C2, D1, D2, E1
A503	UNIT PLANS F1, F2
A504	UNIT PLANS A1*, A1**, B3, D1*

UNIT AREAS - LEVEL 4				
Level	Number	Name	Comments	Area
Level 4	403	UNIT D1	2 BDRM	74.19 m²
Level 4	404	UNIT B2	1 BDRM (AD)	55.20 m²
Level 4	405	UNIT F1	3 BDRM + DEN (AD)	105.15 m²
Level 4	406	UNIT B1	1 BDRM	49.15 m²
Level 4	407	UNIT B1	1 BDRM	49.15 m²
Level 4	408	UNIT E1	2 BDRM + DEN	86.77 m²
Level 4	409	UNIT C2	1 BDRM + DEN	64.22 m²
Level 4	410	UNIT A3	STUDIO	43.41 m²
Level 4	411	UNIT D2	2 BDRM	75.75 m²

UNIT AREAS - LEVEL 5				
Level	Number	Name	Comments	Area
Level 5	503	UNIT D1	2 BDRM	74.19 m²
Level 5	504	UNIT B2	1 BDRM (AD)	55.20 m²
Level 5	505	UNIT F1	3 BDRM + DEN (AD)	105.15 m²
Level 5	506	UNIT B1	1 BDRM	49.15 m²
Level 5	507	UNIT B1	1 BDRM	49.15 m²
Level 5	508	UNIT E1	2 BDRM + DEN	86.77 m²
Level 5	509	UNIT C2	1 BDRM + DEN	64.22 m²
Level 5	510	UNIT A3	STUDIO	43.41 m²
Level 5	511	UNIT D2	2 BDRM	75.75 m²

UNIT AREAS - LEVEL 6				
Level	Number	Name	Comments	Area
Level 6	603	UNIT D1	2 BDRM	74.19 m²
Level 6	604	UNIT B2	1 BDRM (AD)	55.20 m²
Level 6	605	UNIT F1	3 BDRM + DEN (AD)	105.15 m²
Level 6	606	UNIT B1	1 BDRM	49.15 m²
Level 6	607	UNIT B1	1 BDRM	49.15 m²
Level 6	608	UNIT E1	2 BDRM + DEN	86.77 m²
Level 6	609	UNIT C2	1 BDRM + DEN	64.22 m²
Level 6	610	UNIT A3	STUDIO	43.41 m²
Level 6	611	UNIT D2	2 BDRM	75.75 m²

UNIT AREAS - LEVEL 7				
Level	Number	Name	Comments	Area
Level 7	703	UNIT D1	2 BDRM	74.19 m²
Level 7	704	UNIT B2	1 BDRM (AD)	55.20 m²
Level 7	705	UNIT F1	3 BDRM + DEN (AD)	105.15 m²
Level 7	706	UNIT B1	1 BDRM	49.15 m²
Level 7	707	UNIT B1	1 BDRM	49.15 m²
Level 7	708	UNIT E1	2 BDRM + DEN	86.77 m²
Level 7	709	UNIT C2	1 BDRM + DEN	64.22 m²
Level 7	710	UNIT A3	STUDIO	43.41 m²
Level 7	711	UNIT D2	2 BDRM	75.75 m²

UNIT AREAS - LEVEL 8				
Level	Number	Name	Comments	Area
Level 8	803	UNIT D1	2 BDRM	74.19 m²
Level 8	804	UNIT B2	1 BDRM (AD)	55.20 m²
Level 8	805	UNIT F1	3 BDRM + DEN (AD)	104.83 m²
Level 8	806	UNIT B1	1 BDRM	49.15 m²
Level 8	807	UNIT B1	1 BDRM	49.15 m²
Level 8	808	UNIT F2	3 BDRM + DEN	101.96 m²
Level 8	809	UNIT A4	STUDIO (AD)	48.82 m²
Level 8	810	UNIT A3	STUDIO	43.41 m²
Level 8	811	UNIT D2	2 BDRM	75.75 m²

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Rev #	Date	Description
1	2019-07-25	RE-ZONING APPLICATION
2	2019-09-18	ADP/ DIS PRESENTATION
3	2020-03-03	DEPT. REVIEW - RESPONSE
4	2020-09-01	DEPT. REVIEW - RESPONSE 2
5	2020-10-01	DEPT. REVIEW - RESPONSE 3
6	2020-10-09	RESUBMITTED FOR FIRST READING

RAFI ARCHITECTS INC.

TEL
604.688.3655

FAX
604.688.3522

EMAIL
rai@rafiarchitects.com

WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

Members of Architectural Institute of B.C.

Client



CRESSEY
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
PROJECT DATA

Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
Drawn By:	A002
Author	
File name:	Rev:

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RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

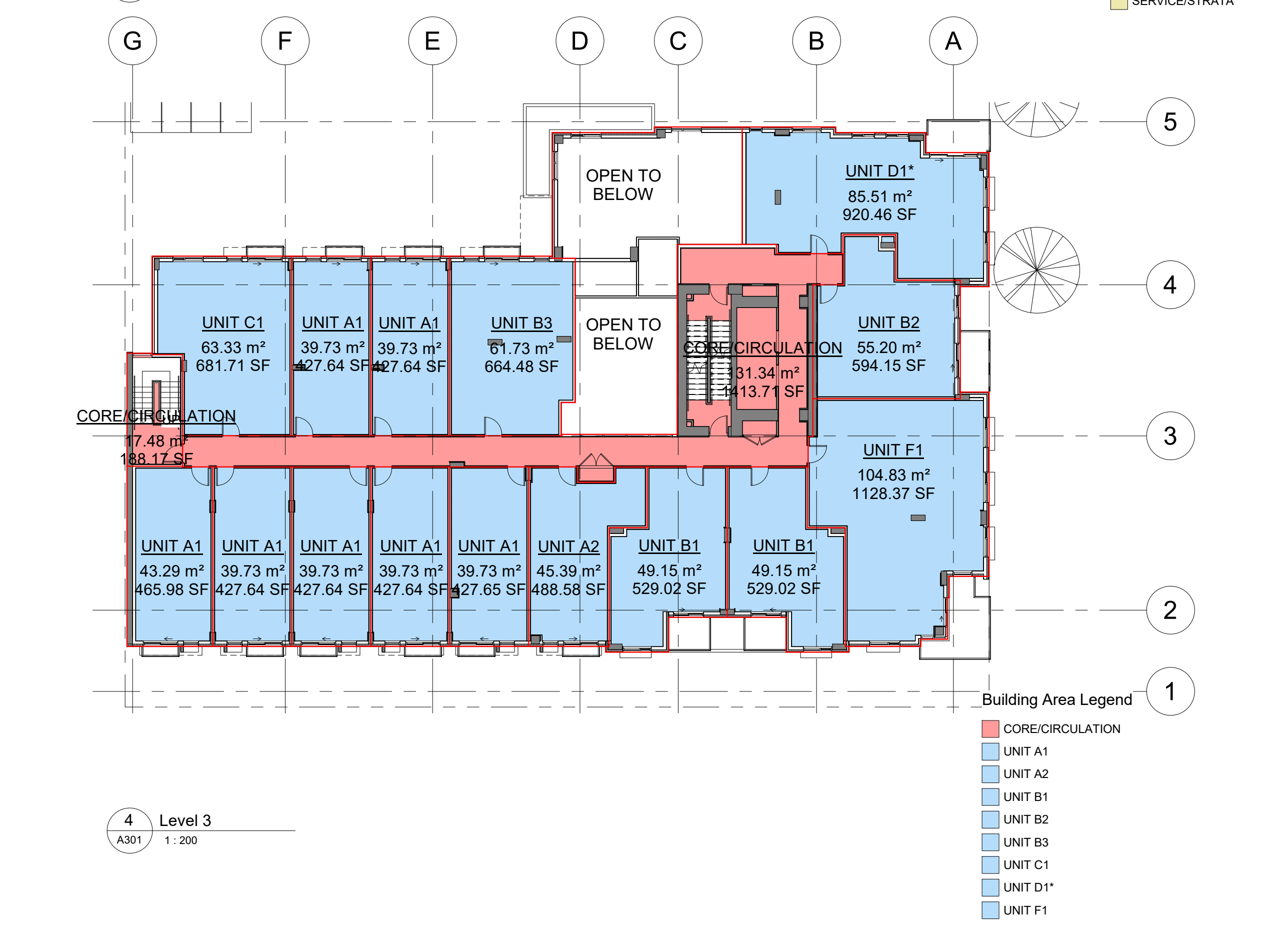
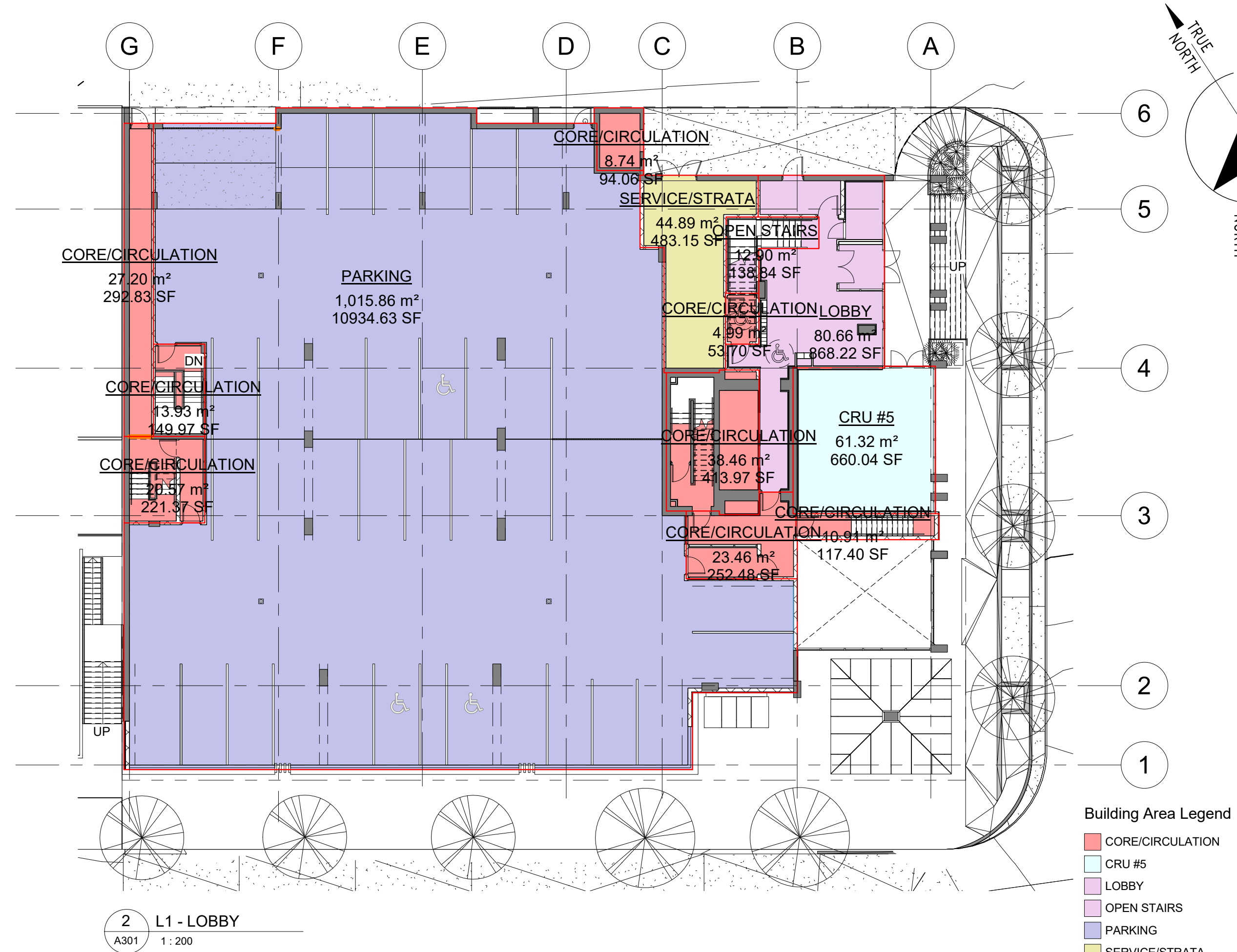
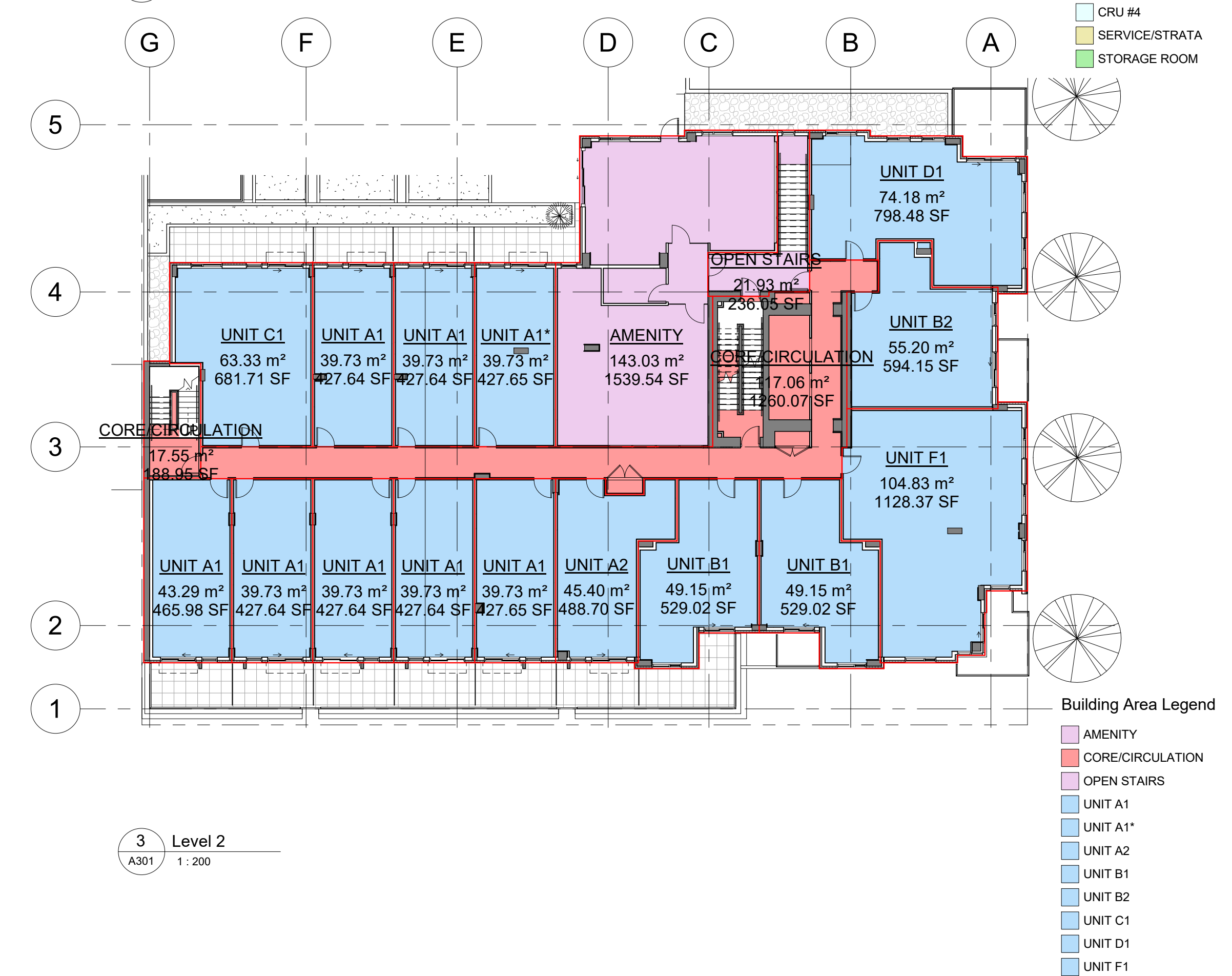
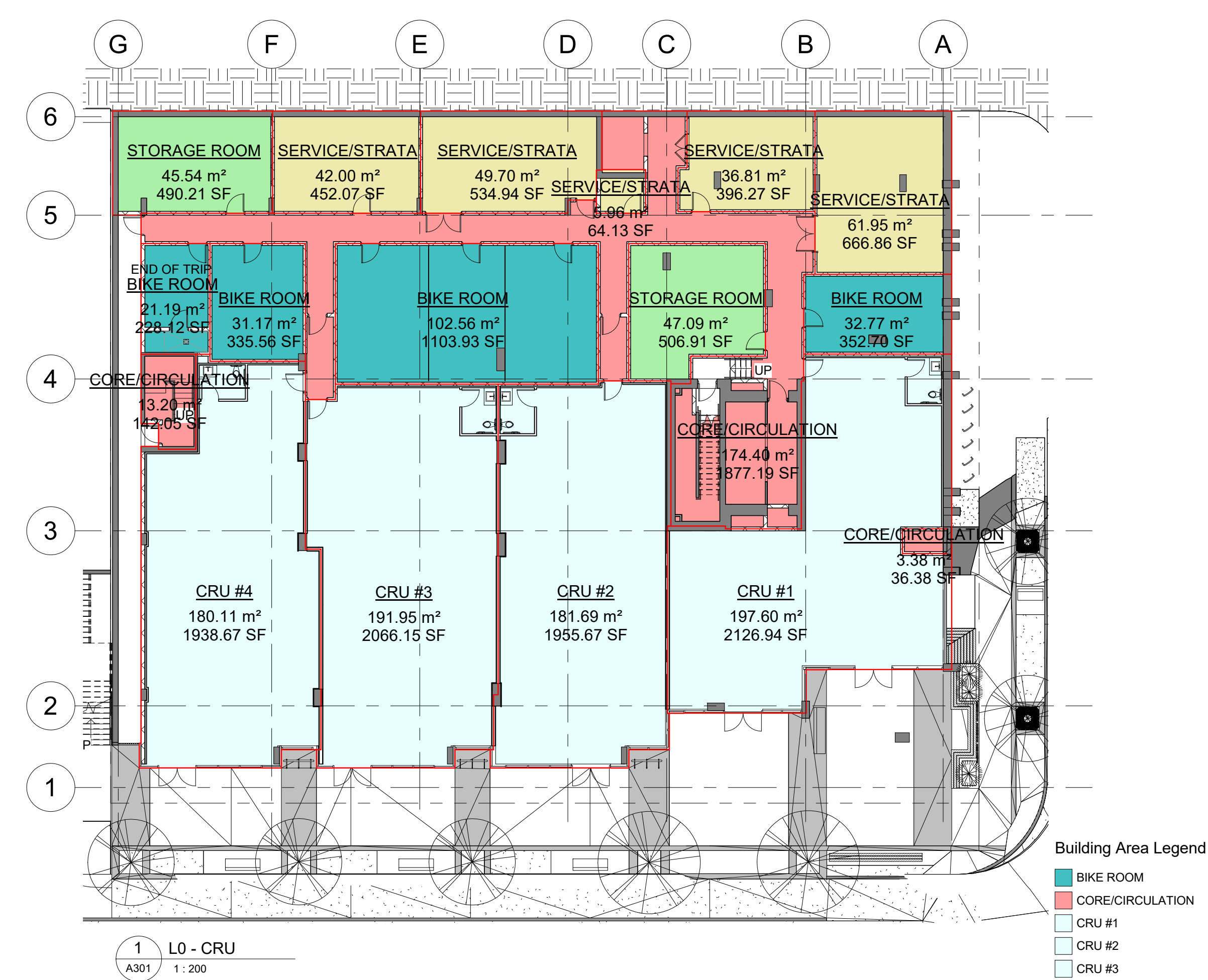
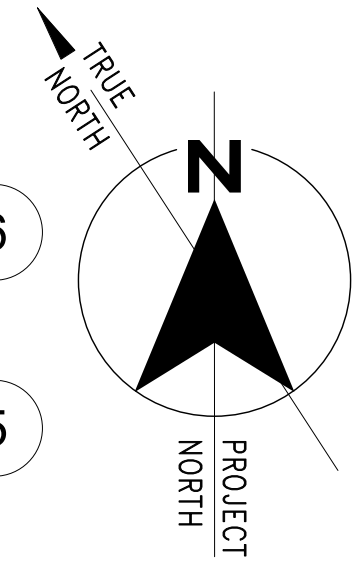
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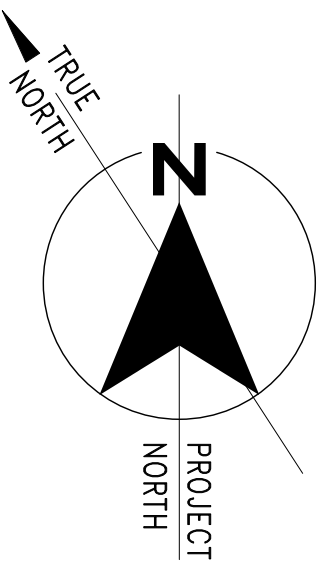
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(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
**SPACE PLANNING
GROSS BLDG AREA
L1, L2, L3, L4**

Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
1 : 200	A003
Drawn By:	Author
File name:	Rev:



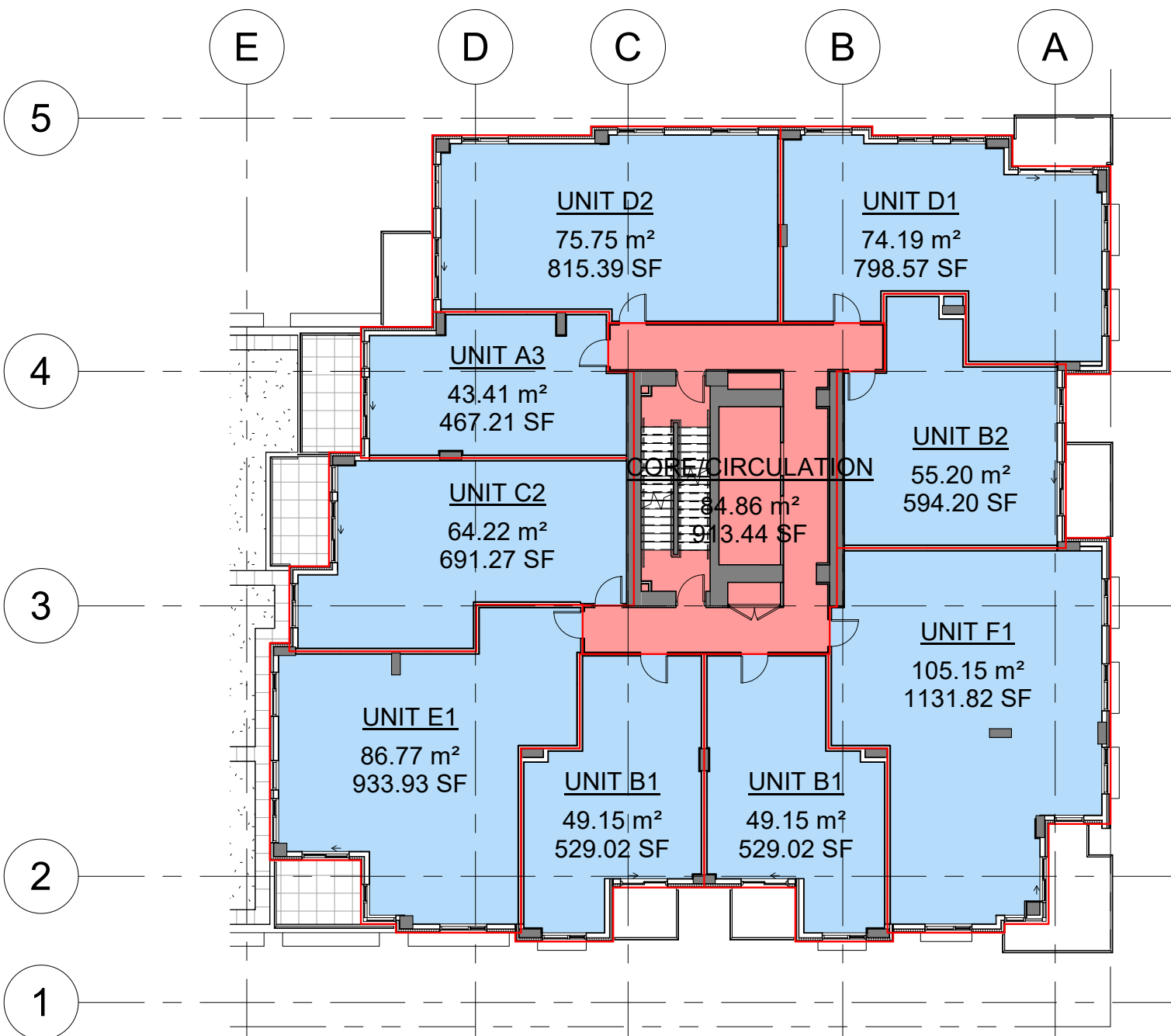


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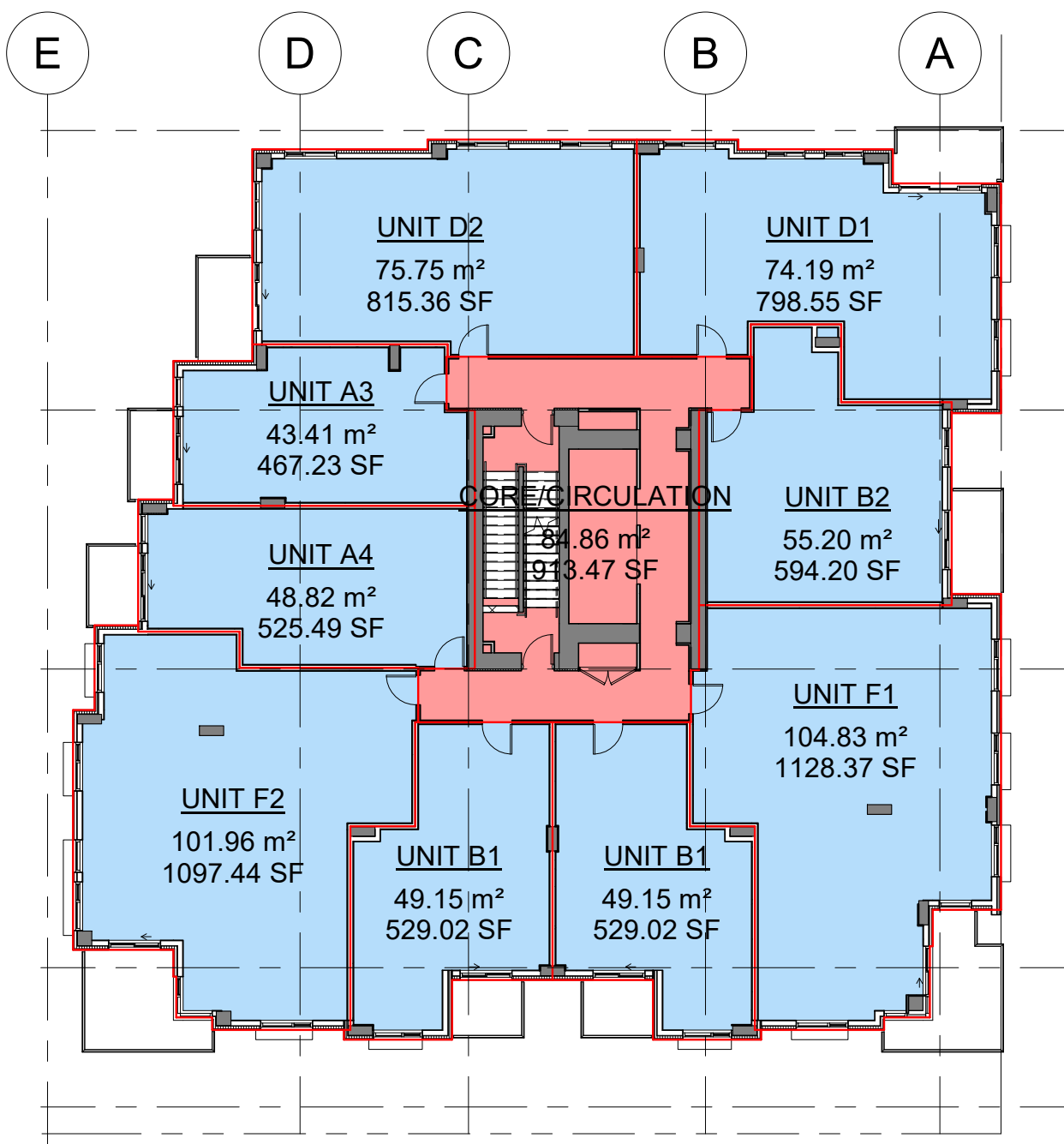
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6	2020-10-09	RESUBMITTED FOR FIRST READING



Building Area Legend

- CORE/CIRCULATION
- UNIT A3
- UNIT B1
- UNIT B2
- UNIT C2
- UNIT D1
- UNIT D2
- UNIT E1
- UNIT F1

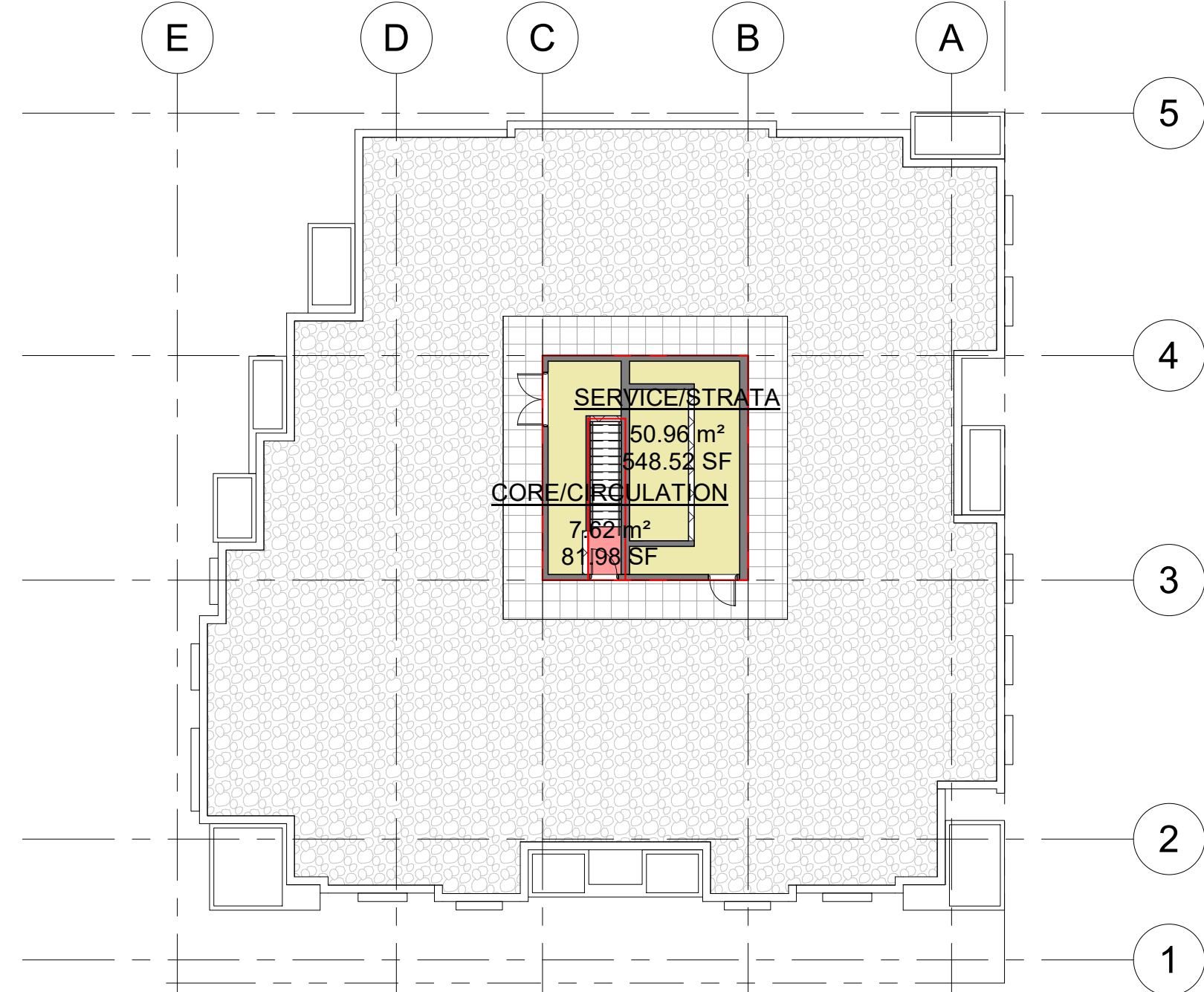
1 Level 4
A301 1:200



Building Area Legend

- CORE/CIRCULATION
- UNIT A3
- UNIT A4
- UNIT B1
- UNIT B2
- UNIT D1
- UNIT D2
- UNIT F1
- UNIT F2

2 Level 8
A301 1:200



Building Area Legend

- CORE/CIRCULATION
- SERVICE/STRATA

3 L9 ROOF
A301 1:200

RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

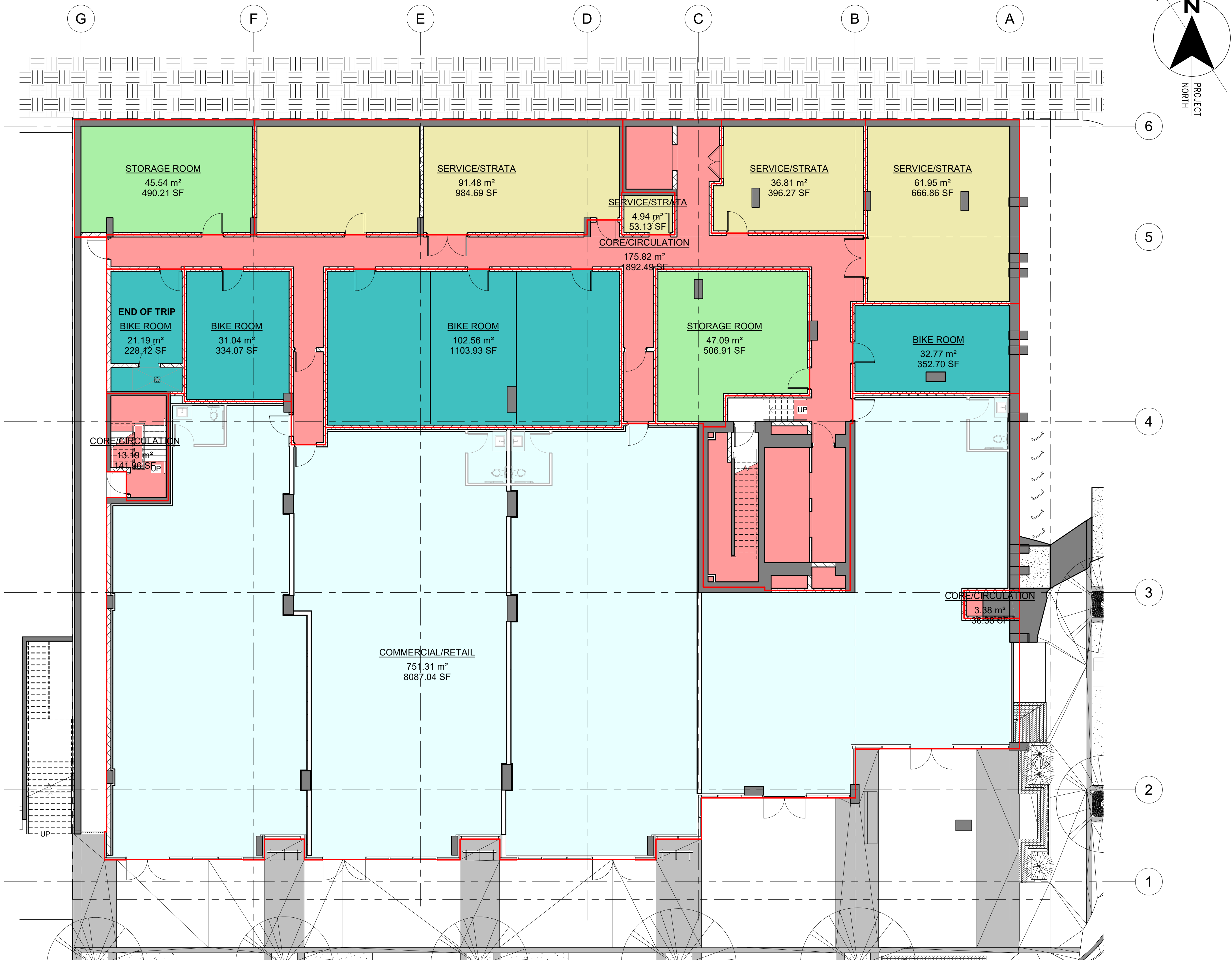
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Client
 **CRESSEY**
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West
Esplanade, NORTH
VANCOUVER, B.C.

Drawing Title
SPACE PLANNING
GROSS BLDG AREA
L4 - L8, L9 ROOF

Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
1:200	A004
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RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

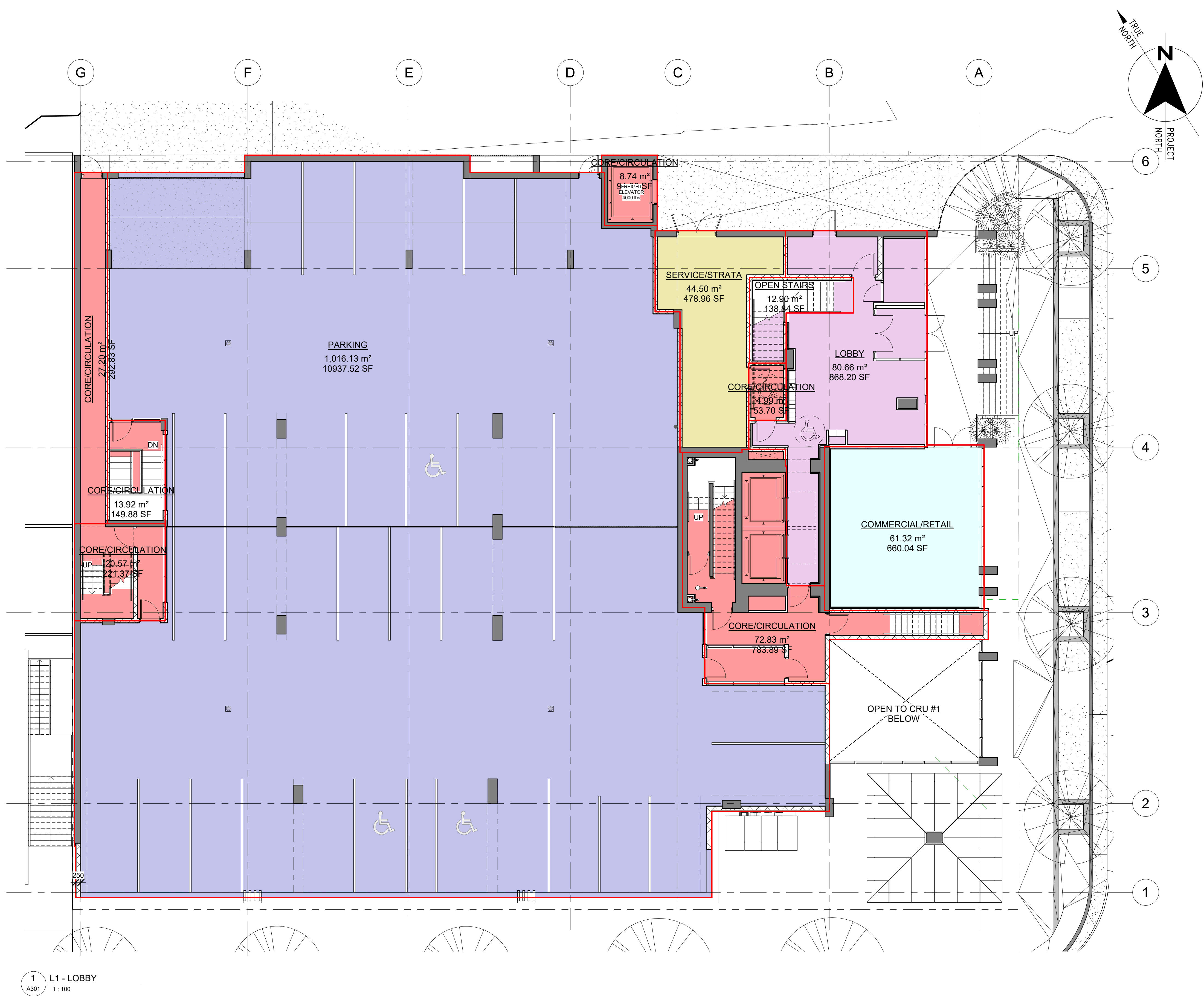
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Client
CRESSEY
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
LEVEL 0 - CRU (FSR AREA)

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A005
Drawn By: Author	Rev:
File name:	



LEVEL 1 FSR

CORE/CIRCULATION	113.76 m²
COMMERCIAL/RETAIL	61.32 m²
	173.89 m²

EXCLUSIONS

PARKING	1,016.13 m²
SERVICE/STRATA	44.50 m²
	1061.71 m²

1 L1 - LOBBY
A301 1 : 100

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Drawing Issue Date

Revision Schedule

Rev #	Date	Description
1	2019-07-25	RE-ZONING APPLICATION
3	2020-03-03	DEPT. REVIEW - RESPONSE
4	2020-09-01	DEPT. REVIEW - RESPONSE 2
5	2020-10-01	DEPT. REVIEW - RESPONSE 3
6	2020-10-09	RESUBMITTED FOR FIRST READING

RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiarchitects.com
WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

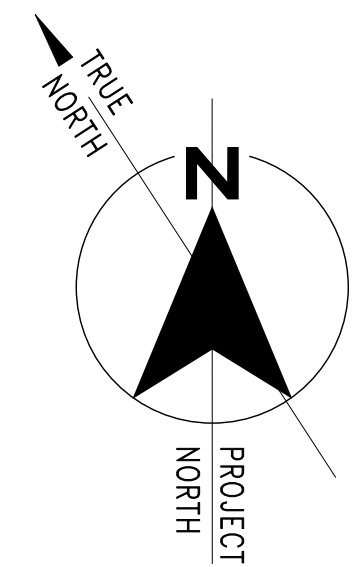
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Client
 **CRESSEY**
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
LEVEL 1 - LOBBY / PARKING (FSR AREA)

Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
1 : 100	A006
Drawn By:	
Author	
File name:	Rev:



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Revision Schedule

Rev #	Date	Description
1	2019-07-25	RE-ZONING APPLICATION
3	2020-03-03	DEPT. REVIEW - RESPONSE
4	2020-09-01	DEPT. REVIEW - RESPONSE 2
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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

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1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

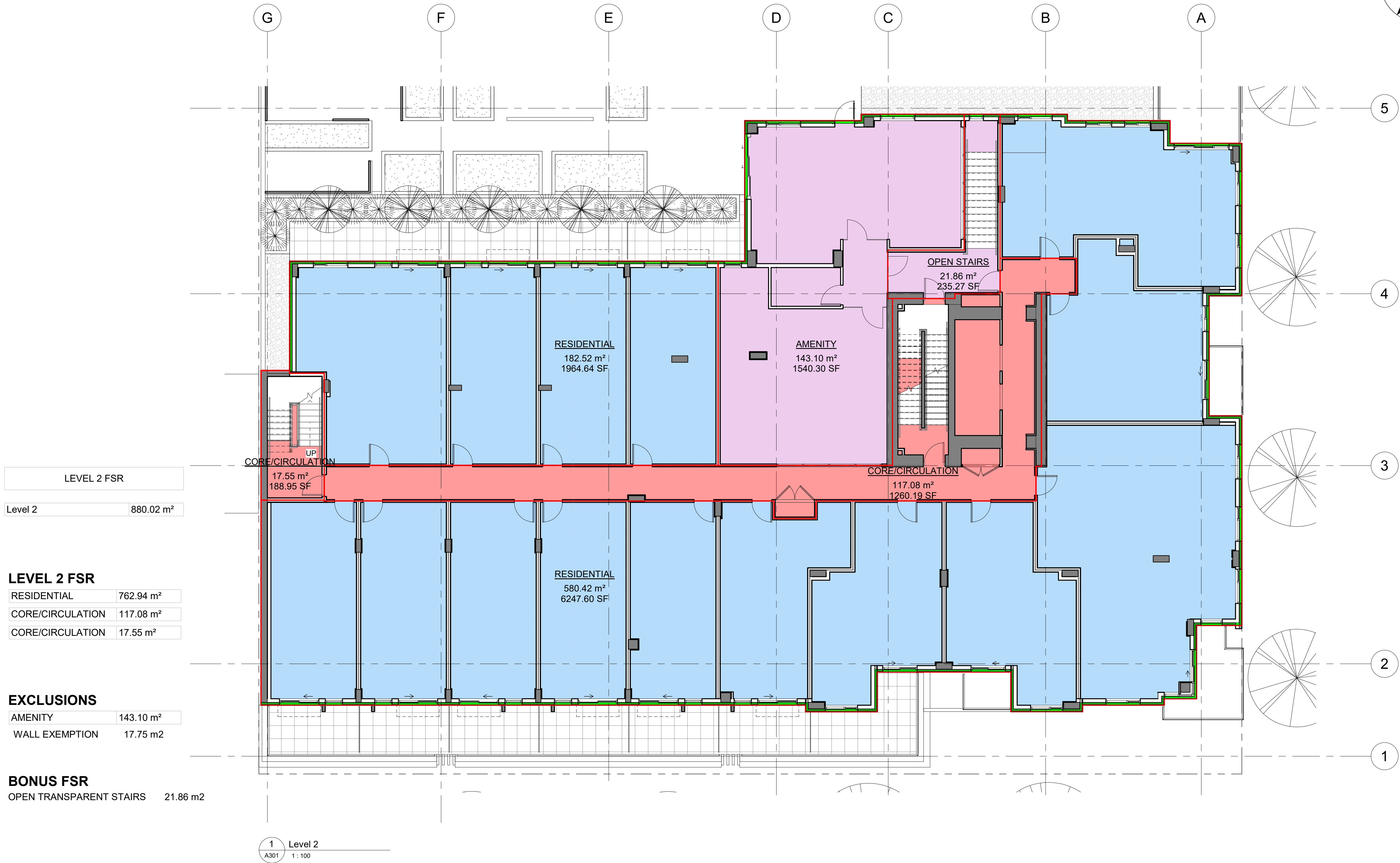
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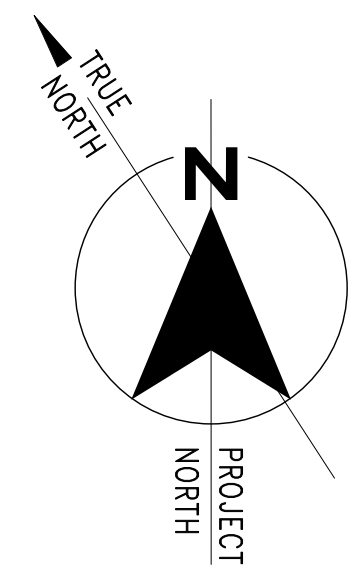
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
LEVEL 2 FLOOR PLAN (FSR AREA)

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A007
Drawn By: Author	Rev:
File name:	





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Revision Schedule

Rev #	Date	Description
1	2019-07-25	RE-ZONING APPLICATION
3	2020-03-03	DEPT. REVIEW - RESPONSE
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5	2020-10-01	DEPT. REVIEW - RESPONSE 3
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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

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1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

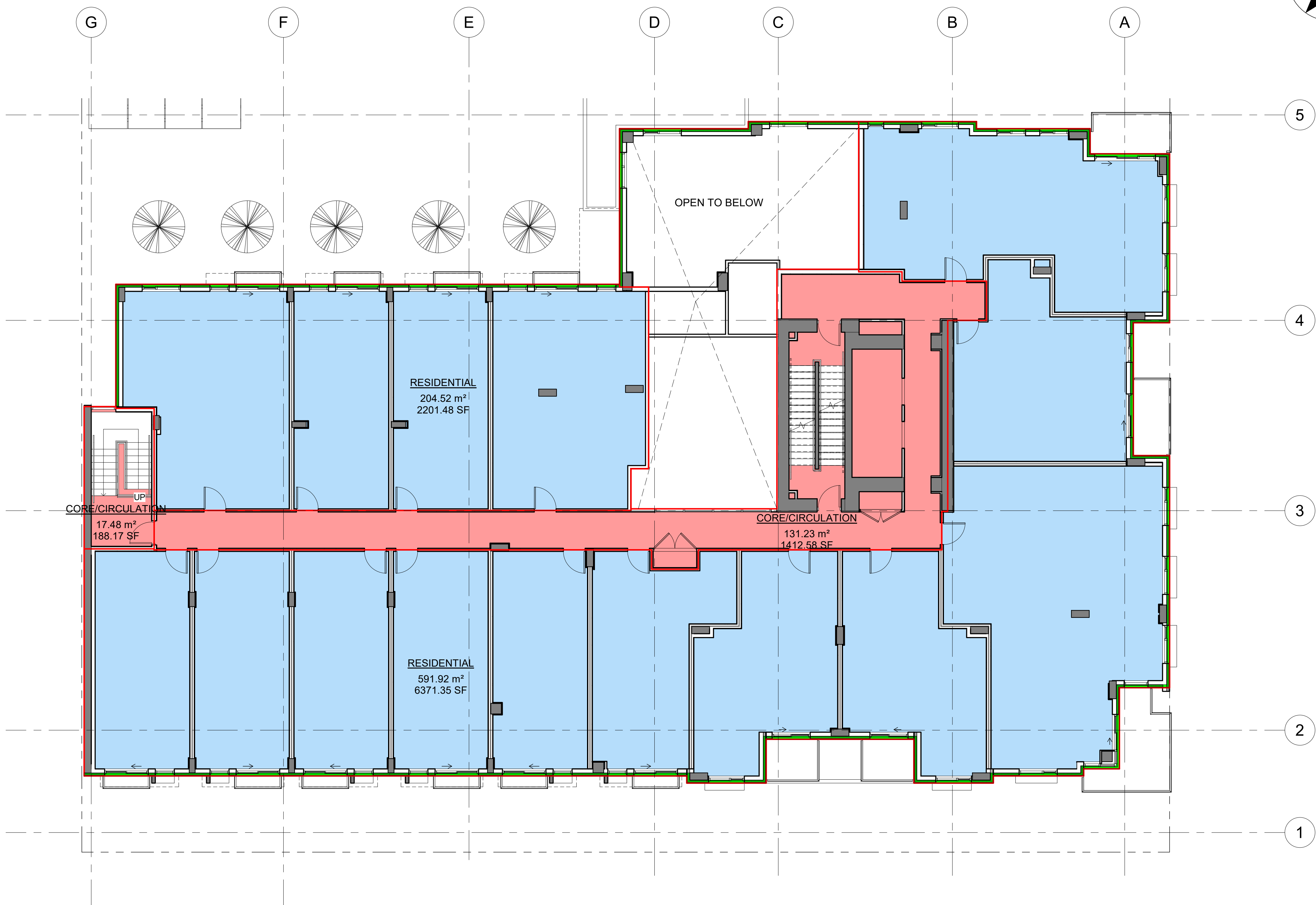
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
LEVEL 3 FLOOR PLAN (FSR AREAS)

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A008
Drawn By: Author	
File name:	Rev:



LEVEL 3 FSR	
Level 3	927.68 m ²

LEVEL 3 FSR	
RESIDENTIAL	796.44 m ²
CORE/CIRCULATION	131.23 m ²
CORE/CIRCULATION	17.48 m ²

EXCLUSIONS	
WALL EXEMPTION	17.75 m2

1 Level 3
A301 1 : 100

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Drawing Issue Date

Revision Schedule

Rev #	Date	Description
1	2019-07-25	RE-ZONING APPLICATION
3	2020-03-03	DEPT. REVIEW - RESPONSE
4	2020-09-01	DEPT. REVIEW - RESPONSE 2
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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

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1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

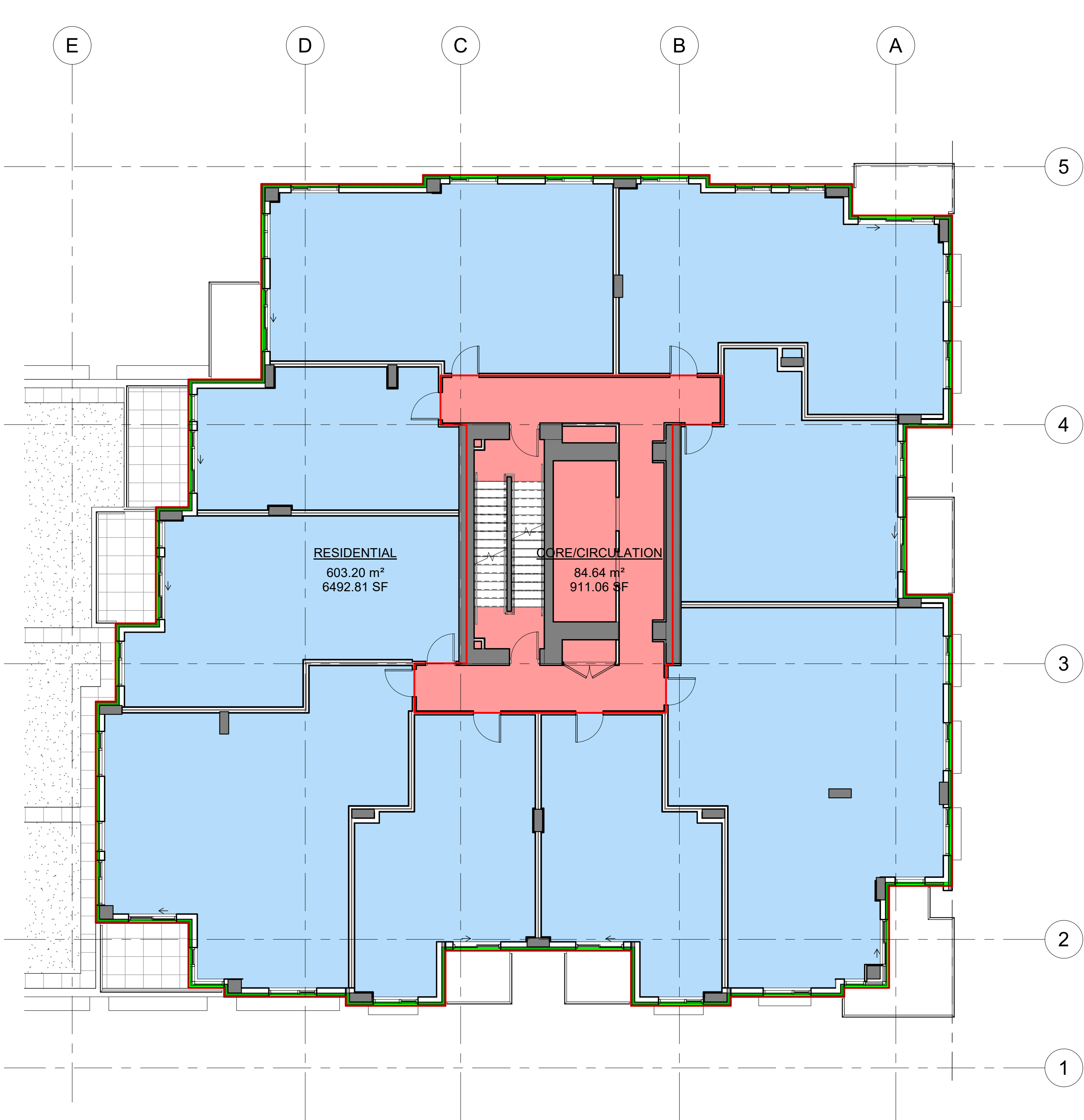
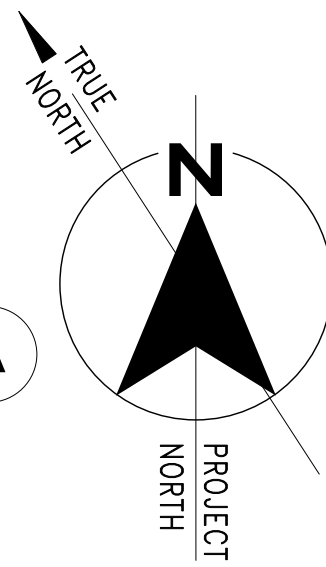
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
LEVEL 4 - 8 & L9 ROOF (FSR AREAS)

Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
1 : 100	A009
Drawn By:	Author
Author	Rev:
File name:	



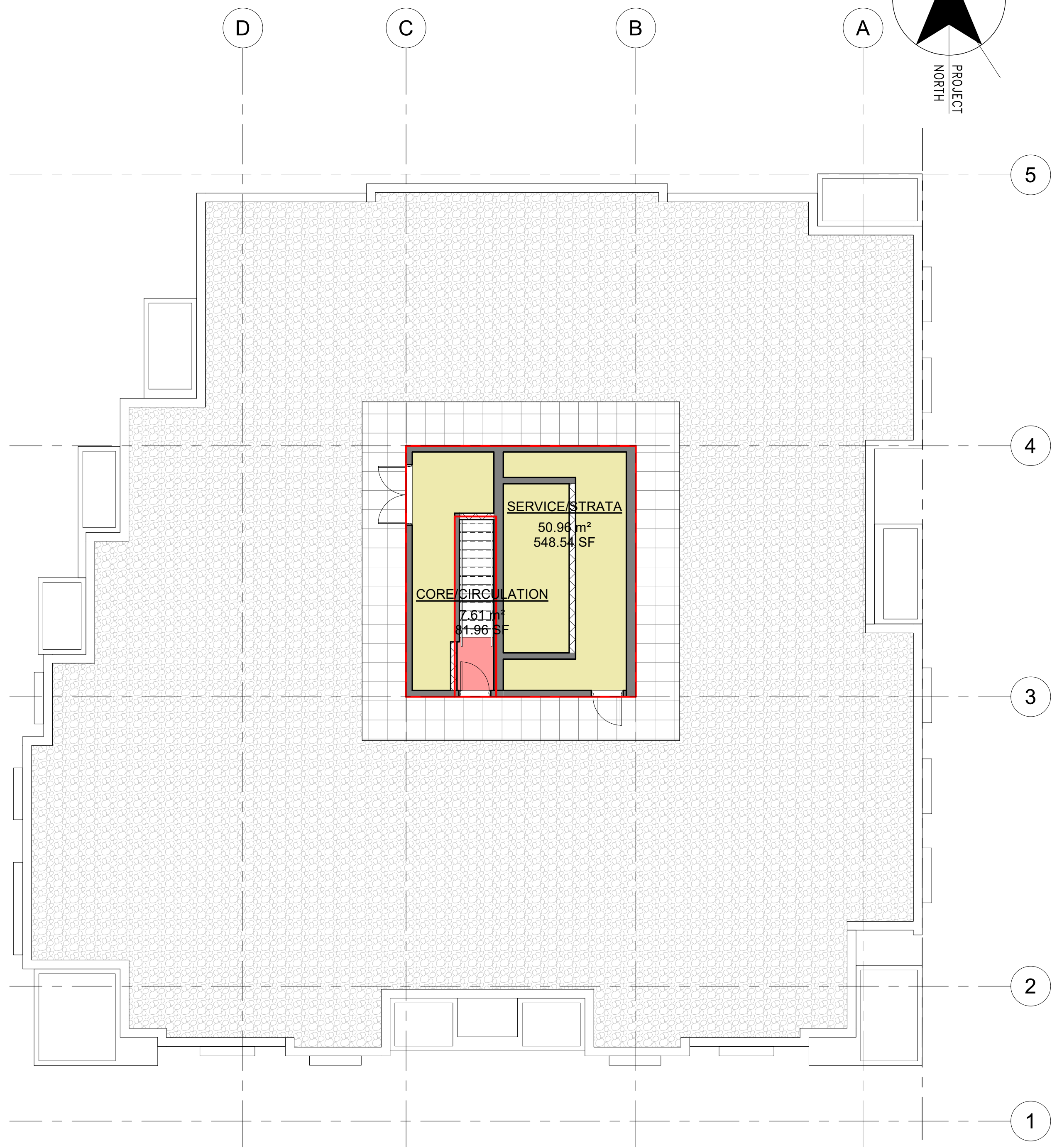
1 Level 4
A301 1 : 100

LEVEL 4 - 8 FSR

PER FLOOR FROM L5 TO L9

CORE/CIRCULATION	84.64 m²
RESIDENTIAL	603.20 m²
WALL EXEMPTION	15.51 m2

LEVEL 4-7, 8 FSR	
Level 4	687.84 m²
Level 5	687.84 m²
Level 6	687.84 m²
Level 7	687.84 m²
Level 8	687.84 m²
L9 ROOF	7.61 m²



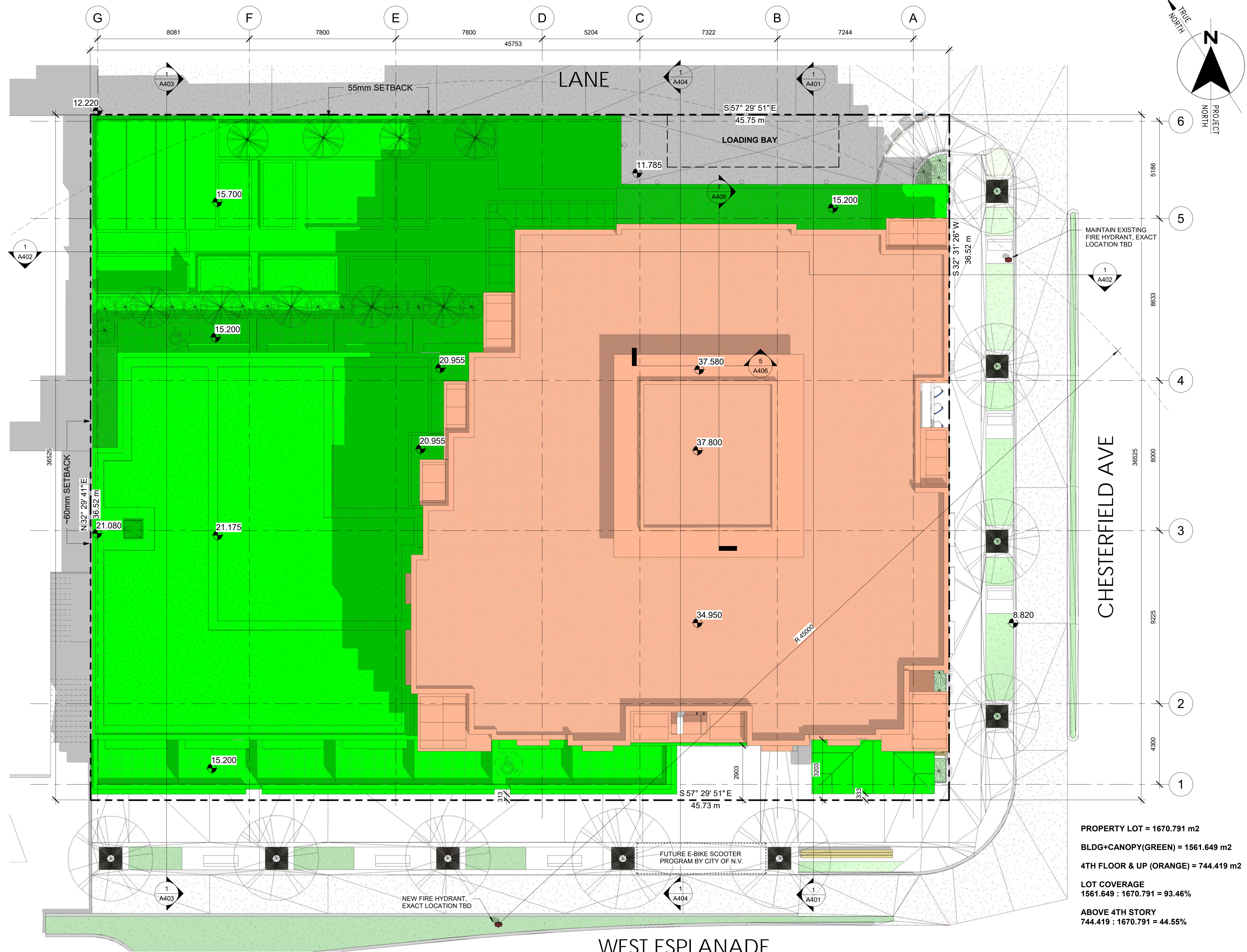
2 L9 ROOF
A301 1 : 100

LEVEL 9 (ROOF) FSR

CORE/CIRCULATION	7.61 m²
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EXCLUSIONS

SERVICE/STRATA	50.96 m²
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Drawing Issue Date

Revision Schedule

Rev #	Date	Description
4	2020-09-01	DEPT. REVIEW - RESPONSE 2
5	2020-10-01	DEPT. REVIEW - RESPONSE 3
6	2020-10-09	RESUBMITTED FOR FIRST READING

RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

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1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

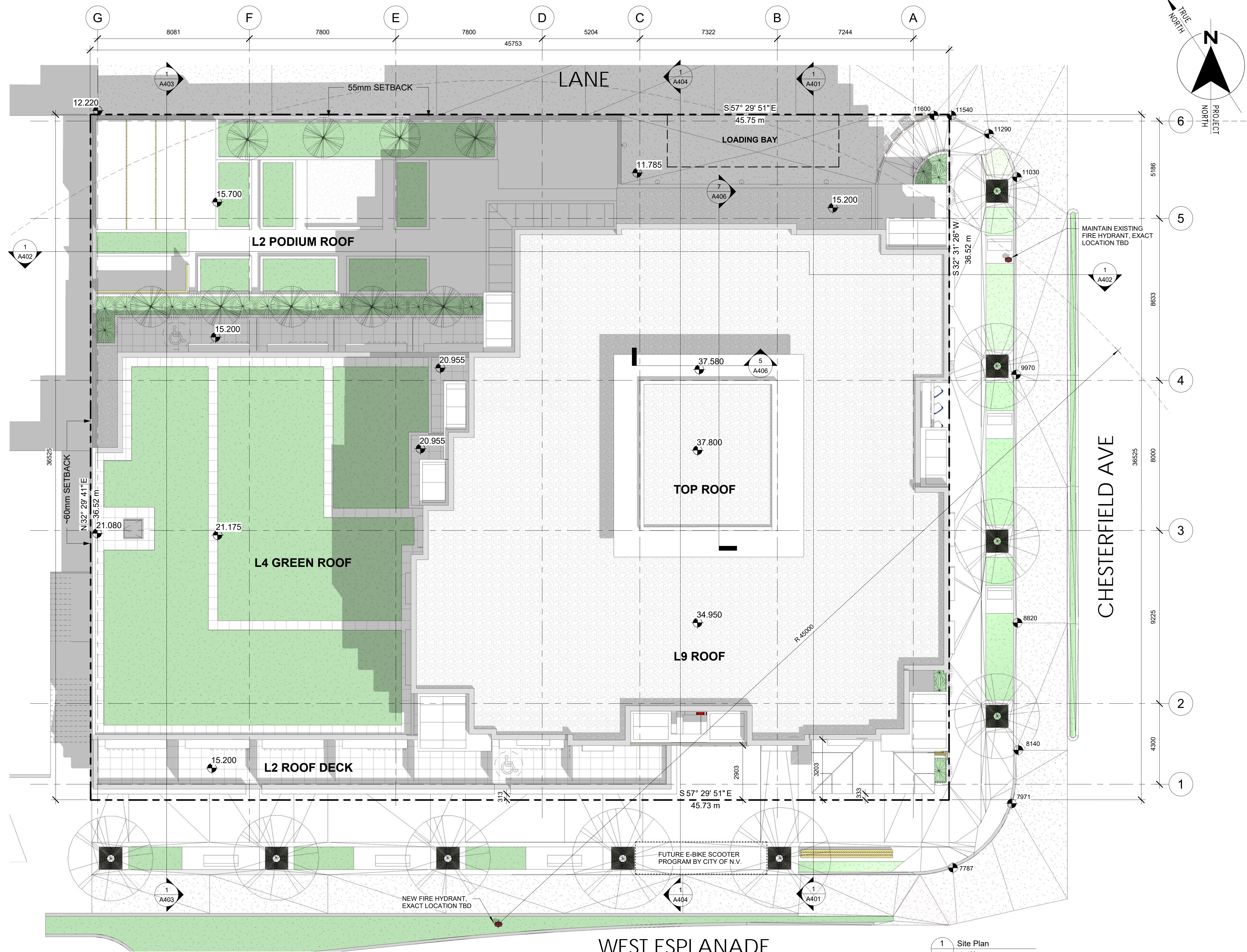
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
LOT COVERAGE OVERLAY

Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
1 : 100	A100-LC
Drawn By:	Author
Author	Rev:
File name:	



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RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

SUITE ONE
1600 HOWE ST
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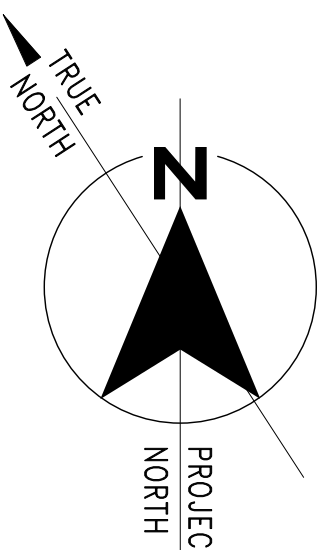
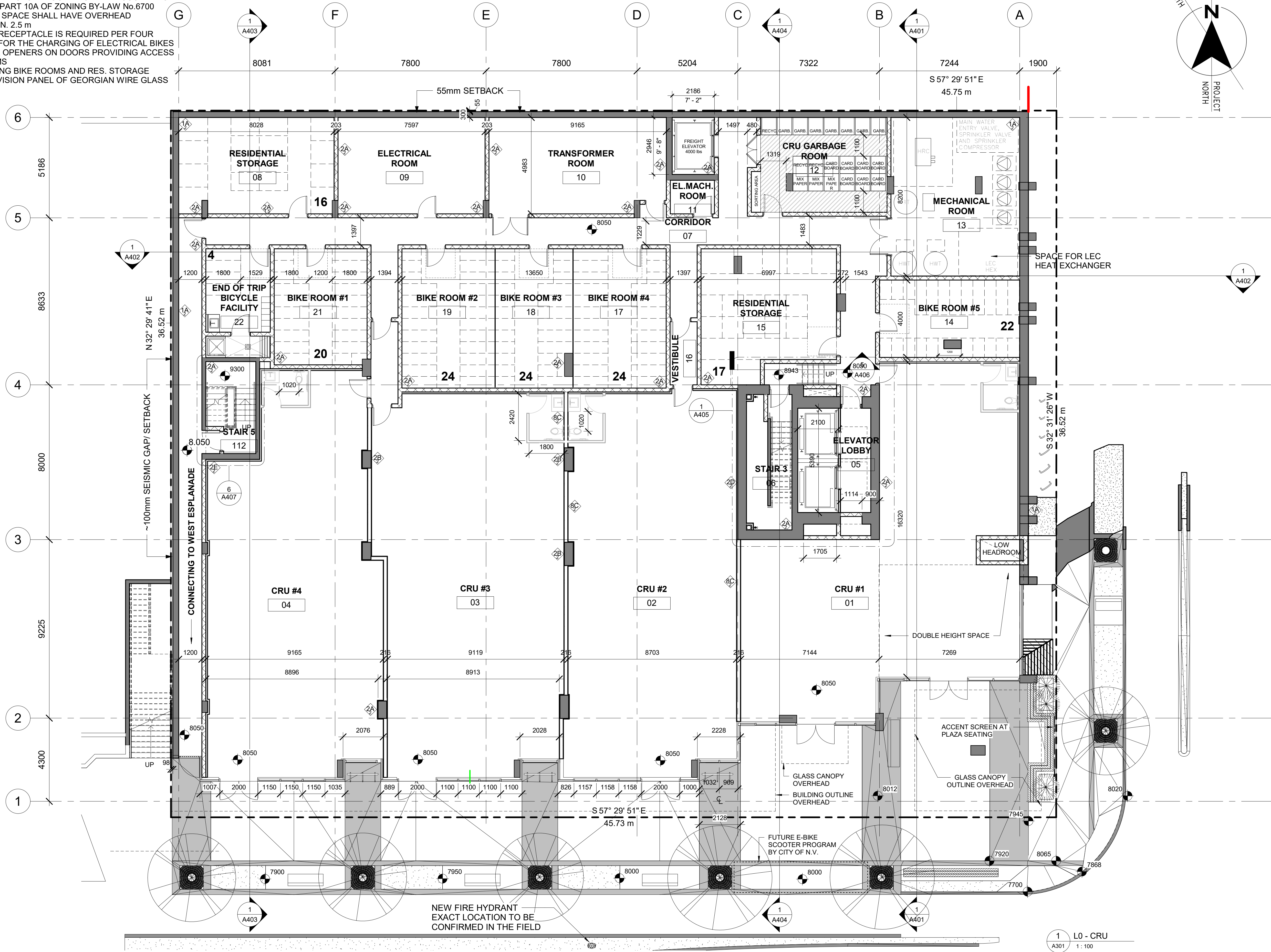
Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
SITE PLAN

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A100
Drawn By: Author	Rev:
File name:	

GENERAL NOTES FOR BICYCLE PARKING:

- CONSTRUCTION OF BICYCLE ROOMS TO BE IN ACCORDANCE WITH DIVISION IV, PART 10A OF ZONING BY-LAW No.6700
- BICYCLE PARKING SPACE SHALL HAVE OVERHEAD CLEARANCE OF MIN. 2.5 m
- ONE ELECTRICAL RECEPTACLE IS REQUIRED PER FOUR BICYCLE SPACES FOR THE CHARGING OF ELECTRICAL BIKES
- AUTOMATIC DOOR OPENERS ON DOORS PROVIDING ACCESS TO BICYCLE ROOMS
- ALL DOORS SERVING BIKE ROOMS AND RES. STORAGE ROOMS TO HAVE VISION PANEL OF GEORGIAN WIRE GLASS



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Drawing Issue Date	

Revision Schedule		
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1	2019-07-25	RE-ZONING APPLICATION
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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW www.rafiarchitects.com
SUITE ONE
1600 HOWE ST
VANCOUVER BC
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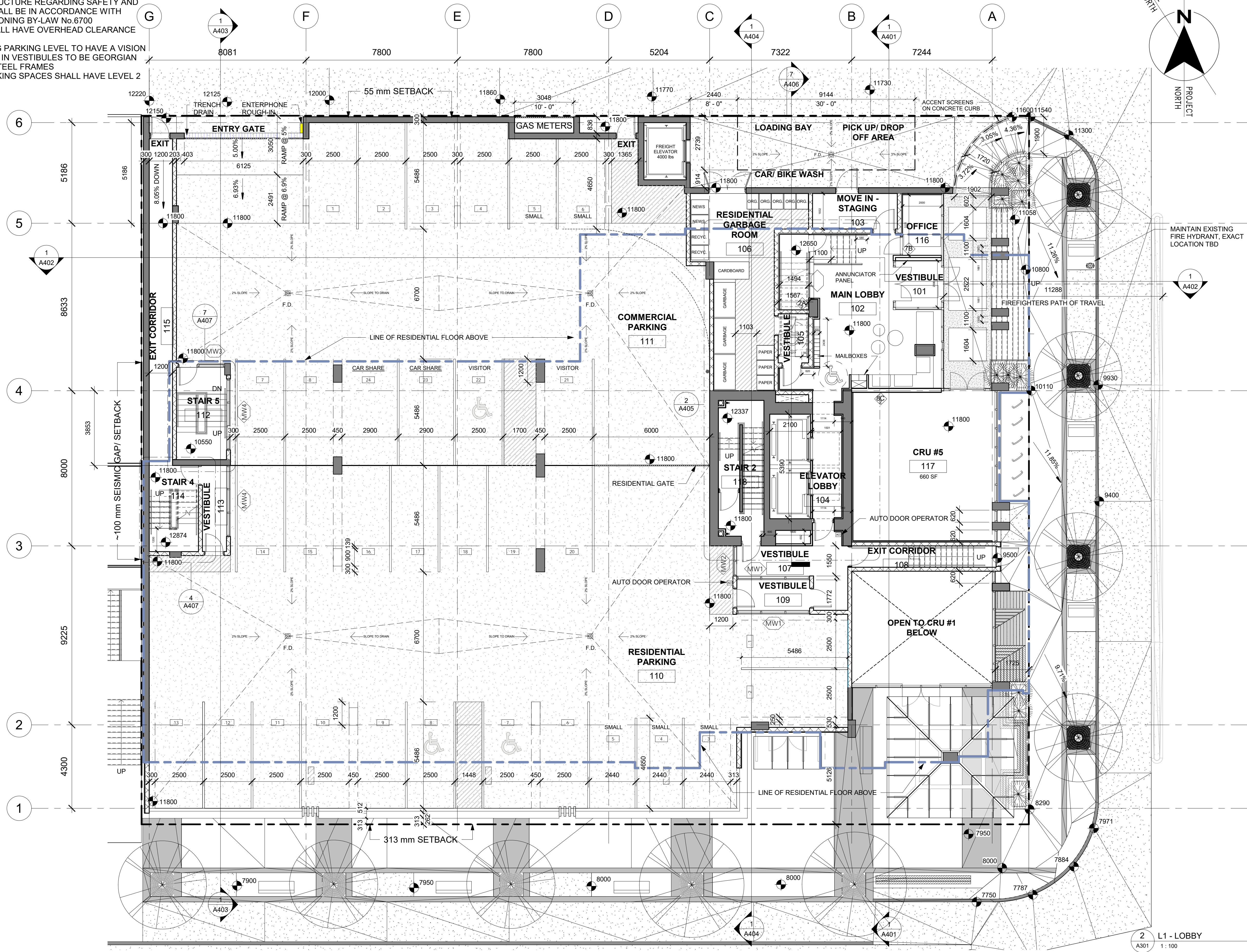
Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
L0 COMMERCIAL GRADE LEVEL

Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
1 : 100	A101
Drawn By:	Author
File name:	Rev:

GENERAL NOTES FOR PARKING:

- DESIGN OF PARKING STRUCTURE REGARDING SAFETY AND SECURITY MEASURES SHALL BE IN ACCORDANCE WITH DIVISION IV, PART 9 OF ZONING BY-LAW No.6700
- CAR PARKING SPACE SHALL HAVE OVERHEAD CLEARANCE OF MIN. 2.13 m (7')
- ALL EXIT DOORS SERVING PARKING LEVEL TO HAVE A VISION PANEL, AND ALL GLAZING IN VESTIBULES TO BE GEORGIAN WIRE SAFETYGLASS IN STEEL FRAMES
- ALL 20 RESIDENTIAL PARKING SPACES SHALL HAVE LEVEL 2 ENERGIZED OUTLETS



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RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW www.rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

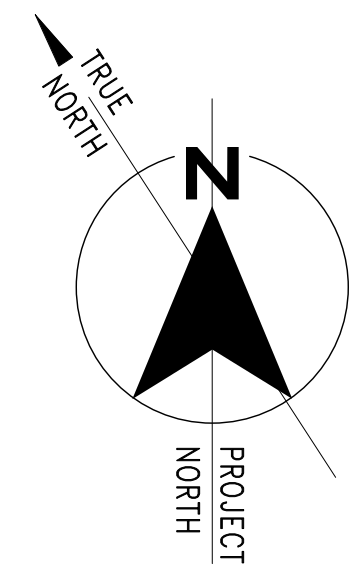
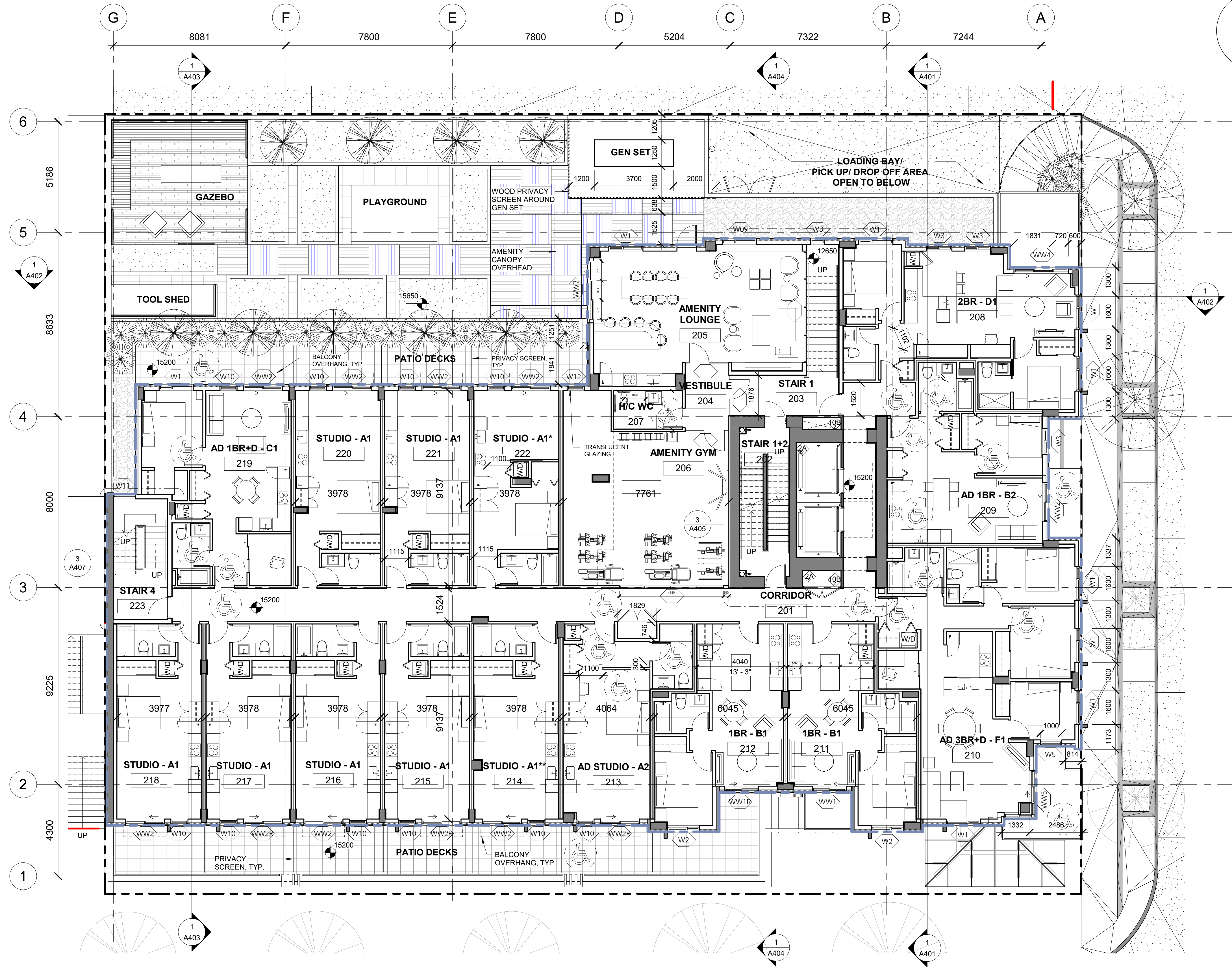
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
L1 PARKING & RESIDENTIAL LOBBY

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A102
Drawn By: Author	Rev:
File name:	



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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com
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1600 HOWE ST
VANCOUVER BC
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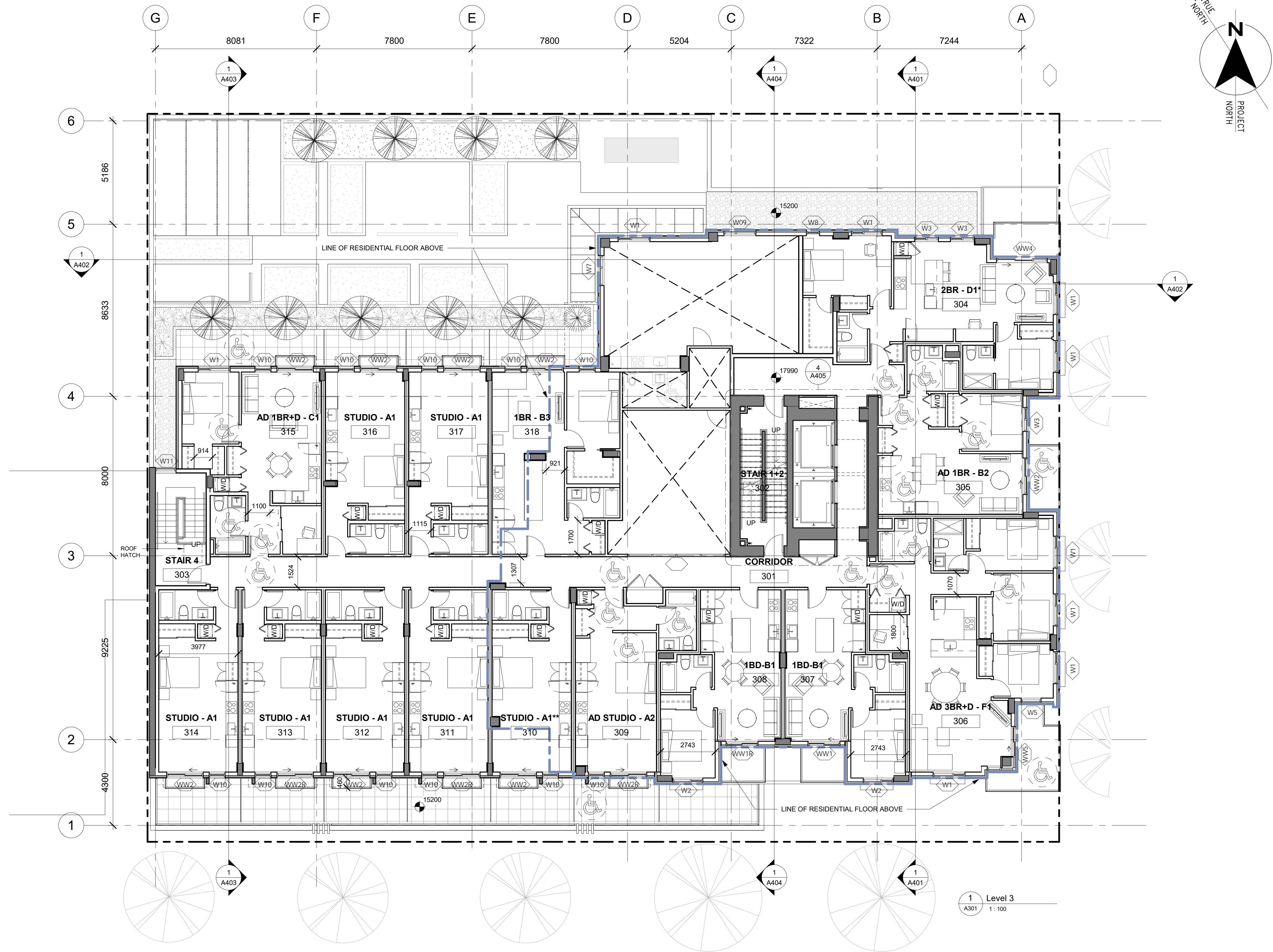
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
L2 RESIDENTIAL FLOOR LEVEL

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A103
Drawn By: Author	
File name:	Rev:

1 Level 2
A301 1:100



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Drawing Issue Date

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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

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1600 HOWE ST
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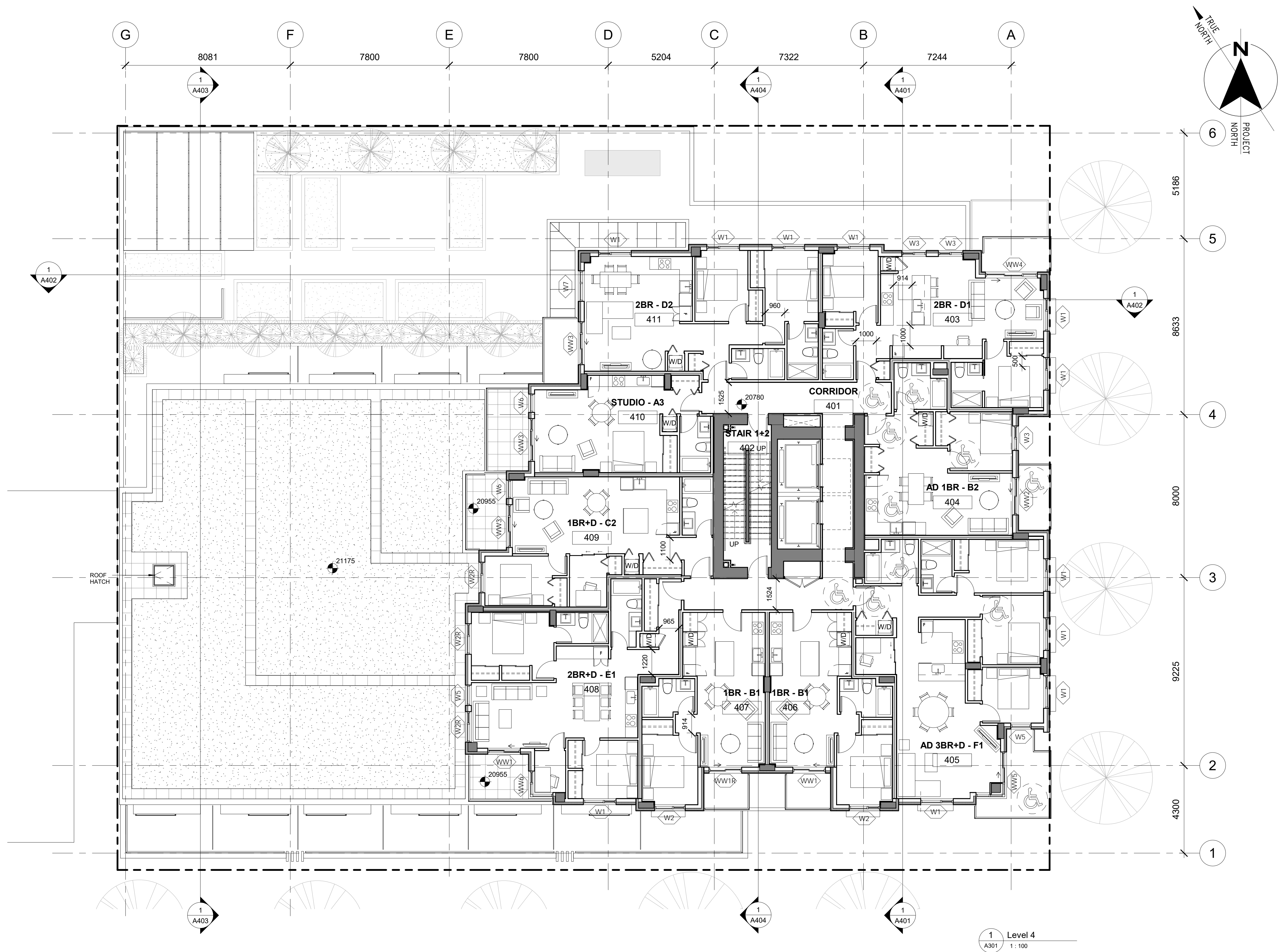
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Project
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Drawing Title
L3 PODIUM FLOOR

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A104
Drawn By: Author	Rev:
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1	2019-07-25	RE-ZONING APPLICATION
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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com
SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

Client

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(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
L4 TOWER LEVEL

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A105
Drawn By: Author	
File name:	Rev:

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Drawing Issue Date

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RAFI ARCHITECTS INC.

TEL
604.688.3655

FAX
604.688.3522

EMAIL
rai@rafiarchitects.com

WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

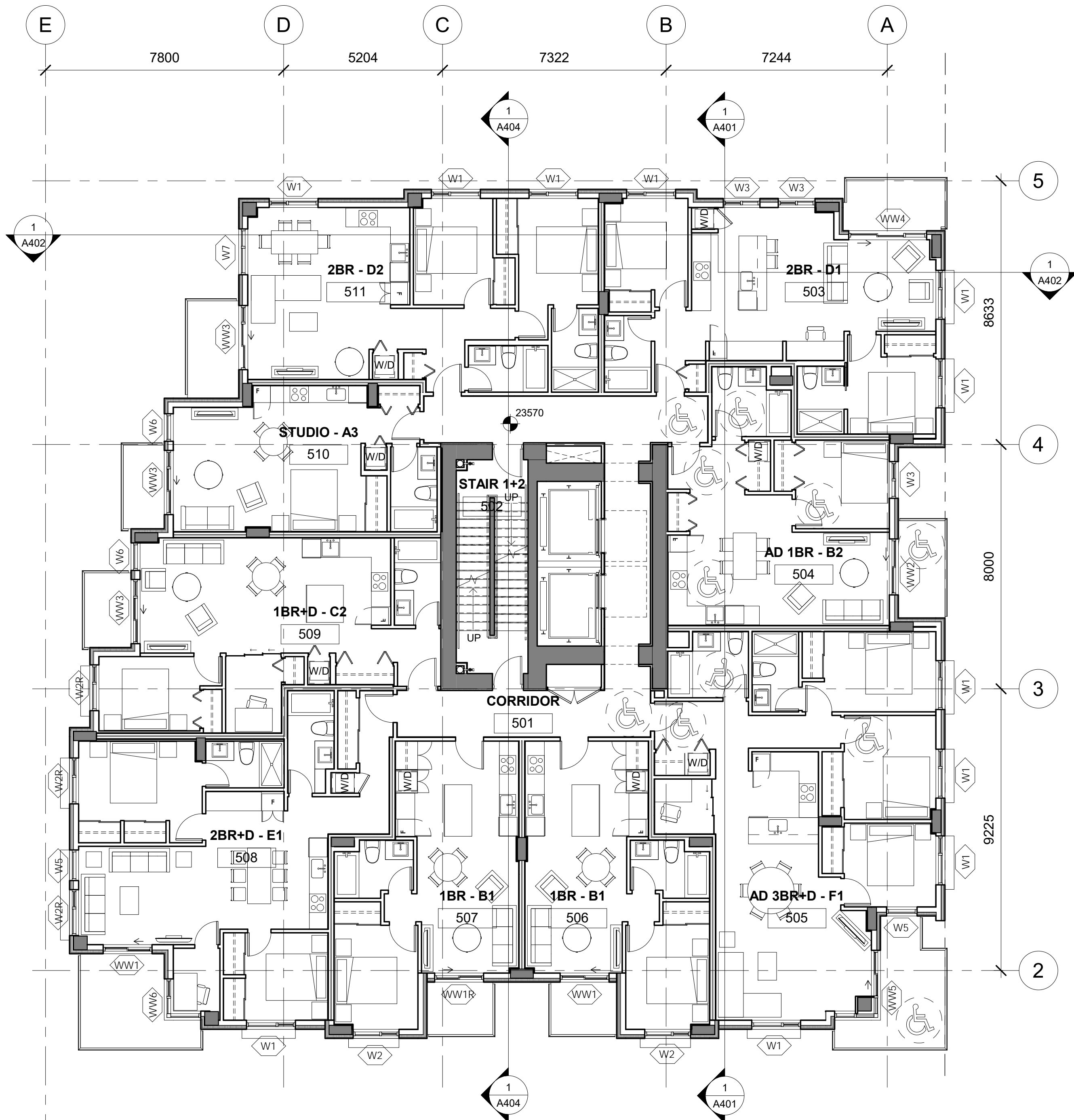
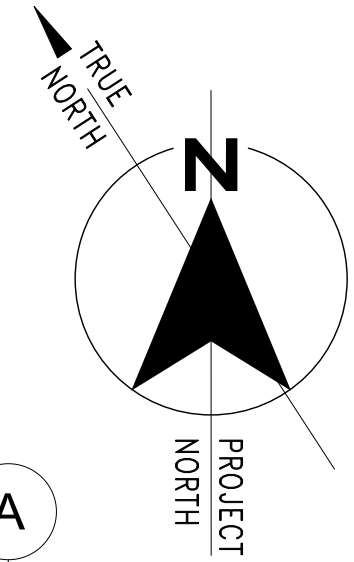
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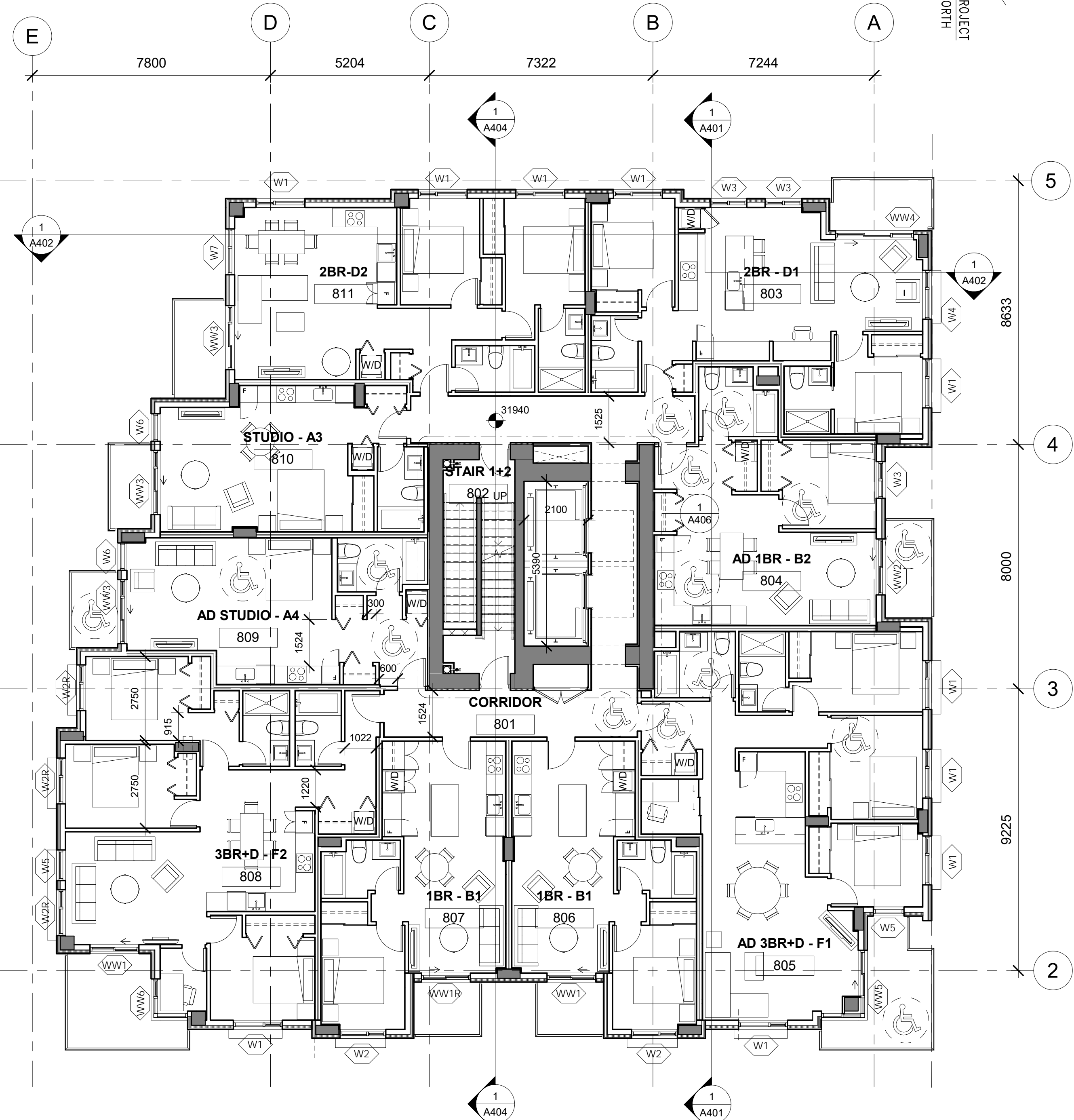
Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
L5 TYPICAL TOWER FLOOR + L8 PH

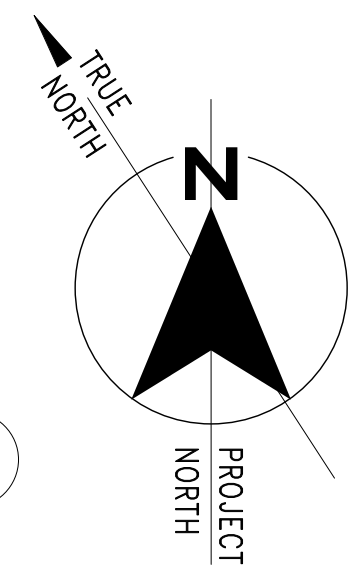
Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
1 : 100	A106
Drawn By:	
Author	
File name:	Rev:



1 Level 5 - 7
A301 1:100



2 Level 8
A301 1:100



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TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com
SUITE ONE
1600 HOWE ST
VANCOUVER BC
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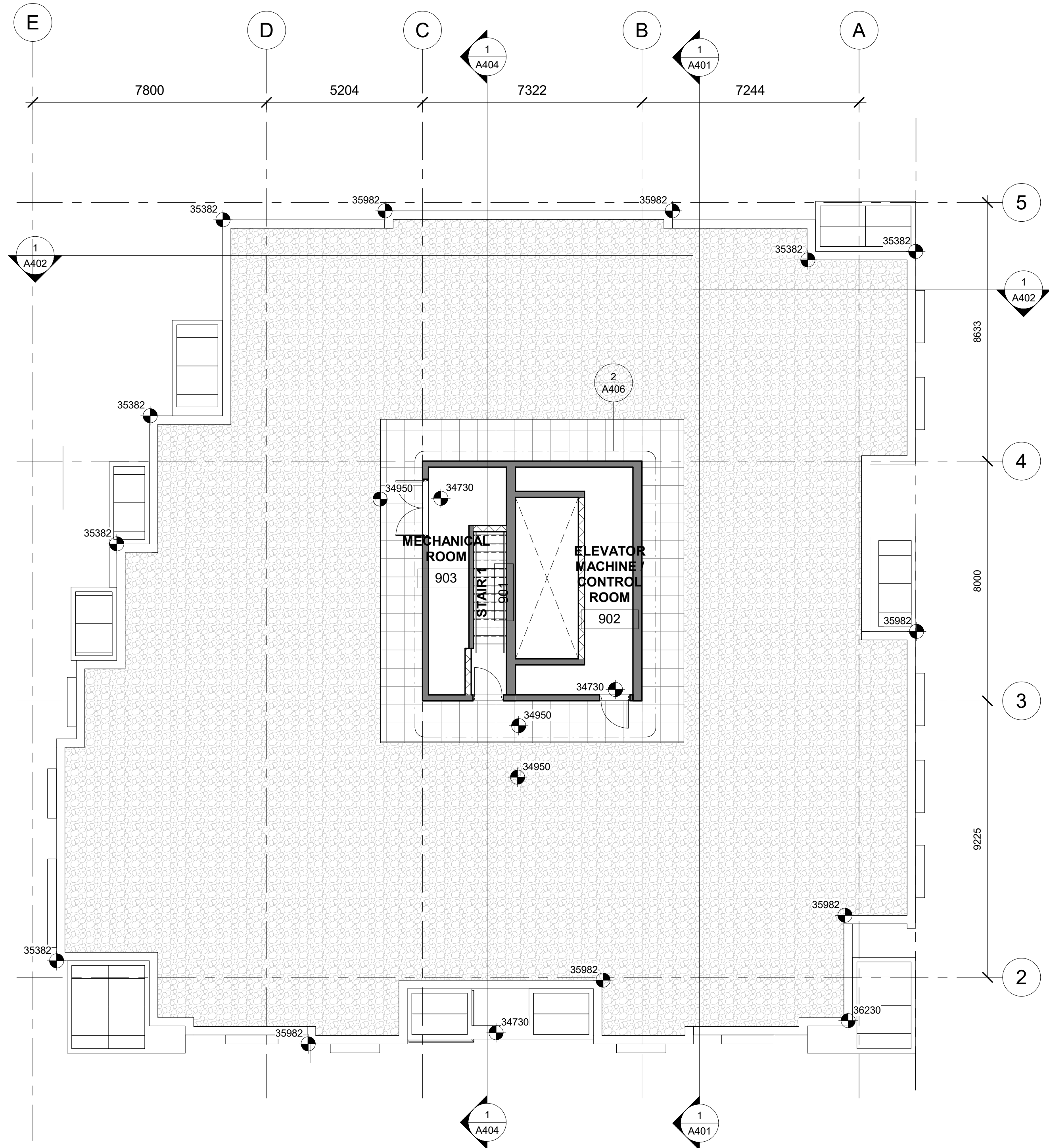
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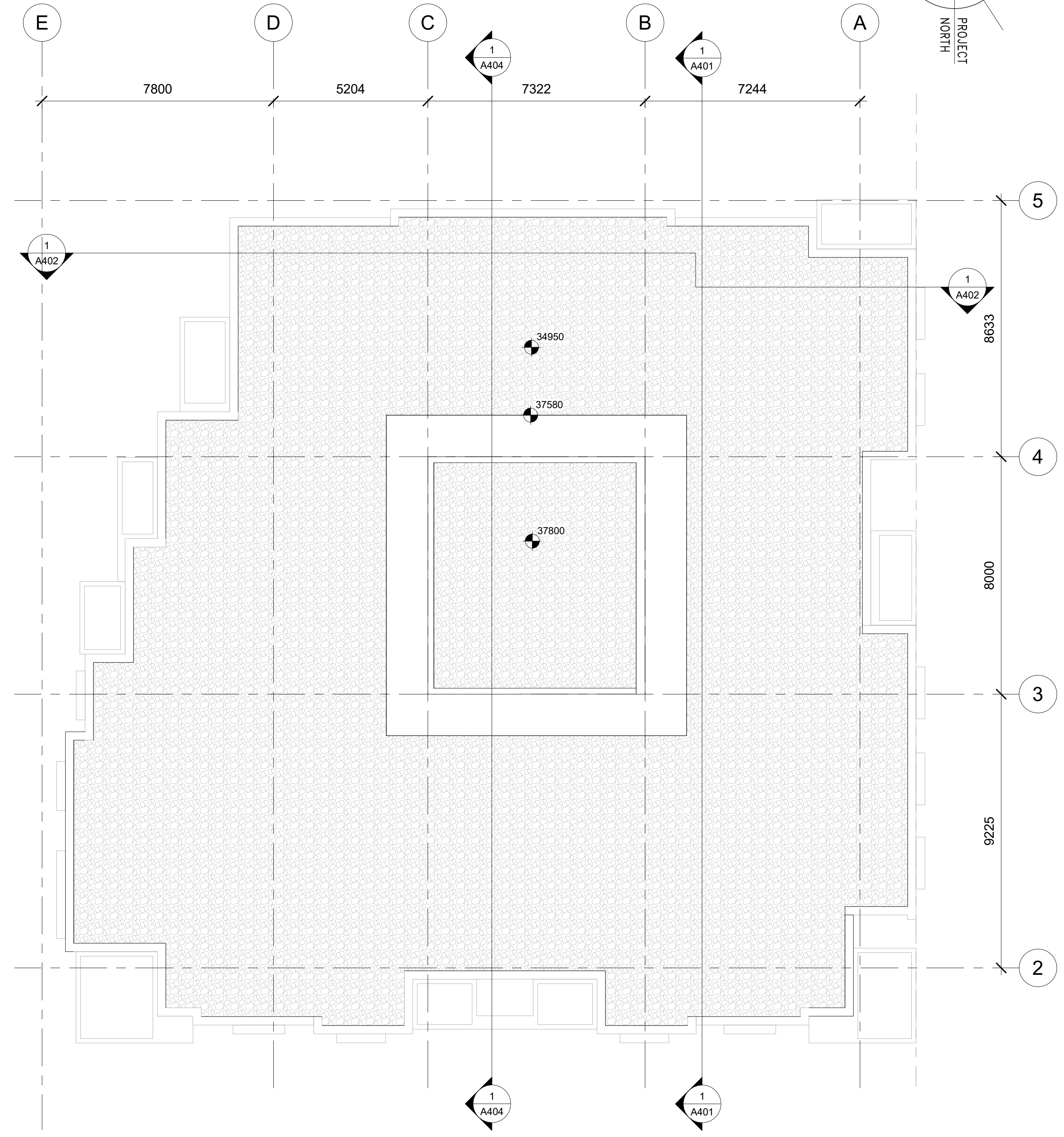
Client
Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
L9 ROOF & TOP ROOF PLAN

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A107
Drawn By: Author	Rev:
File name:	



1 L9 ROOF
A301 1 : 100



2 TOP ROOF
A301 1 : 100

MATERIAL LEGEND

1. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL INSTALLED HORIZONTALLY IN VENTILATED FACADE SYSTEM - *SLATE GREY
2. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL IN VENTILATED FACADE SYSTEM - *PURE WHITE
3. PAINTED ARCHITECTURAL CONCRETE WITH 20mm REVEALS - *OC-130 CLOUD WHITE
4. SUNSHADES - PREFABRICATED HPC LAMINATE - *PURE WHITE
5. CLEAR GLAZING IN PREFINISHED ALUMINIUM FRAMES - *IRON MOUNTAIN GREY
6. CLEAR STOREFRONT/ CURTAIN WALL GLAZING IN PREFINISHED ALUMINIUM FRAMES - *STANDARD WHITE
7. CLEAR GLAZING w/ CERAMIC FRIT PATTERN (TBD) IN PREFINISHED ALUMINIUM RAILINGS - *IRON MOUNTAIN GREY
8. PREFINISHED ALUMINIUM OH & EXIT GATES - *BLACK CHARCOAL
9. LAMINATED GLASS w/ DIFFUSED WHITE INTERLAYER AND STRUCTURAL STEEL CANOPY - *BLACK CHARCOAL
10. PRIVACY SCREEN OF OPAQUE GLAZING IN ALUMINIUM FRAMES - *STANDARD WHITE
11. PREFINISHED MISCELENIIOUS METALS TO MATCH ADJACENT - *DARK GREY/ WHITE
12. WALL MOUNTED LIGHT FIXTURE
13. EXTRUDED TERRACOTTA TILE WALL FACADE - *BRICK RED
14. ACCENT SCREEN - *PERFORATED CORTEN STEEL PANEL (PUBLIC ART TBD)
15. PAINTED ARCHITECTURAL CONCRETE WITH 20mm REVEALS - *WARM GREY



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Drawing Issue Date

Revision Schedule

Rev #	Date	Description
1	2019-07-25	RE-ZONING APPLICATION
2	2019-09-18	ADP/ DIS PRESENTATION
3	2020-03-03	DEPT. REVIEW - RESPONSE
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5	2020-10-01	DEPT. REVIEW - RESPONSE 3
6	2020-10-09	RESUBMITTED FOR FIRST READING

RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiarchitects.com
WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

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Client
 **CRESSEY**
(ESPLANADE)
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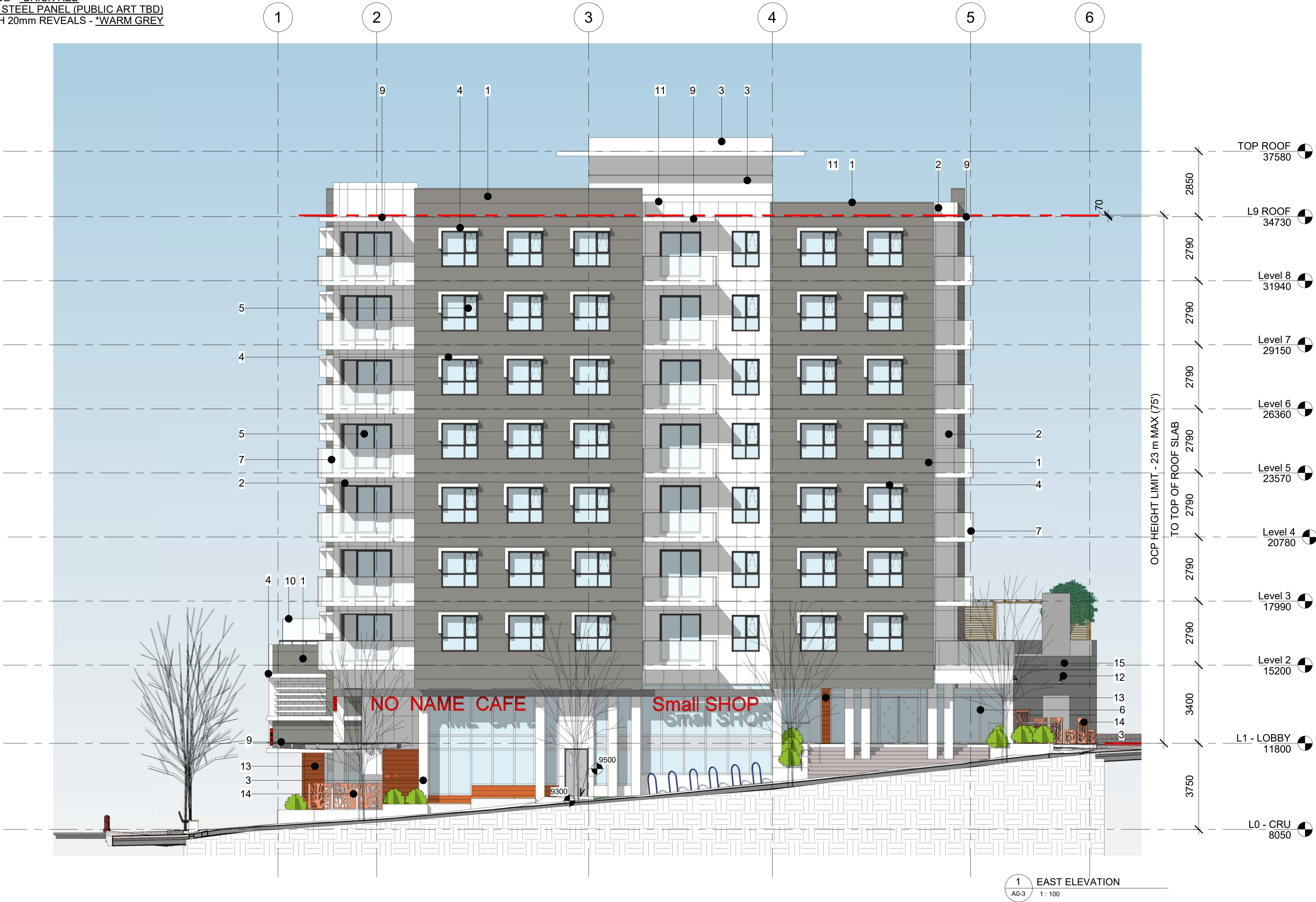
Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
SOUTH ELEVATION

Date: Issue Date	Project No. 18-60
Scale As indicated	Drawing No. A301
Drawn By: Author	
File name:	Rev:

MATERIAL LEGEND

1. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL INSTALLED HORIZONTALLY IN VENTILATED FACADE SYSTEM - *SLATE GREY
2. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL IN VENTILATED FACADE SYSTEM - *PURE WHITE
3. PAINTED ARCHITECTURAL CONCRETE WITH 20mm REVEALS - *OC-130 CLOUD WHITE
4. SUNSHADES - PREFABRICATED HPC LAMINATE - *PURE WHITE
5. CLEAR GLAZING IN PREFINISHED ALUMINIUM FRAMES - *IRON MOUNTAIN GREY
6. CLEAR STOREFRONT/ CURTAIN WALL GLAZING IN PREFINISHED ALUMINIUM FRAMES - *STANDARD WHITE
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15. PAINTED ARCHITECTURAL CONCRETE WITH 20mm REVEALS - *WARM GREY



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Drawing Issue Date

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RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

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(ESPLANADE)
DEVELOPMENT LLP

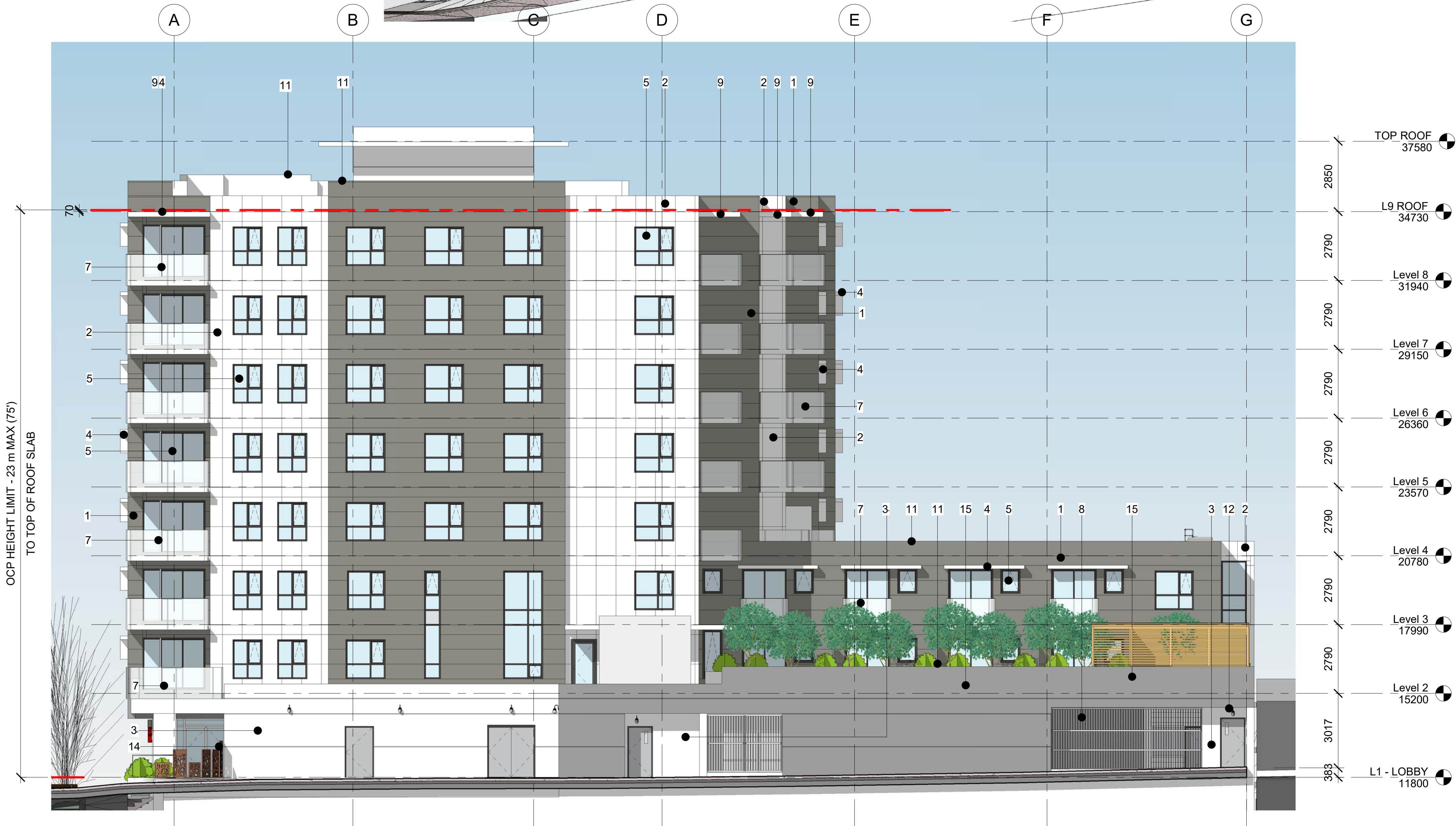
Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
EAST ELEVATION

Date: Issue Date	Project No. 18-60
Scale As indicated	Drawing No. A302
Drawn By: Author	
File name:	Rev:

MATERIAL LEGEND

1. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL INSTALLED HORIZONTALLY IN VENTILATED FACADE SYSTEM - *SLATE GREY
2. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL IN VENTILATED FACADE SYSTEM - *PURE WHITE
3. PAINTED ARCHITECTURAL CONCRETE WITH 20mm REVEALS - *OC-130 CLOUD WHITE
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1 NORTH ELEVATION
A0-3 1:100

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Drawing Issue Date

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RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiarchitects.com
WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

Members of Architectural Institute of B.C.

Client
 **CRESSEY**
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
NORTH ELEVATION

Date: Issue Date	Project No. 18-60
Scale As indicated	Drawing No. A303
Drawn By: Author	Rev:
File name:	

MATERIAL LEGEND

1. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL INSTALLED HORIZONTALLY IN VENTILATED FACADE SYSTEM - *SLATE GREY
2. HIGH-PRESSURE COMPACT LAMINATE CLADDING PANEL IN VENTILATED FACADE SYSTEM - *PURE WHITE
3. PAINTED ARCHITECTURAL CONCRETE WITH 20mm REVEALS - *OC-130 CLOUD WHITE
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RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiarchitects.com
WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

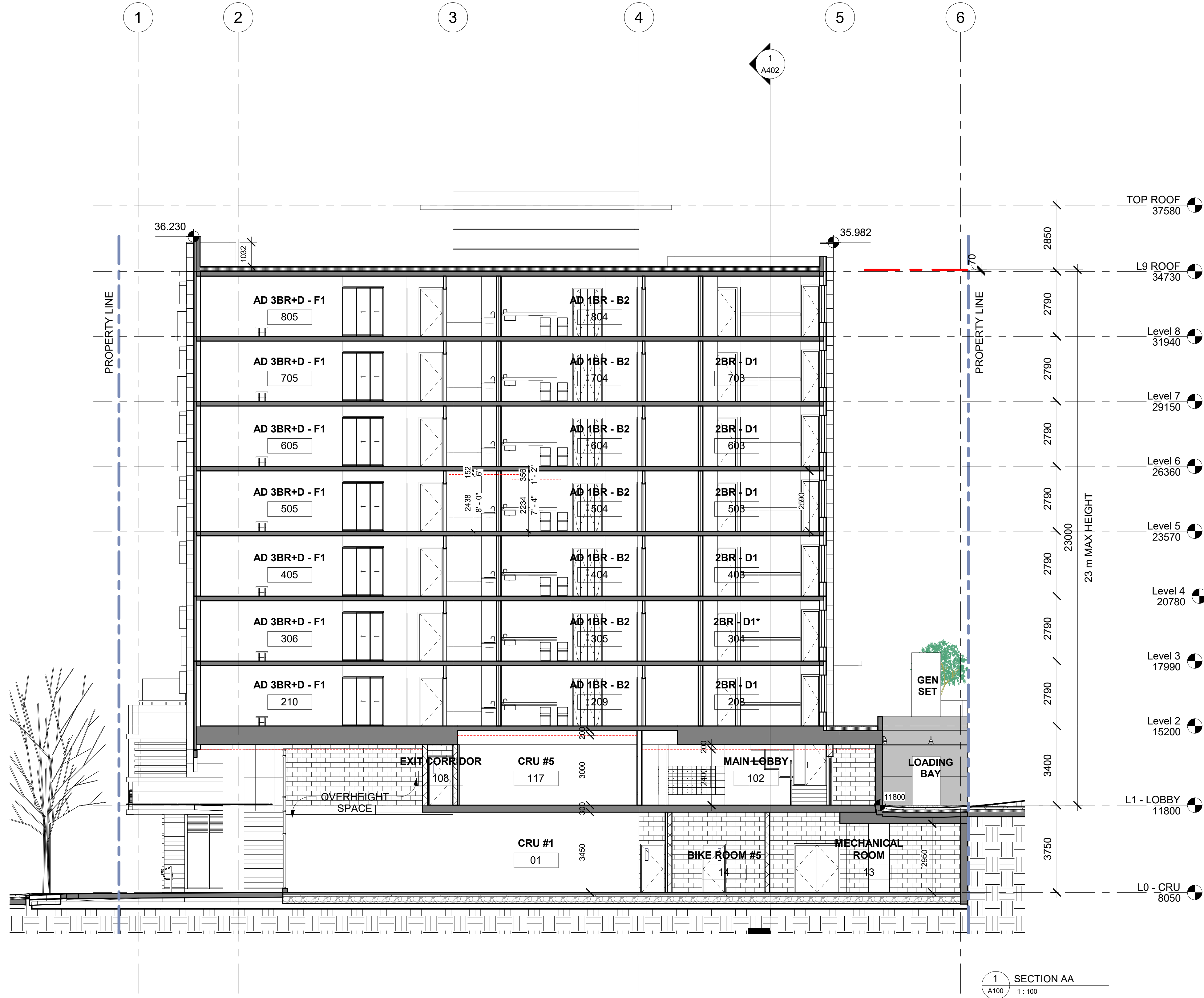
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DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
WEST ELEVATION

Date: Issue Date	Project No. 18-60
Scale As indicated	Drawing No. A304
Drawn By: Author	
File name:	Rev:



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Drawing Issue Date

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RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiarchitects.com
WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

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Client
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(ESPLANADE)
DEVELOPMENT LLP

Project
200 West
Esplanade, NORTH
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Drawing Title
SECTION AA

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A401
Drawn By: Author	Rev:
File name:	

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RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiarchitects.com
WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

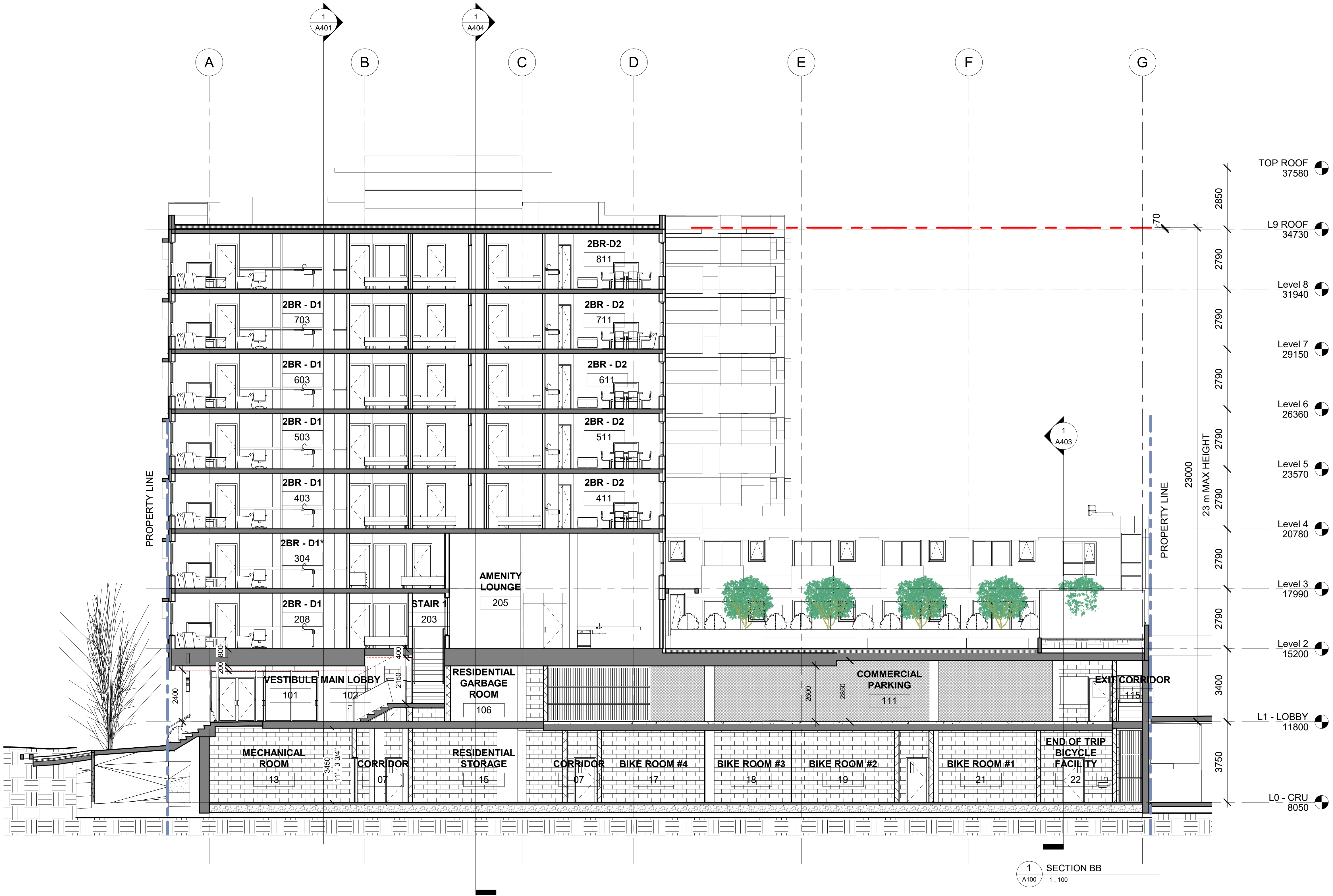
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(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
SECTION BB

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A402
Drawn By: Author	Rev:
File name:	



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Drawing Issue Date

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RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiarchitects.com
WWW
rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

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Client
 **CRESSEY**
(ESPLANADE)
DEVELOPMENT LLP

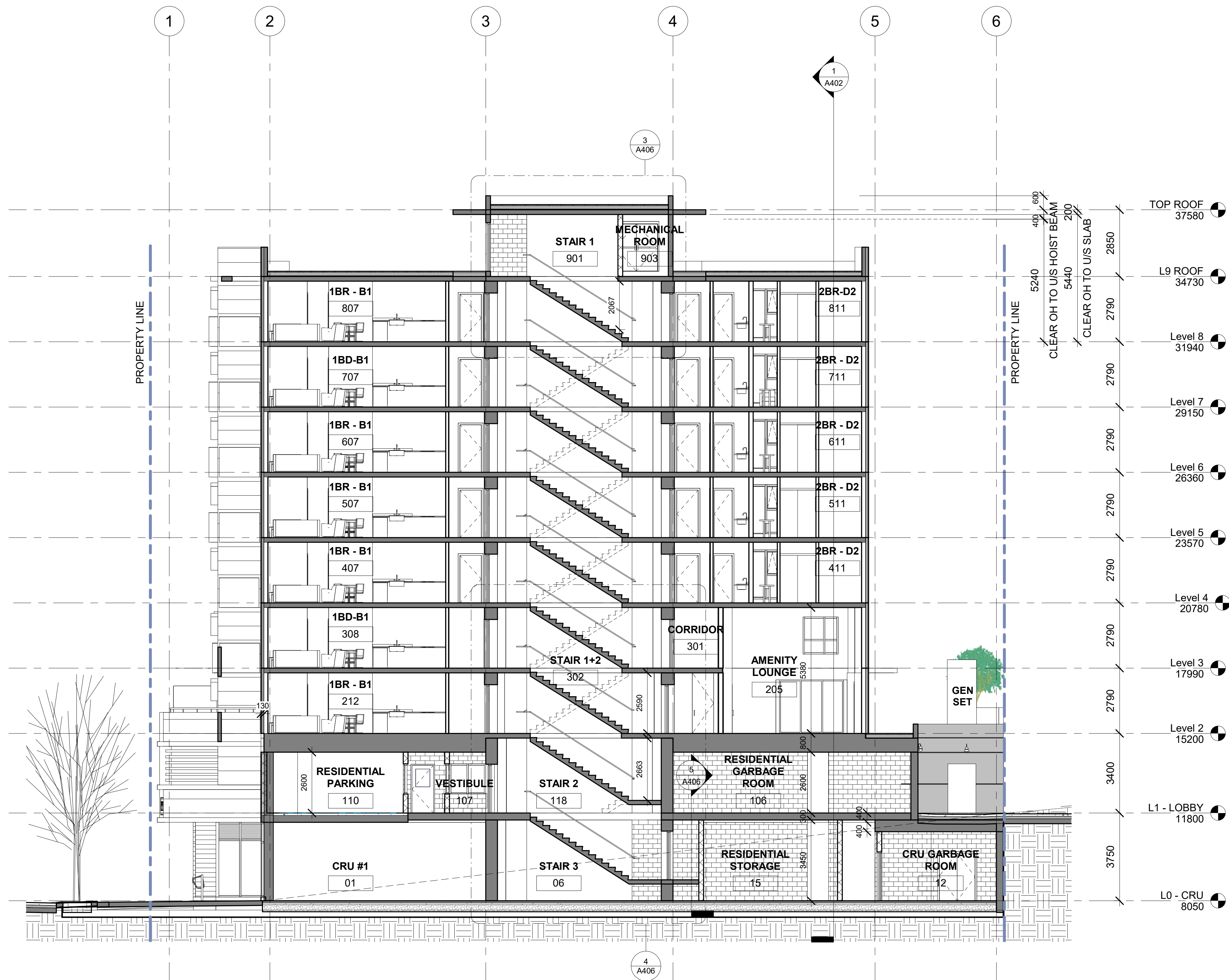
Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
SECTION CC

Date: Issue Date	Project No. 18-60
Scale 1 : 100	Drawing No. A403
Drawn By: Author	Rev:
File name:	



1 SECTION CC
A100 1 : 100



1 SECTION DD
A100 1:100

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Drawing Issue Date

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RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com
SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

Members of Architectural Institute of B.C.

Client
 **CRESSEY**
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West
Esplanade, NORTH
VANCOUVER, B.C.

Drawing Title
SECTION DD

Date: Issue Date	Project No. 18-60
Scale 1:100	Drawing No. A404
Drawn By: Author	Rev:
File name:	

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RAFI ARCHITECTS INC.

TEL 604.688.3655

FAX 604.688.3522

EMAIL rai@rafiarchitects.com

WWW rafiarchitects.com

SUITE ONE

1600 HOWE ST

VANCOUVER BC

V6Z 2L9 CANADA

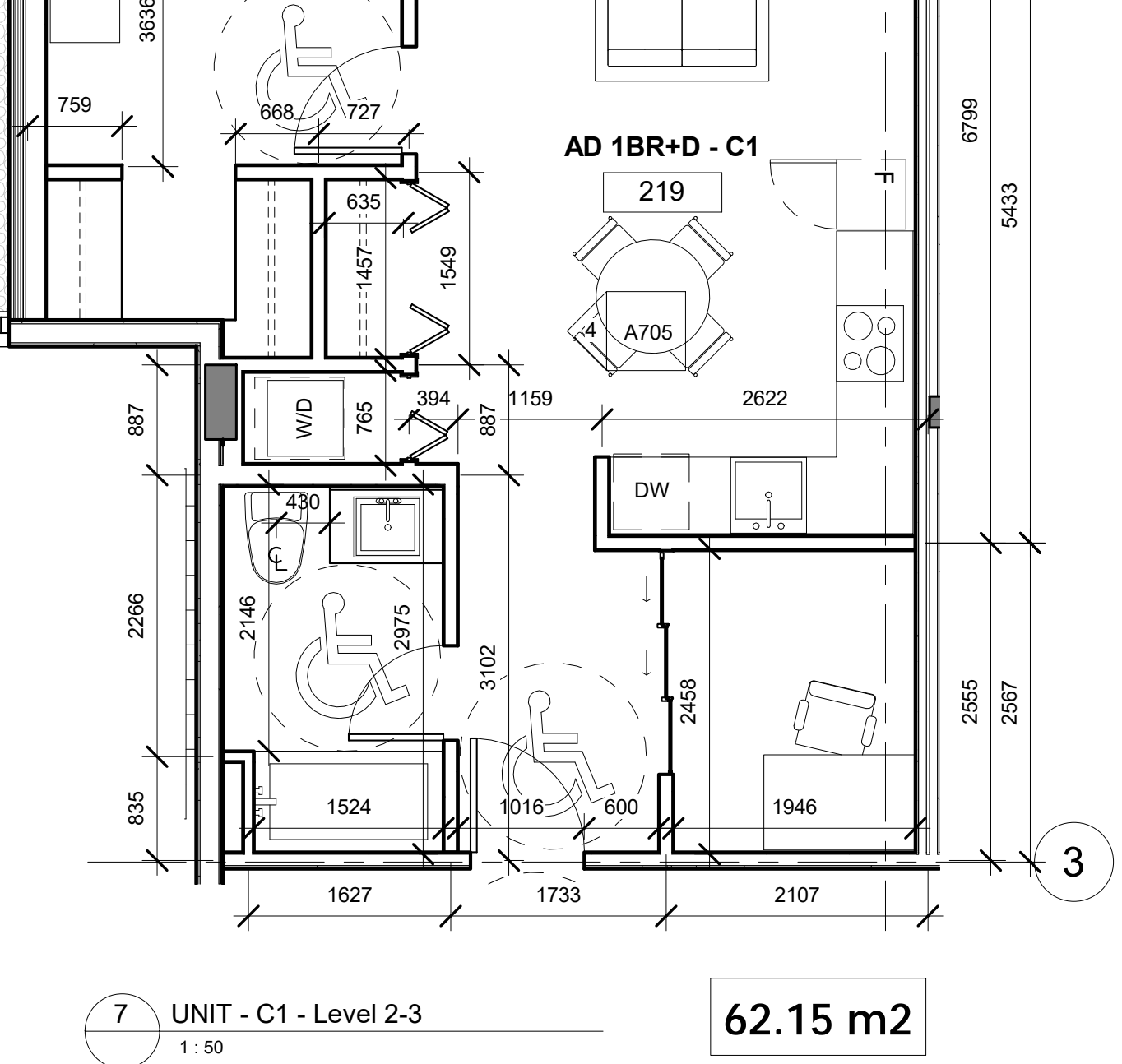
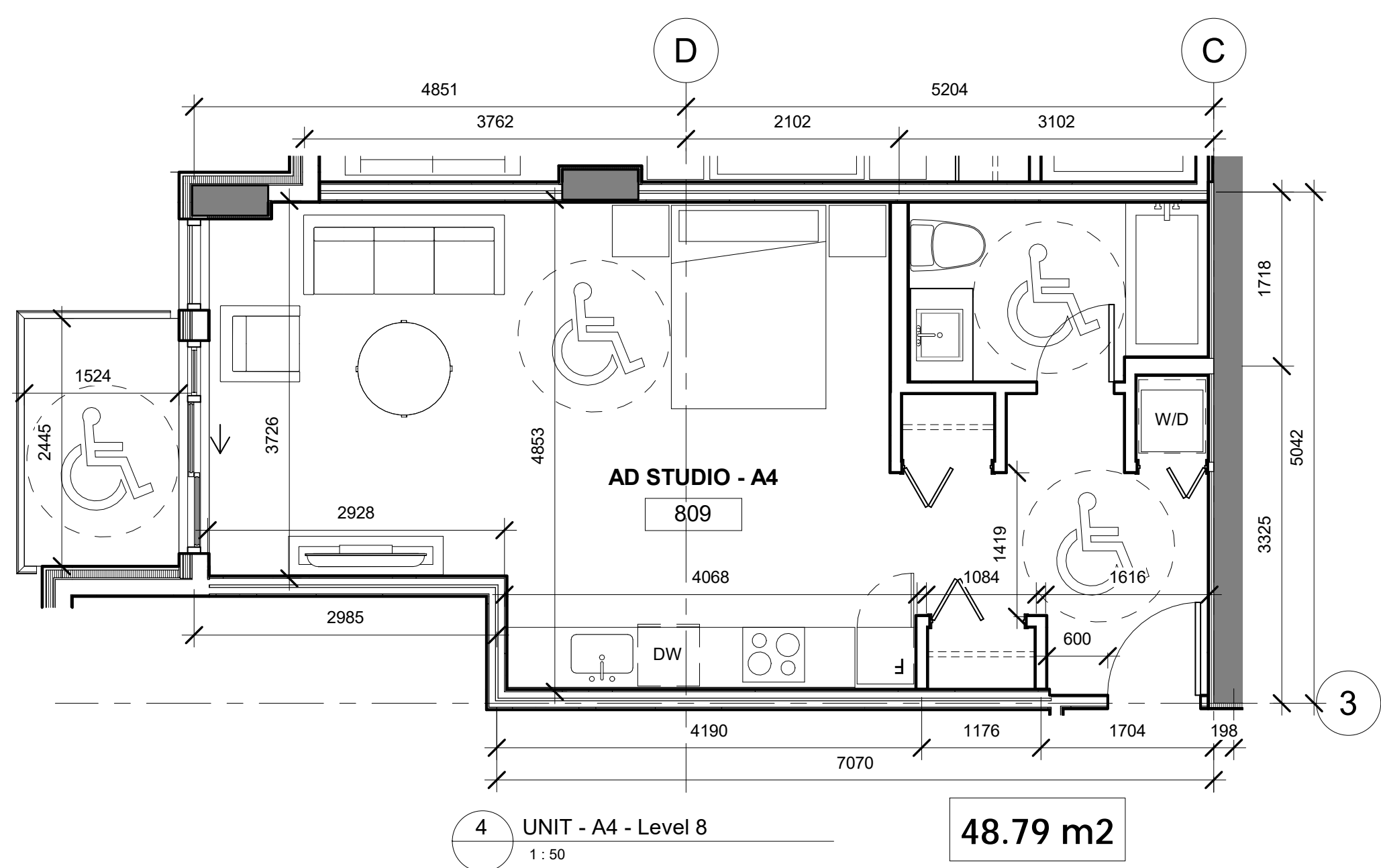
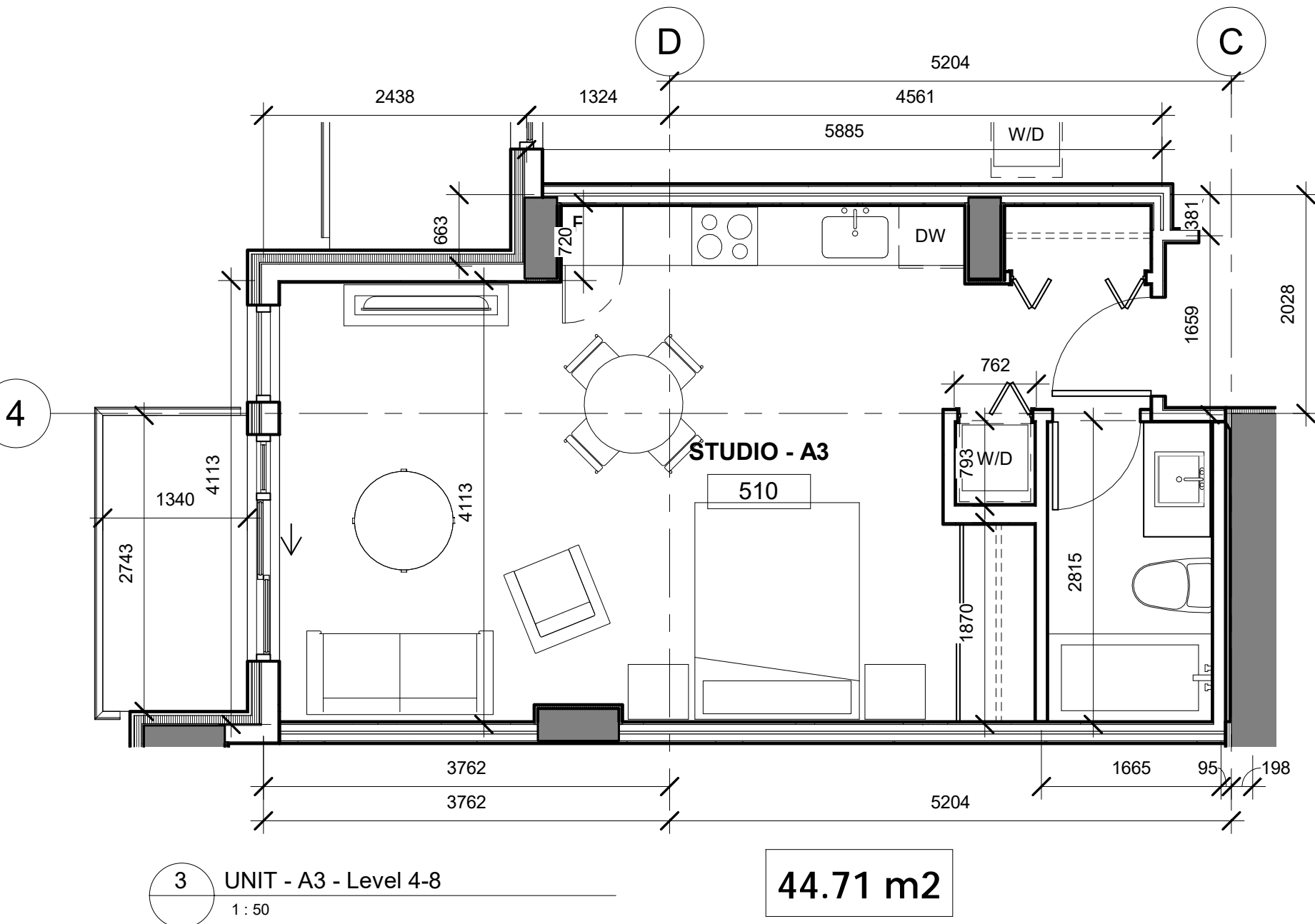
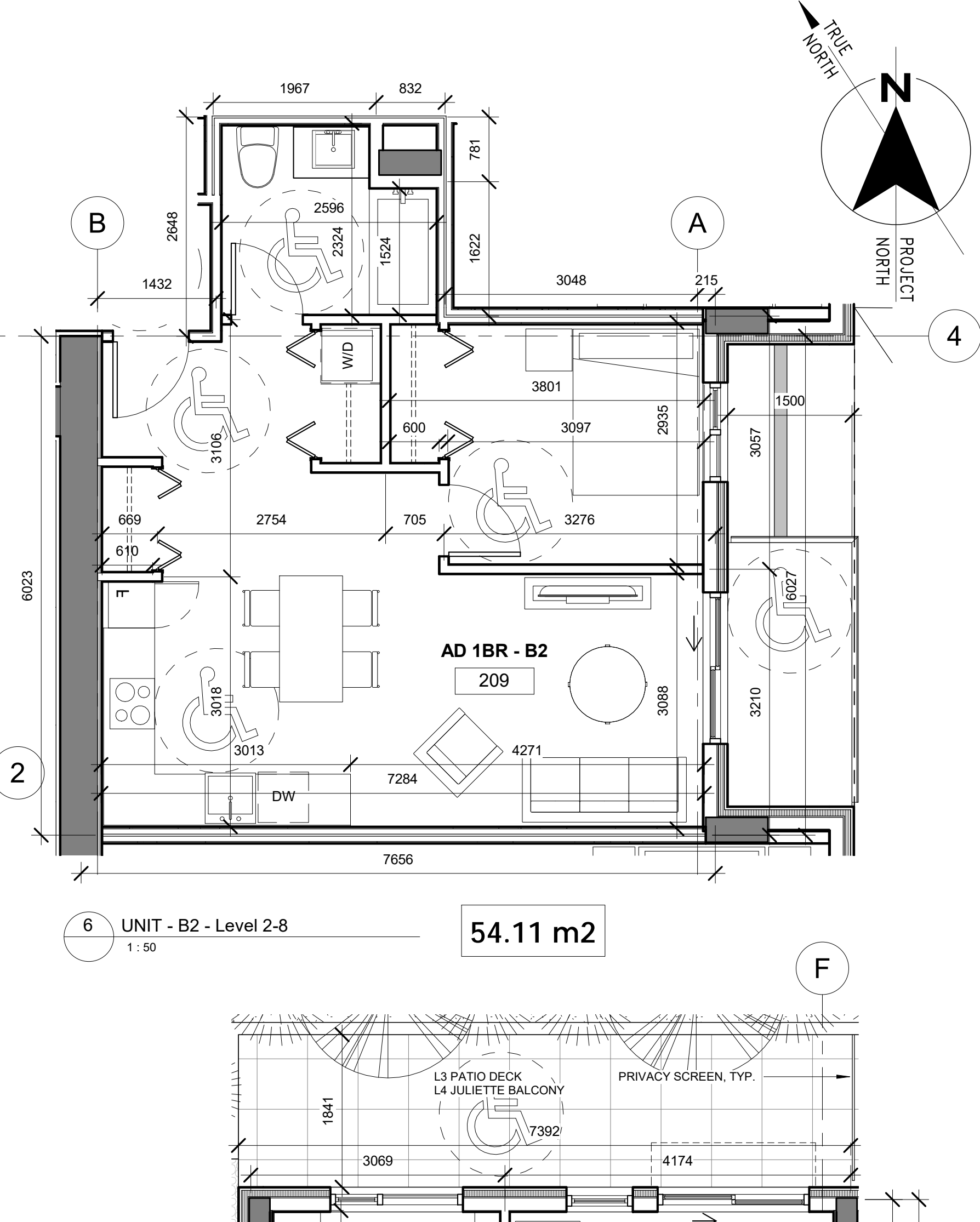
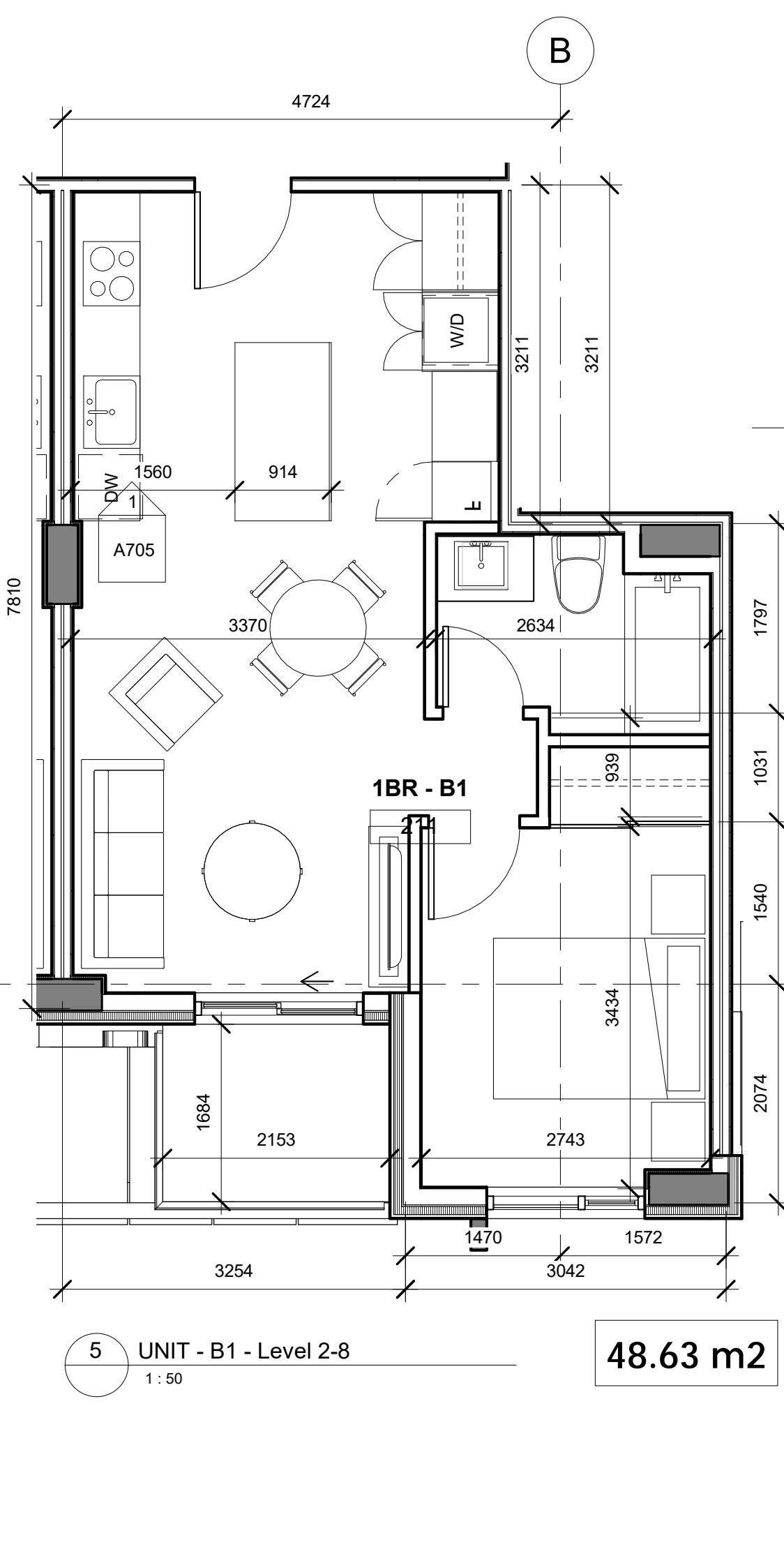
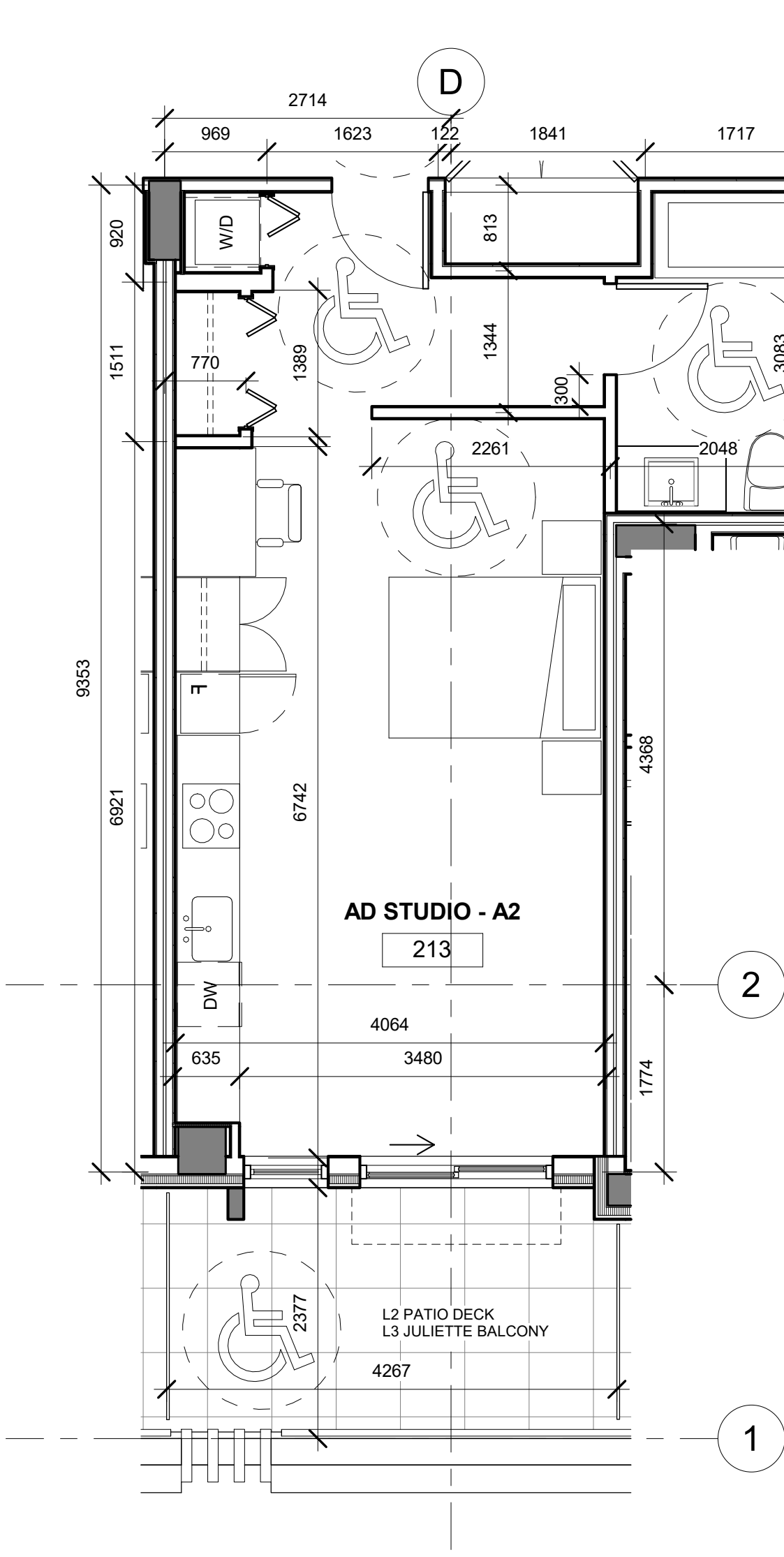
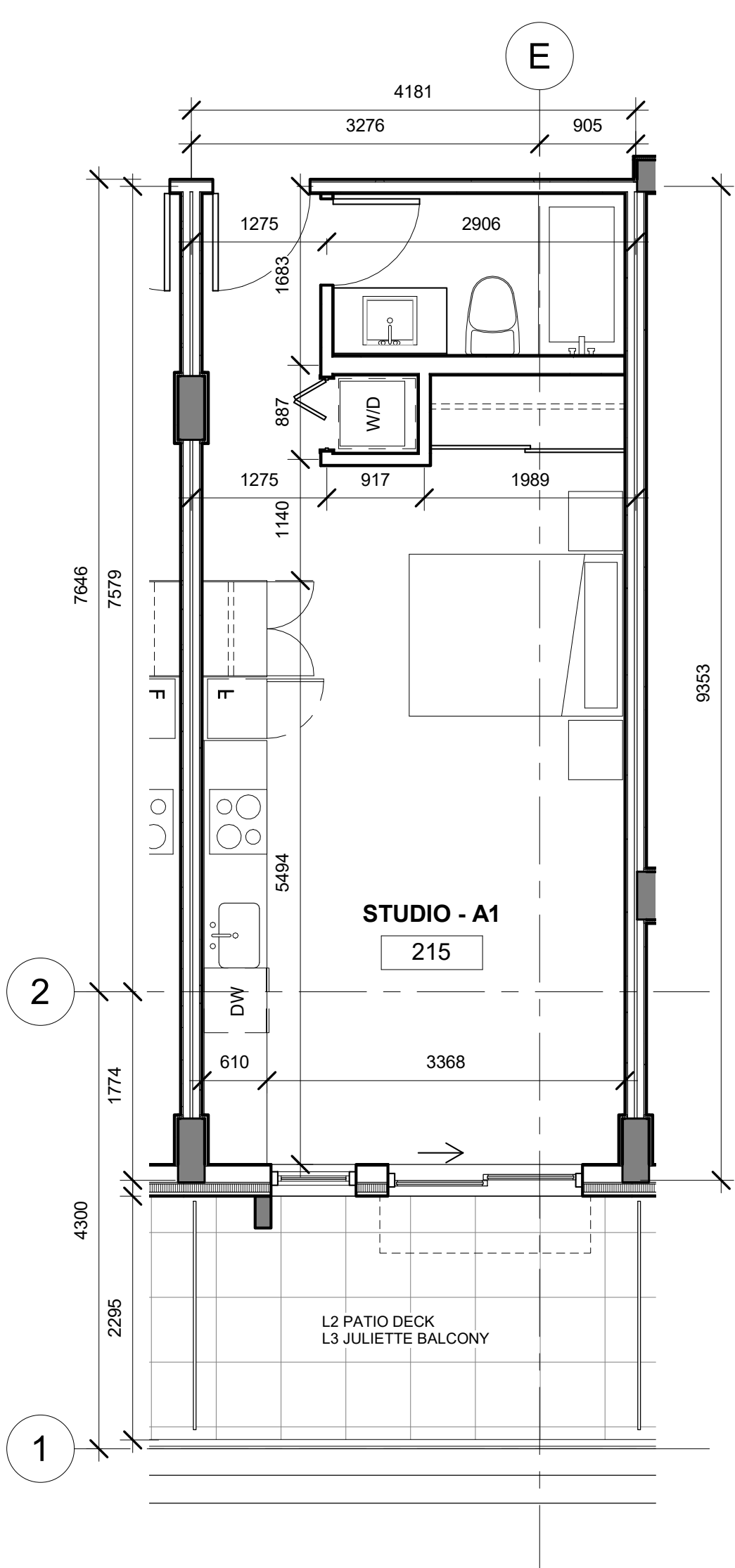
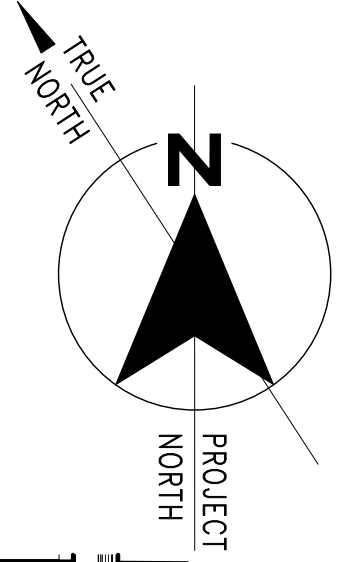
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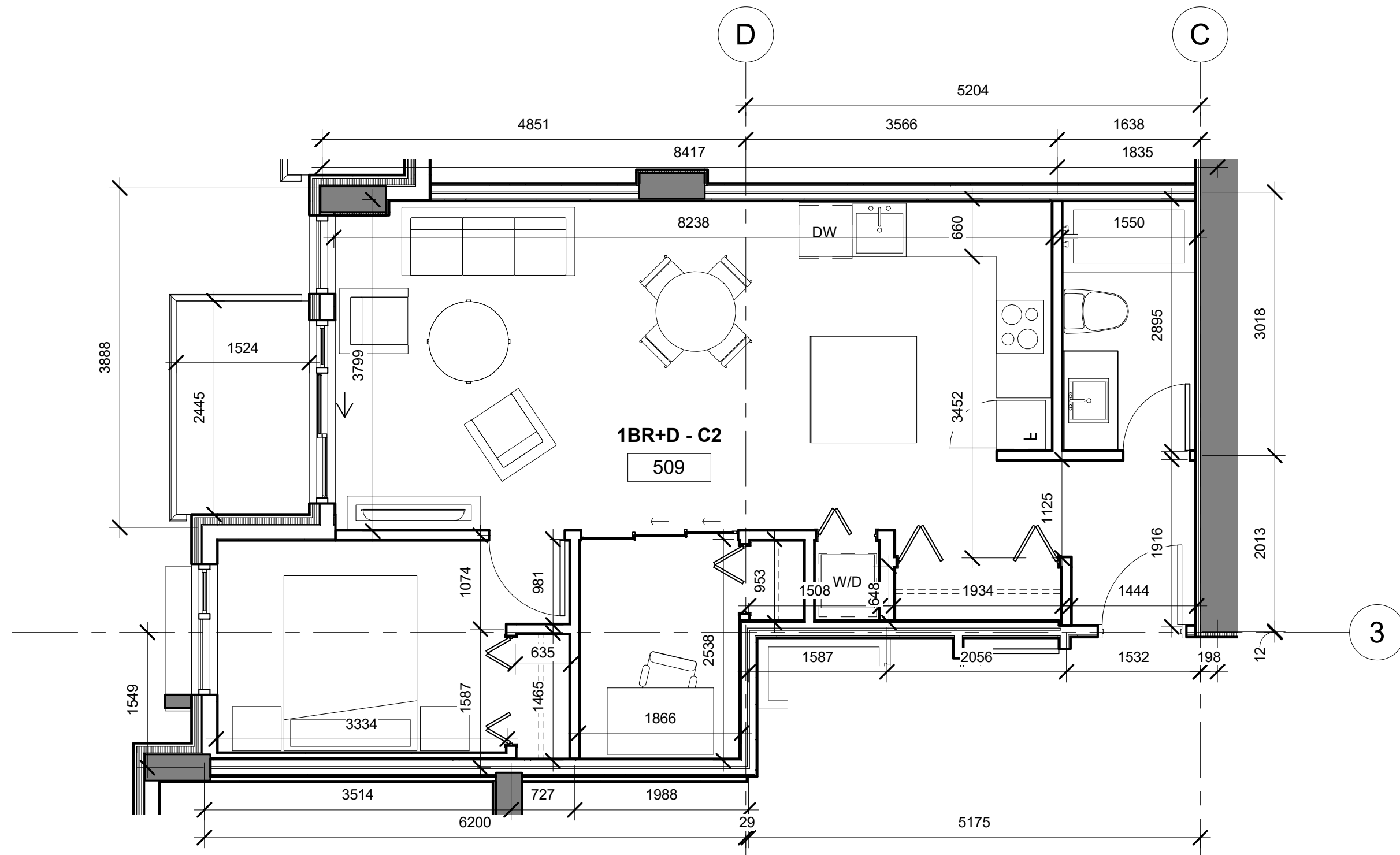
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
UNIT PLANS A1, A2, A3, A4, B1, B2, C1

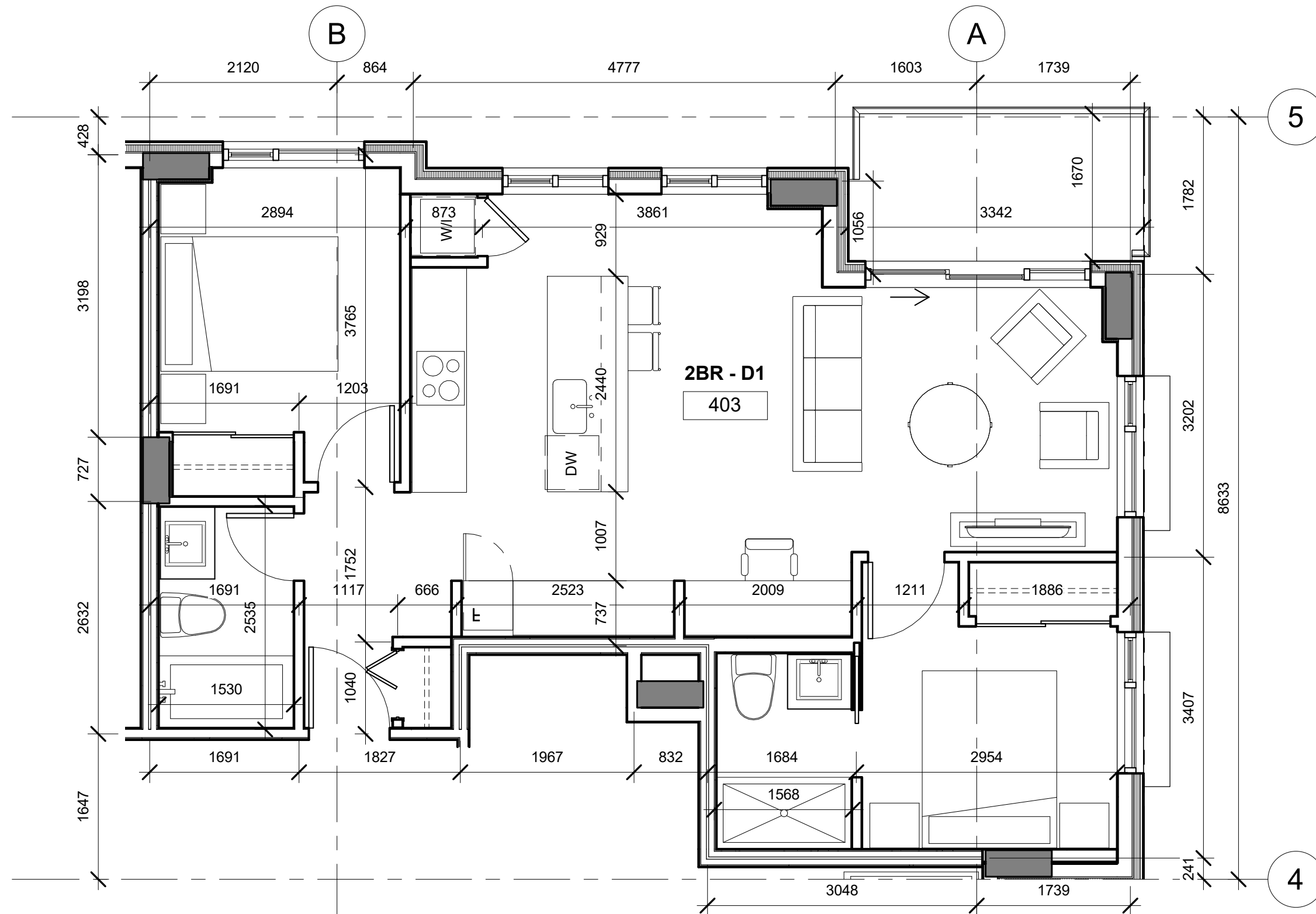
Date:	Project No.
Issue Date	18-60
Scale	Drawing No.
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Drawn By:	Author
File name:	Rev:





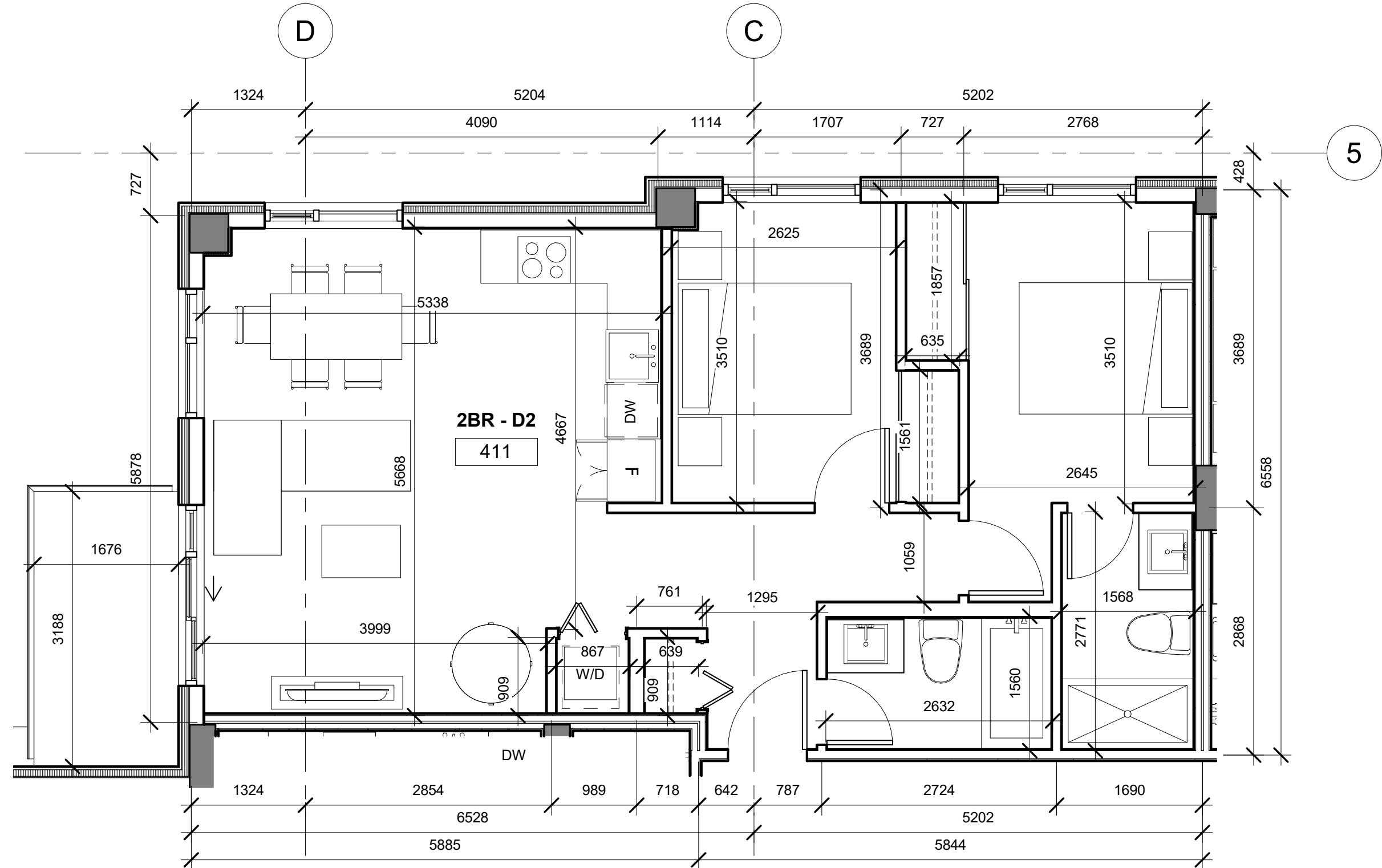
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1:50

64.04 m2



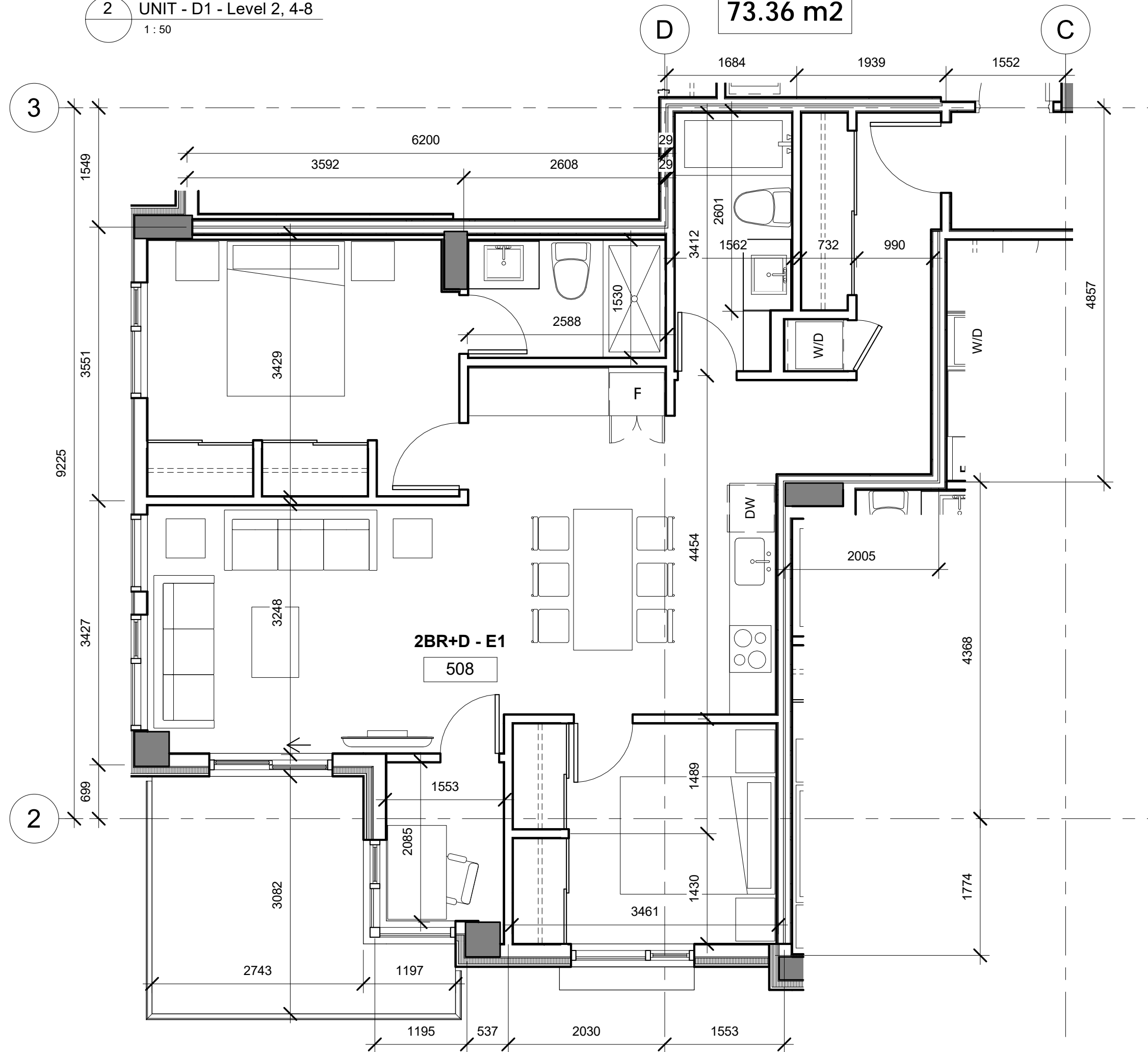
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73.36 m2



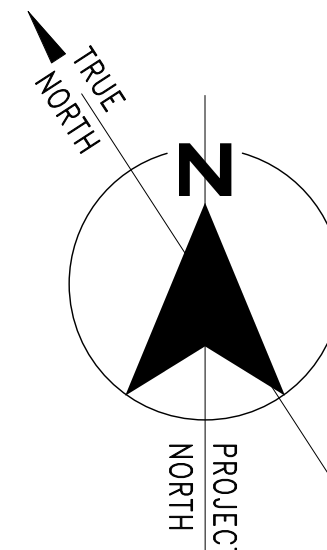
3 UNIT - D2 - Level 4-8
1:50

74.47 m2



4 UNIT - E1 - Level 4-7
1:50

82.14 m2



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RAFI ARCHITECTS INC.

TEL 604.688.3655
FAX 604.688.3522
EMAIL rai@rafiarchitects.com
WWW rafiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

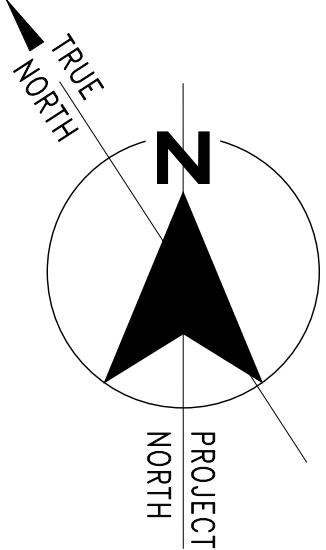
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(ESPLANADE)
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Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
UNIT PLANS C2, D1, D2, E1

Date: Issue Date	Project No. 18-60
Scale 1:50	Drawing No. A502
Drawn By: Author	
File name:	Rev:



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TEL 604.688.3655
FAX 604.688.3522
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SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA

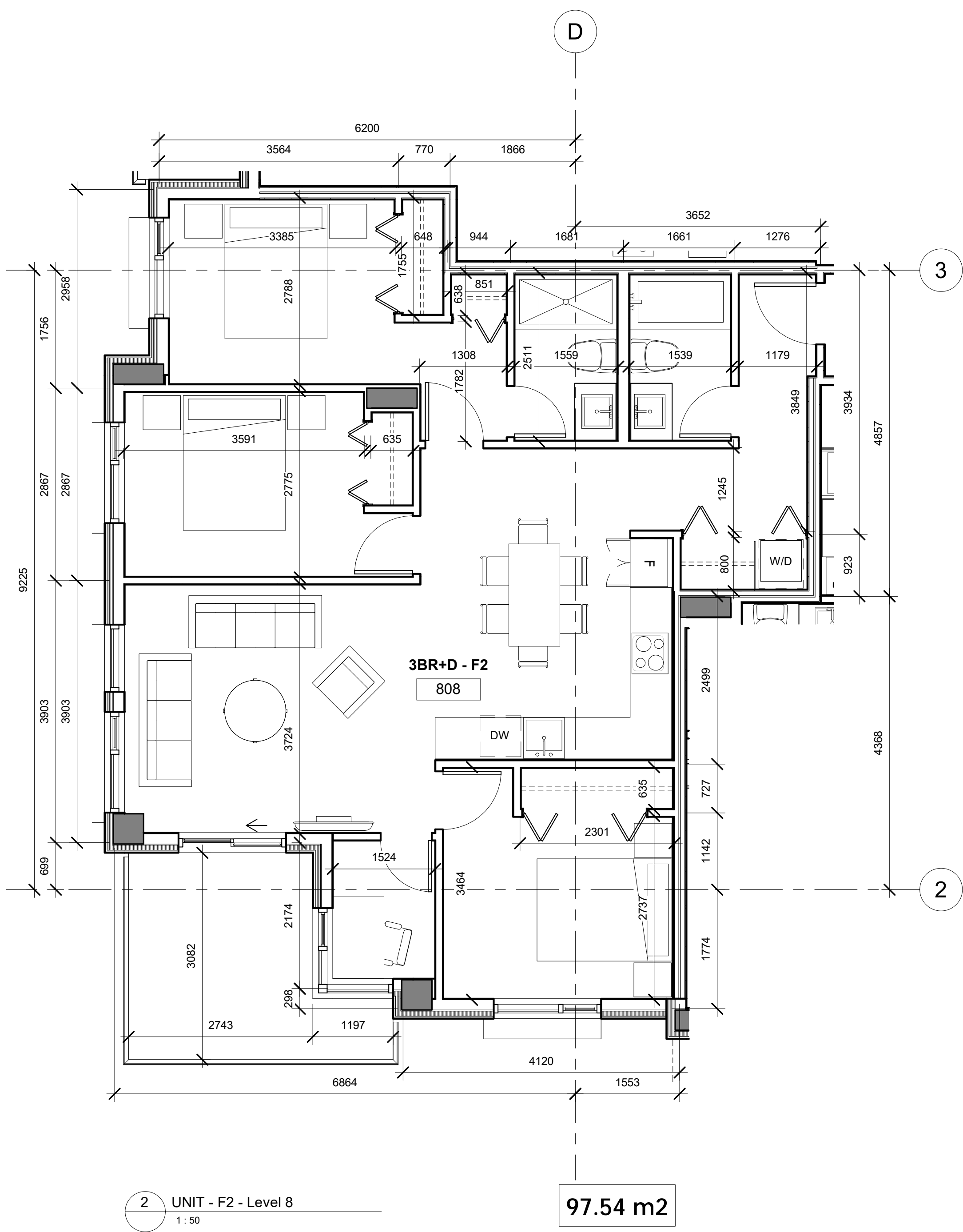
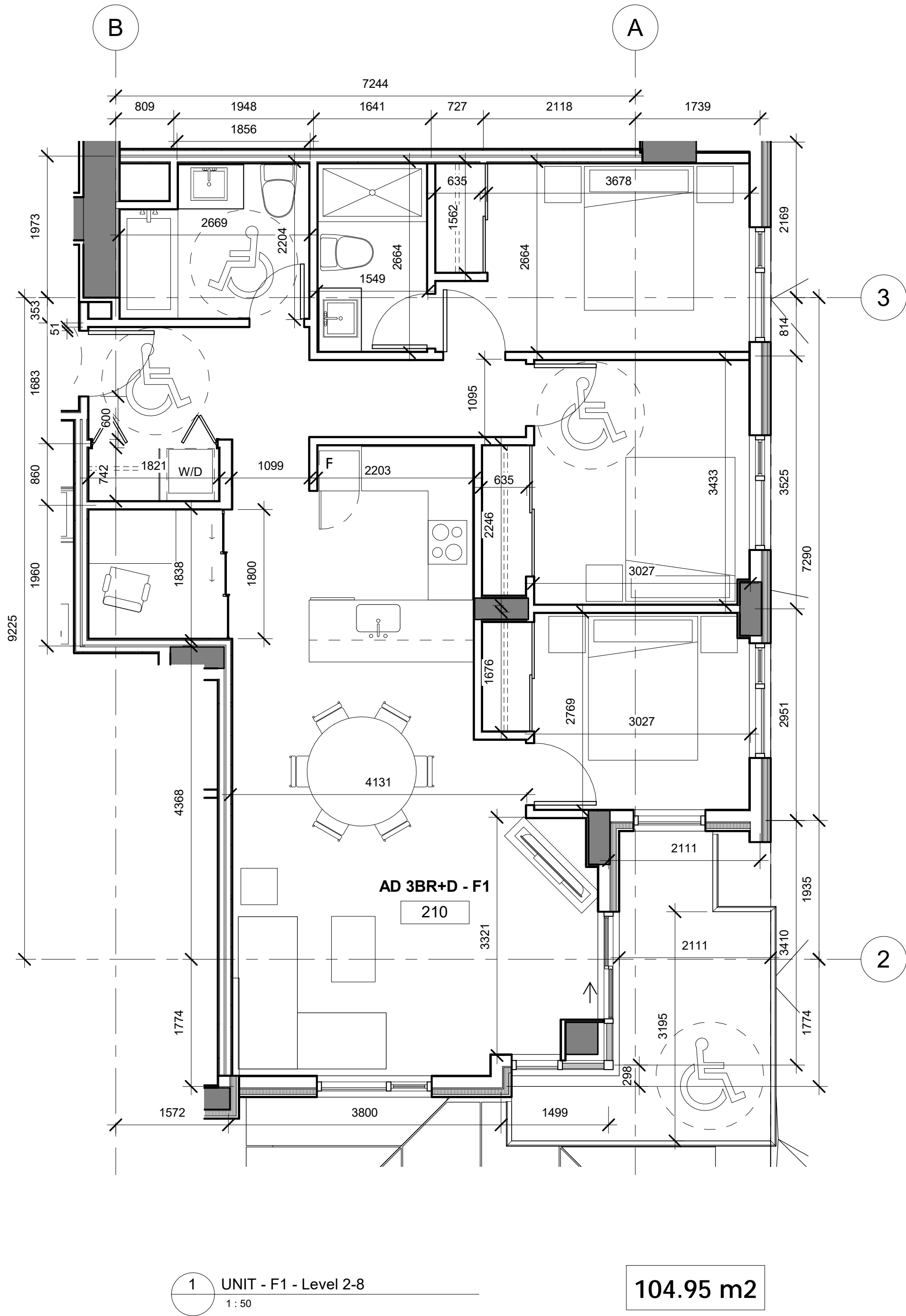
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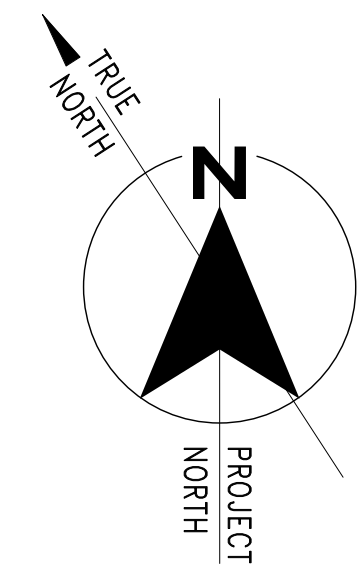
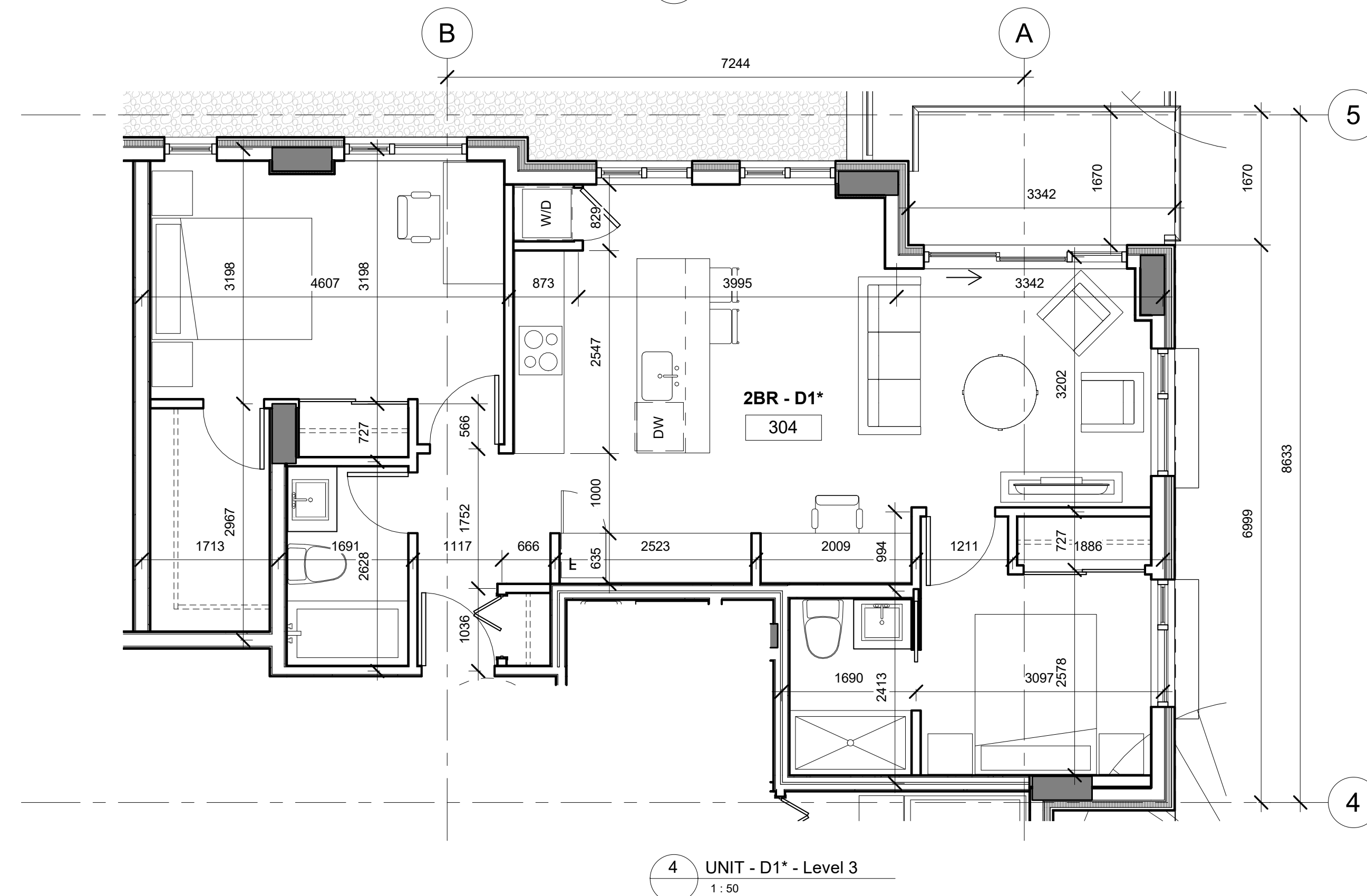
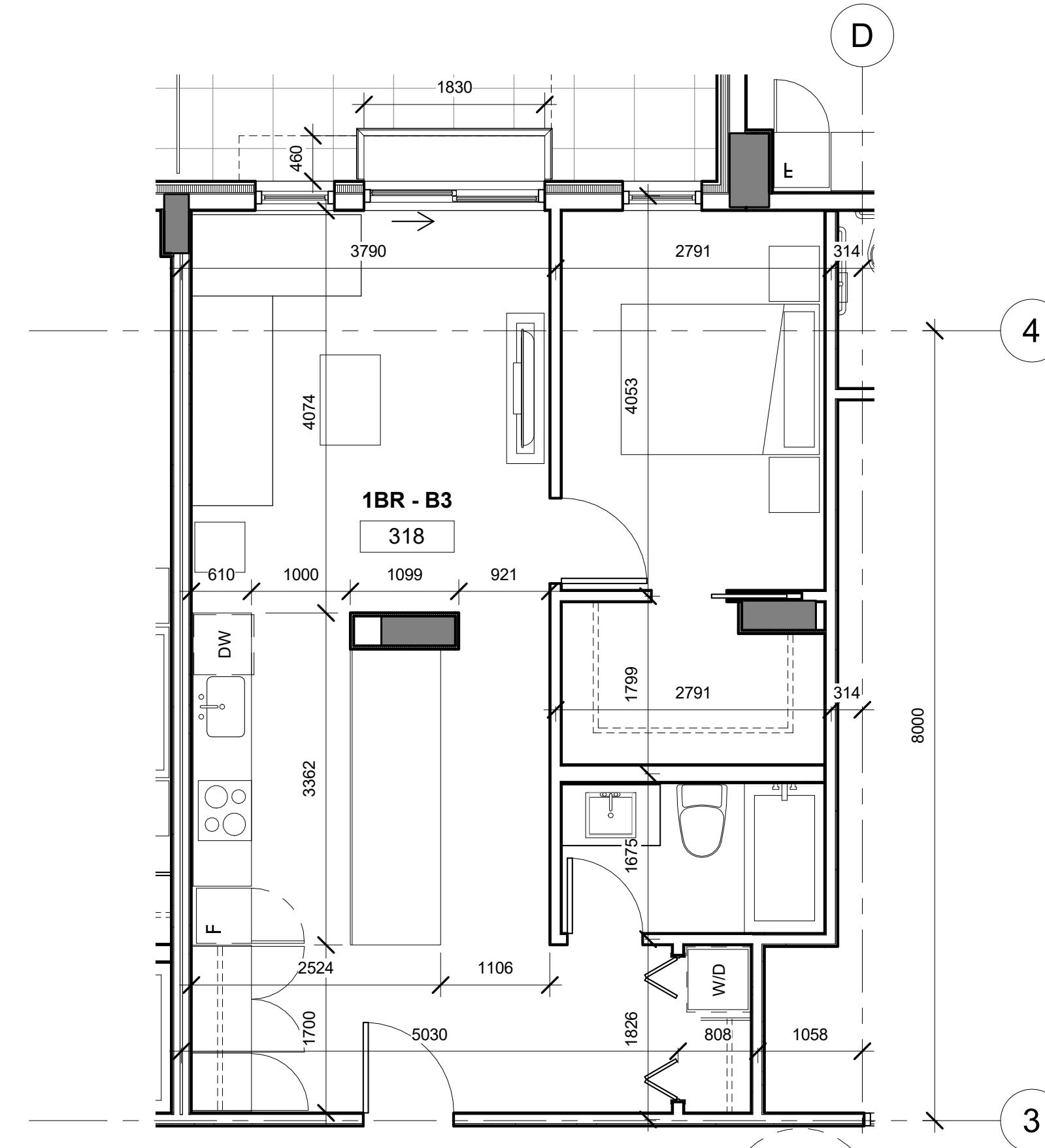
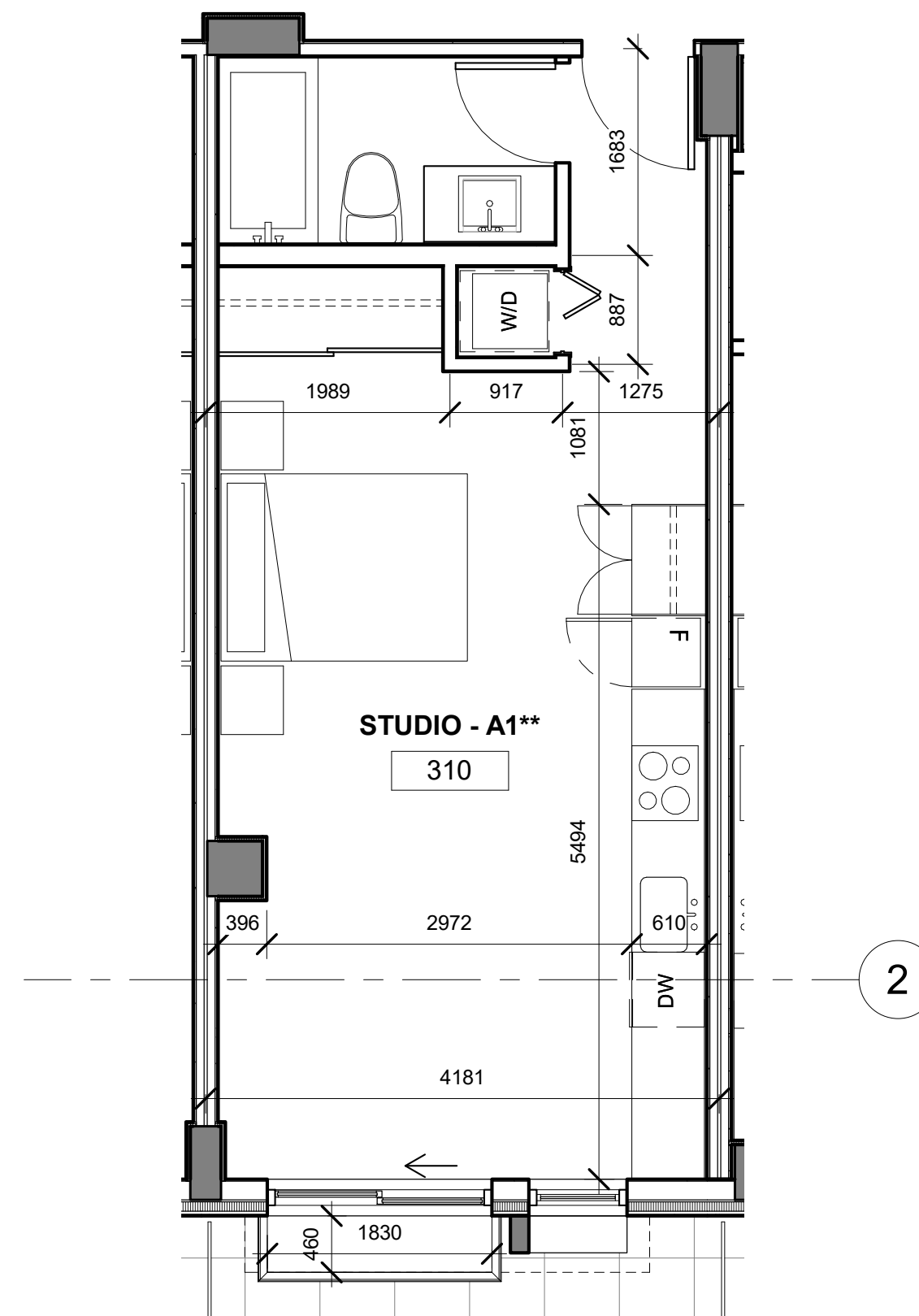
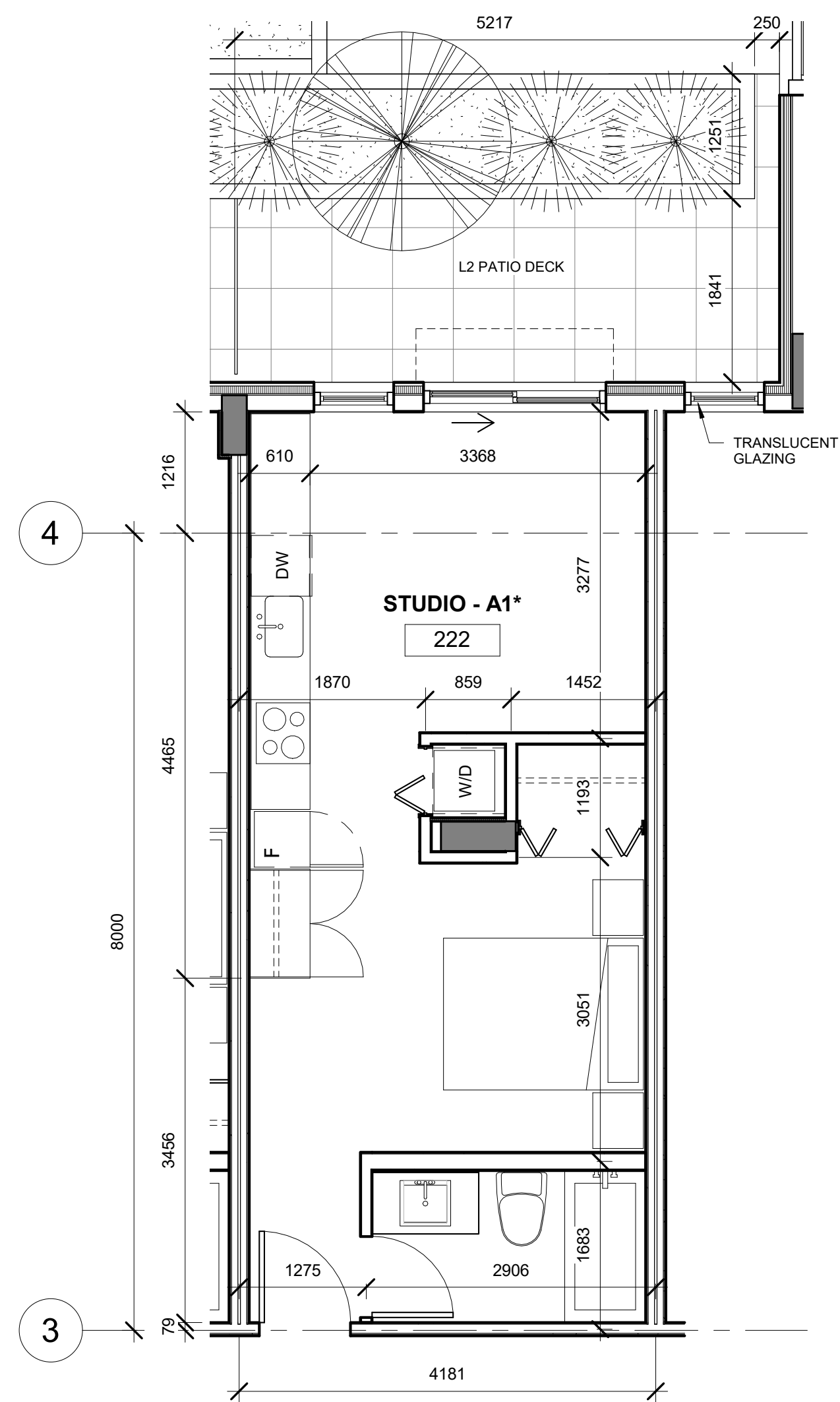
Client
 **CRESSEY**
(ESPLANADE)
DEVELOPMENT LLP

Project
200 West Esplanade, NORTH VANCOUVER, B.C.

Drawing Title
UNIT PLANS F1, F2

Date: Issue Date	Project No. 18-60
Scale 1 : 50	Drawing No. A503
Drawn By: Author	
File name:	Rev:





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Drawing Issue Date

Revision Schedule

Rev #	Date	Description
4	2020-09-01	DEPT. REVIEW - RESPONSE 2
5	2020-10-01	DEPT. REVIEW - RESPONSE 3
6	2020-10-09	RESUBMITTED FOR FIRST READING

RAFI ARCHITECTS INC.

TEL
604.688.3655
FAX
604.688.3522
EMAIL
rai@rafiiarchitects.com
WWW
rafiiarchitects.com

SUITE ONE
1600 HOWE ST
VANCOUVER BC
V6Z 2L9 CANADA



Project
200 West
Esplanade, NORTH
VANCOUVER, B.C.

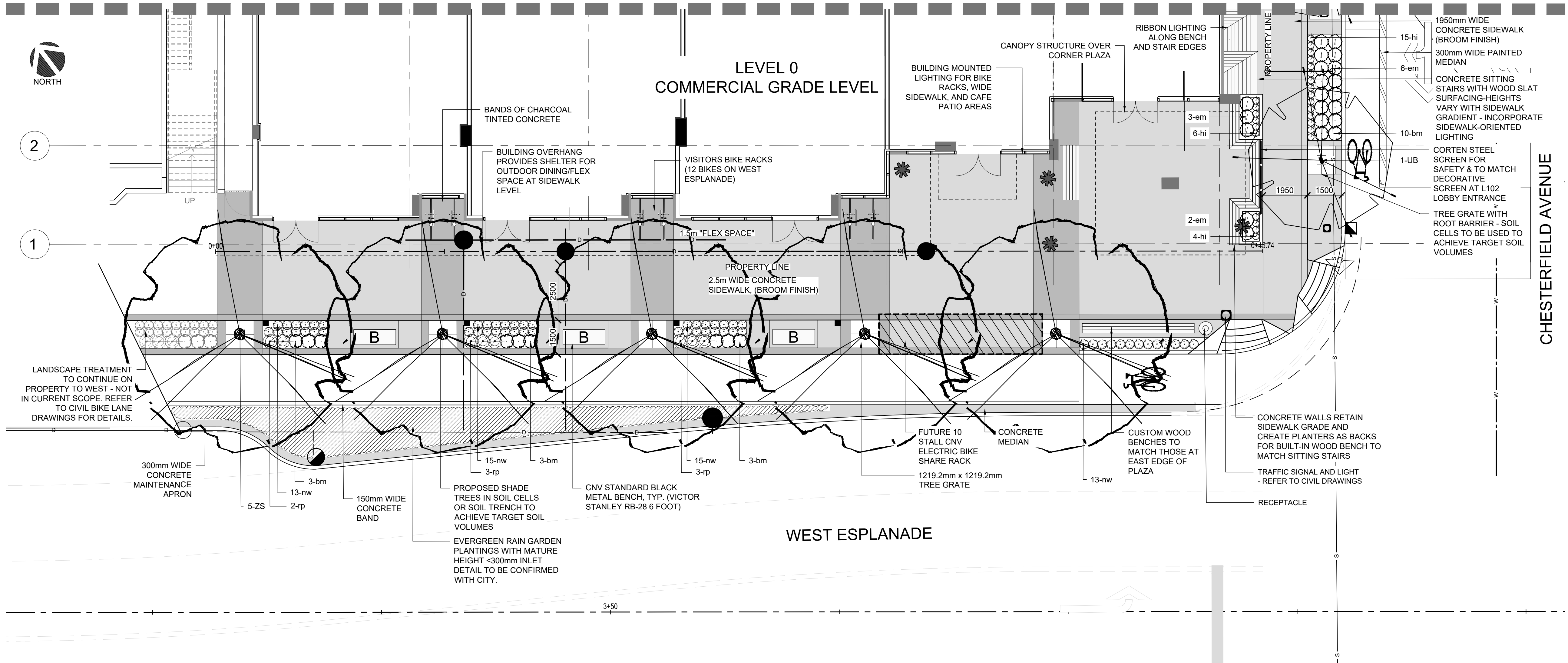
Drawing Title

UNIT PLANS A1*,
A1**, B3, D1*

Date: Issue Date	Project No. 18-60
Scale 1 : 50	Drawing No. A504
Drawn By: Author	
File name:	

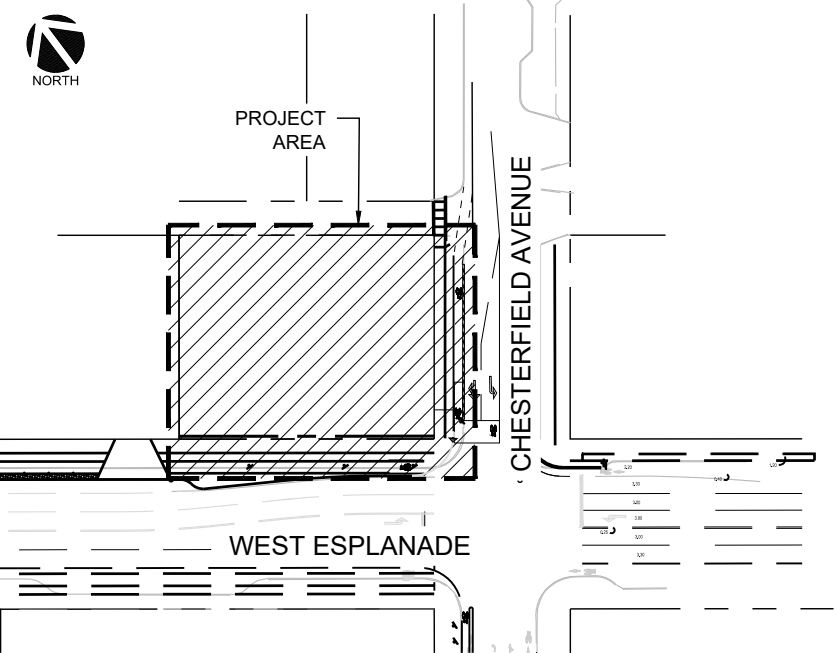
McElhanney D-144722
DATE: 2020-10-08, 17:30, FILE: I:\00\mclhanney\comresy211-05444\Proj\211-05444-00_Cressey - 200 W Esplanade, N Van\10.0.DRAWING\GS\10.0.Landscape\Arch\10.0.1_Sheets\05444-L0-100.dwg
McElhanney D-144722

MATCHLINE REFER TO L1



MATCHLINE REFER TO L1

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KEY PLAN

SCALE N.T.S.

LEGEND

- LOW RAIN GARDEN PLANTING - SPECIES TO BE DETERMINED BASED ON ANTICIPATED RUNOFF
- DESIGNATED AREAS FOR ANNUAL PLANTINGS BY BUILDING MANAGEMENT
- 100-150mm DIA. ROCK TO BE PLACED LEVEL WITH ADJACENT SURFACES. ALL ROCK TO BE INSTALLED TO A DEPTH OF 150mm. COMPLETE WITH HD LANDSCAPE FABRIC WITH AN OVERLAP OF 500mm.
- EX. SANITARY LINE
- EX. WATER LINE
- EX. STORM LINE
- EX. GAS LINE
- PROP. SANITARY LINE
- PROP. WATER LINE
- PROP. STORM LINE
- CNV STANDARD BLACK METAL BENCH, TYP. (VICTOR STANLEY RB-28 6 FOOT)
- CNV STANDARD BLACK METAL BENCH, TYP. (VICTOR STANLEY RB-28 4 FOOT)
- WASTE RECEPTACLE
- BIKE RACK
- BOLLARD LIGHT
- BOULDERS
- POTENTIAL PUBLIC ART LOCATION, MAY MATCH PERFORATED CORTEN STEEL SCREENS

LANDSCAPE PLAN - LEVEL 0 COMMERCIAL GRADE LEVEL

SCALE 1:100

SITE SURFACING AND FEATURE SCHEDULE

REFER TO L0 FOR LOCATIONS



SITE FURNITURE SCHEDULE

REFER TO L0 FOR LOCATIONS



RAIN GARDEN INLET

REFER TO L0 FOR LOCATION



INLET DETAIL TO BE CONFIRMED WITH CITY DURING DETAILED DESIGN

PLANT SCHEDULE

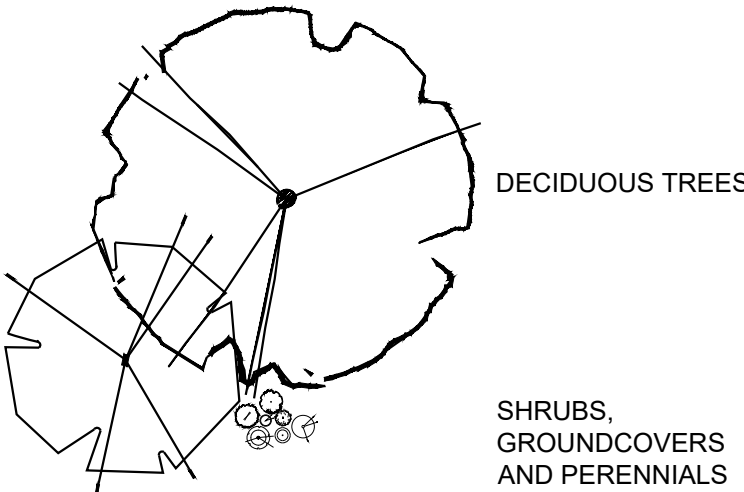
Plant Schedule								
Key	L0	L1	Total Qty.	Botanical Name	Common Name	Size	Spacing O.C.	Mature ht.
Trees								
UB	1	3	4	Ulmus americana 'Brandon'	Brandon Elm	7cm cal. B&B, 2m Standard	As Noted	13m
ZS	5		5	Zelkova serrata 'Green Vase'	Green Vase Zelkova	7cm cal. B&B, 2m Standard	As Noted	18m
Shrubs, Groundcovers & Perennials								
bm	19	38	57	Buxus microphylla 'Winter Gem'	Winter Gem Boxwood	#2 Pot	0.6m	0.6m
em	11	14	25	Euphorbia martinii x 'Rudolph'	Wood Spurge 'Rudolph'	#2 Pot	0.6m	0.5m
hi	25	54	79	Hemerocallis 'Irish Envy'	Irish Envy Daylily	#2 Pot	0.3m	0.6m
nw	56		56	Nepeta 'Walkers Low'	Walkers Low Nepeta	#2 Pot	0.4m	0.5m
rp	8		8	Rosa 'Popcorn Drift'	Popcorn Drift Groundcover Rose	#2 Pot	0.6m	0.5m
hk		9	9	Heuchera Kira 'Evergreen Forest'	Evergreen Forest Coral Bells	#2 Pot	0.4m	0.4m
rp		8	8	Leucothoe Fontanesiana 'Zebid Scarlett'	Scarletta Leucothoe	#2 Pot	0.6m	0.75m

PLANT IMAGES

REFER TO L0 AND L1 FOR LOCATIONS



PLANT MATERIAL



07	2020-10-09	RESUBMITTED FOR FIRST READING	EC/JM	JS	JS
06	2020-10-09	RESUBMITTED FOR FIRST READING	EC/JM	JS	JS
05	2020-09-15	RESUBMIT FOR RE-ZONING	EC/JM	JS	JS
04	2020-09-03	RESUBMIT FOR RE-ZONING	EC	JS	JS
03	2020-03-04	DEPARTMENTAL REVIEW - RESPONSE PACKAGE	EC/KW	JS	JS
02	2019-09-10	ADVISORY DESIGN PANEL MEETING	KW	JS	JS
01	2019-07-12	RE-ZONING APPLICATION	CA	JS	JS
Rev	Date	Description	Drawn	Design	App'd

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Canada V0T 5X3
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Cressey Development Group
200-555 8th Avenue West Vancouver, BC V5Z 1C6

200 W ESPLANADE

Landscape Plan - Level 0

NORTH VANCOUVER, B.C.

Drawing No.

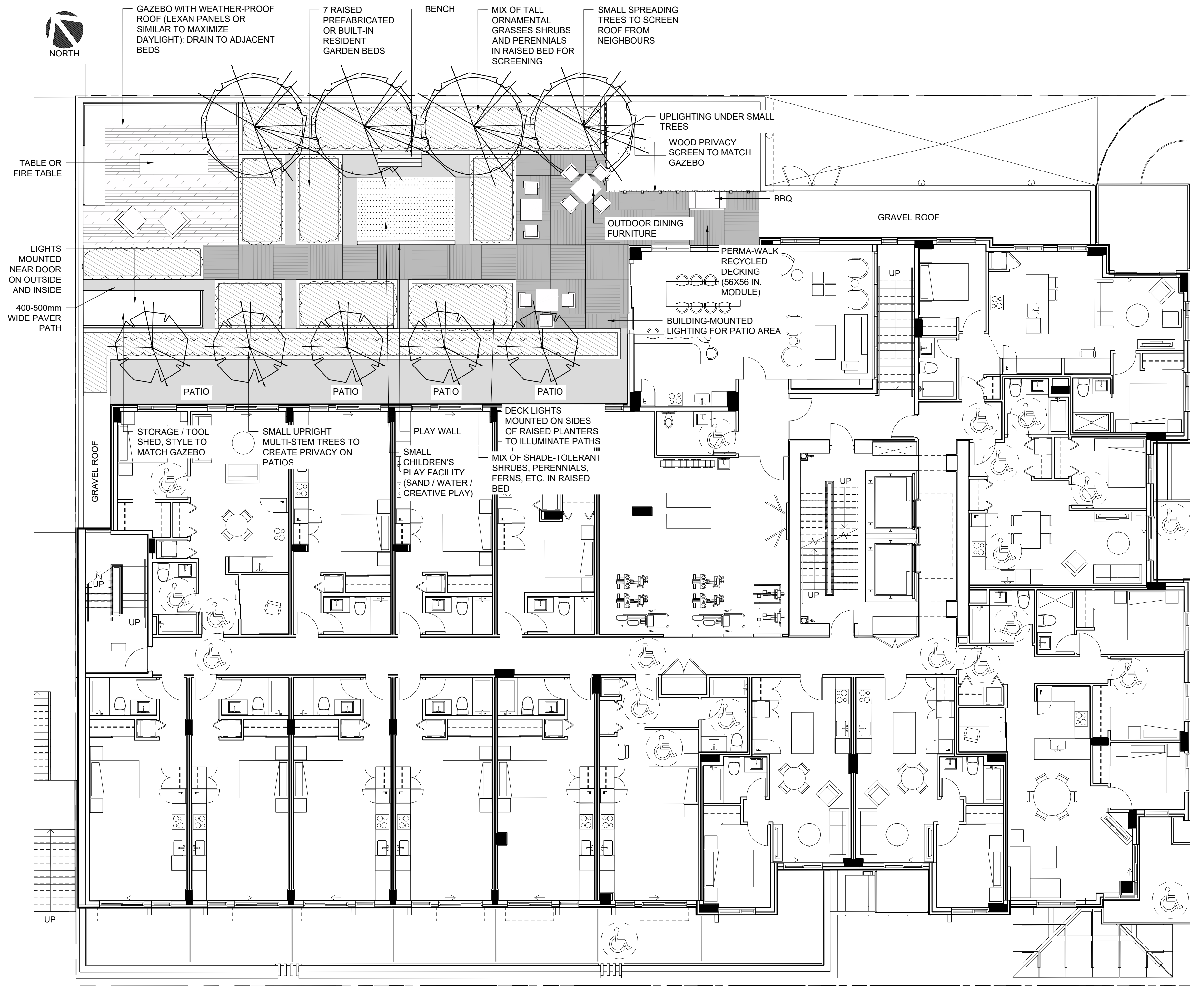
L0

Project Number
2111-05444-00

Rev.
07

DESTROY ALL PRINTS BEARING PREVIOUS REVISION

McElhanney D - 144722
DATE: 2020-10-08, 17:31 FILE: i:\mcelhanney\comsery\211-Engineering\Proj\211-05444-00_Cressey - 200 W Esplanade, N Van\10.0 DRAWINGS\10.0 Landscape\Arch\10.0.1 Sheets\05444-L01-100.dwg
Rev Date Description Drawn Design App'd



LANDSCAPE PLAN - LEVEL 2 RESIDENTIAL FLOOR LEVEL

SCALE 1:100

07	2020-10-09	RESUBMITTED FOR FIRST READING	EC/JM	JS	JS
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05	2020-09-15	RESUBMIT FOR RE-ZONING	EC/JM	JS	JS
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ORIGINAL DWG SIZE: ANSI D (22" x 34")

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Cressey Development Group
200-555 8th Avenue West Vancouver, BC V5Z 1C6
200 W ESPLANADE
Landscape Plan - Level 2
NORTH VANCOUVER, B.C.

Drawing No.
L2
Project Number
2111-05444-00
Rev.
07

UTILITY LOCATES
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KEY PLAN
SCALE N.T.S.

*REFER TO DRAWING L3 FOR
PRELIMINARY PLANT SCHEDULE

SITE FURNITURE SCHEDULE REFER TO L2 FOR LOCATIONS



RAISED BEDS



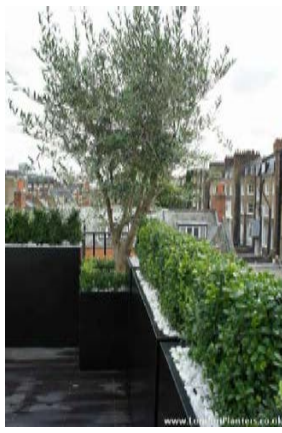
CANOPY STYLE



GAZEBO



TOOL SHED



SMALL TREES
AT EDGES



MIXED SCREEN PLANTING



FIRE TABLE



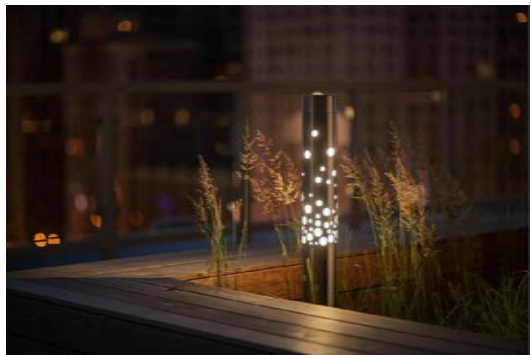
PLAY WALL



MODULAR DECKING



BENCH



COLUMN LIGHTING



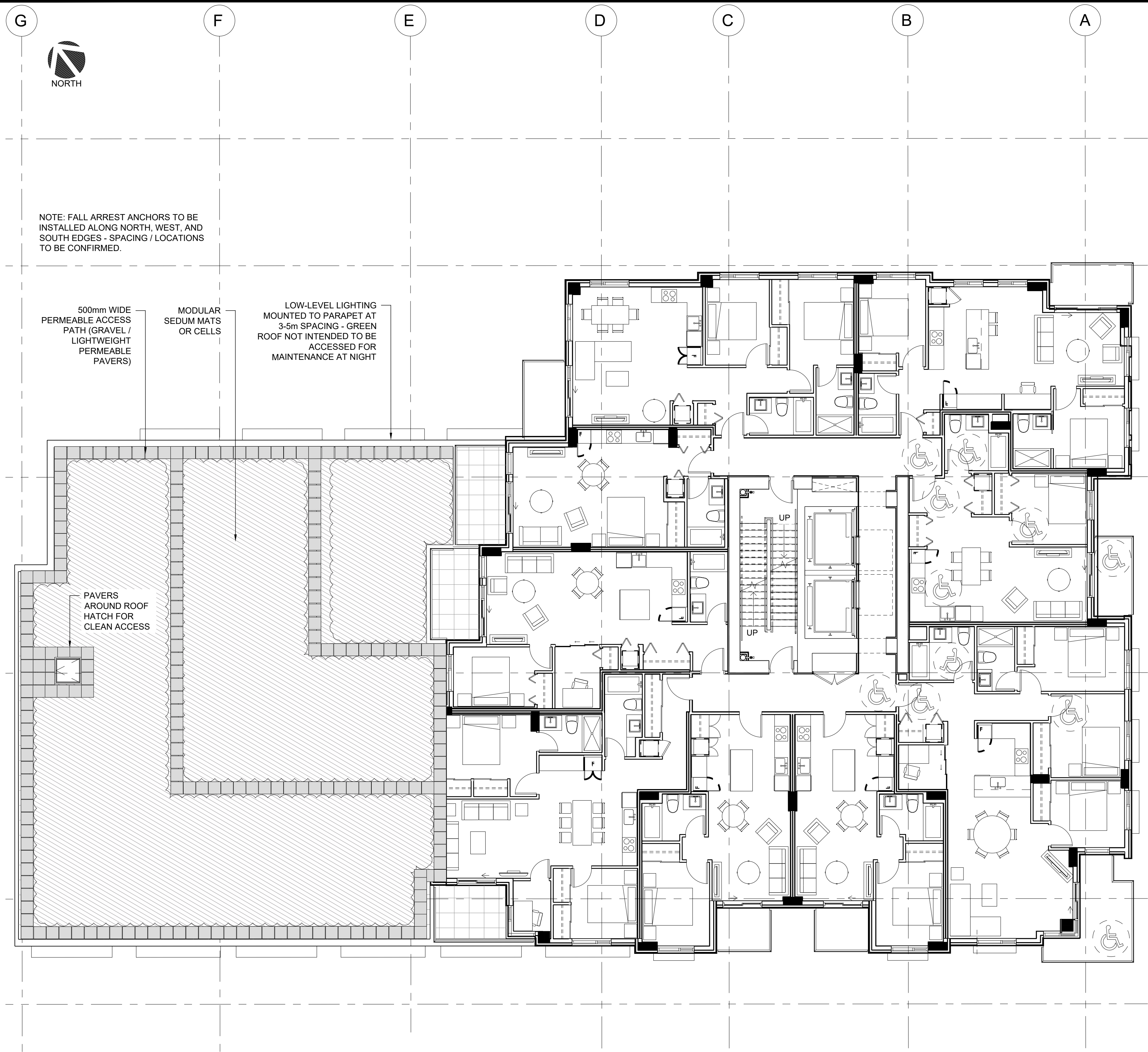
TREE UPLIGHTING



STRING LIGHTS



DECK LIGHTS

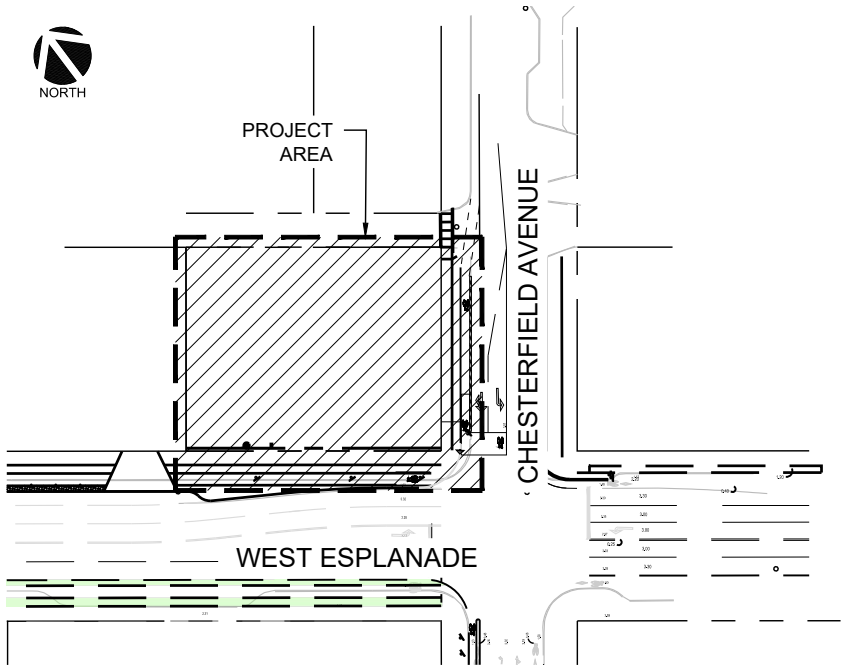


LANDSCAPE PLAN - LEVEL 4 TOWER LEVEL

SCALE 1:100

UTILITY LOCATES

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KEY PLAN

SCALE N.T.S.

DRAFT - PLANT SCHEDULE - LEVEL 2 AND LEVEL 4

QTY	KEY	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (m)	MATURE HT (m)	BC NATIVE	PLACEMENT	FLOWER	SEASON	FRUIT
TREES											
		MAGNOLIA X LOEBNERI	LEONARD MESSEL MAGNOLIA	40 mm CAL.	as noted	6 m		PART SUN, EDGE PLANTERS	PINK/WH	SPRING	
		ACER PALMATUM 'AKA KAWA HIME'	CORAL BARK MAPLE	40 mm CAL., WB	as noted	2.5 m		PART SHADE, ACIDIC SOILS, ALONG L3 PATIOS			
SHRUBS & GROUNDCOVERS											
		CHAMAECYPARIS OBTUSA 'NANA GRACILIS'	DWARF HINOKI CYPRESS	#3 POT	0.5 m	0.9 m		EVERGREEN FOR FULL SUN/PART SHADE			
		ARCTOSTAPHYLOS UVA-URSI	WOOD'S COMPACT KINNICKINICK	#1 POT	0.6 m	0.1 m	Y	PART TO FULL SUN, CREEPING FORM	PINK/WH	SPRING	RED
		ILEX VOMITORIA 'SCHILLINGS'	DWARD YAUPON HOLLY	#3 POT	1.0 m	1.0 m		SUN/PART SHADE, MOUNDING EVERGREEN	WHITE	SPRING	RED (IF BOTH M&F PLANTS)
		ROSA RUGOSA 'ALBA'	WHITE RUGOSA ROSE	#2 POT	1.2 m	1.5 m		FULL SUN, MOUNDING SCREEN AT	WHITE	SPR/SUMM	RED
		CLEMATIS ALPINA	ALPINE CLEMATIS (VINE)	#2 POT	1.5 m	3.0 m	Y	PART TO FULL SHADE, ACID SOIL	PURPLE	SPRING	SEED HEADS
PERENNIALS - SUN/PART SUN MIX											
		CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	FOERSTER'S FEATHER REED GRASS	#1 POT	0.8 m	1.8 m		FULL SUN	BEIGE	JUN- WINTER	
		PENNISETUM ALOPECUROIDES 'MOUDRY'	MOUDRY FOUNTAIN GRASS	#1 POT	0.6 m	0.7 m		FULL SUN, MOUNDING CLUMPS, BLACK SEED HEADS	SILVER/PINK	AUG- WINTER	
		FESTUCA ROEMERI	ROEMER'S FESCUE	#1 POT	0.6 m	0.3m	Y	FULL SUN, WELL DRAINED, TALLER SEED HEADS	GR/PURPLE	JUN- WINTER	
		LAVANDULA ANGUSTIFOLIA	LAVENDER	#1 POT	0.5 m	0.6 m		FULL SUN, POLLINATORS	LAVENDER	SUMMER	
		PENSTEMON FRUTICOSUS	BUSH PENSTEMON	#1 POT	0.5 m	0.4 m	Y	FULL SUN, POLLINATORS, SEMI- EVERGREEN, DROUGHT-TOL	PURPLE	MAY-AUG	
		SEDUM RUPESTRE 'ANGELINA'	ANGELINA STONECROP	#1 POT	0.6 m	0.2 m	Y	PART/FULL SUN, DROUGHT-TOL, GOLD MAT	YELLOW	SUMMER	
		SEDUM SPURIMUM 'DRAGON'S BLOOD'	TWO-ROW STONECROP	#1 POT	0.5 m	0.2 m	Y	PART/FULL SUN, DROUGHT-TOL, BURGUNDY MAT	PINK	SUMMER	
		ANAPHALIS MARGARITACEAE	PEARLY EVERLASTING	#1 POT	0.6 m	0.6 m	Y	FULL SUN, DROUGHT TOL	WH/YELLOW	JUN-OCT	
		ACHILLEA MILLEFOLIUM	YARROW	#1 POT	0.5 m	0.7 m	Y	FULL SUN/PART SHADE, DROUGHT TOL	WH/YELLOW	APR-SEP	
		ASTER LAEVIS	SMOOTH ASTER	#1 POT	0.3 m	0.9 m	Y	FULL SUN	LAVENDER	FALL	
PERENNIALS - SHADE/PART SHADE MIX											
		LUZULA SYLVATICA	GREATER WOOD RUSH	#1 POT	0.5 m	0.5 m		SHADE/PART SHADE, ACID LOVING, TOL SOME DROUGHT	PINK/BURG	MAY-JUL	
		POLYSTICHUM MUNITUM	WESTERN SWORD FERN	#1 POT	1.0 m	1.2 m	Y	SHADE/PART SUN, ACID LOVING, SHADE/PART SHADE, ACID LOVING, SPREADS SLOWLY			
		ADIANTUM PEDATUM	AMERICAN MAIDENHAIR FERN	#1 POT	0.6 m	0.6 m					
		HOSTA X MINUTEMAN	MINUTEMAN PLANTAIN LILY	#1 POT	0.6 m	0.4 m		PART SHADE/PART SUN, ACID LOVING	LAVENDER	SPR-FALL	
		HOSTA 'ITTY GOLD'	ITTY GOLD HOSTA	#1 POT	0.3 m	0.3 m		PART/FULL SHADE, MOIST	WHITE	MIDSUMM	
		GAULTHERIA PROCUMBENS	WINTERGREEN	#1 POT	0.5 m	0.2 m	Y	PART/FULL SHADE, MOIST, WINTER INTEREST	WHITE	JUN-JULY	RED (EDIBLE)

LEAVE SOME GAPS FOR BULBS, ANNUALS TO ADD COLOUR

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02	2019-09-10	ADVISORY DESIGN PANEL MEETING	KW	JS	JS	INFORMATION ON EXISTING UNDERGROUND FACILITIES MAY NOT BE COMPLETE OR ACCURATE. MCELHANNEY, ITS EMPLOYEES AND DIRECTORS ARE NOT RESPONSIBLE NOR LIABLE FOR THE LOCATION OF ANY UNDERGROUND CONDUITS, PIPES, CABLES OR OTHER FACILITIES WHETHER SHOWN OR OMITTED FROM THIS PLAN. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING FACILITIES BY HAND DIGGING OR HYDROVAC AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.
01	2019-07-12	RE-ZONING APPLICATION	CA	JS	JS	
Rev	Date	Description	Drawn	Design	App'd	



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Cressey Development Group
200-555 8th Avenue West Vancouver, BC V5Z 1C6

200 W ESPLANADE

Landscape Plan - Level 4

NORTH VANCOUVER, B.C.

Drawing No.

L3

Project Number

2111-05444-00

Rev.

07



ADVISORY DESIGN PANEL
CITY OF NORTH VANCOUVER
141 WEST 14TH STREET
NORTH VANCOUVER
BC / CANADA / V7M 1H9

T 604 985 7761
F 604 985 9417
INFO@CNV.ORG
CNV.ORG

September 24, 2019

Rafii Architects Inc.
Attn: Foad Rafii
1600 Howe Street, Suite One
Vancouver, BC V6Z 2L9

Dear Mr. Rafii:

Re: 200 West Esplanade (Rezoning Application)

At their meeting on September 18th, 2019 the Advisory Design Panel reviewed the above application and endorsed the following resolution:

THAT the Advisory Design Panel has reviewed the Rezoning Application for 200 West Esplanade and recommends approval subject to addressing the following issues to the satisfaction of the Development Planner:

- Animate the corner with an art piece and/or a canopy that comes more to a human scale to create a sense of place;
- Encourage more colour at the podium and/or raise it up on the building façade
- Consider achieving Step 4 of the Step Code;
- Consider sun shading on the south and west elevations to reduce cooling costs;
- Ensure the use of substantial doors at the lane and interior doors for the bike room to address CPTED concerns;
- Ensure graffiti proof coating is painted on the wall at the lane;
- Encourage a full roof instead of a trellis at the gazebo;
- Consider the separation between the commercial and residential crossover spaces on the lower levels;
- Review the column locations in the CRU;
- Review the Adaptable Design units for the turning radius at corridors and the access door;
- Recommend all street trees be replaced; and
- Incorporate street level lighting.

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

The recommendations of the Advisory Design Panel pertain only to site-specific design and site planning considerations and do not, in any way, represent Council and staff approval or rejection of this project.

Yours truly,

R. Fish
Committee Clerk



**PLANNING & DEVELOPMENT DEPARTMENT
TRANSPORTATION**

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

September 11, 2019

Mr. Graham Brewster
Cressey (Esplanade) Development LLP
200 – 555 West 8th Avenue
Vancouver, BC V5Z 1C6

Dear Graham:

Re: 200 West Esplanade

At their regularly scheduled meeting on September 4, 2019, the Integrated Transportation Committee received a presentation from yourself, Parm Mahal, Darith Sok and Foad Rafiil regarding the above mentioned. Following review and discussion, the following motion was made:

THAT the Integrated Transportation Committee, having received the presentation from G. Brewster, P. Mahal, D. Sok and F. Rafaii, supports the project at 200 West Esplanade as presented at the September 4, 2019 meeting, but notes the following issues for further consideration and to be resolved to the satisfaction of City staff:

- ITC strongly encourages the provision of as many alternative high quality transportation demand management measures as possible such as individual secure bike storage, transit passes, bike maintenance area, individual charging spaces for e-bikes or other electric mobility solutions and car share vehicle and space allocation.
- Given ITC's concern about increasing demand for already-limited street parking in Lower Lonsdale, encourages Council to direct staff to investigate additional parking-demand management strategies for this area.

The Committee also commends the developer for the improvement of the pedestrian realm regarding the elimination of the above ground service kiosks.

CARRIED UNANIMOUSLY

The recommendations of the Integrated Transportation Committee do not, in any way, represent Council and/or staff approval or rejection of this proposal.

Yours truly,

Edytha Barker
Committee Clerk/Secretary

c. W. Tse, Planner, City of North Vancouver
K. Graham, City Clerk, City of North Vancouver



Suite 200
 555 West 8th Avenue
 Vancouver, BC V5Z 1C6
 Tel 604 683 1256
 Fax 604 683 7690
www.cressey.com

Emily Macdonald
 City Planner
 City of North Vancouver
 141 West 14th Street
 North Vancouver, BC
 V7M 1H9

Dear Emily,

200 W Esplanade – Developer Information Session Summary

This letter is to summarize the details of the developer information session for the rezoning of 200 W Esplanade which took place on September 19, 2019, from 5:00 - 8:00pm at the Presentation House Theatre.

The purpose of the Open House was to present the project to the public and request feedback on the development proposal. Presentation material and in person discussion during the event was centered on this objective. The local community was notified of the Developer Information Session by three methods:

1. Site signage;
2. Mailed notifications to surrounding properties/residents;
3. Newspaper ads.

All of these materials were approved by City staff prior to placement or delivery. Copies of each notification method have been attached hereto as Appendix A.

The developer information session was held in the Anne MacDonald Studio at the Presentation House Theatre, and was set up with the following items:

- **Sign-in station** – upon entering the room, attendees were asked to sign in, were given a brief description of the room layout, and then given a comment card.
- **Display boards** – Display boards included architectural drawings, landscape drawings and renderings. Attendees were free to browse the display boards and ask questions about the project from the consultant team or City staff.
- **Comment Forms** – Comment forms were available at tables near the entrance/exit of the room and attendees were encouraged to fill these out.

A number of representatives from the project team and City Staff were in attendance to answer questions. These people included the following:

- Graham Brewster – Cressey Development
- Madeline Mulvihill – Cressey Development
- Foad Rafii – Rafii Architects
- Julie Schooling – McElhanney
- Wendy Tse – City of North Vancouver (planning)

There were approximately 23 people that attended the information session, 10 of whom left comment forms. The majority of the attendees lived nearby in the neighbourhood, and came to see the proposed

project and voice their concern regarding the height of the proposed building. Most attendees were in support of the property being developed, however had concerns about the height. The comment form feedback from the ten forms that were submitted, along with emails and comments received post information session can be summarized as follows:

Comment forms received: 14 (10 at meeting, 4 emailed)

- In support: 1
- Conditional support: 7
- Opposed: 6

Common areas of support included the following:

- Mixed use ground floor;
- Amount of rental housing being added;
- Design of project.

Common areas of concern included the following:

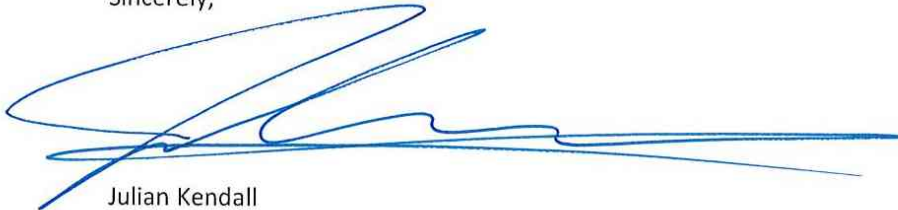
- Building Height;
- Traffic congestion;
- Noise of construction site.

Regarding the common concern of the building being too tall, we have ensured that the building height does not exceed the height that is designated in the Official Community Plan (OCP) for this property (which is designated as Mixed-Use Level 4A (high density)). The OCP went through a lengthy public engagement process and the height designated for this area reflects the overall consensus of this process.

A traffic impact study was done to assess the impact on traffic this development will have. It was determined that the future building will have a very minimal effect on traffic, especially given the small amount of parking that the project includes. Cressey will also be upgrading both Chesterfield and Esplanade in order to make traffic movements more efficient.

One attendee raised the concern of construction noise being disruptive. While this is impossible to avoid completely, Cressey will be submitting a Construction Management Plan to the City for approval and will abide by all city noise bylaws.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Julian Kendall', with a long horizontal flourish extending to the right.

Julian Kendall
Director of Development

Cc: Emily Macdonald, Planner

DEVELOPMENT APPLICATION

200 West Esplanade

PROPOSAL:

Cressey (Esplanade) Development LLP and First Capital Reality has submitted a Development Application for 200 West Esplanade to permit a ten-storey development consisting of commercial retail units at the ground level, above-grade parking on the second level, and 75 market rental units. A total of 3.6 Floor Space Ratio (FSR) is proposed, of which 1.0 FSR is a density bonus for the provision of market rental housing. A variance is requested to permit a total of 33 parking spaces, in consideration of the proximity of the site to the SeaBus, in addition to other minor variances.

Cressey (Esplanade) Development LLP and First Capital Reality will be hosting an information session where interested members of the public will have the opportunity to learn about and respond to the application.

APPLICANT:

NAME: Graham Brewster

COMPANY: Cressey (Esplanade) Development LLP

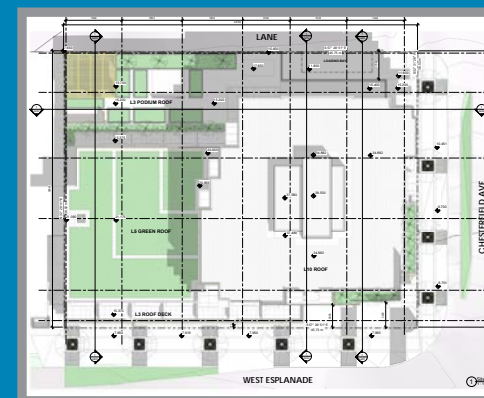
EMAIL: gbrewster@cressey.com

PHONE: 604.683.1256

PROPOSED DEVELOPMENT



SITE PLAN



**FOR MORE INFORMATION
AND TO SHARE YOUR OPINION:**

DEVELOPER'S INFORMATION SESSION

LOCATION: Presentation House Theatre
333 Chesterfield Avenue,
North Vancouver

DATE: Thursday, September 19, 2019

TIME: 5pm - 8pm

CITY OF NORTH VANCOUVER CONTACT

Wendy Tse, Planner 2
wtse@cnv.org 604.982.3942



8' ft

x2



Development Information Open House

Early Public Input Opportunity

Rezoning Application

200 West Esplanade, North Vancouver

Date: September 19, 2019

Time: 5:00pm - 8:00pm

Place: Presentation House Theatre
333 Chesterfield Ave
North Vancouver





The City of North Vancouver has received a rezoning application from Cressey (Esplanade) Development LLP and First Capital Realty to develop a 10-storey mixed-use building at 200 West Esplanade.

Interested members of the public are invited to attend the Development Information Open House with the Applicant for an early opportunity to review the proposal and offer comments.

Applicant Contact

Graham Brewster

Cressey (Esplanade) Development LLP

#200-555 West 8th Avenue

Vancouver, BC V5Z 1C6

+T 604.683.1256

City of North Vancouver Contact

Wendy Tse

Planning & Development Department

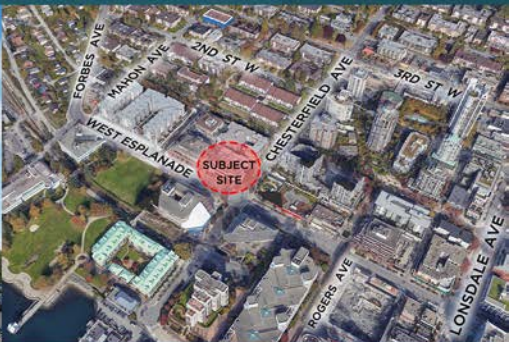
141 West 14th Street

North Vancouver, BC V7M 1H9

+T: 604.982.3942

PUBLIC INFORMATION MEETING

Cressey (Esplanade) Development LLP, in partnership with First Capital Realty, have submitted a Development Application for 200 West Esplanade. The proposal is for a mixed-use building consisting of retail at grade along West Esplanade, and 75 rental housing units above. The applicant has applied to rezone the site from its current CD-148 zoning to allow for a 10-storey building at the corner of Chesterfield Avenue, with a 4 level podium building along West Esplanade. The project is compliant with the City of North Vancouver's Official Community Plan, and addresses a number of key items from the CNV's Housing Action Plan.



Cressey (Esplanade)

Development LLP is holding an information session where interested members of the public are invited to learn about the proposed development.

Date: September 19, 2019

Time: 5:00pm - 8:00pm

Place: Presentation House Theatre
333 Chesterfield Ave
North Vancouver

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8798

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, 2020, No. 8798**” (First Capital (200 West Esplanade) Corporation / Rafii Architects Inc., 200 West Esplanade, CD-729).
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-729 (Comprehensive Development 729 Zone):

Lots	Block	D.L.	Plan	
E	163	271	22317	from CD-148

3. Part 11 of Division V: Comprehensive Development Regulations of Document “A” of “Zoning Bylaw, 1995, No. 6700” is hereby amended by:
 - A. Deleting, in its entirety, Comprehensive Development 148 Zone (CD-148)
 - B. Adding the following section to Section 1101, thereof, after the designation “CD-728 Comprehensive Development 728 Zone”:

“CD-729 Comprehensive Development 729 Zone”

In the CD-729 Zone, permitted Uses, regulations for permitted Uses, regulations for the size, shape and siting of Buildings and Structures and required Off-Street Parking and Loading shall be as in the C-1A Zone, except that:

- (1) The permitted Uses on the Lot shall be limited to:
 - (a) Retail Service Group 1 Use;
 - (b) Civic Use;
 - (c) Accessory Apartment Use, subject to Section 607(1);
 - (d) Accessory Arcade Use, subject to 607(10);
 - (e) Accessory Off-Street Parking Use;
 - (f) Accessory Off-Street Loading Use;
- (2) Section 607(1)(a) Accessory Apartment Use location shall be varied to permit a Residential Use above the First Storey, which, for clarity, is the floor with a geodetic elevation closest to 12 meters;
- (3) Gross Floor Area
 - (a) The maximum Gross Floor Area is 2.6 Floor Space Ratio (FSR);

- (b) Notwithstanding (~~23~~)(a), the Gross Floor Area may be increased as follows:

ADDITIONAL (BONUS) DENSITY			
ADDITIONAL DENSITY CATEGORY	DESCRIPTION	ADDITIONAL DENSITY (BONUS)	POLICY REFERENCE
Rental Housing	100 percent secured rental apartment units	Maximum 1,670.1 square metres (17,977 square feet)	As per OCP Policy Section 2.2.1

Such that the total effective on-site Gross Floor Area is not to exceed 3.6 FSR;

(4) Lot Coverage

The Principal Building shall not exceed a Lot Coverage of 94 percent;

(5) Building Height

- (a) The Principal Building shall not exceed a Height of 23 metres (75.5 feet) as measured from the average Building Grades at the north property line;
- (b) Mechanical rooms, ventilating machines, elevator over-runs, mechanical screening, architectural appurtenances, and access to communal outdoor rooftop areas may project beyond the Height defined in (a) by a maximum of 3.7 metres (12 feet);

(6) Siting

Section 610(5) shall be waived and the Principal Building shall be sited not less than:

- (a) 0.31 metres (1 foot) from West Esplanade;
- (b) 0.0 metres (0 feet) from the lane;
- (c) 0.0 metres (0 feet) from Chesterfield Avenue;
- (d) 0.0 metres (0 feet) from the west property line;

(7) Section 609 Special Landscape Requirements for Commercial Buildings Adjoining or Opposite a Residential Zone shall be waived;

(8) The definition of Cellar shall include portions of floor area that extend beyond the First Storey;

(9) Off-Street Parking, Short-Term and Secure Bicycle Parking, and Accessory Off-Street Loading Spaces shall be provided in conformity with the requirements of Division IV, Parts 9, 10, and 10A, except that:

- (a) A minimum of 22 residential vehicle Parking spaces shall be provided, of which, 2 shall be dedicated for visitor vehicle Parking and a minimum of 2 shall be Disability Parking;

- (b) Of the 2 required residential Disability vehicle Parking spaces, a minimum of 1 shall be provided for visitors;
- (c) A minimum of 8 commercial vehicle Parking spaces shall be provided;
- (d) Two Shared Vehicles and two Shared Vehicle Parking Spaces shall be provided in accordance with Section 905(3) except that subsection 905(3)(d) shall be waived;
- (e) One Loading Space shall be provided;
- (f) Section 906(4)(f) Setbacks from Intersections shall be waived;
- (10) A building constructed on the lot shall achieve an energy efficiency of Step 3, subject to Section 419;
- (11) Unit mix within the Accessory Apartment Use shall include a minimum 10 percent of three-bedroom or larger units;
- (12) All exterior finishes, design and landscaping shall be approved by the Advisory Design Panel.

READ a first time on the <> day of <>, 2020.

READ a second time on the <> day of <>, 2020.

READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8799

A Bylaw to enter into a Housing Agreement (200 West Esplanade)

WHEREAS Section 483 of the *Local Government Act* R.S.B.C. 2015 c.1 permits a local government to enter into a housing agreement for rental housing.

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

1. This Bylaw shall be known and cited for all purposes as “**Housing Agreement Bylaw, 2020, No. 8799**” (**First Capital (200 West Esplanade) Corporation, 200 West Esplanade, CD-729, Rental Housing Commitments**).
2. The Council hereby authorizes the agreement substantially in the form attached to this bylaw between The Corporation of the City of North Vancouver and First Capital (200 West Esplanade) Corporation with respect to the lands referenced as 200 West Esplanade, “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8798” (First Capital (200 West Esplanade) Corporation, 200 West Esplanade, CD-729).
3. The Mayor and City Clerk are authorized to execute any documents required to give effect to the Housing Agreement.

READ a first time on the <> day of <>, 2020.

READ a second time on the <> day of <>, 2020.

READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

RENTAL HOUSING AGREEMENT

THIS AGREEMENT dated for reference _____, 2020.

BETWEEN:

**FIRST CAPITAL (200 WEST ESPLANADE) CORPORATION,
INC. NO. BC356576**

815 – 17th Avenue SW, Suite 200, Calgary, AB, T2T 0A1

(the “**Owner**”)

AND:

THE CORPORATION OF THE CITY OF NORTH VANCOUVER,
a municipal corporation pursuant to the *Local Government Act* and
having its offices at 141 West 14th Street, North Vancouver,
British Columbia, V7M 1H9

(the “**City**”)

WHEREAS:

- A. The Owner is the registered owner of the Lands.
- B. The City is a municipal corporation incorporated pursuant to the Act.
- C. As a condition of the Rezoning Bylaw, the Owner has agreed to enter into a housing agreement with the City in accordance with section 483 of the Act.
- D. Section 483 authorizes the City, by bylaw, to enter into a housing agreement in respect of the form of tenure of housing units, availability of such units to classes of identified person, administration and management of such units and the rent that may be charged for such units.

NOW THEREFORE in consideration of the sum of Ten Dollars (\$10.00) now paid by the City to the Owner and for other good and valuable consideration (the receipt and sufficiency of which the Owner hereby acknowledges), the Owner and the City covenant each with the other as follows:

1. DEFINITIONS

- (a) “**Act**” means the *Local Government Act*, RSBC. 2015 c.1 as amended from time to time;
- (b) “**Affordable Rent**” means, with respect to each Mid-Market Rental Unit, rent that is 10% less than:
 - (i) rent payment amount equal to the “Private Apartment Average Rents” for the corresponding bedroom type in the City of North Vancouver as established by CMHC’s Housing Market Information Portal for the year the tenancy is entered into;

- (ii) if such amount has not yet been set for the year, a rent payment amount equal to the “Private Apartment Average Rents” for the corresponding bedroom type in the City of North Vancouver as established by CMHC’s Housing Market Information Portal for the year previous to the year the tenancy is entered into plus an annual rent increase then permitted under the RT Act; or
 - (iii) if such amount is no longer set out in CMHC’s Housing Market Information Portal, then such amount determined by a survey conducted by an independent consultant acceptable to the City, acting reasonably;
- (c) **“Agreement”** means this agreement as amended from time to time;
- (d) **“Building”** means the following building to be constructed on the Lands pursuant to the Rezoning Bylaw: 9-storey building located at the northeast corner of the intersection of West Esplanade and Chesterfield Avenue, containing one storey of commercial units and 75 Dwelling Units, of which 67 will be Market Rental Units and 8 will be Mid-Market Rental Units;
- (e) **“Commencement Date”** has the meaning set out in section 2.1;
- (f) **“Council”** means the municipal council for the Corporation of the City of North Vancouver;
- (g) **“CMHC”** means Canada Mortgage and Housing Corporation;
- (h) **“Director of Planning”** means the chief administrator of the Department of Planning of the City and his or her successors in function and their respective nominees;
- (i) **“Dwelling Unit”** means a dwelling unit as defined in the City of North Vancouver’s Zoning Bylaw 1995, No. 6700 as amended from time to time;
- (j) **“Lands”** means those lands and premises legally described as: Parcel Identifier: 014-375-168 Lot E Block 163 District Lot 271 Plan 22317;
- (k) **“Mid-Market Rental Units”** means Dwelling Units that are rented to tenants for Affordable Rent;
- (l) **“Market Rental Units”** means Dwelling Units that are rented to tenants for market rental rates as set by the Owner;
- (m) **“Rental Purposes”** means an occupancy or intended occupancy which is or would be governed by a tenancy agreement as defined in Section 1 of the *Residential Tenancy Act*, SBC 2002 c. 78 as amended from time to time;
- (n) **“Rental Units”** means the Market Rental Units and the Mid-Market Rental Units, and **“Rental Unit”** is a singular thereof;
- (o) **“RT Act”** means the *Residential Tenancy Act*, SBC 2002 c. 78 and regulations thereunder, as amended or replaced from time to time; and

- (p) **“Rezoning Bylaw”** means the rezoning bylaw applicable to the Lands described as “Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2020, No. 8799”, as amended or replaced from time to time;
- (q) **“Term”** has the meaning set out in section 2.1.

2. TERM

- 2.1 This Agreement will commence upon the issuance of the first occupancy permit for the Building, or any portion thereof, constructed or to be constructed on the Lands (the **“Commencement Date”**) and will continue until the date this Agreement is terminated in accordance with sections 2.2 or 8.3(c) (the **“Term”**).
- 2.2 This Agreement will terminate immediately upon the removal or destruction of the Building provided the Building is not repaired following the destruction thereof.
- 2.3 Subject to section 7.3, upon termination of this Agreement, this Agreement will be at an end and of no further force and effect.

3. USE OF LANDS

- 3.1 The Owner covenants and agrees with the City that, notwithstanding the Rezoning Bylaw, the Lands will be used and built on only in strict compliance with the terms and conditions of this Agreement and that:
 - (a) during the term of this agreement:
 - (i) the Lands and the residential portion of the Building will not be subdivided (including by filing an air space plan) or stratified, without the prior written approval by the City. As a condition of approval, the City may require a covenant pursuant to section 219 of the *Land Title Act* to be registered on title to the Mid-Market Rental Units requiring these units to be sold or transferred together, as a single site, pursuant to section 219(2)(d) of the *Land Title Act*; and
 - (ii) no Dwelling Unit in the Building will be occupied for any purpose except for Rental Purposes;
 - (b) At least 8 Dwelling Units in the Building will be Mid-Market Rental Units rented at Affordable Rent to tenants eligible pursuant to section 5.1(c), all in accordance with this Agreement.
- 3.2 The Owner further covenants and agrees with the City that the Lands and any residential buildings or structures constructed thereon including the residential portions of the Building will be developed, built and maintained in accordance with all City bylaws, regulations and guidelines as amended from time to time.

4. TENANCY RESTRICTIONS

4.1 The unit mix for Rental Units in the Building will be as follows:

- (a) Studio: 23 Dwelling Units;
- (b) 1-Bedroom: 28 Dwelling Units;
- (c) 2-Bedroom: 16 Dwelling Units;
- (d) 3-Bedroom: 8 Dwelling Units,

or as otherwise approved in writing by the Director of Planning in his or her discretion.

4.2 The unit mix for the 8 Mid-Market Rental Units in the Building will be as follows:

- (a) Studio: 2 Mid-Market Dwelling Units;
- (b) 1-Bedroom: 3 Mid-Market Dwelling Units;
- (c) 2-Bedroom: 2 Mid-Market Dwelling Units;
- (d) 3-Bedroom: 1 Mid-Market Dwelling Unit.

or as otherwise approved in writing by the Director of Planning in his or her discretion.

The locations of the 8 Mid-Market Rental Units within the Building will be in the Owner's sole discretion.

4.3 The Owner will enter into a minimum 1 year tenancy agreement for each of the Mid-Market Rental Units which will convert to a month to month tenancy at the end of the 1 year term. For greater certainty, at the end of each tenancy, the Mid-Market Rental Unit will continue to be rented as a Mid-Market Rental Unit at Affordable Rent, which obligation will be ongoing at all times during the Term.

5. OWNER'S OBLIGATIONS

5.1 The Owner will operate and maintain the Rental Units in accordance with the following requirements:

- (a) **Management and administration:** The Owner will be fully responsible for the management and administration of the Rental Units, and all associated costs. Without limiting the Owner's responsibility, liability and obligations under this Agreement, the Owner may retain one or more subsidiaries, agent(s) and/or licensee(s) to conduct the management and/or administration of the Rental Units;
- (b) **Advertisement:** The Owner will feature the tenure restrictions set out in this Agreement prominently in all advertising of Mid-Market Rental Units;
- (c) **Tenant Eligibility- Mid-Market Rental Units:** The Owner will only rent Mid-Market Rental Units to tenants whose gross annual household income does not

exceed the following formula: Affordable Rent for the appropriate size of Mid-Market Rental Unit [multiplied by] 12 [divided by] 0.25.

To determine financial eligibility, the Owner may reasonably rely on information provided by the prospective tenant. Unless the Owner's reliance is unreasonable, negligent or in wilful misconduct, the Owner will have no liability nor will have breached this agreement if the prospective tenant intentionally or unintentionally provides inaccurate information. The Owner will have no obligation to monitor or update financial circumstances of the tenant once the tenancy agreement has been signed;

- (d) **Rent Amount and Permitted Increases:** Affordable Rent for Mid-Market Rental Units is to be determined at the time of entering into a tenancy agreement. Rent amounts may be subsequently increased by the permitted annual rent increase then set under the RT Act.
- (e) **Parking:** All tenants and occupants of the residential portion of the Building, including tenants and occupants of Mid-Market Rental Units, will have equal access, at equal rates, to parking stalls assignable for exclusive use of residential occupants of the Building, acknowledging that due to the ratio of parking stalls per Dwelling Units in the Building, there may be instances when no parking stalls are available for exclusive use of a Dwelling Unit.
- (f) **Common Amenities:** All residential occupants of the Building, including tenants and occupants of Mid-Market Rental Units, will have equal access, at equal rates, to all indoor and outdoor residential amenities on the Lands from time to time, including visitor parking stalls, storage units, fitness facilities, guest suites, recreation facilities and the like.
- (g) **Short Term Rentals:** Mid-Market Rental Units will only be used as a principal residence of a tenant. The Owner will not permit a Mid-Market Rental Unit to be used for short term rental purposes (being rentals for periods shorter than 30 consecutive days).
- (h) **Compliance with applicable laws:** The Owner will comply with all applicable provisions of the RT Act and any other provincial or municipal enactments imposing obligations on landlords in relation to residential tenancies.
- (i) **Performance:** The Owner will perform its obligations under this Agreement diligently and in good faith.
- (j) **Evidence of compliance:** Provided that the same can be done without breaching the *Personal Information Protection Act* (British Columbia) and *Personal Information Protection and Electronic Documents Act* (S.C. 2000, c. 5) (each as amended from time to time) the Owner will, at business license renewal or upon request by the City, from time to time, supply to the City copies of any documentation in possession of the Owner necessary to establish compliance with the Owner's obligations under this Agreement.

6. DEFAULT AND REMEDIES

- 6.1 The City may, acting reasonably, give to the Owner a written notice (the “**Notice**”) requiring the Owner to cure a default under this Agreement within 30 days of receipt of the Notice or such longer period as may reasonably be required to cure such default provided the Owner is diligently pursuing same. The Notice must specify the nature of the default. The Owner must act with diligence to correct the default within the time specified.
- 6.2 If the Owner fails to correct a default as contemplated in section 6.1, the Owner will pay to the City, within 30 days of receiving a written request by the City:
- (a) \$2,000.00 for each default under this Agreement that has not been remedied as provided under section 6.1; and
 - (b) \$200.00 each day the default remains un-remedied beyond the date for correcting the default as provided under section 6.1;

This section is without prejudice to any other remedies available to the City under this Agreement and at law or in equity.

- 6.3 The Owner will pay to the City on demand by the City all the City's costs of exercising its rights or remedies under this Agreement, on a full indemnity basis.
- 6.4 Notwithstanding section 6.2, the Owner acknowledges and agrees that in case of a breach of this Agreement which is not fully remediable by the mere payment of money and promptly so remedied, the harm sustained by the City and to the public interest will be irreparable and not susceptible of adequate monetary compensation.
- 6.5 Each party to this Agreement, in addition to its rights under this Agreement or at law, will be entitled to all equitable remedies including specific performance, injunction and declaratory relief, or any of them, to enforce its rights under this Agreement.
- 6.6 The Owner acknowledges and agrees that it is entering into this Agreement to benefit the public interest in providing housing for Rental Purposes, and that the City's rights and remedies under this Agreement are necessary to ensure that this purpose is carried out and that the City's rights and remedies under this Agreement are fair and reasonable and ought not to be construed as a penalty or forfeiture.
- 6.7 No reference to nor exercise of any specific right or remedy under this Agreement or at law or at equity by any party will prejudice, limit or preclude that party from exercising any other right or remedy. No right or remedy will be exclusive or dependent upon any other right or remedy, but any party, from time to time, may exercise any one or more of such rights or remedies independently, successively, or in combination. The Owner acknowledges that specific performance, injunctive relief (mandatory or otherwise) or other equitable relief may be the only adequate remedy of a default by the Owner under this Agreement.

7. LIABILITY

- 7.1 Except for the negligence or wilful misconduct of the City or its employees, agents or contractors, the Owner will indemnify and save harmless each of the City and its elected officials, board members, officers, directors, employees, and agents, and their heirs, executors, administrators, personal representatives, successors and assigns, from and against all claims, demands, actions, loss, damage, costs and liabilities, which all or any of them will or may be liable for or suffer or incur or be put to by reason of or arising out of:

- (a) any act or omission, negligent or otherwise, by the Owner, or its officers, directors, employees, agents, contractors, or other persons for whom at law the Owner is responsible;
 - (b) the Owner's default under this Agreement; and
 - (c) the Owner's ownership, operation, management or financing of the Lands for the provision of housing for Rental Purposes.
- 7.2 Except to the extent such advice or direction is given negligently or in wilful misconduct, the Owner hereby releases and forever discharges the City, its elected officials, board members, officers, directors, employees and agents, and its and their heirs, executors, administrators, personal representatives, successors and assigns from and against all claims, demands, damages, actions or causes of action by reason of or arising out of advice or direction respecting the ownership, operation or management of the Lands for the provision of housing for Rental Purposes which has been or hereafter may be given to the Owner by all or any of them.
- 7.3 The covenants of the Owner set out in sections 7.1 and 7.2 of this Agreement will survive the expiration or the earlier termination of this Agreement and will continue to apply to any breach of the Agreement and to any claims arising under this Agreement during the ownership by the Owner of the Lands.
- 8. GENERAL PROVISIONS**
- 8.1 The Owner agrees to reimburse the City for all legal costs reasonably incurred by the City for the preparation, execution and registration of this Agreement. The Owner will bear their own costs, legal or otherwise, connected with the preparation, execution or registration of this Agreement.
- 8.2 Nothing in this Agreement:
 - (a) affects or limits any discretion, rights, powers, duties or obligations of the City under any enactment or at common law, including in relation to the use or subdivision of land;
 - (b) affects or limits any enactment relating to the use of the Lands or any condition contained in any approval including any development permit concerning the development of the Lands; or
 - (c) relieves the Owner from complying with any enactment, including the City's bylaws in relation to the use of the Lands.
- 8.3 The Owner and the City agree that:
 - (a) this Agreement is entered into only for the benefit of the City;
 - (b) this Agreement is not intended to protect the interests of the Owner, occupier or user of the Lands or any portion of it including the Rental Units; and

- (c) the City may at any time execute a release and discharge of this Agreement in respect of the Lands, without liability to anyone for doing so.
- 8.4 This Agreement burdens and runs with the Lands and any part into which any of them may be subdivided or consolidated, by strata plan or otherwise. All of the covenants and agreements contained in this Agreement are made by the Owner for itself, its successors and assigns, and all persons who acquire an interest in the Lands after the date of this Agreement. Without limiting the generality of the foregoing, the Owner will not be liable for any breach of any covenant, promise or agreement herein in respect of any portion of the Lands sold, assigned, considered or otherwise disposed of, occurring after the Owner has ceased to be the owner of the Lands.
- 8.5 The covenants and agreements on the part of the Owner in this Agreement have been made by the Owner as contractual obligations as well as being made pursuant to section 483 of the Act.
- 8.6 The Owner will, at its expense, do or cause to be done all acts reasonably necessary to ensure this Agreement is noted against the title to the Lands, including any amendments to this Agreement as may be required by the Land Title Office or the City to effect such notation.
- 8.7 The City and the Owner each intend by execution and delivery of this Agreement to create both a contract and a deed under seal.
- 8.8 An alleged waiver by a party of any breach by another party of its obligations under this Agreement will be effective only if it is an express waiver of the breach in writing. No waiver of a breach of this Agreement is deemed or construed to be a consent or waiver of any other breach of this Agreement.
- 8.9 If a Court of competent jurisdiction finds that any part of this Agreement is invalid, illegal, or unenforceable, that part is to be considered to have been severed from the rest of this Agreement and the rest of this Agreement remains in force unaffected by that holding or by the severance of that part.
- 8.10 All notices, demands, or requests of any kind, which a party may be required or permitted to serve on another in connection with this Agreement, must be in writing and may be served on the other parties by registered mail, or e-mail transmission, or by personal service, to the following address for each party:

City: The Corporation of the City of North Vancouver
141 West 14th Street
North Vancouver, British Columbia
V7M 1H9
Attention: Director, Planning Department

Owner: At the address set out on the registered title to the Lands, from time to time.

Service of any such notice, demand, or request will be deemed complete, if made by registered mail, 72 hours after the date and hour of mailing, except where there is a postal service disruption during such period, in which case service will be deemed to be complete only upon actual delivery of the notice, demand or request; if made by facsimile or e-mail transmission, on the first business day after the date when the facsimile or e-mail

transmission was transmitted; and if made by personal service, upon personal service being effected. Any party, from time to time, by notice in writing served upon the other parties, may designate a different address or different or additional persons to which all notices, demands, or requests are to be addressed.

- 8.11 Upon request by the City, the Owner will promptly do such acts and execute such documents as may be reasonably necessary, in the opinion of the City, to give effect to this Agreement.
- 8.12 This Agreement will enure to the benefit of and be binding upon each of the parties and their successors and permitted assigns.

9. INTERPRETATION

- 9.1 Gender specific terms include both genders and include corporations. Words in the singular include the plural, and words in the plural include the singular.
- 9.2 The division of this Agreement into sections and the use of headings are for convenience of reference only and are not intended to govern, limit or aid in the construction of any provision. In all cases, the language in this Agreement is to be construed simply according to its fair meaning, and not strictly for or against either party.
- 9.3 The word "including" when following any general statement or term is not to be construed to limit the general statement or term to the specific items which immediately follow the general statement or term to similar items whether or not words such as "without limitation" or "but not limited to" are used, but rather the general statement or term is to be construed to refer to all other items that could reasonably fall within the broadest possible scope of the general statement or term.
- 9.4 The words "must" and "will" are to be construed as imperative.
- 9.5 Any reference in this Agreement to any statute or bylaw includes any subsequent amendment, re-enactment, or replacement of that statute or bylaw.
- 9.6 This is the entire agreement between the City and the Owner concerning its subject, and there are no warranties, representations, conditions or collateral agreements relating to the subject matter of this Agreement, except as included in this Agreement and except for any covenants and statutory rights of way that may be registered on title to the Lands from time to time. This Agreement may be amended only by a document executed by the parties to this Agreement and by bylaw, such amendment to be effective only upon adoption by Council of an amending bylaw to Bylaw 8799.
- 9.7 This Agreement is to be governed by and construed and enforced in accordance with the laws of British Columbia.
- 9.8 This Agreement can be signed in counterpart and delivered electronically.

IN WITNESS WHEREOF each of the City and the Owner have executed this Agreement under seal by their duly authorized officers as of the reference date of this Agreement.

THE CORPORATION OF THE CITY OF NORTH VANCOUVER,
by its authorized signatories:




MAYOR

CITY CLERK

FIRST CAPITAL (200 WEST ESPLANADE) CORPORATION ,
by its authorized signatories:

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 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Natalie Corbo, Sustainable Transportation Coordinator

Subject: RIDGEWAY SLOW SPEED ZONE IMPLEMENTATION

Date: October 14, 2020 File No: 16-8330-04-0001/1

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

RECOMMENDATION

PURSUANT to the report of the Sustainable Transportation Coordinator, dated October 14, 2020, entitled "Ridgeway Slow Speed Zone Implementation":

THAT "Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2020, No. 8801 (Ridgeway Neighbourhood 30 km per hour Zone)" be considered.

ATTACHMENTS

1. Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2020, No. 8801 (Ridgeway Neighbourhood 30 km per hour Zone) (CityDoc [#1951940](#))
2. Ridgeway School Zone Safety Review Action Plan (CityDoc [#1920906](#))

BACKGROUND

An expanded 30 km/h slow speed zone for the Ridgeway School neighbourhood is a key recommendation of the Ridgeway School Zone Safety Review Action Plan, completed by staff in spring 2020 (see Attachment 2). This speed reduction is part of a series of roadway changes designed to create better driver behavior that is more conducive to a safe and comfortable pedestrian and cyclist experience on these neighbourhood streets. The first set of changes in early October 2020 included corner bulges, new painted crosswalks, and sightline improvements around the school to improve pedestrian safety at intersections. An amendment to the City's Street and Traffic Bylaw, 1991, No. 6234 is required to implement speed limits that are lower than the default speed limit of 50 km/h on most City streets, including those in the Ridgeway School neighbourhood.

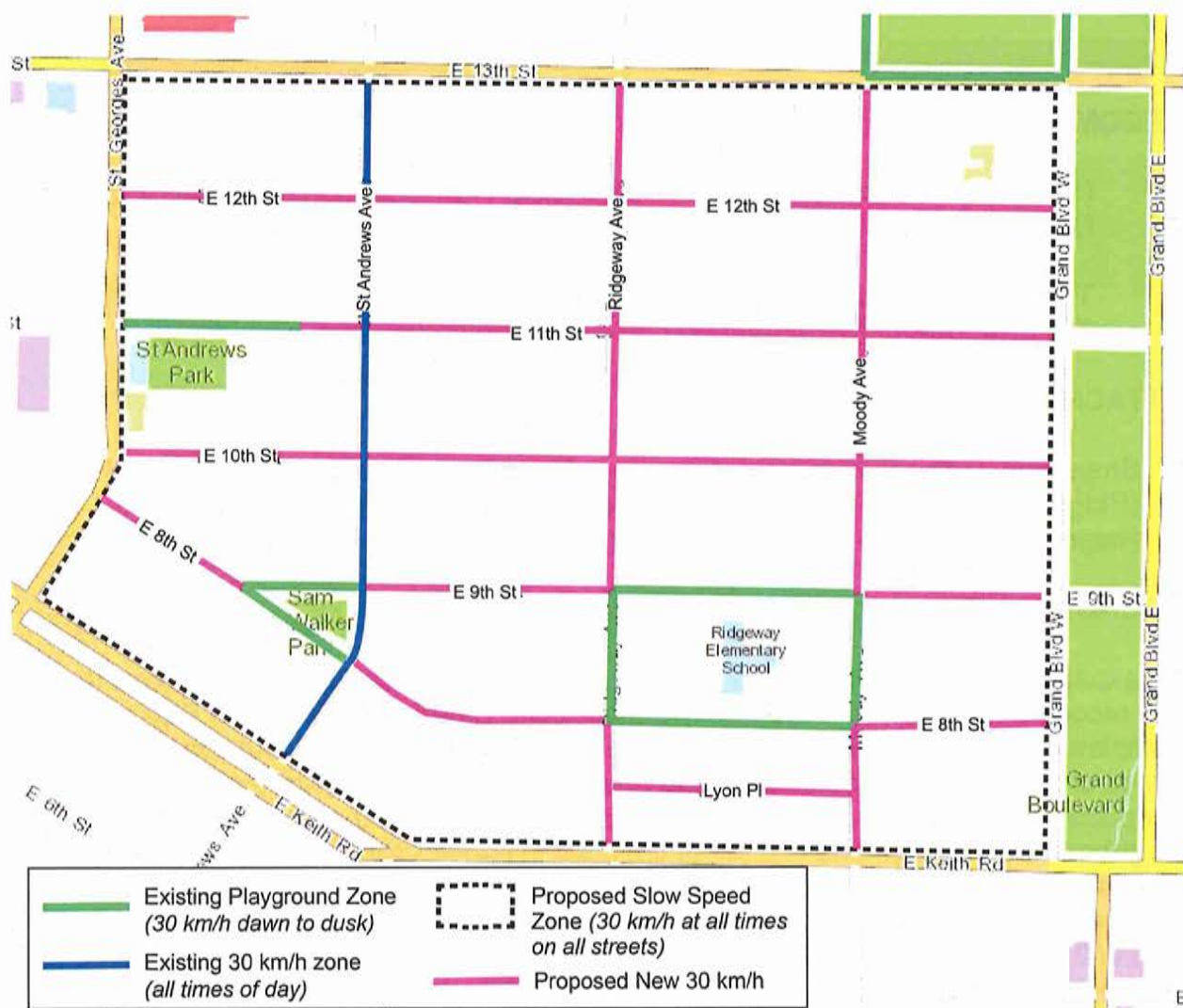
DISCUSSION

The proposed 30 km/h slow speed zone will encompass the broader Ridgeway School neighbourhood and be in effect at all times

The proposed expanded slow speed zone would lower the speed limit to 30 km/h at all times of day on all local streets within the Ridgeway Elementary School Area, shown in Figure 1.

The proposed slow speed zone would have drivers transition to 30 km/h upon turning off an arterial or collector road onto designated local roads in the neighbourhood. Aligning the change in speed with the change in road classification provides an additional visual cue for drivers, as designated local streets look and feel different from arterial roads. This change would also connect the existing slow speed zones on St Andrews Avenue, in front of St Andrews Park, around Sam Walker Park and around Ridgeway Elementary.

Figure 1: Existing and proposed 30 km/h zones



At present, there is Playground Zone signage around the school, meaning that posted speeds on the four blocks immediately surrounding the school site are reduced from 50 km/h to 30 km/h from dawn to dusk.

Lowering posted speeds will increase the safety and comfort of families and other vulnerable road users in the neighbourhood

Lower speeds protect people walking and cycling because the severity of traffic collisions involving vulnerable road users is a function of the vehicle operating speed. Studies have shown that the probability of a pedestrian being fatally injured in an accident with a car is dependent on the speed of the car; at 50 kilometers per hour there is 10% chance that the pedestrian will survive; and at 30 kilometers per hour there is a 90% chance of survival.¹

The network of streets within the Ridgeway Elementary School area are key walking routes for students and families and several of these streets are recommended as “Best Walking Routes” through the City’s Safe and Active School Travel program. A lower speed limit in this broader area is anticipated to increase the comfort levels of neighbourhood residents and school families walking in the area.

Speed data collected in recent years indicates that operating speeds are generally below 50 km/h, but feedback from school children, parents and neighbourhood residents identified that existing speeds feel too fast for the street context, and make walking and crossing the street less comfortable. Several blocks around Ridgeway Elementary are lacking sidewalks or curb ramps on both sides, which may mean that people walking need to cross the street more frequently to access a sidewalk. Overall, the area generates a relatively high number of pedestrian trips due to proximity to the school, hospital, parks and other amenities. Several school parents also identified speed as a barrier to participating in the “Drive-to-Five” program that encourages families to park several blocks away and walk five minutes to school, as they noted that it would mean dropping students off in a 50 km/h zone rather than a 30 km/h zone.

The speed limit change will also complement the other changes being implemented as part of the Ridgeway Action Plan (see Attachment 2). These include new curb bulges, painted crosswalks, and sightline improvements at intersections adjacent to the school, constructed in early October 2020. Diagonal diverters and on-street murals to highlight new crossing treatments will be implemented through early 2021. Phase 2 measures will include further enhancements to school-adjacent crossings, measures to encourage compliance with the 30 km/h zone, and enhanced intersection crossings along East Keith Road.

Reducing speeds will have limited impacts on vehicle travel time

Although current operating speeds vary on different blocks, generally about 85% of vehicle traffic using local streets in the Ridgeway neighbourhood are already traveling at speeds around 40 km/h or lower. The speed limit reduction would represent an increase in travel time of up to 15 seconds for someone driving to the nearest arterial. Vehicles

¹ City of North Vancouver Safe Mobility Strategy (2020)

traveling across the neighbourhood would experience up to 35 seconds increased travel time. However, future measures in the Ridgeway Action Plan are designed to reduce cut-through traffic in this neighbourhood.

The Ridgeway slow speed zone will provide neighbourhood-scale data to inform future speed reduction projects

This slow speed zone builds upon the St. Andrews 30 km/h pilot, implemented in August 2020. Per the Safe Mobility Strategy, the City will look to identify additional areas where speeds could be reduced in the future. The St. Andrews corridor pilot and the Ridgeway School neighbourhood slow speed zone will allow staff to learn about the effectiveness of signage-based speed limit reductions, and test further speed reduction measures as needed.

Ongoing monitoring will inform modifications to the slow speed zone

Staff will monitor speeds and volumes in the slow speed zone before and after implementation. Based on data and observations from staff, residents and the school community, staff will make refinements and modifications, as per Phase 2 of the action plan. This may include the installation of supporting measures such as speed humps or pavement markings to support further speed reductions if necessary. Physical changes such as these can have a significant impact on driver behavior, and encourage speeds that are more appropriate for the street—further work will be done through the upcoming Mobility Strategy to create an updated street classification system that will encourage physical design measures that better align with the primary use of the street.

North Vancouver RCMP have indicated support for efforts to increase the safety and comfort of City streets, but have advised that the availability of regular police presence (e.g., daily or weekly) to enforce the speed limit change is limited at this time. The RCMP have advised that they expect the first month of the change to elicit the most calls from the public. In response, the City will work with the volunteer Speed Watch team and the RCMP at launch to encourage compliance through education. Following this period, enforcement of the speed limit change will be incorporated into on-going traffic enforcement rotations, and targeted enforcement periods may be considered after the initial rollout.

Pending Council endorsement, staff will aim to implement 30 km/h speed limit signage in early December. Advance notice will be given to residents and the school community, and we will use signage on arterials to create awareness of the change. Transportation Planning staff will work with internal Communications staff and the School District to inform the broader community.

FINANCIAL IMPLICATIONS

In order to change the default speed limit (per the Motor Vehicle Act), 30 km/h signage is required on each block. The signage and installation costs are estimated at \$15,000. Funding is available through the existing Safe Routes to Schools project budget.

INTER-DEPARTMENTAL IMPLICATIONS

The Ridgeway School Zone Safety Review action plan was developed in collaboration with Engineering, Parks and Environment (EPE), and Communications staff will continue to support public awareness as we move to implementation. EPE was involved in developing the slow speed zone plan, and will continue to be involved in the specifics of implementation. Staff have also consulted with the RCMP on this action item.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

Existing City policies support lower speeds in the Ridgeway neighbourhood. Establishing slower speed limits in expanded areas around schools is a key priority of the Safe Mobility Strategy. Slower speed limits support Council's Strategic Plan's goal of a "Connected City", by enabling more active and sustainable ways for people and goods to move to, from and within the City safely and efficiently. The initiative also supports key policy direction in the City's Official Community Plan around prioritizing the safety of school zones.

RESPECTFULLY SUBMITTED:



Natalie Corbo
Sustainable Transportation Coordinator

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8801

A Bylaw to amend “Street and Traffic Bylaw, 1991, No. 6234”

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

1. This Bylaw shall be known and cited for all purposes as **“Street and Traffic Bylaw, 1991, No. 6234, Amendment Bylaw, 2020, No. 8801” (Ridgeway Neighbourhood 30 km per hour Zone)**.
2. “Street and Traffic Bylaw, 1991, No. 6234” is amended as follows:
 - A. By replacing section 1004.2 with the following:

.2 30 km/h Streets

Notwithstanding Section 1003, it shall be unlawful for any person to drive or operate a motor vehicle at a rate of speed greater than 30 km per hour on:

- (a) Rufus Drive between Cedar Village Crescent and the City Boundary at 16th Street;
- (b) Ridgeway Avenue and Moody Avenue between East Keith Road and East 13th Street;
- (c) East 8th Street, East 9th Street, East 10th Street, East 11th Street and East 12th Street between St. Georges Avenue and Grand Boulevard West; and
- (d) Lyon Place between Ridgeway Avenue and Moody Avenue.

READ a first time on the <> day of <>, 2020.

READ a second time on the <> day of <>, 2020.




READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK



 Division Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
PLANNING & DEVELOPMENT DEPARTMENT

INFORMATION REPORT

To: Mayor Linda Buchanan and Members of Council

From: Natalie Corbo, Sustainable Transportation Coordinator

Subject: RIDGEWAY SCHOOL ZONE SAFETY REVIEW ACTION PLAN

Date: June 4, 2020 File No: 16-8330-04-0001/1

SUMMARY

This report outlines the outcomes of the Ridgeway School Zone Safety Review. Actions to address issues around the school and broader neighbourhood will be delivered in phases to align with available staff and financial resources. Information on the outcomes of the review and action plan will be provided to the school and neighbourhood prior to changes being implemented.

BACKGROUND

Staff initiated the Ridgeway School Zone Safety Review in November 2019 in order to assess traffic and safety concerns around Ridgeway Elementary School and identify mitigating actions.

Key issues identified through data collection, staff observation and engagement with the school and neighbourhood community included concern about crossing safety at intersections, vehicle speeds, traffic congestion and unsafe driver behaviour in the school zone. A detailed summary of key issues and community input was provided in a Council information report dated December 19, 2019.

Options to mitigate these issues were identified by staff based on planning and engineering best practice, with consideration given to innovative and emerging tools. Options were presented for input at a public open house in February and outlined in a Council information report dated February 18, 2020.

DISCUSSION

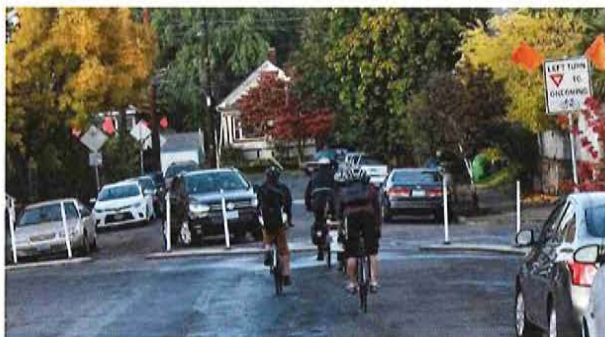
The action plan detailed below responds to the following objectives that were established at the outset of the project. Staff have selected interventions that best met these objectives, with budget as the primary constraint:

1. Supports active travel to school
2. Reduces congestion in the school zone
3. Improves safety by minimizing risk of conflicts between vehicles and vulnerable road users
4. Addresses community input
5. Is cost effective and replicable
6. Is feasible to implement on a long-term, permanent basis

Phase 1 Actions: 2020

The measures introduced in phase 1 will be a mix of permanent and temporary changes. This will allow staff to monitor impacts and make adjustments as needed. This approach also enables staff to accomplish more within existing budgets. These actions will be delivered by the end of 2020.

- a. *Increase visibility of high-volume pedestrian crossings near the school:* Enhance the safety and comfort of crossings nearest to the school, as crossing safety was the number one concern we heard about through the engagement process. These treatments will also aim to increase overall awareness and visibility of the school zone. Specific interventions will include:
 - Additional painted crosswalks leading to the school site
 - Physical barriers in “no-stopping” zones to improve traffic flow and sightlines
 - Expanded curb bulges to improve sightlines
 - Use of paint and signage where possible to highlight the school zone
- b. *Install diagonal diverters at key intersections:* New diagonal diverters are anticipated to reduce the potential for conflict between vehicles, thereby mitigating the impacts of congestion, as well as reducing the potential for conflicts between vehicles and pedestrians. This treatment can also discourage non-local traffic cutting through the neighbourhood and encourage more efficient traffic flow in the school zone. Initial implementation will be completed with temporary materials to allow for adjustments as required. See the images below for examples.



Diagonal diverter with temporary materials, Portland OR

- c. *Expanded slow speed zone:* Expand the existing 30 km/h zone area beyond the immediate school boundaries and adjust it to be in affect at all times of day. This improves the safety of pedestrian and cycling routes in all directions near the school and addresses the discomfort that residents and families feel with existing speeds. Furthermore, this may support families who have concerns about parking several blocks away and walking to the school in a 50 km/h zone. Council direction is required for this change and staff will present a plan for Council's consideration this summer.
- d. *On-street murals to highlight tactical treatments:* When feasible (physical distancing restrictions make this instalment challenging), staff aim to involve the community in creating several on-street murals. Paint and bright colours can be used to highlight curb bulges, no stopping zones and pedestrian priority areas, while enlivening the streets. A community-based process will promote a sense of ownership among students and families.

To support the phase 1 interventions, staff will also monitor the effectiveness of the City's new Open Street Action Plan and determine if possible expansion of the Open Streets network to include key streets in the Ridgeway neighbourhood may be appropriate.

Phase 2: 2021-2022

Higher-cost upgrades are not possible within existing budgets and are also contingent on prioritization through a City-wide process. Phase 2 will include monitoring of volumes, speeds and conflicts to allow staff to adjust physical measures as needed. Measures to be considered in phase 2 include:

- Adjustments to phase 1 measures
- Additional speed reduction measures to support the expanded 30 km/h zone, if necessary, e.g., additional speed hump, curb bump-outs, etc.
- Enhanced pedestrian crossings along East Keith Road
- Further physical enhancements to pedestrian crossings adjacent to the school

Communications Plan

Staff will continue to update the Ridgeway Let's Talk page as the primary resource for community members. Updates regarding the outcomes of the safety review and action plan implementation will be communicated in the coming weeks via web updates and emails to the school community sent in collaboration with the school and the North Vancouver School District. Residents will be also be notified via mail-outs.

FINANCIAL IMPLICATIONS

Phase 1 initiatives are estimated to cost approximately \$60,000 and are feasible within the existing Safe Routes to School Budget. If further funding is required to adjust measures or enhance them with more permanent materials, budget requests will be made for 2021. Phase 2 measures would cost upwards of \$300,000, which is not available within existing budgets. Proceeding with phase 2 initiatives will require future budget requests.

NEXT STEPS

Staff will proceed with implementation of phase 1 through summer and fall 2020, subject to Engineering Operations staff availability. Staff will also seek Council direction for an expanded slow speed zone in summer 2020.

RESPECTFULLY SUBMITTED:



Natalie Corbo
Sustainable Transportation Coordinator

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8801

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MAYOR

CITY CLERK

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The Corporation of **THE CITY OF NORTH VANCOUVER**
COMMUNITY & PARTNER ENGAGEMENT DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Paul Duffy, Manager, Bylaw Services

Subject: NOISE CONTROL MEASURES AND BYLAW REVIEW

Date: October 16, 2020 File No: 09-3900-01-0001/2020

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

RECOMMENDATION

PURSUANT to the report of the Manager, Bylaw Services, dated October 16, 2020, entitled "Noise Control Measures and Bylaw Review":

THAT staff be directed to engage subject matter experts to assist with a comprehensive review of noise issues in the City and report back on the establishment of a Noise Advisory Task Force to consider a long term strategy for managing noise in the City, with funding to be addressed in the 2021 budget;

THAT noise monitoring stations be installed and piloted in areas of the City to monitor noise trends, as described in Proposed Action 1;

THAT staff be directed to prepare a bylaw for Council consideration to amend the Noise Control Bylaw to add the words "talking and singing with" to paragraph 9, Schedule "B", regarding amplified sound, as described in Proposed Action 2;

THAT the Noise Exemption Permit process, outlined in Part 4 of the Noise Control Bylaw, be reviewed and proposed amendments be included in the bylaw to amend the Noise Control Bylaw, as described in Proposed Action 3;

THAT staff be directed to prepare a bylaw for Council consideration to amend the Noise Control Bylaw to include an assessment of tonal and impulsive content of sound to be considered in any noise complaint assessment, as described in Proposed Action 4;

AND THAT the requirements for noise control construction signage be updated and proposed amendments be included in the bylaw to amend the Noise Control

Bylaw, as described in Proposed Action 5.

ATTACHMENTS

1. Noise Control Bylaw, 1987, No. 5819 (Doc #501351)
2. Vancouver Coastal Health Recommendations (Doc #1940834)
3. How Loud is Too Loud, Health Impacts of Environmental Noise in Toronto (Doc #1937453)

SUMMARY

On September 9, 2019, Council resolved:

THAT staff review and recommended amendments to the Noise Control Bylaw, 1987, No. 5819;

THAT staff consider and recommend enforcement options for noise related infractions;

THAT staff consider and provide other mitigation strategies to minimize noise in the community;

AND THAT staff pilot and utilize crowd-sourcing and other existing technology solutions to monitor noise across our community, such that problem areas can be identified.

PURPOSE

The purpose of this report is to respond to Council's resolution of September 9th, 2019 and to propose a number of potential actions for Council's consideration in regards to mitigating noise in the City.

BACKGROUND

Noise, including noise from transport, industry, construction and neighbours is a prominent feature of any city. Noise produced by human activities has been increasingly recognized as a serious and growing environmental and health problem. According to the World Health Organization (WHO), noise is second to air pollution in the impacts it has on health. Noise pollution has been implicated in a variety of health disorders, ranging from stress and hypertension to permanent hearing loss. Noise is measured in decibels (dB) and extended and repeated exposure to sound at or above 85 dB can cause hearing loss.

The primary source of noise in cities is largely from widespread use of mechanical devices, mostly transportation and construction related. The City of North Vancouver began to regulate noise in 1952. The City's current Noise Control Bylaw (the "Bylaw") was adopted in 1987 and has only seen limited amendments since this time.

began to regulate noise in 1952. The City's current Noise Control Bylaw (the "Bylaw") was adopted in 1987 and has only seen limited amendments since this time.

For many years, the City has contracted and continues to contract the Environmental Health Department of Vancouver Coastal Health to provide technical assistance, i.e. decibel readings and reports, to assist with enforcement of the Bylaw. Vancouver Coastal Health (VCH) has provided input into the Bylaw review and their overview and recommendations are listed as Attachment 2.

DISCUSSION

Reducing the exposure to environmental noise to residents is multi-pronged and requires periodic assessment of the noise environment. Municipalities have the power to create laws and policies which can help reduce noise pollution. However, implementation of noise mitigation and noise minimizing regulations are not easy to implement and enforce. Successful noise reduction strategies require the active participation of residents, organizations and other City partners.

Comprehensive Assessment of the Issue and Long-term Strategy

Given the complexity of the issue, a comprehensive review of noise issues and a long-term strategy is required in order to provide an effective response. The City does not have the expertise to undertake such a review so staff are recommending subject matter experts be hired to assist staff in preparing a long-term strategy for Council's consideration. Staff have submitted a project sheet for funding to pursue this direction. This will allow the City to work with experts in the field to determine which noise reduction strategies will be the most effective.

For example, long-term noise mitigation strategies can be implemented through the creation of policies which target noise emanating from the transportation network construction and activities such as low-noise road surfaces, redesigning street spaces, landscape and construction design.

In order to build a successful noise reduction strategy, the City, businesses and residents must work together. To develop a long term noise reduction strategy, staff recommend that Council create a select committee to examine noise issues and make recommendations for improvement. This committee group will include residents, businesses and related associations. Staff will report back to Council on the establishment of the committee with recommendations on terms of reference and composition.

In addition, staff will work to gather and share baseline information including deploying monitoring devices and crowd sourcing devices to understand the noise and societal impacts.

Further, to be successful in noise mitigation processes, community engagement and education must take place. This body of work will begin with the approval of a 2021 budget.

Current Actions

In the interim, the City is routinely considering noise mitigation as part of their day to day work and are implementing the following steps to minimize some noise impacts in the City.

Current Noise Mitigation Strategies

City Organization Noise Mitigations

1. City Vehicles: Aside from the lower noise, electric vehicles do not emit harmful pollutants that internal combustion engines produce and therefore provide improved air quality for the operator and nearby public. Currently 10% of the City's vehicles are electric. Staff will be completing a technical review of the electrical infrastructure upgrades required at City facilities to be ready to support a large scale transition to an electric fleet in the next few years. As more vehicle options become available, the City will continue to explore a wider range of vehicles including pickup trucks and heavier vehicles.
2. Parks and Environment Equipment Noise: Staff are continuously looking at new equipment and technology to assist in their day-to-day operations. Although a gradual switch to electric has been more about emission reduction, noise reduction has been a secondary benefit. While the costs of electric equipment has been more than gas powered equipment, their use has been beneficial to both staff and the environment. Staff are currently using battery hand-held blowers, back pack blowers, grass trimmers, push lawn mowers, a pole saw and chainsaw and are looking at purchasing an electric ride-on mower. The City will continue to add electric powered items to its lawn maintenance equipment as technology improves and purchasing costs are reduced.

City-Wide Noise Mitigations

1. Port of Vancouver: Approximately 7 km of shoreline is managed by the Port of Vancouver, consisting of five major terminals: Neptune, Lynnterm, Cargill, Richardson International and G3 in addition to the Vancouver Dry Dock maintenance facility. The Port of Vancouver can be noisy with terminal operations, car and truck traffic, rail car movement, train whistles, ship engines and construction. Port operations are industrial by nature and some of the terminals operate 24/7. Over the years, noise from port related activities has been an issue. Both the port and terminal operators have implemented measures such as noise monitoring and equipment upgrades in recent years to help reduce noise pollution. The City also has a representative on the North Shore Waterfront Liaison Committee which is comprised of local residents, North Shore municipalities, industry and the port authority. The Committee's role is to liaise between different groups, share information and address local port-related issues such as noise. The City will continue to use this forum as a means of championing the City residents concerns about noise or port related issues.

2. Transportation: Noise from motor vehicle traffic is an increasingly prominent feature of any municipality. The default speed limit in the City is 50 km/h, unless otherwise posted. To date, the City has moved to lower speeds around schools, playgrounds and along some designated bicycle routes in order to improve safety for vulnerable road users. These measures have the added benefits of reducing travel-related noise from vehicles. City staff are exploring opportunities to provide expanded “slow speed” zones in other areas of the City. Combustion engines account for a large portion of noise generated from vehicles. The City is working to provide an expanded network of public charging stations in order to further incentivize the use of zero emission or electric vehicles in the City, which are demonstrated to be quieter.

Noise related to trucks and delivery vehicles is common throughout the City. A comprehensive review of the City’s goods movement network and policies will be undertaken as part of the Mobility Strategy update, which may include exploring the feasibility of enabling smaller delivery vehicles in some areas of the City and a review of existing truck routes. Lastly, the City will continue to encourage active transportation to provide the enabling conditions for people to choose walking, cycling and transit.

3. New Construction Design and Construction Quality: With the construction of new buildings, there are opportunities to address noise mitigation through building design and construction quality. Newer buildings that are built to higher energy standards are inherently better at mitigating outdoor noise before it enters indoor living areas and energy standards are rising with the implementation of the Energy Step Code. Development projects requiring rezoning are generally expected to exceed the minimum requirements for energy efficiency and noise covenants have been secured for certain projects to ensure noise mitigation is incorporated into new buildings where there is a high potential for noise pollution from sources such as rail and port activities. Outside of the rezoning process, noise mitigation requirements were added to the Zoning Bylaw with the rezoning of Moodyville and adoption of the Moodyville Development Permit Area Guidelines. These requirements currently apply only to projects within the Moodyville area.

Further opportunities for noise mitigation that could be explored include:

- Introducing a rezoning policy with a schedule (map) of where enhanced noise control measures will be secured through covenant
 - Investigating retractable balcony enclosure systems as a means of mitigating noise transmission
 - Incentives/subsidies for building owners to upgrade old windows
4. Building and Construction Processes: The mitigation of noise generated during both the construction and operation of a building is integrated into the Building Permit application review and construction administration process. For example, frequent noise-generating equipment such as heat pumps and air conditioning units are identified in the plan review stage and steps are taken to ensure appropriate equipment selection and siting in relation to adjacent residential uses.

Prior to the commencement of any construction activity, site safety signage must be posted; this signage includes the City's permitted hours of construction, as well as an after-hours telephone number through which City staff can be reached at any time of day or night to address construction-related concerns, including noise. Building staff also administer the Noise Control Bylaw exemption application process, through which construction sites may request variances to allow for extended or augmented work hours. The Construction Ambassador position in Bylaws and the requirement of Good Neighbour Agreements for construction projects both of which can address excessive noise from construction sites will continue.

Potential Immediate Actions to Mitigate Noise

In advance of an assessment and development of a long-term strategy there are a number of potential actions that the City can undertake to address some noise issues. The following potential actions outline five (5) recommendations from staff that may assist in benchmarking our current noise levels while introducing policy and regulations to minimize some noise in the City.

Noise Monitoring

Potential Action 1: Install noise monitoring sensors in key areas of the City to monitor and baseline noise levels.

Many cities are beginning to actively engage in monitoring community noise. The Port of Vancouver has been monitoring noise on the north and south shores of the Burrard Inlet since 2013. The Port of Vancouver noise monitoring program is used to better understand the source and intensity of port related noise and to help respond to community concerns regarding noise. Actively monitoring, mapping and reporting on noise trends highlights the importance of considering noise impacts in policy and planning decisions.

Measuring noise over a period of time in key areas of the City can be used to obtain a better understanding of the existing noise environments. Initiating a noise monitoring pilot program in the City would assist in identifying the noise trends and determine how noise levels are changing overtime and would utilize this information in future transportation, planning and building processes.

Although there are two types of noise monitoring solutions that could be deployed depending on the intended use of the data collected, staff are recommending noise monitoring sensors for planning and baselining purposes only. This cost is significantly less than the second option which is supported through with CCTV cameras and comes with privacy issues. The estimated cost for this solution would be \$10,000 for the installation of this noise monitoring network and \$800 per sensor for future additions to the network.

Staff are recommending to deploy noise monitoring sensors to monitor and baseline noise levels in the City.

Potential Action 2: Amend the Bylaw to include the words “talking and singing with” to paragraph 9, Schedule “B”.

On various dates in the summer of 2012, a street performer was issued six Bylaw enforcement notices relating to amplified music regarding her performances in the Civic Plaza area. The street performer successfully challenged these notices in the Supreme Court of British Columbia. The Court set aside the Bylaw notices based on their interpretation of paragraph 9, Schedule “B” of the Bylaw which states, “Shouting, 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, is prohibited, save and except Peace Officers or Fire Fighters while in the conduct of their lawful duty”. The Courts interpreted that “the use of equipment to amplify the spoken voice did not specify the use of equipment to amplify a “singing voice”.

Bylaw Services has investigated 12 busking complaints with amplified sound thus far in 2020. To address the gap in the Bylaw that was highlighted in the Court decision, staff recommend that the word singing should be included as follows; “Shouting, *talking or singing with* [emphasis added] 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, is prohibited, save and except Peace Officers or Fire Fighters while in the conduct of their lawful duty”.

Adding these additional words to this section will close the gap identified by the Court to allow enforcement of this section of the Bylaw. This would provide an enforcement option in regards to amplified music.

Potential Action 3: Enhance the Noise Exemption process.

Part 4 of the Bylaw sets out an application process for a noise exemption from any provision of this Bylaw. The majority of these noise exemption permits are issued for construction outside normal construction hours. While a significant portion of the process is current and applicable, there are portions that need to be updated. The following are a list of proposed updates to this process;

1. Review the decision making process for both construction related applications and non-building related applications based on input from the noise advisory committee;
2. Not only consider the justification and reasoning for the noise exemption request but also consider the past performance of the site in the evaluation process;
3. Clarify the justification and reasons for exemptions; and
4. Remove outdated terminology in the process.

Since the application for a noise exemption permit was included in the Bylaw in 2004, it has not been updated. Currently, reasons for justification for a noise exemption permit is not set out in this Bylaw. Taking into account the past history of the site will provide an incentive to minimize the impacts of construction to the surrounding neighborhood from the beginning of the project.

Staff recommend to enhance the noise control exemption permit process to ensure strong communication and construction management for noise outside permitted hours and propose amendments to the Bylaw as required.

Potential Action 4: Include an assessment of tonal noise of sound in any noise complaint assessment.

Often the sound of energy from a noise source will be spread over a wide band of frequencies. Tonal noise is a noise source which will emit noise that is concentrated in a narrow part of the spectrum or contains a high portion of energy at a single frequency. Examples of sources that can cause tonal noise includes circular saws, fans, compressors, motors and transformers. Most have moving parts that rotate or vibrate at a given audible frequency. Humans are quite good at selectively hearing tones. Tonal noise is generally more noticeable and more annoying than non-tonal noise when both are emitting the same level of noise.

More municipalities are beginning to add decibels penalties to the measured noise readings which contains tonal noise. There are a number of assessment tools that are currently in use to adjust the measured noise levels and factor in the penalties for tonal noise. The City of Victoria and the City of Richmond currently use adjustment factors for tonal noise. The number of mechanical noise complaints investigated by the City each year is small. Out of the small number of complaints, there may be a small percentage that would be a borderline breach or just under the maximum permitted noise level. With the additional penalty of 5 decibel weighting, these complaints would become a breach of the Bylaw requiring the owner to address the noise emanating from the device. Adding tonal noise adjustment penalties may address those sounds that may not be in breach of the decibel readings but because of their noticeable and annoying characteristics, these sounds can be addressed with this added penalty.

Vancouver Coastal Health currently have the capability to assess tonal noise with their current equipment. While it is difficult to determine the actual cost to the business or home owner who is in breach of the Bylaw because of tonal noise, considerations are given to the life span of the equipment, the extent of the decibel readings and/or proximity to new construction before a course of action is plotted.

Staff recommend to add tonal adjustment penalties to noise complaints containing tonal noise.

Potential Action 5: Update the Bylaw requirements on posting noise control construction signage around a construction site.

Considerate construction requires a conscious effort in applying precautionary measures and establishing communications with the surrounding neighbors. Although the City currently recommends that signage be placed on all street frontages surrounding a construction site, the Bylaw only requests one sign. Under the Bylaw, a noise control sign is required to be posted at any construction site with a permit value over \$500,000. This sign must display construction hours, name and contact number of the general contractor, a 24 hour contact number for complaints and a City of North Vancouver noise control number. Our current Bylaw only calls for a sign to be posted in

a prominent location on the property visible from at least one adjacent street. Requiring signs on all exposed sides of the construction site would provide information to neighbors regarding noise related issues. This requirement will add a small additional cost to the developer and it may add an additional environmental impact in disposing of signage at the end of the project.

Staff recommend amending the Bylaw to update the signage requirements to enhance the efforts of keeping the neighbors informed and aware of the construction project.

Enforcement/Education Opportunities

1. Construction Ambassador Program: In late 2014, Council directed staff to take a series of actions to mitigate the effects of several significant redevelopment projects occurring in Lower Lonsdale. The Construction Ambassador Program position was created to take on the role of pro-active construction site monitoring and responding to construction related complaints. As construction noise complaints continue to form a significant amount of noise complaints received by the City, staff reviewed the program during the summer of 2019. Staff determined that the program had not provided the impact that was initially intended. The review indicated that Bylaw education remained the priority with very few steps toward enforcement. Subsequent to the review, education remains a priority, however if a pattern of complaints develops, Bylaw Notices are issued as a future deterrent. From January to October 13th, 2020 there have been a total of 24 Bylaw Notices that were issued for construction noise. Staff may also escalate problem sites to the Chief Building Official who has the ability to issue a "Stop Work" order.
2. The Environmental Health Department of Vancouver Coastal Health has been contacted and have offered to provide presentation(s) to building and planning staff on the type of files that they investigate on behalf of the City. This education can assist in consideration and early intervention to prevent the noise issues from surfacing at the end of the building projects.
3. The City construct a noise web page. The City can educate the residents on noise in our environment. Making information available and accessible to the public helps to proactively manage public expectations about enforcement of noise related issues. The site can provide information on noise, access the noise measurements from noise monitoring stations, how to report noise related issues, who to contact, such as the City for home, construction sites or the Port of Vancouver for port noise or CN Rail for train noise. The City can also display the noise policy and strategies to mitigate noise in the City.

FINANCIAL IMPLICATIONS

As mentioned, any noise mitigation strategies must take into account a vast number of technical, operational and economical factors. The cost-benefit ratios of all solutions have to be considered. There are studies that have revealed substantial costs are associated with noise and abatement in economic, social and health terms.

In order to engage noise experts, residents, and community partners to develop a long-term noise mitigation strategy, staff have submitted a project sheet for \$50,000 in funding to pursue this direction. This will allow the City to work with committee members to determine which noise reduction strategies will be the most effective. This body of work would begin with the approval of a 2021 budget.

Noise complaints contribute to the cost of noise pollution. Bylaw Services, Police and Vancouver Coastal Health spend a significant amount of time investigating noise complaints. One Bylaw Services position is focused primarily on construction complaints which takes away time from other enforcement activities.

Should the City begin to monitor noise, there will be an approximate \$15,000 in start-up costs for equipment and staff would need to explore funding options. It will also require additional staff time to process and/or post the noise data.

There are costs that come with moving to an electric fleet of vehicles, while these costs can be built in overtime, there will be an increase in new vehicle purchases. Early feedback from staff on the lawn maintenance equipment has found the technology not yet comparable to that of gas powered lawn maintenance equipment. Staff are having to purchase additional batteries to ensure a full days use out of the lawn maintenance equipment.

And finally, while difficult to quantify in terms of financial implications, sleep disturbance is one of the most common consequences of noise pollution. When sleep is interrupted, memory, creativity and judgement can become impaired. This can impact the health and productivity of our residents.

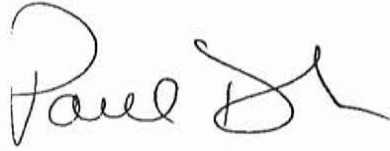
INTER-DEPARTMENTAL IMPLICATIONS

Various sections within the City plan and implement policies to mitigate noise. Transportation, Planning, Environment, Building and the RCMP have been consulted to supply information contained within the report.

STRATEGIC PLAN, OCP OR POLICY IMPLICATIONS

These recommendations would align with all the priorities identified in the City's Strategic Plan including; "A City for People", "A Liveable City", "A Vibrant City", "A Connected City" and "A Prosperous City". By reducing the negative effects of noise pollution, there will be less burden on our environment, our residents and the economy. Not only will such an environment promote a more active lifestyle such as walking, cycling and active recreation which will also reduce noise levels from transportation, it will contribute to the health and wellbeing of all residents in the City.

RESPECTFULLY SUBMITTED:

A handwritten signature in black ink, appearing to read "Paul Duffy". The signature is fluid and cursive, with the first name "Paul" written in a larger, more prominent script than the last name "Duffy".

Paul Duffy
Manager, Bylaw Services



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

“NOISE CONTROL BYLAW, 1987, NO. 5819”

CONSOLIDATED FOR CONVENIENCE – JANUARY 24, 2011

Amendment Bylaw, 1993, No. 6300	Schedule B6
Amendment Bylaw, 1998, No. 7053	Schedule “B”
Amendment Bylaw, 2003, No. 7513	Statutory Holidays
Amendment Bylaw, 2004, No. 7578	Application for Exemption
Amendment Bylaw, 2004, No. 7581	Ticket Information
Amendment Bylaw, 2004, No. 7585	Schedule B & B6
Amendment Bylaw, 2008, No. 7943	Bylaw Notice Process
Amendment Bylaw, 2008, No. 7944	Addition to Schedule A
Amendment Bylaw, 2011, No. 8121	Power Gardening or Building Maintenance Equipment

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

Bylaw No. 5819

A Bylaw to control Noise within the Municipality

WHEREAS Section 932(c) of the Municipal Act empowers the Council by bylaw to regulate or prohibit the making or causing of noises or sounds in or on a highway or elsewhere in the Municipality which disturb, or tend to disturb, the quiet, peace, rest, enjoyment, comfort, or convenience of the neighbourhood, or of persons in the vicinity, or which in the opinion of the Council, are objectionable or liable to disturb the quiet, peace, rest, enjoyment, comfort, or convenience of individuals or the public, and to make different regulations or prohibitions for different areas of the Municipality;

AND WHEREAS Section 932(d) of the Municipal Act empowers the Council by bylaw to prevent or prohibit persons from shouting, using megaphones and making other noise in or at or on streets, wharves, docks, piers, steamboat landings, railway stations or other public places;

AND WHEREAS Section 120 of the Motor Vehicle Act grants to the Corporation certain powers to regulate traffic, as traffic is in that Act defined, and grants to the Corporation certain powers to delegate to an officer or employee of the Corporation, the authority to exercise said powers to regulate traffic;

AND WHEREAS Regulation 7A.01 of the regulations to the Motor Vehicle Act prohibit a person from causing noise by operating a motor vehicle in any of the ways set out in the said regulations:

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

PART 1 - TITLE

101 This Bylaw shall be known and cited for all purposes as “**Noise Control Bylaw, 1987, No. 5819**”.

PART 2 – DEFINITIONS

201 In this Bylaw unless the context otherwise requires:

- 201.1 in the absence of specific provisions herein to the contrary, words used in this Bylaw shall have the meaning, if any, given to them by definition in the Municipal Act, R.S.B.C. 1979 c. 290 and amendments thereto or, if not defined therein, the meaning, if any, given to them by definition in the Motor Vehicle Act R.S.B.C. 1979 c.288 and amendments thereto;
- 201.2 wherever in this bylaw the masculine or singular term is used it shall be understood that the reference shall include the feminine and the plural where the context so requires;
- 201.3 where any word or abbreviated word or abbreviated term or abbreviated name that is not defined in this bylaw, or where any technical standard that is not set out in this bylaw, is used in this bylaw, such word, abbreviated word, abbreviated term, abbreviated name, or technical standard shall be interpreted by reference to the definitions and technical standards last published by the Canadian Standards Association (C.S.A.), or American National Standards Institute (A.N.S.I.), or the International Organization for Standardization (I.S.O.), or the International Electro-Technical Commission (I.E.C.), or the Society of Automotive Engineers (S.A.E.), or the Machinery and Equipment Manufacturers Association of Canada (M.E.M.A.C.), as the case may require.
- 201.4 “**acoustic calibrator**” is 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;
- 201.5 “**A-weighting**” is the frequency weighting characteristic as specified in I.E.C. 123 or I.E.C. 179, which approximates the relative sensitivity of the human ear to different frequencies (pitches) of sound;
- 201.6 “**A-weighted sound pressure level**” is the sound pressure level modified by application of the A-weighting characteristic and is measured in A-weighted decibel, sometimes denoted “db(A)”;
- 201.7 “**activity area**” includes any area of the municipality not designated as either a mixed area or as a quiet area, except any residential uses located in conjunction 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.
- 201.8 “**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;

- 201.9 **“Bylaw Officer”** has the same meaning as the “City of North Vancouver Bylaw Enforcement Bylaw, 2005, No. 7675”, Section 15.
- 201.10 **“C-weighting”** is the frequency weighting setting of an approved sound meter which approximates the inverse of the 100 phon equal loudness contour. The ear may respond closer to the C-weighting curve at high sound levels.
- 201.11 **“City”** means The Corporation of the City of North Vancouver;
- 201.12 **“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;
- 201.13 **“construction”** is 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;
- 201.14 **“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;
- 201.15 **“continuous sound”** means any sound occurring for a duration of more than three minutes, or occurring continually, sporadically or erratically, but totalling more than three minutes in any fifteen minute period of time;
- 201.16 **“Council”** means the City Council of the City;
- 201.17 **“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;
- 201.18 **“daytime”** means from 0700 hours to 2000 hours of the same day;
- 201.19 **“emergency vehicle”** shall have the meaning given to the interpretation section of the Motor Vehicle Act;
- 201.20 **“highway”** shall have the meaning given to it by the Motor Vehicle Act, and also includes boulevards and sidewalks;
- 201.21 **“holiday”** shall have the meaning given to it by the Interpretation Act of B.C.;

- 201.22 **“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;
- 201.23 **“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. Any 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;
- 201.24 **“municipality”** means the geographic area over which the City is the Municipal Government;
- 201.25 **“nighttime”** means from 2000 hours of any day to 0700 hours of the following day;
- 201.26 **“noise”** includes:
1. 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,
 2. 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.
 3. any sound, continuous sound or non-continuous sound listed in Schedule “B” attached hereto;
- 201.27 **“Noise Control Officer”** is the person appointed by resolution of Council, and may be the Medical Health Officer of the municipality, the Vancouver Coastal Health Authority and includes the Chief Public Health Inspector and any Public Health Inspectors, properly delegated to act for him or on his behalf; and/or the Bylaw Enforcement Officer; and/or any Peace Officer; and/or any employee of the municipality properly delegated by Council;
- 201.28 **“person”** includes a Corporation, Partnership, or Party and the personal or other legal representatives or a person to whom the context can apply according to law;

- 201.29 **“point of reception”** means:
1. for residential uses 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,
 2. for non-residential uses any place on premises where sound originating from any source, other than a source on the entirety of the same non-residential use premises, is received; or,
 3. any place on a highway where sound is received;
 - .4 for the purposes of Section 307(a) means any place in the municipality more than 15 metres from a source of sound where sound is received;
 5. for the purposes of Section 308 means any place in the municipality more than 6 metres from a vehicle where sound from such vehicle is received;
- 201.30 **“Power Gardening or Building Maintenance Equipment”** means electric or gasoline powered equipment used for landscaping or building maintenance including but no limited to lawn mowers, yard trimming devices, power washers, mechanical painters or sprayers, leaf blowers, tree or stump grinders, and compressors .
- 201.31 **“Statutory Holiday”** means New Year's Day, Good Friday, Victoria Day, Canada Day, British Columbia Day, Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day and any other holiday prescribed by regulation;
- 201.32 **“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;
- 201.33 **“slow response”** is a dynamic characteristic setting of a sound level meter, which setting meets the specifications listed in A.N.S.I. Type 11 or I.E.C. 123;
- 201.34 **“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;

- 201.35 **“sound level”** means:
1. 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;
 2. for the purposes of Section 308 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;
 3. for the purposes of Section 317 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;
 4. 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.
- 201.36 **“sound level meter”** is a device listed in A.N.S.I. Type 11 or I.E.C. 123, that is calibrated for the measurement of sound and includes Bruel and Kjaer’s Precision Sound Level Meter Type 2215;
- 201.37 **“vehicle”** shall have the meaning given in the interpretation section of the Motor Vehicle Act.

PART 3 – REGULATIONS

301 Objectionable Sounds

The Council deems that the sounds listed on Schedule “B” attached hereto, are objectionable or are liable to disturb the quiet, peace, rest, enjoyment, comfort or convenience of individuals, or the public at a point of reception in the municipality, notwithstanding that such sound may not constitute a breach of any other provision of this bylaw.

302 Noise Prohibited

302.1 A person shall not make, nor cause to be made, nor permit to be made by:

1. 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;
2. any vehicle, conveyance, vessel, machinery, equipment or device, if any of the same are in the control of such first-mentioned person;
3. 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 the bylaw;

302.2 Neither the owner or any occupier of real property shall bring on to, or keep, or use, or cause, or permit to be brought on to, to be kept, or to be used, on such real property:

1. any vehicle, conveyance, machinery, equipment or device;
2. any animal, or bird, or fowl;

which is the source of a sound, which when received at a point of reception in the municipality, shall constitute a noise.

302.3 Neither the owner, occupier, company, contractor nor worker shall make, nor cause to be made, nor permit to be made, objectionable or disturbing sounds pursuant to Section 301 and Section 8, of Schedule “B”.

303 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.

304 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.

305 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.

306 Non-Continuous Sound Levels

A person may make, cause, or permit to be made, a non-continuous sound with a sound level during the daytime of 80 decibels or less, and during the nighttime of 75 decibels or less when received at a point of reception in the municipality.

307 Construction and Power Gardening Equipment Sound

Notwithstanding the provisions of Sections 303, 304, 305, or 306 hereof; a person may use or cause or permit to be used, equipment which causes a continuous sound level;

- a) resulting from construction which does not exceed a continuous sound level of 85 decibels when measured at a point of reception;
- b) resulting from Power Gardening or Building Maintenance Equipment during the daytime, except between 0700 hours and 0900 hours on Saturday, Sunday or a Public Holiday, 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.

308 Vehicle Sound Levels

Notwithstanding the provision of Section 303, 304, 305 and 306 hereof, a person may make, cause or permit to be made, a sound by a vehicle while on a highway not in excess of the sound levels prescribed in the following table:

	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 licenced net weight 2,200 Kg. or more	75 decibels	85 decibels
Other vehicles	70 decibels	75 decibels

309 Vehicle Sound

A person shall not use a horn or other warning device on a vehicle except for the purpose of giving an audible warning where necessary for the safe operation of such vehicle, or for the safety of others on the highway.

310 Refuse Collection

No person shall collect refuse from receptacles or refuse containers, in a quiet area or in a mixed area, during the nighttime.

311 Security Alarm

No person shall maintain, possess or use a security system, burglar alarm or other device equipment with an alarm which sounds in the premises and is intended to direct attention to trespass or an unlawful act, except where such system is provided with an operating automatic shut-off device which stops the alarm sound within 15 minutes.

312 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.

313 City Exemption

Notwithstanding Sections 303, 304, 305, 306 and Schedule "B", the City or its agents, may at any time:

- 313.1 construct, alter, relocate, repair or demolish buildings and structures;
- 313.2 excavate, grade, or fill land;
- 313.3 engage in well-pointing;
- 313.4 construct, install, alter, relocate, repair or remove public facilities or utilities;
- 313.5 construct, alter, relocate, repair, fill, or excavate highways.
- 313.6 allow community and City sponsored special events on City streets or parks.

314 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.

315 Right of Entry

Pursuant to Section 310 of the Municipal Act, 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.

316 Noise Control Construction Signs

Where the application involve a building constructed under Part 3 of the BC Building Code or where the building permit value exceeds \$500,000.00; 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 be incorporated into a Construction Site Sign as defined in the Sign Bylaw. A Noise Control Bylaw sign must:

- (a) be posted in a prominent location on the parcel of land that is clearly visible from at least one adjacent street.
- (b) shall be limited to a maximum height from grade of 3.65 metres;
- (c) be a maximum area of 3.0 square metres for Part 3 buildings and a maximum area of 1.5 square metres for single or two family dwellings;
- (d) contain script that is at least 5.08 cm high, and is in a colour that contrasts with the background of the sign; and
- (e) set out the hours permitted for construction under this By-law, and any exemptions to the construction hours which may have been granted;
- (f) state the name of the general contractor for the construction on the parcel of land, the name and telephone number of an individual representative of that general contractor;
- (g) give a monitored 24-hour telephone contact number for complaints and concerns, and the City of North Vancouver Noise Complaint telephone number.”

317 Commercial premises C-weighted Noise Levels

No person shall in any commercial premises make, cause, or permit to be made or caused 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 dBC, or during the night time exceeds a rating of 65 dBC when measured at the point of reception.”

PART 4 – APPLICATION FOR EXEMPTION

401 Application to City Manager

Any person may make application to the City Manager to be granted an exemption from any of the provisions of this bylaw with respect to any source of sound for which they might be prosecuted, and the City Manager may refuse to grant any exemption, or may grant the exemption applied for, or any exemption of lesser effect. Any exemption granted shall specify the time period during which it is effective and may contain such terms and conditions as the City Manager sees fit.

402 Details of Exemption Application

The City Manager may give consent in writing to carry on any such works or events outside the prescribed limits and upon such terms as the City Manager determines. In any case where, because of an emergency or other unforeseen circumstance, an application for an exception cannot be submitted within the time limit prescribed in this subsection, the City Manager may waive that limitation.

Other than for emergency works the application mentioned in Subsection 401, shall be made in writing, and shall be submitted to the City Manager prior to the date of the proposed activity, and shall contain:

402.1 The applicant's information:

- (a) the name, address, and telephone number of the applicant;
- (b) the address of the construction site and development name;
- (c) the building permit number, if applicable;

402.2 a description of the source of sound for which an exemption is sought;

402.3 a statement of the particular provision or provisions of the bylaw from which exemption is sought;

402.4 the period of time, hours and days requested of duration not in excess of six months, for which the exemption is sought;

402.5 the reasons why the exemption should be granted;

402.6 regardless of the requested exemption, a statement of the steps, if any, planned or presently being taken to, mitigate the noise for which the exemption must be provided.

402.7 a non-refundable application fee of \$75.00.

403 Noise Control Officer

A copy of the application for exemption will be delivered to the Noise Control Officer, who will prepare a report to the City Manager, stating the merits of the application, recommendations as to terms and conditions which should be imposed upon the applicant if the exemption is granted, and the application for exemption will not be considered until a report has been prepared and considered.

404 Report

The City Clerk shall make a copy of the Noise Control Officer's report available to the applicant, once it has been filed for consideration by the City Manager.

405 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 and the Council so informed.

406 Community Notification

Where an exemption to the noise bylaw is granted the applicant will notify businesses and residents within 70 metres of the parcel property lines. The applicant will also send a copy of the community notification to the City of North Vancouver, the R.C.M.P., and the Vancouver Coast Health Authority. The notification will be in writing and forwarded at least 24 hours and no more than 7 days prior to the exempted noise. The notification shall include:

1. The applicant's information:
 - (a) the company and or construction company name, address, and telephone number;
 - (b) the project name and address of the construction site;
 - (c) the 24-hour monitored contact name and contact number.
2. The details of the exempted work:
 - (a) potential disruptions and other relevant activity including lights construction cranes, trucks, etc;
 - (b) the reasons why the noise exempted work is necessary.
3. Information about the exemption granted as well as any limitations or conditions imposed by the City regarding the exemption as well as a description of any steps taken or planned to minimize the noise nuisance.
4. Telephone numbers for the City of North Vancouver and the RCMP"

The City Manager will notify Council of all exemptions granted to the Noise Control Bylaw and any conditions imposed for the exemption."

PART 5 – ENFORCEMENT

501 Enforcement

Every person who violates a provision of this Bylaw, or consents, allows or permits an act or thing to be done in violation of a provision of this Bylaw, or who neglects to or refrains from doing anything required to be done by a provision of this Bylaw, is guilty of an offence and is liable to the penalties imposed under this Bylaw or any other applicable Bylaw of the City, and is guilty of a separate offence each day that a violation continues to exist.

Any person who contravenes any of the provisions of this Bylaw commits an offence punishable upon summary conviction and is liable to a fine of not more than \$10,000.00 or to imprisonment for not more than six months or to both. Each day that an offence continues shall constitute a separate offence.

Any person designated as a Bylaw Enforcement Officer pursuant to the Bylaw Notice Enforcement Bylaw, 2005, No. 7675 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.

The provisions of this Bylaw are severable. If, for any reason, any provision is held to be invalid by the decision of a court of competent jurisdiction, such a decision shall not affect the validity of the remaining provisions of this Bylaw.

PART 6 – REPEAL AND ENACTMENT

601 Repeal

Bylaw No. 5465, being “Noise Control Bylaw, 1983, No. 5465” and “Noise Control Bylaw, 1983, No. 5465, Amendment Bylaw, 1983, No. 5501”, and “Noise Control Bylaw, 1983, No. 5465, Amendment Bylaw, 1984, No. 5570, are hereby repealed.

702 Enactment

This bylaw is effective and in force and binding on all persons as from the day following the date of its adoption.

READ a first time by the Council on the 8th day of June, 1987

READ a second time by the Council on the 8th day of June, 1987.

READ a third time and passed by the Council on the 8th day of June, 1987.

RECONSIDERED and finally adopted by the Council, signed by the Mayor and City Clerk and sealed with the Corporate Seal on the 15th day of June, 1987.

"J.E. LOUCKS"

MAYOR

"B.A. HAWKSHAW"

CITY CLERK

CITY OF NORTH VANCOUVER

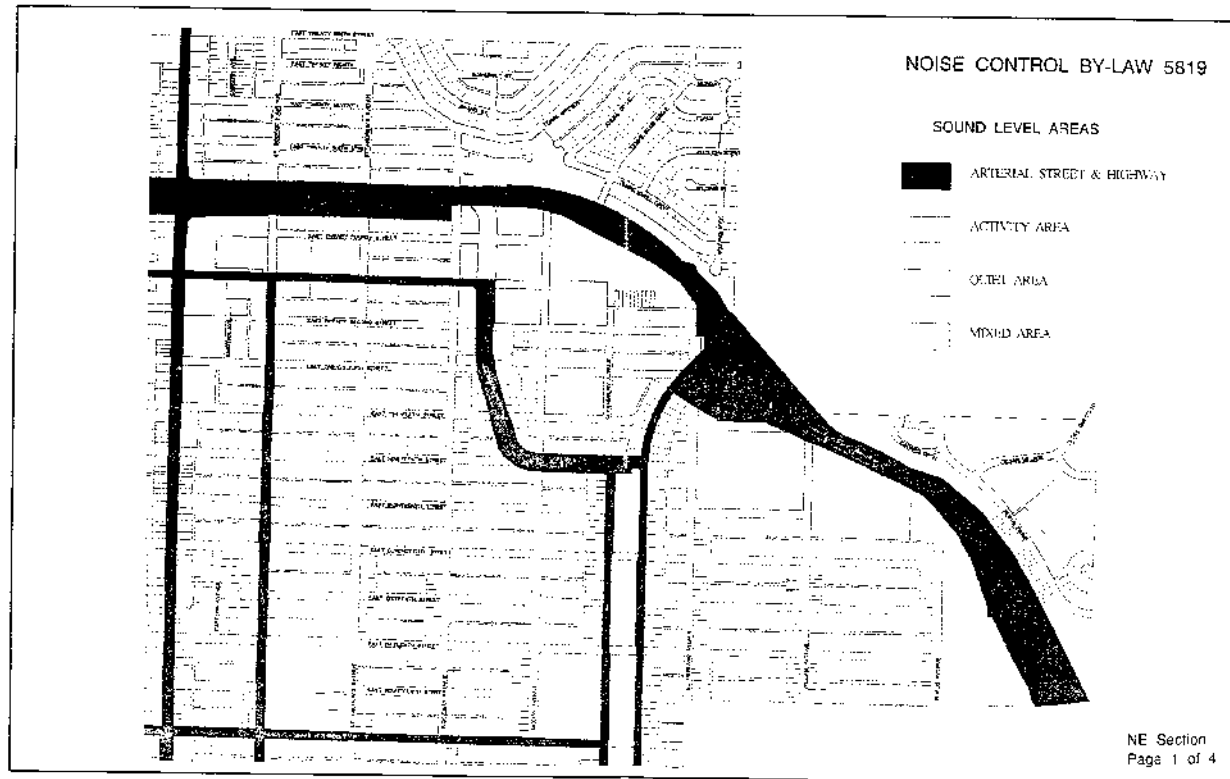
SCHEDULE 'A'

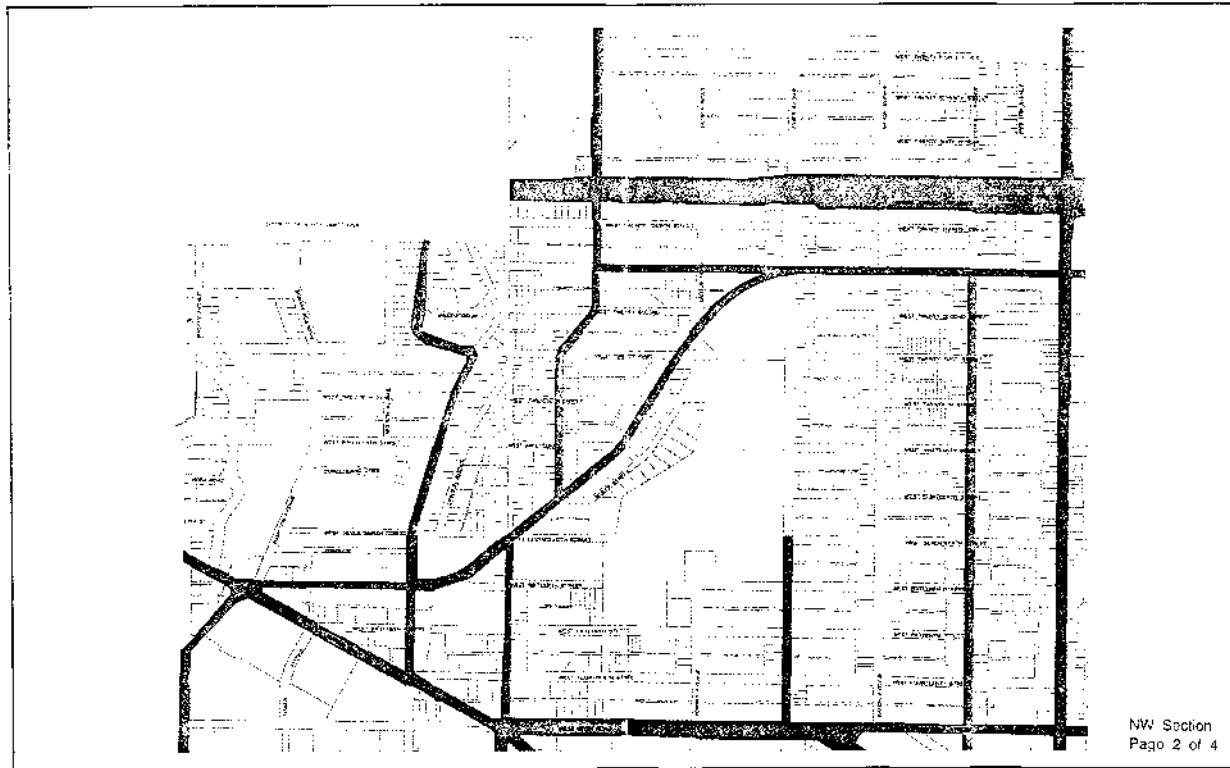
NOISE CONTROL BY-LAW NO. 5819 (1987)

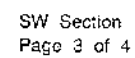
BY-LAW ADOPTED JUNE 15, 1987

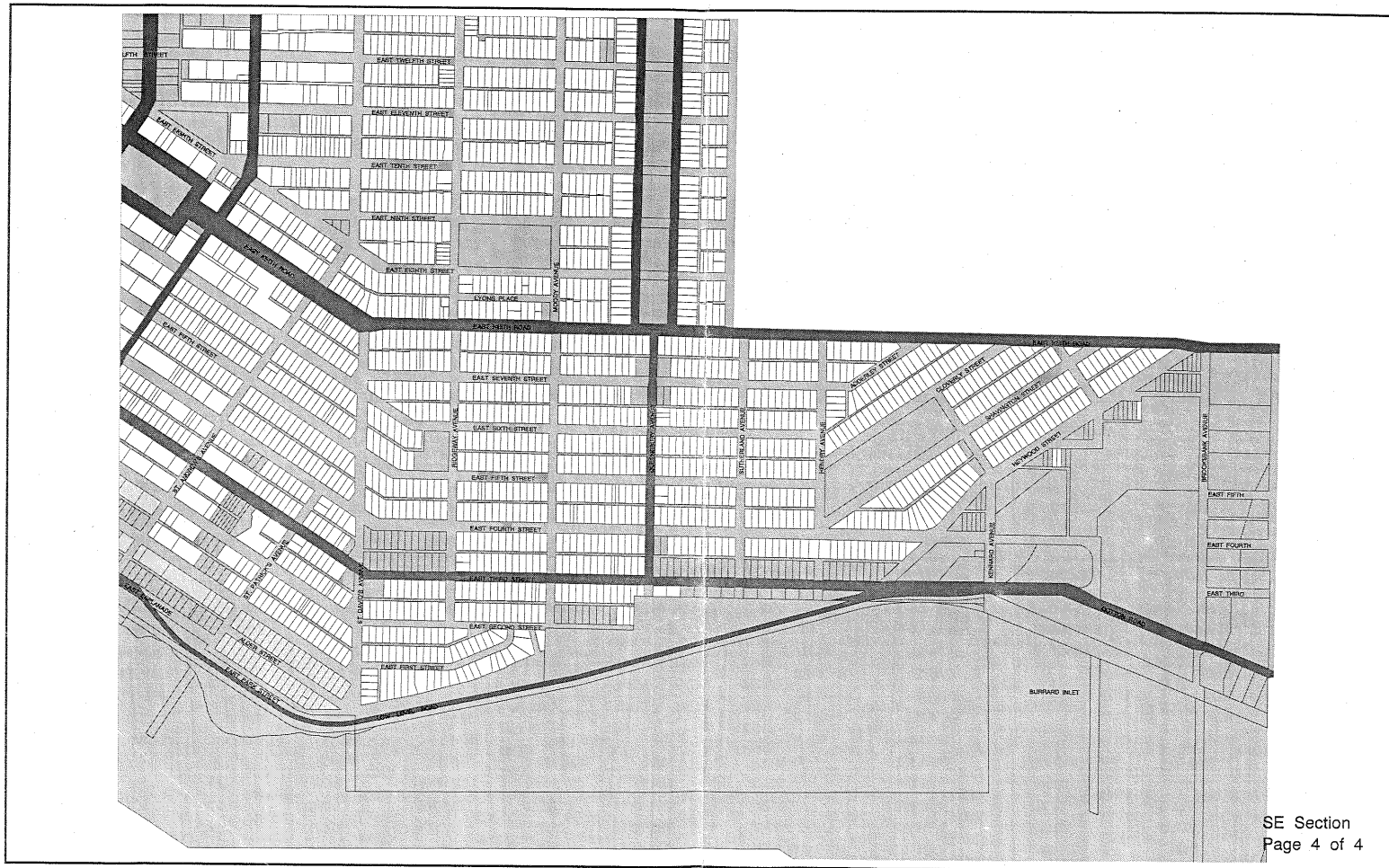
SCALE : 1:7500
DATE : December 23, 1994

This map was produced on the City of North Vancouver's Geographic Information System on December 21, 1994. The original map, MA1-BASE-16, is archived with the City's Engineering Department. This map is available in colour and at larger scales by contacting Computer Services.









SCHEDULE "B"
NOISE CONTROL BYLAW

Schedule of Objectionable or Disturbing Sounds

1. 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 fifteen (15) minutes.
2. The sound made by a combustion engine that is operated without an effective exhaust muffling system in good working order, being in use whenever such engine is in operation.
3. The sound made by operating a vehicle in such a way that the tires squeal.
4. The sound made by a vehicle horn or other warning device used except under circumstances required or authorized by Section 309 of this bylaw.
5. The sound made by a vehicle, or a vehicle with a trailer, resulting in banging, clanking, squealing, or other like sound due to an improperly secured load, or improperly secured equipment, or due to inadequate maintenance.
6. 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.
7. 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 (16.4 ft.) from the motor vehicle; and is continuously made for more than two (2) minutes.
8. The sound generated by construction activity or the activity of construction equipment, is **permitted** during the following times only:
 - (a) between the hours of 7:00 a.m. to 8:00 p.m., Monday through Friday;
 - (b) between the hours of 9:00 a.m. and 7:00 p.m. on Saturdays.

Construction activity is **prohibited** on Sundays and public holidays.

9. Shouting, 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, is prohibited, save and except Peace Officers or Fire Fighters while in the conduct of their lawful duty.

10. The sound of a burglar alarm or security system that continues for more than 15 minutes.
11. The audible sound of a motor vehicle security system which is made either continuously, or intermittently, for a period exceeding one minute; or which produces a false alarm activating more than three times in a 24 hour period, but does not include the activation status signal given when arming or 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 to be a vehicle unlawfully placed or maintained or permitted to remain upon a street.
12. The sound generated by Garden and Building Maintenance equipment is permitted during the following times only:
 - a) between the hours of 7:00am and 8:00pm Monday through Friday;
 - b) between the hours 9:00am and 7:00pm Saturdays, Sundays and public holidays.

BARKING DOG COMPLAINT FORM

To deal effectively with the barking dog complaints, The Corporation of the City of North Vancouver asks that the citizens assist by providing the information detailed below:

Instructions

1. When this form and the daily record are completed, mail them to:

Bylaw Officer
City of North Vancouver
147 14th Street East
North Vancouver, BC V7L 2N4
2. It is required to be submitted at the same time:
 - (a) the completion of this form by a member of each household disturbed by the barking dog; and
 - (b) a daily record (for seven consecutive days) of the times when the barking most disturbs the peace.
3. Each person who completes this form must:
 - (a) print their name and sign;
 - (b) be a resident of the neighbourhood;
 - (c) be disturbed by the barking;
 - (d) be over 16 years of age; and
 - (e) be willing to appear in Court as a witness.

Complaint Form:

1.	How Long has the barking been a disturbance?	1 month, 1 year, etc.
2.	What prior measures have you taken to correct the situation?	
3.	What is the frequency of the disturbance?	Every day, every night, most days, most nights
4.	What is the duration of the disturbance?	Number of hours each night
5.	What effect has this disturbance on you?	Disturbs your sleep, is harmful to your health, etc.
6.	Whom do you believe owns/controls the dog?	Name and address
Note:	Please attach daily record as per instruction #2(b)	

SUMMARY OF MAXIMUM PERMISSIBLE SOUND LEVELS

as provided in the
Noise Control Bylaw 5819
of the
City of North Vancouver

Bylaw Section		Maximum Sound Level
303	Quiet Area – night time	45
	Quiet Area - daytime	55
304	Mixed Area – night time	50
	Mixed Area – daytime	55
305	Activity Area – night time	55
	Activity Area - daytime	60
306	Non-continuous Sound – night time	75
	Non-continuous Sound - daytime	80
317	Commercial Premises – night time	65 C-weighted
	- daytime	70 C-weighted
307	Construction Noise Levels	85
	Power Lawnmower, etc. – daytime	77
308	Vehicles on highways with speed limits: 50 m/h or less – under 2200 kg. Licensed Net Weight	70
	- over 2200 kg.	75
	Licensed Net Weight Over 50 km/h – under 2200 kg.	75
	Licensed Net Weight - over 2200 kg.	85
	Licensed Net Weight	
	Sound levels noted in the table are dB(A) unless otherwise noted, and measured at the “point of reception”.	
Night time – 2000 hours of one day to 0700 hours of the following day.		
Day time - 0700 hours to 2000 hours of the same day.		

For further information or clarification, you are required to refer to the bylaw.

SAMPLE NOTIFICATION LETTER

[company letterhead]

Date: [_____]

Notice to Residents and Business neighbouring the [project name]:

Regarding: Construction Noise beyond [_____]

We are the [company] working at the [project name, project address]. On [date], the City of North Vancouver granted [company] permission to:

- work [details of exemption].

As you may know this is [later/earlier] than normally permitted under the City of North Vancouver Noise Control By-law No. 5819. While we regret the need to impose noise created by our construction efforts on you at that time, this exception to the times is critical in allowing us to build this project.

This notice is intended to advise you that we will be working until [time and date].

We will make every effort to minimize the noise and should we have an opportunity to finish earlier, we will do so. We are taking the following steps to reduce the noise:

- [Description of any steps taken or planned to minimize the noise nuisance].

We apologize for any inconvenience this may cause and we thank you for your patience. If you have any questions or concerns about this construction project, please contact one of the following:

- [Construction company 24-hour monitored contact phone number and name].
- City of North Vancouver at 604.985.7761.
- Vancouver Coastal Health Authority at 604.983.6700
- The RCMP after hours at 904.985.1311.

Review of the City of North Vancouver Noise Control Bylaw 1987 No. 5819

1. Introduction

The City of North Vancouver has for many years contracted the Environmental Health Department of Vancouver Coastal Health Authority to provide technical assistance in operating the noise control program.

Following a resolution by Council requesting City Staff to review the Noise Control Bylaw, the Bylaw Manager has asked VCH for input into the Bylaw review. The resolution also asked for other noise mitigation strategies to be considered and referred to work being done in Toronto. Toronto Public Health suggested looking at a range of possible strategies, including choosing quieter technologies, using transportation plans, community plans and building codes in addition to noise bylaws to reduce noise.

The City of North Vancouver Noise Control Bylaw is similar to the other municipal noise control bylaws on the North Shore and other urban areas in BC. These bylaws in addition to having a general nuisance clause have specific noise zones with prescribed noise limits. The other urban municipalities away from the north shore tend to have a greater number of noise zone limits. Most rural municipalities have chosen to use the general nuisance clause rather than having noise zones with prescribed noise limits.

The bylaws for the City of Richmond and the City of Victoria also have adjustment for tonal and impulsive qualities of the sound, which tend to be more annoying than constant sound.

2. Discussion

a. General Noise Nuisance Clause

All noise bylaws in BC contain a general prohibition of noise nuisance. Generally the bylaws prohibit a person from making sound that “*disturbs or tends to disturb the peace, quiet, rest, enjoyment, comfort or convenience of the neighbourhood*” (See Appendix A for excerpts of various bylaws). This type of definition of noise is based on the common law definition of private nuisance. The Bylaw Manager has expressed concern that the general clause may give the impression to the public that any sound that a specific individual finds personally disturbing will be a breach of the bylaw and that this concept would be too broad for reasonable application.

Over time courts have established objective criteria to assess nuisance. Typically the factors taken into consideration are: the sound intensity and character, its duration, the time of day or night the sound occurs, the presence of aggravating characteristics, what measures could reduce or modify the sound, the characteristics of the neighbourhood, number of persons affected, social utility of the sound producing activity, and whether the best practical means of control are employed to mitigate the sound. Given the complexities, the courts tend to make decisions on a case by case basis with the general rule based on what would affect the

average reasonable person, and what action would be reasonable in the given circumstances to not cause excessive disturbance. The aim is to take out the subjectivity and balance the right of a land owner/occupier to use their land, and the neighbour land owner/occupier to enjoy their land.

In addition to the general clause, the City of North Vancouver has chosen to establish limits for different areas called a maximum permitted noise level. Previous staff at the City have suggested noise levels below this prescribed level are permitted and therefore not a breach of the bylaw. This has led to the custom and practice of the general clause not being used within the jurisdiction of the City of North Vancouver.

Contrasting with the District of West Vancouver Bylaw, that establishes both a general clause and a prescribed limit that if exceeded is a breach of the bylaw, leaving the possibility for a noise below this prescribed level to be found in breach of the general nuisance clause.

However the City of Richmond specifically states that the general clause does not apply should a noise reading be practical and the prescribed level is not breached. The City of Victoria gives a similar exception, but modified to say that noise audible at nighttime may be a breach of the general clause even if it meets the prescribed level.

Given the complex nature of noise nuisance and multiple factors taken into account in deciding a breach of the general clause. It will be a matter for the municipality to decide how it wants to administer this issue. This could range from removing the general clause, leaving it in place but using discretion as to when to use it, or making an assessment for all complaints that do not exceed the maximum noise level.

b. Sound Areas

The Noise Bylaw describes three types of sound area for the City. These areas are called “Quiet Area”, “Mixed Area” and “Activity Area”. Noise limits are established for continuous sound during the daytime and nighttime for each zone. Quiet Areas tend to be predominately residential areas and afforded the more stringent noise limits. Activity Areas tend to be public spaces, public building and industrial lands and are afforded the least protection for noise. Mixed Areas tend to be mixed residential/commercial buildings in the Lonsdale corridor/lower Lonsdale area. The map of sound areas was based on the land uses at the time the map was created. The map has not been updated for some time, and land uses in the City have changed as the City develops.

There have been 2 files in the last few years that highlight this issue. The former Lonsdale School site converted to residential development and the former detachment converted to mixed commercial and residential development. Complaints about noise from mechanical equipment located at neighbouring properties were investigated, but because the point of reception is still classified as “Activity Area”, no breach of the bylaw was observed.

Any changes to the area category would need careful consideration; as an example a change to Mixed Area would be advantageous to the complainant, but could be more burdensome to the existing commercial/institutional property in the area. There is now more residential property being constructed in the lower Lonsdale/ Marine Drive/W 1st Street area which is an Activity Area. It may be beneficial to have a review of the noise map, and tie into the OCP review.

There has been some discussion on noise mapping. This is a tool that has been used in larger communities in Europe to help generate discussion on creating government action plans to reduce community noise. If in the future noise mapping became available in BC, then it may be useful to review the noise zone map against the noise map. There has been some discussion on looking to have a more detailed matrix of specified noise levels at the boundary of noise zone, similar to that seen in the City of Vancouver Bylaw. Again any changes to the area category would need careful consideration.

c. Quality adjustments

The quality of the sound can influence the human response to sound in addition to the intensity of the sound. Humans find tonal sound, impulsive sound and intermittent sound to be more annoying than constant sound. This means that quieter sounds may still be found to be annoying if it has some of these properties. There are assessment tools around the world that are used to adjust the measured sound levels to reflect these aggravating factors. There are two bylaws in BC, one for the City of Richmond and one for the City of Victoria that use adjustment factors for tonal and impulsive sounds.

d. Objectionable Sound

Many of the objectionable sounds listed in Schedule B relate to the maintenance and use of a vehicle or in vehicle entertainment. These clauses are similar to many found in other noise bylaws in BC. However, the challenge is that municipal staff does not have the authority to stop vehicles or obtain ID from drivers which means that these clauses are not used. The Police are named bylaw officers for the purposes of the Noise Bylaw, so it would be possible for a Police Officer to use this part of the bylaw; however, the Police have their own powers under the Motor Vehicle Act Regulations to cover the same issues. Therefore there may not be a need for duplication, unless there is an advantage to the Police to use the Municipal Bylaw. The last time that the City of Vancouver did a noise educational event with motorcyclists was over 20 years ago and my search of the newspaper indicated that the last educational event was solely done by the VPD.

e. Crowd source data

There are a number of noise apps available and becoming quite popular. There are also some websites operating where people can download their data to highlight noise or tranquil areas in a city which are gaining in popularity. The challenge with this technology is

the accuracy of the apps. Some have suggested that they are not accurate with as much as a 20 dB discrepancy compared to scientifically calibrated equipment; the other challenge is the way the data is collected. Extraneous noise could give a false reading, and sound varies with distance. So with no standardization of measurement, comparisons cannot be made. I would say that the use of crowd source data is not suitable for noise bylaw use.

3. Recommendations

- Consider joining with other municipal departments such as planning, building control, and engineering to review noise in the city and what collaborative work could be done to assess and reduce noise in the city.
- Consider what support from VCH healthy built environment team would be useful when considering noise in community plans.
- Consider reviewing the sound area map.
- Consider including an assessment of tonal and impulsive content of sound in any noise complaint assessment.
- Consider applicability of the bylaw to vehicle noise, or whether education and/or other traffic control measures would be appropriate.

Prepared by: John Pickles

Reviewed by: Jonathan Choi

Date: December 3, 2019

Appendix A: General Noise Nuisance

City of North Vancouver: Noise Control Bylaw 1987 No. 5819

302.1 A person shall not make, nor cause to be made, nor permit to be made by:

1. 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;
2. any vehicle, conveyance, vessel, machinery, equipment or device, if any of the same are in the control of such first-mentioned person;
3. 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 the bylaw;

201.26 “noise” includes:

1. 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,
2. 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.
3. any sound, continuous sound or non-continuous sound listed in Schedule “B” attached hereto;

District of West Vancouver: Noise Control Bylaw No. 4404, 2005

5.1 No person shall make or cause, or permit to be made or caused, any noise or sound which: 5.1.1 disturbs or is liable to disturb the quiet, peace, rest, enjoyment, comfort, or convenience of individuals or the public; or 5.1.2 exceeds the Sound Levels prescribed in this Bylaw.

City of Vancouver: NOISE CONTROL BY-LAW NO. 6555

4. Notwithstanding any other provision of this By-law the following are declared by Council to be noises or sounds which are, in its opinion, objectionable or liable to disturb the quiet, peace, rest, enjoyment, comfort or convenience of individuals or the public and are hereby prohibited, and no person being the owner or occupant of any premises shall make, cause, allow, or permit:

(a) the noise resulting from a gathering of two or more persons at any time, where one or more human voice is raised beyond the level of ordinary conversation,

(b) the sound of a radio, television, 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, provided that the sound does not emanate from a commercial premises, or

(c) the noise resulting from construction except during the hours and days during which section 16 permits a person to carry on construction, which can easily be heard by an individual or member of the public who is not on the same premises, notwithstanding that such noise or sound might not constitute a breach of any other provision of this by-law.

City of Burnaby: Burnaby Noise or Sound Abatement Bylaw 1979 (2018)

3. No person shall, except as in this bylaw may be provided,

(a) make or cause any noise or sound in or on a highway or elsewhere in the Municipality which disturbs, or tends to disturb, the quiet, peace, rest, enjoyment, comfort, or convenience of the neighbourhood, or of persons in the vicinity;

(b) make or cause any noise or sound or continuous noise or continuous sound or non-continuous noise or non-continuous sound in the Municipality that exceeds the dBA's authorized by this bylaw.

City of Victoria: NOISE BYLAW BYLAW NO. 03-012

11 (1) Subject to the other provisions of this Bylaw,

(a) a person must not make or cause a noise or sound in a street, park, plaza or similar public place which disturbs or tends to disturb the quiet, peace rest, enjoyment, comfort or convenience of persons in the neighbourhood or vicinity;

(b) a person who is the owner or occupier of, or is in possession or control of, real property must not make, suffer, or permit any other person to make, a noise or sound, on that real property, which can be easily heard by a person not on the same premises and which disturbs or tends to disturb the quiet, peace rest, enjoyment, comfort or convenience of persons in the neighbourhood or vicinity.

(2) Subsection (1) does not apply to a person who makes, causes, or permits to be made or caused, a sound or noise in compliance with the provisions of sections 5 to 8 unless the noise or sound is clearly audible at a point of reception in a residential area between the hours of 10:00 p.m. one day and 7:00 a.m. the following day.

ESSENTIALS OF
CANADIAN LAW

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FOURTH EDITION

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Faculty of Law
The University of Manitoba



near the plaintiff's farm. The defendant knew that the loud noise would disrupt the breeding season of the plaintiff's extremely nervous and temperamental animals. The defendant argued that in normal circumstances the discharge of firearms is not an unreasonable interference with the enjoyment of land and the plaintiff's loss arose solely from the hypersensitivity of silver foxes in the breeding season. Nevertheless, the defendant was found liable in private nuisance. The defendant's knowledge of the plaintiff's sensitive land use, combined with the malicious nature of the defendant's conduct, made the interference unreasonable. One Canadian court has pushed this exception further and imposed liability in the absence of malice. The defendant was held liable for failing to take reasonable care by suspending the blasting of stumps on his land while the plaintiff's fur-bearing animals were breeding. The defendant, at no inconvenience to himself, could have suspended the blasting for a month and avoided causing damage to the plaintiff.⁷

2) Interference with Enjoyment and Comfort of Land

A landholder is required to be much more tolerant of occasional interference in her comfort and enjoyment of land. The courts take a fairly robust approach to the extent of give and take that is required, particularly in an urban environment. All citizens must tolerate a certain level of noise, odour, and pollution. In order to prove a private nuisance, the plaintiff must show an interference that in all the circumstances of the case is unreasonable to the ordinary person. No protection is given to fastidious or delicate sensibilities.⁸ The circumstances relevant to deciding if the interference is unreasonable include the character of the neighbourhood, the intensity of the interference, the duration of the interference, the time of day and the day of the week of the interference, the zoning designation of the area, the utility of the defendant's activity, the nature of the defendant's conduct, and the sensitivity of the plaintiff. None of these factors is conclusive but they do deserve some further comment.

a) The Character of the Neighbourhood

Nuisance is a relative concept dependent to a large extent on the kind of neighbourhood where the activity takes place. There is a famous distinction drawn in an old English case between Belgrave Square, a quiet residential area of London, and the industrial area of Bermondsey. The

7 *MacGibbon v. Robinson*, [1953] 2 D.L.R. 689 (B.C.C.A.).

8 *Walter v. Selfe* (1851), 4 De G. & Sm. 315, 64 E.R. 849 at 852.

Court observed that "what would be a nuisance in Belgrave Square would not necessarily be so in Bermondsey."⁹ Every city has its Belgrave Squares and its Bermondseys and the noise and smells that are tolerable in an industrial and commercial area may be excessive in a residential neighbourhood. The standard of tolerance may also be different in a rural area compared with that of an urban environment. The smells of some agricultural operations that may be reasonable in a rural environment may be intolerable in an urban residential area, and a reasonable level of noise in the city may be too much for a rural area. Those who live in a remote cottage area may have a reasonable expectation of even greater peace and quiet.

b) The Intensity of the Interference

There is no liability for the occasional loud noise, the transient bad smell, the periodic barking of a dog, or the smoke from a barbecue. The interference must be of sufficient intensity to be intolerable to the ordinary Canadian citizen. The kinds of smells that amount to nuisances have, for example, been described as "nauseating," "sickening," "very offensive," and "absolutely horrible."¹⁰ More scientific evidence can now be brought in respect of noise. The decibels may be counted and public health standards may be used as a guide to tolerable limits. Those limits are not, however, conclusive of the issue. In *Sutherland v. Canada (Attorney General)*¹¹ the trial judge held that aircraft noise arising from the operation of a new runway at Vancouver International Airport amounted to a private nuisance. The court held that consideration must be given not only to the scientific noise metrics evidence but also to the subjective evidence of the noise and its effect on the plaintiffs who lived below the flight path.¹²

c) The Duration of the Interference

Reasonable people are tolerant of quite a significant interference with their enjoyment of land if the interference is temporary and short-lived. The occasional loud party next door, the noise and dust from a construction site, and the repair of residential roads are normally in the realm of the tolerable. When the interference is persistent and long-term, the tolerable may become intolerable. Many of the cases where

9 *Sturges v. Bridgman* (1879), 11 Ch.D. 852 at 865.

10 See, for example, *Appleby v. Erie Tobacco Co.* (1910), 22 O.L.R. 533 (C.A.).

11 [2001] B.C.J. No. 1450 (S.C.), rev'd on other grounds [2002] B.C.J. No. 1479 (C.A.).

12 See also *Suzuki v. Munroe*, [2009] B.C.J. No. 2019 (S.C.) where considerable reliance was placed on the "decibel count" of a neighbour's air-conditioning unit.

private nuisance has been established deal with long-lasting incompatible land uses.

d) The Time of Day and the Day of the Week

The time of day when the interference takes place is particularly relevant to the acceptable level of noise. In a residential area it is reasonable to expect less noise at night than during the day. Most people work during the day and sleep at night.¹³ Noise in the early hours of the morning leading to broken sleep patterns is a particular concern.¹⁴ Those who work nights are out of step with conventional patterns and they cannot demand the same degree of quiet for their sleep. The day of the week has also been regarded as a relevant factor. Courts have taken judicial notice of the fact that many people like to sleep late on weekends and early morning noise on those days, even the ringing of church bells,¹⁵ may be regarded as a nuisance.

e) Zoning Designation

The twentieth century witnessed a massive growth in the governmental control of land use by means of municipal zoning, building regulations, environmental legislation, and other land use and public health legislation and regulations. This has diminished the importance of private nuisance in adjusting and resolving land-use conflict. Canadian courts have not, however, recognized compliance with zoning bylaws or other rules or regulations controlling land use as a defence to an action in private nuisance. It is a factor in determining both the character of the neighbourhood and the standard of tolerable interference but it is not conclusive of the issue. This is a wise policy. Compliance with zoning regulations does not guarantee that the defendant's use of land is not an unreasonable interference with that of a neighbour.

13 See, for example, *Walker v. Pioneer Construction Co. (1967) Ltd.* (1975), 8 O.R. (2d) 35 (H.C.J.), where the noise from the defendant's asphalt plant was held to be a nuisance at night but not during the day.

14 See *Popoff v. Krafczyk*, [1990] B.C.J. No. 1935 (S.C.) where the squawking of the defendant's macaws daily between 5:00 a.m. and 6:00 a.m. was held to be a nuisance.

15 See the Australian decision in *Haddon v. Lynch*, [1911] V.L.R. 5 (S.C.), aff'd [1911] V.L.R. 230 (F.C.), where an injunction was awarded to restrain the ringing of church bells until after 9 a.m. on Sundays. See also *Laing v. St. Thomas Dragway*, [2005] O.J. No. 254 (S.C.J.) where an injunction was issued to prohibit motor vehicle racing before 1 p.m. on Sundays.

f) The Utility of the Defendant's Conduct

A defendant may not defend an action in private nuisance on the basis that the defendant's use of land is generally beneficial to the public. Nevertheless, the utility of the activity is likely to have some bearing on the standards of tolerance of reasonable persons and, where liability is imposed, it may have an influence on the ultimate remedy. Trains, planes, and automobiles, industrial and commercial activities, emergency vehicles, the construction and repair of infrastructure, and agricultural operations are all productive of some level of interference with the enjoyment of land. They are also indispensable activities in a modern society and courts are acutely aware of the need to avoid decisions that are disruptive of, or incompatible with, essential operations and beneficial societal activities. Courts have, for example, been particularly cautious in respect of agricultural operations such as hog farming and other animal husbandry that carry an unavoidable odour and industries upon which many persons depend for their livelihood. Conversely, a stricter view may be taken towards purely recreational and sporting activities with less vital social benefit. A court may, for example, be less favourably inclined to rock concerts, loud music in residential areas, all-night revelry, and the continual intrusion of golf balls from a neighbouring golf course.

g) The Nature of the Defendant's Conduct

The primary focus in a private nuisance action is the impact of the defendant's activities on the plaintiff's enjoyment of property. Nevertheless, the nature of the defendant's conduct is not ignored. Decision making in private nuisance is influenced to some degree by the comparative assessment of the reasonableness of the conduct of the parties. The courts are, for example, less likely to protect the land use of a defendant who acts unreasonably and is motivated by a desire to cause annoyance, discomfort, and inconvenience to the plaintiff than one that is conducted prudently for a laudable purpose. *Christie v. Davey*¹⁶ is an illustrative case. The plaintiff, a music teacher, lived in a semi-detached house next to the defendant. The defendant objected to the sound of the music coming from the plaintiff's premises. He protested by hammering and banging trays on the common wall between the two residences. This was done maliciously to annoy the plaintiff and interfere with his vocation. An injunction was issued to prohibit it. The judge observed that he might have taken a different view of the matter if both litigants were entirely innocent.

16 [1893] 1 Ch. 316.

11) The Sensitivity of the Plaintiff

There is no liability if the plaintiff is abnormally sensitive to the defendant's land use. The standard is that of the reasonable and ordinary resident in the geographic area and the rule in *Robinson v. Kilvert*¹⁷ applies equally to interference with the enjoyment and comfort of land. No protection is given to abnormally light sleepers or those who suffer from allergies. There is also no protection available for abnormally sensitive commercial activities such as a special illuminated advertising sign that was adversely affected by flood lighting of the defendant's property.¹⁸ Once a nuisance is established, however, the defendant must take the plaintiff as he finds him and will probably be liable for the full extent of his loss.

3) Non-intrusive Nuisances

The most common form of private nuisance is one that emanates from the defendant's land, crosses the plaintiff's boundary, and intrudes onto the plaintiff's land, causing material damage or a loss of enjoyment or comfort to the plaintiff. Nuisance by noise, smoke, water, fumes, chemicals, and odour take this form. Not all nuisances are of this kind. An unreasonable interference with land may occur without any intrusion onto the plaintiff's land. The usual principles of private nuisance are applicable in these cases, but courts are more reluctant to intervene when there is no tangible or intangible invasion of the plaintiff's property.


There are few circumstances where physical damage to property can be inflicted without some intrusion. The best example is the decision in *Pugliese v. Canada (National Capital Commission)*.¹⁹ In that case, the defendant's construction of a sewer collector lowered the water table under the plaintiffs' land. This caused the plaintiffs' land to subside, which, in turn, resulted in damage to their houses. The defendant was held liable in private nuisance even though the damage was caused by the removal of water rather than the invasion of some substance onto the property. This case is consistent with the strong protection provided by private nuisance in respect of physical damage.

There is much greater reluctance to impose liability for non-intrusive conduct that interferes with the enjoyment and comfort of land. These cases pose a much greater threat to the defendant's freedom of land use. There is, for example, generally no liability for blocking the

¹⁷ Above note 5.

¹⁸ *Noyes v. Huron & Erie Mortgage Corp.*, [1932] O.R. 426 (H.C.J.).

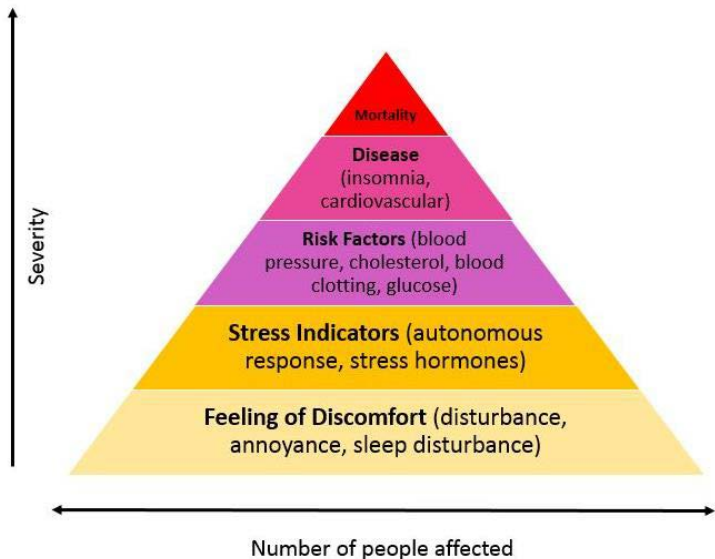
¹⁹ (1977), 17 O.R. (2d) 129 (C.A.), var'd [1979] 2 S.C.R. 104.

	
Title:	Noise Bylaws - Health evidence and potential noise mitigation strategies for mixed land use planning
Information Requestor(s):	Dr. Mark Lysyshyn, Jonathan Choi, John Pickles, Ross Adamson
Request Date:	Oct 7, 2019
Question from Requestor:	To inform North Vancouver noise bylaw revisions, drawing from Toronto Public Health and international guidance and standards, what noise mitigation strategies may we consider in North Vancouver?
Methods:	Background research was conducted into noise bylaw zones and noise mitigation strategies. We compared North Vancouver to other similar size and growing municipalities. In addition, City of North Vancouver suggested Victoria and Edmonton as forward thinking health-based city planning bylaws. We included NYC as a future state for a large international population. We also included Toronto as they had a lot of research done on noise.
Report Date:	Oct 23, 2019
Prepared by:	Sammie Hwang, Sabrina Sandhu, Linda Dix-Cooper
cc:	Randy Ash, Regional Manager of Health Protection

- Summary of key findings:**
- 42 to 60dB have been associated with adverse human health effects, which is below City of North Vancouver’s current bylaw sound levels.
 - Among six municipalities reviewed, North Vancouver and Victoria are the only bylaws that include definitions of sound zones (see definitions). -City of Vancouver has considered the impact of noise within higher density buildings, where commercial and residential mix, by implementing indoor noise level requirements for any device (e.g. radio, television, player), music amplified or not, bass, continuous and non-continuous sounds.
 - There is a gap in all of the bylaws, including City of North Vancouver for **mixed use (residential commercial and residential industrial border areas)**.
 - Timing for noise bylaws varies by location:
 - Day and night are defined as 7am-10pm consistently across most cities. Metropolitan Cities (Toronto and New York City), do not specify noise bylaw differences by day and night. City of Vancouver has different time periods than other major cities (7am-10pm daytime) according to their bylaw on noise (Oct 1, 2019 update to Noise Bylaw). (Note: On their website it still says: outside of downtown 7am-8pm; Downtown: 6am to midnight). Bylaw states that around event sites such as BC Place & Rogers it is 7am to 11pm.
 - Noise mitigation strategies exist for built environment (new and existing) as well as commercial and industrial activities.

Background: Framework (Figure 1)
Detailed Results: Report includes the following:
 Figure 1 – Framework for noise and health
 Table 1A & B – Summary of health-based evidence for sound level bylaws and standards
 Table 2A & B – Noise mitigation strategies that North Vancouver may consider, for (A) new and (B) existing land uses and policies
 Table 3 - Comparison chart of Noise bylaw limits by zones for various cities

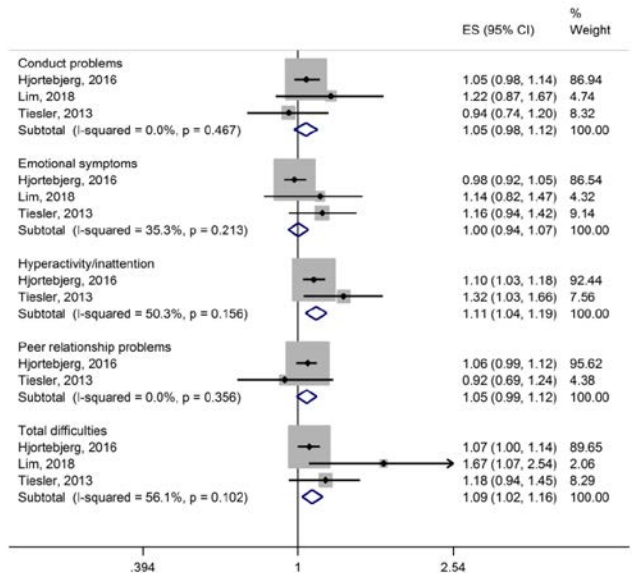
Background: Here is a suggested framework for discussing environmental noise and noise pollution mitigation strategies (fig 1).
Figure 1: Noise is a biological stressor and a component of one’s physical environment (Excerpt from Toronto Public Health, 2017, p.8)



“Within an exposed population, the most severe health impacts from noise exposure will be experienced by a relatively small proportion of the population, but a larger number of people will experience feelings of discomfort or stress. Figure adapted from (Wolfgang Babisch, 2002) as cited in (W Babisch et al., 2010).

Tables:

Table 1A: Summary of health-based evidence for sound level bylaws and standards

Reference (Year)	Range in dB associated with adverse health effects	Health effects	Supporting information																																																																								
Systematic Review Paper by Toronto Public Health (May 29, 2017), “Health Impacts of Environmental Noise in Toronto” and “How loud is too loud? Health Impacts of Environmental Noise in Toronto” (April 2017) Toronto Public health technical report.	42 to 60dB <i>* details below, by outcome</i>	<p>Table 1: Effects of noise on health and wellbeing with sufficient evidence (source: European Environment Agency, 2010)</p> <table><tr><th>Effect</th><th>Exposure Measure *</th><th>Threshold ** (dBA)</th><th>Effect type</th></tr><tr><td>Annoyance disturbance</td><td>L_{den}</td><td>42</td><td>Chronic</td></tr><tr><td>Self-reported sleep disturbance</td><td>L_{night}</td><td>42</td><td>Chronic</td></tr><tr><td>Learning, memory</td><td>L_{eq}</td><td>50</td><td>Acute, chronic</td></tr><tr><td>Stress hormones</td><td>L_{max Leq}</td><td>NA</td><td>Acute, chronic</td></tr><tr><td>Sleep</td><td>L_{max, indoors}</td><td>32</td><td>Acute, chronic</td></tr><tr><td>Reported awakening</td><td>SEL_{indoors}</td><td>53</td><td>Acute</td></tr><tr><td>Reported health</td><td>L_{den}</td><td>50</td><td>Chronic</td></tr><tr><td>Hypertension</td><td>L_{den}</td><td>50</td><td>Chronic</td></tr><tr><td>Ischaemic heart diseases</td><td>L_{den}</td><td>60</td><td>Chronic</td></tr></table> <p>Note: * L_{den} and L_{night} are defined as outside exposure levels. L_{max} may be either internal or external as indicated. ** Level above which health effects start to occur or start to rise above background. NA – not available.</p> <p><i>Reference: Table 1 above is an excerpt from Toronto Public Health, 2017, p. 13/14)</i></p>	Effect	Exposure Measure *	Threshold ** (dBA)	Effect type	Annoyance disturbance	L _{den}	42	Chronic	Self-reported sleep disturbance	L _{night}	42	Chronic	Learning, memory	L _{eq}	50	Acute, chronic	Stress hormones	L _{max Leq}	NA	Acute, chronic	Sleep	L _{max, indoors}	32	Acute, chronic	Reported awakening	SEL _{indoors}	53	Acute	Reported health	L _{den}	50	Chronic	Hypertension	L _{den}	50	Chronic	Ischaemic heart diseases	L _{den}	60	Chronic	<p>Outcomes identified in Lit Review by TOPH:</p> <ul style="list-style-type: none">• Cardiovascular Effects: myocardial infarction, hypertensive heart disease, ischemic heart disease, high blood pressure, cerebrovascular disease (stroke), coronary heart disease• <u>Cognitive Impacts</u>: impairment (attention, memory adults, errors upon testing in children)• <u>Sleep Disturbance</u>: increased arousals, changes to sleep structure• <u>Mental Health</u>: annoyance, depression, quality of life• Pulmonary Effects: chronic obstructive pulmonary disease, pneumonia• Other Effects: diabetes, <u>behaviour in children</u> <p><i>Note: *underlined denotes key child development factors.</i></p> <p><u>Definitions</u>: L_{den} vs. L_{dn} vs. L_{eq} vs. SEL_{indoors} (e=evening (1900-2300), d=daytime, n=night; eq=equivalent continuous sound; SEL= total noise energy produced during an event during period of noisiness).</p>	<p>Note (Toronto PH document, page 4): “The study estimated that nearly 90% of the residential population is exposed to average daytime levels above 55dBA. Nighttime noise levels are lower with about 40 percent of the residential population exposed to average nighttime noise levels above 55 dBA. The study also found that dissemination areas in the lowest income group are nearly 11 times more likely to have 50 percent of their residents exposed to nighttime noise above 55 dBA than residents in dissemination areas in the highest income group. ... Almost 60 percent of the noise in Toronto can be attributed to traffic noise “</p> <p>https://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-104524.pdf</p>																															
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Schubert, 2019 Review article of 3 studies in a meta-analysis	RR for every 10d L _{DENB} increase in noise exposure	<p>Odds ratios for children developmental impairments associated with 10d L_{DENB} increases of noise exposure:</p>  <table><thead><tr><th></th><th>ES (95% CI)</th><th>% Weight</th></tr></thead><tbody><tr><td colspan="3">Conduct problems</td></tr><tr><td>Hjortebjerg, 2016</td><td>1.05 (0.98, 1.14)</td><td>86.94</td></tr><tr><td>Lim, 2018</td><td>1.22 (0.87, 1.67)</td><td>4.74</td></tr><tr><td>Tiesler, 2013</td><td>0.94 (0.74, 1.20)</td><td>8.32</td></tr><tr><td>Subtotal (I-squared = 0.0%, p = 0.467)</td><td>1.05 (0.98, 1.12)</td><td>100.00</td></tr><tr><td colspan="3">Emotional symptoms</td></tr><tr><td>Hjortebjerg, 2016</td><td>0.98 (0.92, 1.05)</td><td>86.54</td></tr><tr><td>Lim, 2018</td><td>1.14 (0.82, 1.47)</td><td>4.32</td></tr><tr><td>Tiesler, 2013</td><td>1.16 (0.94, 1.42)</td><td>9.14</td></tr><tr><td>Subtotal (I-squared = 35.3%, p = 0.213)</td><td>1.00 (0.94, 1.07)</td><td>100.00</td></tr><tr><td colspan="3">Hyperactivity/inattention</td></tr><tr><td>Hjortebjerg, 2016</td><td>1.10 (1.03, 1.18)</td><td>92.44</td></tr><tr><td>Tiesler, 2013</td><td>1.32 (1.03, 1.66)</td><td>7.56</td></tr><tr><td>Subtotal (I-squared = 50.3%, p = 0.156)</td><td>1.11 (1.04, 1.19)</td><td>100.00</td></tr><tr><td colspan="3">Peer relationship problems</td></tr><tr><td>Hjortebjerg, 2016</td><td>1.06 (0.99, 1.12)</td><td>95.62</td></tr><tr><td>Tiesler, 2013</td><td>0.92 (0.69, 1.24)</td><td>4.38</td></tr><tr><td>Subtotal (I-squared = 0.0%, p = 0.356)</td><td>1.05 (0.99, 1.12)</td><td>100.00</td></tr><tr><td colspan="3">Total difficulties</td></tr><tr><td>Hjortebjerg, 2016</td><td>1.07 (1.00, 1.14)</td><td>89.65</td></tr><tr><td>Lim, 2018</td><td>1.67 (1.07, 2.54)</td><td>2.06</td></tr><tr><td>Tiesler, 2013</td><td>1.18 (0.94, 1.45)</td><td>8.29</td></tr><tr><td>Subtotal (I-squared = 56.1%, p = 0.102)</td><td>1.09 (1.02, 1.16)</td><td>100.00</td></tr></tbody></table>		ES (95% CI)	% Weight	Conduct problems			Hjortebjerg, 2016	1.05 (0.98, 1.14)	86.94	Lim, 2018	1.22 (0.87, 1.67)	4.74	Tiesler, 2013	0.94 (0.74, 1.20)	8.32	Subtotal (I-squared = 0.0%, p = 0.467)	1.05 (0.98, 1.12)	100.00	Emotional symptoms			Hjortebjerg, 2016	0.98 (0.92, 1.05)	86.54	Lim, 2018	1.14 (0.82, 1.47)	4.32	Tiesler, 2013	1.16 (0.94, 1.42)	9.14	Subtotal (I-squared = 35.3%, p = 0.213)	1.00 (0.94, 1.07)	100.00	Hyperactivity/inattention			Hjortebjerg, 2016	1.10 (1.03, 1.18)	92.44	Tiesler, 2013	1.32 (1.03, 1.66)	7.56	Subtotal (I-squared = 50.3%, p = 0.156)	1.11 (1.04, 1.19)	100.00	Peer relationship problems			Hjortebjerg, 2016	1.06 (0.99, 1.12)	95.62	Tiesler, 2013	0.92 (0.69, 1.24)	4.38	Subtotal (I-squared = 0.0%, p = 0.356)	1.05 (0.99, 1.12)	100.00	Total difficulties			Hjortebjerg, 2016	1.07 (1.00, 1.14)	89.65	Lim, 2018	1.67 (1.07, 2.54)	2.06	Tiesler, 2013	1.18 (0.94, 1.45)	8.29	Subtotal (I-squared = 56.1%, p = 0.102)	1.09 (1.02, 1.16)	100.00	<p>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6765874/pdf/ijerph-16-03336.pdf</p>
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Select additional health outcome studies published after the Toronto Public Health, identified by LDC in a pubmed literature review limited to 2017-2019 suggest linkages between environmental noise (measured or modelled) from traffic (or occupation*) among:

- Seniors: Dementia & mild cognitive impairment with 10 A-weighted decibel [dB(A)] increase in LDEN (Tzivian, 2016), Stroke incidence (WHO, 2018)
- Adults: Obesity (RR = 1.25, 95% CI: 1.04; 1.51, per 10 dB in 5-year mean) & adiposity markers (Foraster, 2018), metabolic disorders like diabetes ([Klompemaker, 2019](#)), cholesterol, attention performance impaired >70dB traffic noise compared to 50 or 60dB ([Schlittmeier, 2015](#)); Lifetime noise exp associated with enhanced (cortical & subcortical) fMRI response ([Dewey, 2019](#)); Wind turbine noise associated with sleep meds & antidepressants ([Poulsen, 2019](#)).
- Adolescents: In loud urban US areas adolescents report later bed times to adjust to noise ([Rudolph, 2019](#)).
- Children: Overweight at 7 years ([Schultz Christensen, 2016](#)); Blood pressure (Dzhambov, 2017; Review article) Not linked to BP in ([Warembourg 2019](#))
- Infants: *Low birthweight & Small for Gestational Age(GA) at birth in Finland among pregnant women occupationally exposed to noise ~>85dB fulltime (Selander, 2019)
- Healthcare-related: psychotropic (anxiolytic) drug use and reported noise annoyance (OR = 1.41; 95% CI: 1.02–1.95) in Finland >60dB (Okokon, 2018). Also: ([Klompemaker, 2019](#))
- Traffic noise exposure is experienced by the population with inequity (SES & ethnic differences (in London: Tonne, 2018; in USA: Casey, 2017) & Quality of sleep in the first and last hours of sleep are most crucial to feeling well the next day ([Roosli, 2019](#)).

*Note: Noise effect modification reported on air pollution association with cognitive performance impairment ([Tzivian, 2017](#)). Above epidemiological studies have their limitations: Studies tend to model outdoor noise exposure using land use spatial regression proxy; They tend to adjust for air pollution & other stressors. Full references available upon request. This list is incomplete. Refer to WHO, 2018 Health Evidence Review for additions to Toronto review. *Suggest considering hiring a RA for a full review of above noise epidemiological studies, including a table summarizing the population and study methods such as noise measurement and adjustment for traffic air pollution.*

Table 1B: Summary of above Health-based Noise Guidelines:

Reference (Year)	Target noise guideline	Supporting information
World Health Organization (2018) Environmental Noise Guidelines for the European Region	53dB/Lden average <u>produced by</u> road traffic 45dB/Lnight average <u>produced by</u> road traffic at night	Above this is associated with adverse health effects. Above this is associated with adverse effects on sleep.
World Health Organization guidelines (2009)	55dBA (Leq 16 hours) average outdoor levels through the day and evening. 40dBA (Leq 8 hours) average outdoors night. 30dBA (Leq 8 hours) average indoor night.	Note: Given that 40 dBA is often difficult to achieve in urban centres, the WHO also set an interim average nighttime limit of 55 dBA.
Ontario Ministry of Environment and Climate Change road-related noise 1 hour averages thresholds	For sensitive land uses such as residential uses, mitigation measures are required if average outdoor levels at the center of a window or door opening exceed as follows: 55dBA average during the day (0700 to 2300) 50dBA average during the night (2300-0700).	<i>Referenced in:</i> “How loud is too loud? Health Impacts of Environmental Noise in Toronto” (April 2017) Toronto Public health technical report. https://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-104524.pdf

Table 2A & B: Noise mitigation strategies that North Vancouver may consider, for (A) new and (B) existing land uses and policies

(A)

New building developments / land use planning	Background **All in accordance with building codes	Suggested interventions
Distance	<ul style="list-style-type: none"> Examples of local noise sources: major roads/truck routes, loading areas, construction sites, airports/flight paths, railyards, ports 	<ul style="list-style-type: none"> Maximize the distance between local noise sources and residences and vulnerable populations (e.g. schools, hospitals, childcares, residential cares). Set adequate (achievable) setback requirements.
Design	<ul style="list-style-type: none"> Recommend referring to City of Vancouver Noise Control Manual 	<ul style="list-style-type: none"> Design layouts and orientations to keep sleeping areas away from noise sources (e.g. orienting windows away from local noise sources or adding wing walls)
Materials	<ul style="list-style-type: none"> Recommend referring to City of Vancouver Noise Control Manual 	<ul style="list-style-type: none"> Install noise barriers and other noise shields to reduce noise exposure. Consider sound insulated windows, window glazing, and façade insulation. Enclose or use silencer/muffler for noise sources. Improvements in paving materials and tire composition (Ref: Toronto) Noise cancelling technologies to reduce noise transmission into vehicles and buildings

(B)

Existing infrastructure / activities	Background	Themes	Suggested interventions
Roadway	<ul style="list-style-type: none"> In general, vehicle noise increases with speed (this association is stronger for cars than for buses/heavy duty vehicles). Traffic calming is mainly used to promote road safety, but it can reduce noise when the traffic has few or no heavy duty vehicles. Speed limit reduction from 50 km/h to 30 km/h not only reduces noise levels by half (Ref: Toronto), it also reduces the amount of severe collisions leading to fewer injuries and deaths. Pedestrians' chances of surviving a crash at 30 km/h are much higher (90%) than if they are hit at 50 km/h (30%). 	<i>Traffic calming</i> (speed reduction to 30 km/h) (NCCHPP Urban Traffic Calming and Environmental Noise NCCHPP A 30-km/h Speed Limit on Local Streets)	<ul style="list-style-type: none"> Point location interventions that reduce both driving and speed variations (e.g. more roundabouts, speed bumps) Area-wide interventions that reduces traffic volume while encouraging low, constant speeds Reduce speed limits from 50 km/h to 30 km/h Street design that favours non-automobile uses to reduce traffic volume (i.e. make it more convenient and safe for modes of active transportation) Redirect traffic to main road networks <p>Note: Shifting noise to the arteries/highways may increase risk of health inequalities as many people with less favourable socioeconomic circumstances tend to live closer to these roads</p>
	<ul style="list-style-type: none"> Restricting cars from certain areas and/or times of the day can reduce the amount of noise from traffic. General air pollution will reduce during/in car-free times/zones (e.g. 40% reduction of NO₂ levels on car free day in France). 	<i>Traffic Restriction</i> (car free zones)	<ul style="list-style-type: none"> Restrict cars around vulnerable populations (e.g. schools, hospitals, childcares, residential cares) <p>Note: For areas like schools, can also relieve congestion from parents drop off and pick up and promote more active modes of travel / physical activity</p> <ul style="list-style-type: none"> Restrict car access in busy downtown / city centre areas (e.g. Lower Lonsdale) except electric vehicles, public transit, emergency vehicles, etc. Congestion charges for gas/diesel vehicles in busy areas during peak hours
Commercial / Business Operations		<i>Time limitation</i> of operations associated with noise	<ul style="list-style-type: none"> Stricter criteria for applications for noise bylaw exemptions Set time limits for music from bars/restaurants, A/C and circulation devices, garbage/refuse collection vehicles
Technology	<ul style="list-style-type: none"> Targets motorists who are operating vehicles without mufflers or who have modified their vehicles to make more noise 	<i>Enforcement of excessive noise</i> from motorists	<ul style="list-style-type: none"> Allow enforcement entities to firmly enforce fees/fines and/or increase fees/fines Audio equivalent of red-light cameras (used in Edmonton, Abu Dhabi) to measure noisy motorists
	<ul style="list-style-type: none"> Fully electrified fleet will be 3-4 dB more silent compared to the current fleet, especially for speeds up to 20 km/h. Fully electric vehicles are 1-2 dB more silent than hybrid vehicles. The # of people by traffic noise will be reduced by 30% when there are enough electric cars to perceive this noise reduction. At speeds over 50 km/h, electric and hybrid cars are not quieter than conventional cars – tire-road noise increases with speed and becomes the dominant noise source. 	<i>Promotion of electric vehicles</i> (study from RIVM Netherlands)	<ul style="list-style-type: none"> Actions listed in CNV's Electric Vehicle Strategy Electrification of passenger and transit vehicles
		<i>Devices or equipment</i>	<ul style="list-style-type: none"> Specify limits for amplified sound / device (Ref: NYC) Consumer education – label products with a noise rating (dB) (e.g. garden equipment) Require equipment performance standards, by dB (e.g. for construction)

Table 3: Comparison chart of Noise bylaw limits by zones for various cities

Sound Level Area / Zone	Zone Description	Bylaws, by location									
		City of Vancouver Bylaw No. 6555 (consolidated Oct 1, 2019)		Toronto Municipal Code Chapter 591, Noise 2019-09-30	City of North Vancouver Noise Control Bylaw, 1987, No. 5819 (consolidated Jan 24, 2011)		City of Victoria Noise Bylaw No. 03-012 (consolidated Feb 1, 2015)		City of Edmonton Community Standards Bylaw (consolidated Jun 4, 2019)		New York City Local Laws of the City of New York, 2005, No. 113
		Day 7am-10pm weekday, Sat. & 10am-10pm Sun/holiday BC Place, Rogers, civic plaza in the event zone 7am-11pm	Night		Day 7am-10pm same day	Night 10pm-7am following day	Day: 7am-10pm weekday or Sat. 10am-10pm Sun./holiday	Night any time not included within the definition of daytime under this Bylaw	Day 7am-10pm	Night 10pm-7am	
Quiet Area	CNV 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 CoVic means those areas so described in this Bylaw and so indicated on the Noise District Map set out in Schedule A CoV any portion of the City not defined as an activity zone, intermediate zone or event zone	55	45		55	45	55	45			
Residential									65 fr/7am-10pm Prohibited: >65 fr/7am-10pm The following is exempt: 70 in 2 hr in 1 day 75 in 1 hr in 1 day 80 in 30 min in 1 day 85 in 15 min in 1	50 fr/ before 7am or after 10pm	

									day		
Non-residential									75 fr/7am-10 pm 80 in 2 hr in 1 day 85 in 1 hr in 1 day	60 fr/ before 7am or after 10pm	
Mixed Area (adjacent residential-commercial; same building or shared wall or party wall or wall that is flush to a wall of a commercial premise)	CNV 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. Any 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	Indoor measured in center of closest residence room: 55 dBC for 3+ min or commercial 3+ dB above background noise for 3+ min or Day 50 for 3 min Night 45 for 3 min			55	50					
Activity Area	CNV any area of the municipality not designated as either a mixed area or as a quiet area, except any residential uses located in conjunction 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 nonindustrial uses. CoVic means those areas so described in this Bylaw and so indicated on the Noise District Map set out in Schedule A	70 measured at pnt of reception or 6.1 metres (whichever is greater)	65 measured at pnt of reception or 6.1 metres (whichever is greater) Rogers Arena 82 dBC for 15 min		60	55	70	70			
Non-Continuous		75	70		80	75					
Intermediate		70	65				60	55			
Harbor Intermediate	CoVic means those areas so described in this Bylaw and so indicated on the Noise						60	55			

	District Map set out in Schedule A									
Commercial		70 dBC	65 dBC		70 dBC	65 dBC	70 dBC	65 dBC		
Amplified Sound indoors		Any live entertainment fr/restaurants – Class 1 or 2 made after 1am and before 9am is not permitted		45 for 10 min or 60dBC fr/11pm-7am or 50 or 65dBC fr/7am-11pm						
Music fr/ Bars & restaurants		80 dBC in Schedule F or 75 dBC in Schedule F for 1 min at 3 metres from the wall and 1.2 metres from the ground and 3+ above background noise for 1 min at 3 metres from the wall and 1.2 metres from the ground After 9am and before 1 am, Restaurants Class 1 or 2 90 for 3 min measured at 2 metres and height of 1.2 metres above the floor								42 fr/nearby residential AND 7 over ambient noise level as measured from street or right of way 15 ft fr/source b/t 10pm-7am Bass sounds: may not exceed 6 dBC above ambient sound if it is > 62 dBC
A/C & Circulation Devices				50 for both A/C & stationary source, exempt if a provincial environmental compliance approval is complaint						1 device: <42 as measured 3 ft fr/any opening Multiple devices: cumulative noise of 45 or less
Construction and Power Gardening Equipment Sound		Chainsaw 87 Power Equipment 77 at 50 ft (only daytime use) Leaf Blower Win 50 metres of residential 8am-6pm weekday or 9am-5pm Sat Construction General 7:30am-8pm weekday no holiday; 10am-8pm Sat Street Construction 7am-8pm weekday or Sat; 10am-8pm Sun/holiday		Construction Exemptions are made for the following w/approval from Executive Director: A noise mitigation plan and A statement certified by a professional engineer or acoustical consultant for any sounds that are not technically or operationally feasible to control Prohibit noise from 7pm-7am, except until 9am on Sat. Prohibit any noise on Sun./holidays Power devices Prohibit use fr/power device 7pm-7am, until 9am weekend/holidays (doesn't apply to public places or golf courses???) All Power Equipment 85 at 20m fr/source	85 7am-9am	77	Power equipment 8am-8pm 75 at the point of reception or 50 ft or 15.2 m Leaf blower 65 at pnt of reception or 15.2m (9am-8pm weekday) or (9am-5pm weekend/holiday) Chainsaws 85 at pnt of reception or 15.2m (8am-8pm weekday or 9am-5pm weekend/holiday) Construction 85 at pnt of reception or 15.2m (7am-7pm weekday or 10am-7pm Sat, only no holiday)	Prohibited: Before 7am or after 9pm M-Sat Before 9am or after 7pm Sun, holidays	Construction: all contractors must submit a noise mitigation plan prior to start of work; each site location must have the noise mitigation plan; if location is near a sensitive location, additional steps must be taken 7am-6pm weekdays and 10am-4 pm Sat/Sun with single family dwellings or 300+ ft from religious institutions Construction is permitted fr/ 7am-6pm The following is prohibited: -noise levels 10+ measured at 15 ft fr/ property line -impulsive sounds (short abrupt sounds)	
Loading & Unloading				Prohibited fr/ 11pm7am, except until 9am weekends/holidays						
Garbage Truck/Refuse Collection Vehicles		Outside Downtown Area 7am-8pm weekday 10am-8pm weekend/holiday Inside Downtown Area 6am-12am weekday 10am-12am weekend/holiday					Exempt from garbage collection service (i) b/t 6am- 8pm within an Activity District; (ii) b/t 6:30am-8pm on a weekday; (iii) b/t 10am- 8pm on a Saturday,	Prohibited before 7am or after 10pm	80 measured at 35 ft+ fr/compacting unit in activity AND 80 fr/11pm-7am win 50 ft of property line when measured at 35ft+ fr/vehicle when in use	

						Sunday or holiday;				
Food Vending Vehicles										No jingles/music while stationary, only during movement.
Vehicles					<i>Speeds < 50 km/hr</i>	<i>Speeds > 50 km/hr</i>				
Weight: 2200 kg +					75	85				
Other vehicles					70	75				
Motor vehicles/motorcycles				Motorcycles 92 fr/ exhaust outlet as measured at 50 cm fr/ an idle engine All Vehicles -Prohibit noise from pnt of reception fr/9pm-7am, except until 9am weekends/holidays. -No honking, revving of engines, squealing tires, banging or clanking					Motorcycles When engine is idling: 92 at 50 cm fr/exhaust outlet When engine is not idling: 96 at 50 cm fr/exhaust outlet	-no honking; no excessive sounds where speed limit is < 35 mph -Excessive sounds: 150ft+ fr/vehicles <10,000lb (cars) 200ft+ fr/vehicles >10,000lb (trucks) 200ft fr/motorcycle
Animal Sounds		No person being the owner or occupant of any premises shall cause, allow, or permit the cry of an animal or bird which can easily be heard by a person not on the same premises and which disturbs or tends to disturb unreasonably the quiet, peace, rest, enjoyment, comfort or convenience of that person	No person shall cause or permit persistent noise, including barking, calling or whining or other similar persistent noise, to be made by any animal kept or used for any purpose							7am-10pm for continuous period of 10+ min 10pm-7am for continuous period of 5+ min

All sound levels are measured in dBA unless otherwise specified.

The following zones overlap in City of Vancouver:

ZONES	QUIET		ACTIVITY/EVENT		INTERMEDIATE	
	Day	Night	Day	Night	Day	Night
QUIET	55	45	60	55	60	55
ACTIVITY/EVENT	60	55	70	65	70	65
INTERMEDIATE	60	50	70	65	70	65

City of Vancouver Noise Control By-law No. 6555. Accessed here: <https://bylaws.vancouver.ca/6555c.PDF>

City of Victoria has the following sound levels specified by noise source district and noise receiver district:

Schedule B
Summary of Districts' Permitted Noise Levels

		NOISE RECEIVER DISTRICT							
		QUIET		INTER-MEDIATE		HARBOUR INTER-MEDIATE		ACTIVITY	
		Day	Night	Day	Night	Day	Night	Day	Night
NOISE SOURCE DISTRICT	QUIET	55	45	55	50	55	50	60	60
	INTER-MEDIATE	60	50	60	55	60	55	65	65
	HARBOUR INTER-MEDIATE	60	50	60	55	60	55	65	65
	ACTIVITY	60	55	65	60	67.5	60	70	70

Table 1: Equivalent Sound Level (L_{eq}) Limits (expressed in dBA) for sound or noise created and received in the "Quiet", "Intermediate" and "Activity" Noise Districts

City of Victoria Noise Bylaw No. 03-012. Accessed from: <https://www.victoria.ca/assets/City~Hall/Bylaws/bylaw-03-012.pdf>

Correction factors for sound levels

- 10 For all purposes under this Bylaw, when assessing a sound relative to the limits set out in sections 5 to 8 and summarized in Schedule B, the following correction factors must be applied to the measured equivalent sound level whenever the sound has, as a defining characteristic, impulsiveness, tonality, or persistent intermittency:

Impulsiveness

- (a) a +5 dB correction if the sound under consideration is impulsive in character;

Tonality

- (b) a +5 dB correction if the sound under consideration is tonal (i.e., it contains one or more pure tone components);
- (c) 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 containing 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 dB or more for tones in the 500 Hz. to 16 kHz. bands,
 - (ii) by 5 dB or more for tones in the 160 to 400 Hz. bands,
 - (iii) and by 10 dB or more for tones in the 31.5 to 125 Hz. bands;

Intermittency

- (d) a +5 dB correction if the sound under consideration is persistently intermittent;

Multiple Corrections

- (e) a correction equal to the sum of the corrections applicable under paragraphs (a) to (d) for each of the characteristics, described in those paragraphs, that the sound possesses to a maximum of 10 dB.

Noise disturbing neighbourhood

- 11 (1) Subject to the other provisions of this Bylaw,
- (a) a person must not make or cause a noise or sound in a street, park, plaza or similar public place which disturbs or tends to disturb the quiet, peace rest, enjoyment, comfort or convenience of persons in the neighbourhood or vicinity;
 - (b) a person who is the owner or occupier of, or is in possession or control of, real property must not make, suffer, or permit any other person to make, a noise or sound, on that real property, which can be easily heard by a person not on the same premises and which disturbs or tends to disturb the quiet, peace rest, enjoyment, comfort or convenience of persons in the neighbourhood or vicinity.
- (2) Subsection (1) does not apply to a person who makes, causes, or permits to be made or caused, a sound or noise in compliance with the provisions of sections 5 to 8 unless the noise or sound is clearly audible at a point of reception in a residential area between the hours of 10:00 p.m. one day and 7:00 a.m. the following day.



HOW LOUD IS TOO LOUD?

Health Impacts of Environmental Noise in Toronto



Reference:

Toronto Public Health. How Loud is Too Loud? Health Impacts of Environmental Noise in Toronto. Technical Report. April 2017

Authors:

Kelly Drew, Ronald Macfarlane, Tor Oiamo, Meghan Mullaly, Desislava Stefanova, Monica Campbell

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www.toronto.ca/health/reports, or by:

Phone: 416-338-7600

TTY: 416-392-0658

email: publichealth@toronto.ca

Executive Summary

There is increasing concern about the impacts of environmental noise on health, especially in urban areas. The growing body of evidence indicates that exposure to excessive environmental noise does not only impact quality of life and cause hearing loss but also has other health impacts, such as cardiovascular effects, cognitive impacts, sleep disturbance and mental health effects.

Health studies usually report on average noise exposure for a specific period (daytime, nighttime or 24 hrs) and measured as A-weighted decibel levels (dBA). Toronto Public Health (TPH) conducted a noise monitoring study in the early fall of 2016. The average 24-hour equivalent noise levels in Toronto were 62.9 dBA. Average daily levels at individual locations ranged from a low of 50.4 to a high of 78.3 dBA, with mean levels of 64.1 dBA daytime (7:00 a.m. to 11:00 p.m.) and 57.5 dBA nighttime (11:00 p.m. to 7:00 a.m.). Nearly 60 percent of noise in Toronto can be attributed to traffic noise and it is estimated that dissemination areas in the lowest income quintile are almost 11 times more likely to have 50 percent of their residents exposed to night noise levels over 55 dBA, than residents in the highest income quintile. The results of the study show that levels of noise in Toronto are similar to levels found in other large cities such as Montreal and Toronto; as well, similar to other cities there is a disparity between income and exposure to noise.

Non-auditory health impacts of environmental noise were reviewed by the World Health Organization (WHO) in 2009 and 2011. The reports show that cognitive impacts, sleep disturbance mental health and cardiovascular effects could occur at noise levels commonly experienced in urban environments. Toronto Public Health has reviewed the evidence that has accumulated since the WHO evaluation. Newer evidence confirms that health impacts can occur at levels between 42 and 60 dBA outdoors, which is below the 70 dBA benchmark that TPH had previously been considered protective of health. The available evidence suggests that environmental noise in Toronto occurs at levels that could be detrimental to health.

The World Health Organization (2009) established health-protective guidelines of 55 dBA outdoors (Leq 16 hours) for daytime and evening exposures and night-noise exposure guidelines of 40 dBA (outdoors Leq night 8 hours, to keep an indoor average of 30 dBA). Given that 40 dBA is often difficult to achieve in urban centres, the WHO indicated an interim nighttime limit of 55 dBA. The Ontario Ministry of Environment and Climate Change has recommendations for road-related noise thresholds: for sensitive land uses, such as residential uses, mitigation measures are required if outdoor levels at the centre of a window or door opening exceed 55 dBA daytime or 50 dBA nighttime.

Reducing the exposure of environmental noise to residents is multi-pronged and includes periodic assessment of the noise environment through monitoring and modelling, policy interventions (for example, traffic management, building code standards, equipment performance standards, and noise bylaws), and education and engagement of the public. Maintaining a quality outdoor noise environment will contribute to better health and wellbeing. Not only will such an environment promote a more active lifestyle (walking, cycling and active

recreation), which can reduce noise levels from transportation, it will also contribute to a reduction in the risk of chronic disease, making Toronto a healthier city for all.

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Glossary

Sound levels are reported in decibels (dB) or A-weighted decibels (dBA) which take into account the human perceptions of loudness at different frequencies. The loudness of sound (L) may be expressed in different ways:

Leq: The equivalent continuous level, which is the average level of sound over a period of time (for example hour, day, or year)

Leq 24: The equivalent continuous level, which is the average level of sound over a period of 24 Hours

Ldn: the average equivalent sound level over a 24 hour period with a penalty added for noise during the nighttime hours

Lden: the average equivalent sound level over a 24 hour period with a penalty added for noise during the evening and nighttime hours

Lmax: the maximum level of sound that occurs in a period of time

Lnight: average level during the night (usually 8-hours, for example 11pm to 7 am)

Plane of door or of window: the centre of an exterior window or door opening in a building

SEL: the sound exposure level measured over one second

Environmental Noise and Health

Environmental noise is considered to be any unwanted sounds created by human activity (Murphy, King, & Rice, 2009). Environmental noise includes noise from roads, rail and air, as well as construction noise, music systems (amplified sound), neighbours, small machinery and air conditioners. This makes it an important issue for densely populated urban environments. This definition allows for environmental noise to be considered a type of pollution, an element that can be regulated, controlled and mitigated. As is common practice, environmental noise for the purpose of this study refers to noise outdoors. It does not include noise generated indoors such as noise that travels between units in multi-residential buildings.

Noise is a complex issue to measure as it has several important properties including: loudness (intensity, measured in decibels on a logarithmic scale [dB or dBA]), duration (continuous, intermittent, or impulsive), and frequency (pitch). Measurements of loudness are often reported on the A-weighted scale, and can include additional penalties for evening and night levels (see glossary for additional information on noise measurements). In environmental noise and health research the focus tends to be on average noise levels for a specific period (day, night or 24 hrs) and measured in dBA. Since the decibel is a logarithmic unit, a sound received by the ear at 60 dBA is perceived as twice as loud as sound at 50 dBA.

Until recently the impacts of environmental noise were generally deemed a quality of life issue and the main concern was impact on hearing and annoyance. As Figure 1 shows, within an exposed population, the most severe health impacts from noise exposure will be experienced by a relatively small proportion of the population, but a larger number of people will experience feelings of discomfort or stress.

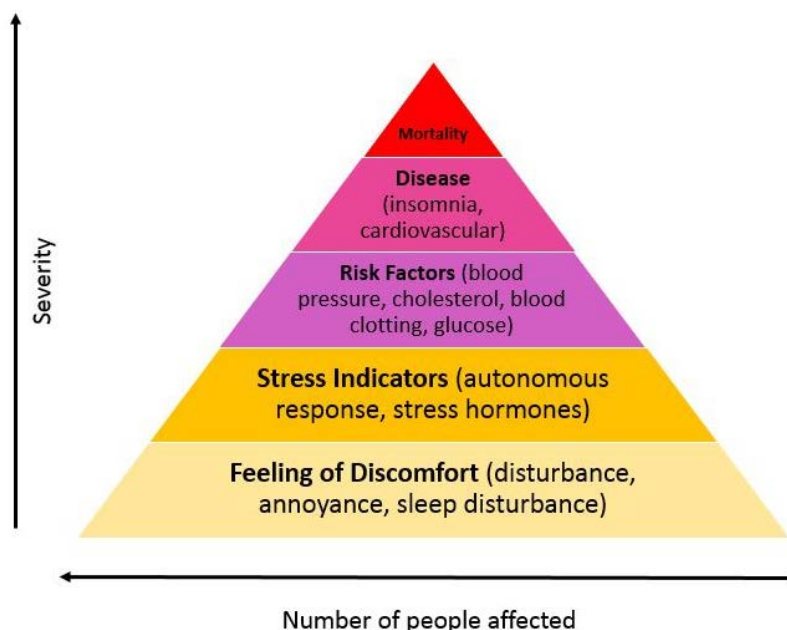


Figure 1: Source: adapted from (Wolfgang Babisch, 2002) as cited in (W Babisch et al., 2010) Noise is considered a biological stressor and a component of one's physical environment, and this therefore one of the determinants of health (Mikkonen & Raphael, 2010). The experience

of noise is based on both noise as heard by the observer and individual sensitivities to noise, with physical and psychological mediators influencing the non-auditory impacts of noise exposure (Murphy & King, 2014). The majority of the available health evidence comes from studies that modelled outdoor noise levels using proximity to roadways, railway tracks or airports to estimate exposure.

Noise-induced Hearing Loss

For a long time, the main health concern related to noise was related to occupational exposure and hearing loss. The World Health Organization (World Health Organization, 2009, 2011) has determined that noise-induced hearing loss is unlikely when average daily exposure to noise is below 70 dBA and impulse sound levels do not exceed 110 dBA. The equivalent 8-hour exposure threshold for hearing loss that includes impulse sounds is 75 dBA (World Health Organization, 1999, 2009, 2011). In Ontario, the Occupational Health and Safety Act protects workers so that no employee is exposed to levels exceeding 85 dBA (8-hour average) (Government of Ontario, 2014). Noise at this level could still result in some hearing loss.

It is important to note that hearing loss or damage is a cumulative impact, as people are exposed to noise throughout their lifetime and hearing damage can build over time. In some cases personal noise exposure is based on choices made, such as ear buds and personal listening devices, operating small equipment without protection or attending concerts and events. While these personal choice exposures were not considered in this review, they can have an impact on health. The WHO considers hearing loss or damage from acute or chronic exposure a health concern as this can affect a person's ability to function in society and result in social isolation. There is now evidence that noise can have other health impacts not related to hearing.

Non-Auditory Health Impacts of Environmental Noise

There has been growing interest in the non-auditory impacts of environmental noise on health. In 2009, the World Health Organization Regional Office for Europe released its Night Noise Guidelines for Europe and in 2011 the Burden of Disease from Environmental Noise. From these comprehensive reviews, the WHO recommended that outdoor noise levels do not exceed an average of 55 dBA during the day and an average of 40 dBA at night.

Toronto Public Health searched the literature published between 2010 and January 2017 to identify any new evidence that had emerged since the WHO review. The health effects that were included were impacts identified in the previous WHO reviews as well as emerging health impacts supported by strong evidence. Diabetes and adverse behavior in children are emerging end-points of concern. Health impacts considered in this review are:

- **Cardiovascular Effects:** myocardial infarction, hypertensive heart disease, ischemic heart disease, high blood pressure, cerebrovascular disease (stroke), coronary heart disease
- **Cognitive Impacts:** impairment (attention, memory adults, errors upon testing in children)

- **Sleep Disturbance:** increased arousals, changes to sleep structure
- **Mental Health:** annoyance, depression, quality of life
- **Pulmonary Effects:** chronic obstructive pulmonary disease, pneumonia
- **Other Effects:** diabetes, behaviour in children

Cardiovascular Effects

Noise exposure has been linked to cardiovascular diseases as vascular tension is impacted by stress responses (Babisch, 2005 in Bodin et al., 2016). These effects have been reported to occur at levels ranging from 55 to 73.6 dBA outdoors.

Myocardial infarction occurs when stress hormones like noradrenaline and cortisol interfere with beta-adrenergic receptors of the circulatory system (Gan, Davies, Koehoorn, & Brauer, 2012). Noise has been associated with an increased risk of mortality from myocardial infarction. Outdoor noise has been linked to increased odds of hypertensive health outcomes as a result of stress which affects individual hormone and blood pressure levels (Sørensen et al., 2011a). A higher arousal of the autonomous nervous and endocrine systems, which is adversely influenced by road traffic noise exposure, is associated with an increased risk of mortality from ischaemic heart disease (World Health Organization, 2011).

Adverse increases in blood pressure from environmental noise are associated with cardiovascular mortality (Chobanian et al., 2003; Ezzati et al., 2002 as cited in Fuks et al., 2011). By influencing factors like atherosclerosis and elevated blood pressure, road traffic noise exposure has been linked to an increased risk of mortality from cerebrovascular disease (stroke) (Sørensen et al., 2014). Exposure to certain noise levels indicate an increase risk in mortality due to impacts on blood pressure, which is a risk factor for the advancement of coronary heart disease, a condition that indicates the blood vessels of the heart are compromised (World Health Organization, 2016).

Recio and colleagues (2016) found a 3.5 percent increase in the risk of death from myocardial infarction and 2.9 percent increase in the risk of death from ischaemic heart disease, and 2.4 percent increase in the mortality rate of cerebrovascular disease for every 1 dBA increase in nighttime noise levels between 58.7 – 76.3 dBA (L_{max} night) for people 65 and older. For people younger than 65, there was an 11 percent increased risk of death from myocardial infarction and ischaemic heart disease for every 1 dBA increase in average nighttime noise levels between 56.2 – 69.9 dBA. Similar results were found in other studies with increased risk of mortality from myocardial infarction and ischaemic heart disease (approximately 55-60 dBA during the day, >50dBA at night)(Seidler et al., 2016a; Sørensen et al., 2012).

Seidler and colleagues (2016b) reported a statistically significant increase in odds of hypertensive heart disease for every 10dBA increase in noise over 55dBA (Leq 24). Banerjee and colleagues (2014) found similar results of increased odds of hypertension at 60dBA (L_{den}) for women and 65dBA (L_{den}) for men. The WHO (2011) found that road traffic noise and air pollution independently impact the prevalence of hypertension. Indoor environmental nighttime noise levels above 30dBA have been associated with increased odds of hypertension and high systolic blood pressure per increase of 5 dBA (Foraster et al., 2014). Sørensen and colleagues (2011a)

reported that in people over 64.5 years of age, exposure to every 10 dBA (Lden) increase in residential road traffic noise was associated with a 27 percent higher risk for stroke.

In analysis of road traffic noise, Gan and colleagues (2011) reports an increased relative risk of mortality from coronary heart disease of 13% for every 10 dBA over 58dBA and 29% for every 10dBA increase over 70 dBA when the effect of PM2.5 was taken in to account. Significant correlations for noise were still found when the effect of black carbon was taken in to account with an increased relative risk of mortality from coronary heart disease of 9% for every 10 dBA over 58 dBA and 22% for every 10 dBA increase over 70 dBA when compared to those with noise exposures less than 58 dBA.

Cognitive Impairment

Van Kempen and colleagues (2012) found an association between students exposed to road and air noise pollution at school and the number of errors made during SAT testing. In contrast, another study reported that children had increased information and conceptual recall when exposed to road or aircraft noise at school (Matheson et al., 2010). It was suggested this was due to context-dependent memory, where people recall information better when exposed to a similar environment where it was originally introduced (Matheson et al., 2010).

Cognitive impairment in adults as a result of exposure to noise has only recently been studied. Initial evidence suggests environmental noise, acts as a sensory stimulant and may hinder cognitive abilities including "attention, memory and executive function" (Wright, Peters, Ettinger, Kuipers, & Kumari, 2016b).

Sleep Disturbance

Sleep disturbance due to noise exposure is a common complaint among noise exposed populations (World Health Organization, 2011). Sleep is important to physical and mental health and well-being. Sleep is involved with the healing and repair of the body, and disturbed or deficient sleep has been linked to an increased risk of many chronic diseases. Sleep disturbance has an impact on metabolic and endocrine function and contributes to the risk of cardiovascular disease. Sleep loss is associated with weight gain, risk of diabetes, and susceptibility to viral illness (World Health Organization, 2009). Chum and colleagues (2015), indicated an increased odds of self-reported sleep disturbance in areas with elevated noise and traffic levels. Increased odds of worse quality sleep was found with outdoor daytime aircraft noise between 50-60 dBA and nighttime noise levels between 50-55 dBA (Schreckenberg, Meis, Kahl, Peschel, & Eikmann, 2010).

Mental Health

Annoyance and its link to mental health is an emerging area of research on the impacts associated with exposure to environmental noise. Annoyance to noise results in a multitude of emotional responses including "disturbance, dissatisfaction, displeasure, irritation, nuisance, or anger" ((Van Kempen & Van Kamp, 2005)as cited in Babisch, Schulz, Seiwert, & Conrad, 2012). The condition of annoyance can be conceptualized in one of two ways - as a mediating factor in, or indicator for, biological responses to noise (Evans & Cohen, 1982 as cited in Oiamo,

Luginaah, & Baxter, 2015). In general, the extent and impact of annoyance varies among individuals exposed to environmental noise (Murphy & King, 2014).

A recent study looking at self-reported noise exposures found higher odds of high annoyance in populations exposed to moderate truck traffic when compared to those exposed to light truck traffic and similarly when comparing people exposed to constant truck noise to those exposed to no truck noise (Dratva et al., 2012). When looking at residents living in buildings with one quiet façade, De Kluizenaar and colleagues (2011) found that individuals benefited from both decreased noise exposure at the most exposed façade as well as lower levels of annoyance from road traffic noise. In buildings without a quiet façade the odds of annoyance increased as traffic noise increased (De Kluizenaar et al., 2011). In a study by Schlittmeier and colleagues (2015) that individuals reported average outdoor noise levels of 50 dBA Leq (10 sec) were “significantly less annoying” than when average levels were 70 dBA Leq (10 sec). In 2011, the WHO estimated 42 dBA outdoors as the point at which individuals exhibit high levels of annoyance when exposed to road traffic noise.

Increased stress and sleep disturbance have been suggested as the biological pathways by which environmental noise influences depression. Orban and colleagues (2016) found an association between high noise exposure, defined as 55 dBA Lden outdoors and greater than 50 dBA Lnight and an increased risk of self-reported high depressive symptoms.

Quality of life is defined as "an individual's perception of their position in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (WHO as cited in Shepherd et al., 2010). The World Health Organization Quality of Life (short-form) scale consists of 26 factors divided into four domains: physical health (7 items), psychological wellbeing (6 items), social relationships (3 items), and environmental factors (8 items). Shepherd and colleagues (2013) found higher scores across all dimensions of the Health-Related Quality of Life (HRQL) scale (except for the social dimension) for individuals residing in areas of median 55 dBA Ldn noise levels, compared to those living in “noisy” regions of median 76 dBA Ldn. In 2016, Shepherd and colleagues found noise annoyance more predictive of “psychological, social and environmental” domain variability on the HRQOL when compared to annoyance from air pollution.

Pulmonary Effects

Chronic obstructive pulmonary disease (COPD) is a term that describes multiple chronic conditions that limit airflow to the lungs (World Health Organization, 2017). Recio and colleagues (2016) found a 4% increase in the risk of death from for every 1 dBA increase with nighttime noise levels ranging from 58.7 to 76.3 dBA (Lmax night) for people 65 and older.

Recio and colleagues (2016) found a 3% increase in the risk of death from pneumonia for every 1 dBA increase with nighttime noise levels from 58.7 – 76.3 dbA (Lmax night) in people 65 and older. The authors suggest that this association is the result of chronic stress from exposure to noise which leads to reduced immunity.

Emerging Health Evidence

There is new but limited evidence for an association between exposure to environmental noise exposure and diabetes and metabolic processes. (Basner et al., 2014; Muenzel et al., 2014 as cited in Tonne et al., 2016). In individuals 65 years and older, exposure to noise at levels ranging from 56.2 to 69.9 dBA Leq night has been associated with a 11 percent increase in relative risk of mortality from diabetes for every one dBA (Recio et al., 2016).

There is some evidence of an association between road traffic noise and increased risk of a higher abnormal total difficulties score, hyperactivity, conduct problems and difficulties with peer relationship in children as based on a standardised Strengths and Difficulties Questionnaire (Hjortebjerg et al., 2016). Another study found an association between increased road traffic noise exposure at school sites and attention deficit hyperactivity disorder symptoms (Forns et al., 2016).

There has been limited focus on low-frequency noise exposure and health impacts in traditional literature (Murphy & King, 2014). Low-frequency noise is generally referring to noise levels from 20-200 Hz, and buildings tend to have difficulty with attenuating these levels (Wise & Leventhall, 2011). There is some evidence that low-frequency noise may contribute to annoyance and sleep disturbance.

Annoyance while known as an impact of environmental noise, it had not been studied much in regard to its relationship with health. Environmental noise is starting to be recognized as an important factor in the health of individuals, particularly as we undergo rapid development and urbanization.

Discussion

Based on the best available health evidence at that time, Toronto Public Health (2000) had concluded that exposure to noise at levels of up to 70 dBA (Leq 24) would not result in any adverse impacts. This review along the WHO 2009 and 2011 reviews indicate that health effects occur at much lower exposure levels (see for example Table 1). Previous evidence found ischaemic heart disease at threshold around 70 dBA, current evidence finds this threshold to start around 58 dBA. Currently, the thresholds for self-reported sleep disturbance is 42 dBA nighttime, where as previously there were around 60 dBA. The more recent evidence reviewed for this report (refer to the Appendix) supports these lower thresholds.

Table 1: Effects of noise on health and wellbeing with sufficient evidence (source: European Environment Agency, 2010)

Effect	Exposure Measure *	Threshold ** (dBA)	Effect type
Annoyance disturbance	L _{den}	42	Chronic
Self-reported sleep disturbance	L _{night}	42	Chronic
Learning, memory	L _{eq}	50	Acute, chronic
Stress hormones	L _{max} Leq	NA	Acute, chronic
Sleep	L _{max} , indoors	32	Acute, chronic

Reported awakening	SEL _{indoors}	53	Acute
Reported health	L _{den}	50	Chronic
Hypertension	L _{den}	50	Chronic
Ischaemic heart diseases	L _{den}	60	Chronic

Note: * L_{den} and L_{night} are defined as outside exposure levels. L_{max} may be either internal or external as indicated.

** Level above which health effects start to occur or start to rise above background. NA – not available.

Policy makers benefit from noise thresholds as they provide standards on which to base limitations on. Some health impacts have been suggested to occur using a no threshold model but evidence for this is limited at the current time. Due to the difference in measurement of the time periods where health effects are seen (day, evening, night), the thresholds are not directly comparable to each other and to guideline levels without conversion.

Noise Levels Recommended for Health

To protect health, the World Health Organization (2009) established night-noise guidelines of 40 dBA (outdoors Leq night 8 hours) to keep an indoor average of 30 dBA. Understanding that 40 dBA is often difficult to achieve in urban centres, they added an interim value of 55 dBA night. Additionally, the WHO recommended daytime levels of 55 dBA (Leq 16 hours). The Ministry of Environment and Climate Change (MOECC) (Government of Ontario, 2013) has recommendations for road related noise thresholds before mitigation measures are required of 55 dBA daytime and 50 dBA nighttime (See Table 2). These levels are applicable to road and stationary sources of noise at the centre of window or door openings for sensitive land uses such as residential properties, hotels, schools, hospitals, and community centres. More information on the MOECC guidelines can be found in the Noise Regulation in Ontario section of this report. The evidence identified in this review supports using the WHO guidelines as maximum noise exposure to protect health.

Table 2 – Outdoor Residential Noise level guidelines from the WHO and MOECC

Measure Detail	Noise Level (dBA)		
	Day	Evening	Night
Noise Duration	12 Hr	4 Hr	8 Hr
Timeframe	7:00-19:00	19:00-23:00	23:00-7:00
Authority			
WHO Target noise guideline	55		40
	Calculated Maximum Equivalent Ldn: 55.6		
	Calculated Maximum Equivalent Lden: 56.5		
	Calculated Maximum Equivalent Leq (24h): 53.3		
MOECC Target noise guideline (1 hr Average)	55		50
	Calculated Maximum Equivalent Ldn: 58.2		
	Calculated Maximum Equivalent Lden: 58.7		

Noise Levels in Toronto

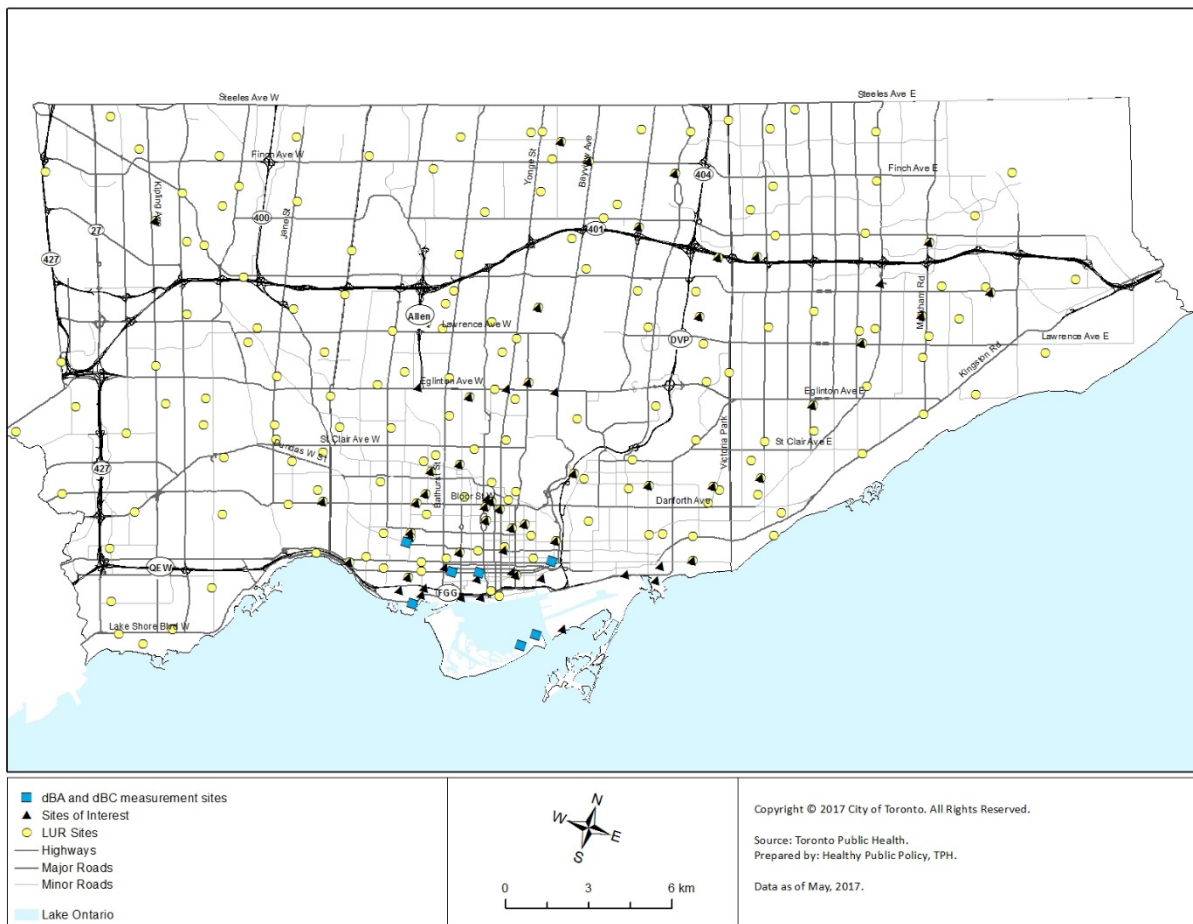
The City of Toronto is currently undergoing a noise bylaw review. To determine if current exposures to noise in Toronto could have a negative impact on health, and inform the revisions to the bylaw Toronto Public Health commissioned a noise monitoring and modelling study, the results of which can be found in Environmental Noise Study in the City of Toronto report (Oiamo, et al., 2017).

Noise Monitoring

Over the period of August to October 2016 a total of 227 noise measurements were made. Noise was monitored using the A-weighted decibel scale at 220 different locations across the City (see Figure 2) for approximately a one week period at each site. Additional measurements were done using the C-weighted scale at seven locations where the noise environment was influenced by sources of amplified sound to provide information on the distribution of lower frequency sounds. The sites were chosen based on a combination of population densities, land uses and sites of interest as determined by the project advisory committee. The project advisory committee suggested locations where events are held, or where residents have expressed concerns about noise or noise levels are expected to be high. The sites were categorised by land use (residential, open space, employment, industrial/commercial, residential), road type (local, collector, major arterial) and sites of interest (schools, long-term care/hospitals, community housing, concert venues, EMS, CNE, BMO field, TTC yards, historic or cultural sites and Toronto island).

The monitoring data was analysed in a number of traditional noise metrics for each site as well as for different categories of sites. Measurements for the full week, weekend and weekdays as well as average measurements for 24 hours (Lden, Leq 24h), day (Leq 16h), night (Leq 8h) and maximum measured 1 second (Lmax). Exceedance levels, values that describe the sound level exceeded in a specified period of time (L1 is 1% of the time, L5 is 5% of the time) were determined for the listed time periods as well. In addition, values were calculated that described the percent of time a noise level was exceeded (for example 95% of the time noise levels at night are above 40dBA).

Figure 2: Noise Monitoring Locations in Toronto (recreated from Oiamo et al., 2017)



Noise Modelling

To better understand the distribution of noise levels and exposure in Toronto, two modelling methods were used; a propagation model, which estimated the percentage of noise from road traffic specifically and a receptor-based land-use regression model that extrapolates the effect of environmental features on observed noise levels. These models were combined to create maps of predicted noise levels for daytime and nighttime across the city.

The modelling results compared the traffic based model to the receptor based land use regression model to determine the areas where the traffic model was over or under predicting noise levels based on the built environment and monitoring results. The study found that the traffic model was over predicting noise levels in areas with high levels of vegetation coverage and was under predicting noise levels in areas where population density was high. The lack of data for rail and air traffic noise means noise emissions from these sources were not modelled in this study. However, the monitoring and modelling process would still take these noise sources in to account but their precise impact on the soundscape could not be inferred. Due to data limitations sound barriers and noise walls could not be included in the modelling process. This led to some of the major roadways noise levels being over estimated in the initial traffic model. These over and under estimations were corrected for in the final modelling process.

It should be noted that land use regression is a math based approach to predicting exposures, and in this case a modelled approach to predicting where the noise from the traffic model was over or under estimated. The predictors for vegetation coverage, population density, distance to airports and railways all logically relate to noise level estimates. The interpretation of how other predictor's effect noise levels is less straight forward. Detailed methods for the modelling methods uses can be found in the report of Oiamo and colleagues (2017).

To estimate population noise exposures, the noise estimates from the final daytime and nighttime surface models were linked to Statistics Canada population estimates. Noise was estimated for the exposed façade of all residential buildings in Toronto and dissemination block level population data were used to estimate the number of residents in each building based on building size. From this, the proportion of residents exposed to daytime and nighttime levels at certain thresholds was estimated. To estimate the impact on vulnerable populations a logistic regression model was used to look at the relationship between income and noise. Household incomes were linked to dissemination areas where nighttime noise levels exceeded 55dBA for at least 50% of the residents.

Results

The monitoring study found the average 24-hour equivalent noise levels across the city to be 62.9 dBA. Average daily levels at each site ranged from a low of 50.4 to a high of 78.3 dBA. Daytime and night time averages can be seen in Table 3. Weekdays were found to be louder than weekends across the city.

The dBC measurements were primarily taken in areas where there was a known source of amplified sound. It was observed that the dBC values did not decrease with the dBA values during the latenight hours but the cause of this is unknown, but could be due to vibration of low frequency amplified sound.

Table 3 – Average dBA levels from noise monitoring. (Source: Oiamo et al., 2017)

dBA (n=220)	Full Week				Weekday				Weekend			
	Lden	Leq24h	LeqD	LeqN	Lden	Leq24h	LeqD	LeqN	Lden	Leq24h	LeqD	LeqN
Mean	66.4	62.9	64.1	57.5	66.7	63.2	64.5	57.6	65.3	61.2	62.4	56.8
Median	65.3	61.9	63.2	56.4	65.4	62.1	63.4	56.1	64.5	60.6	61.9	55.9
Std. Devi	6.9	6.4	6.3	7.8	6.9	6.3	6.2	7.9	7.3	7	7	7.9
Minimum	54	50.4	51.6	42.6	53.9	50.7	52.2	42.2	51.3	47.5	48.4	43.5
Maximum	82.3	78.3	79.5	74.4	82.9	78.9	80.1	74.8	80.8	76.5	77.8	74.1

Note: Lden is the average equivalent sound level over a 24 hour period with a penalty added for noise during the evening and nighttime hours; Leq is The equivalent continuous level, which is the average level of sound over 24 hours; LeqD is The equivalent continuous level, which is the average level of sound over 16 daytime hours; LeqN is The equivalent continuous level, which is the average level of sound over 8 nighttime hours;

Observed average noise levels among the sites of interest varied depending on the type of site or land-use. The lowest noise levels were observed in residential areas and along local roads. As expected, the highest levels were observed in mixed-use areas and along major arteries. Sites identified as close to construction activities also exhibited higher average noise compared to the overall average noise levels. Monitoring was completed in late summer early fall, which corresponds to peak construction season. High average noise levels were noted near busy TTC facilities and an EMS station and monitors in proximity to large gatherings of people also indicated high noise exposures at specific periods in time (BMO Field and CNE). The noise bylaw identifies quiet zones, which are defined as hospital, retirement home, nursing home, senior citizens residence, or other similar uses. Monitoring locations in or near 'quiet zones' showed similar patterns to overall levels. This might be due to the fact these facilities are generally found along major roads, and may have a larger number of emergency vehicles passing close by.

Overall the study found that 62% of the time the mean noise level was above 55dBA during the day (Leq_{day}) and 54% of the time above 50dBA (Leq_{night}) at night. The modelling indicated that 59% of the noise in Toronto can be attributed to traffic (Leq_{24}). This result is similar to the results of comparable studies in Montreal and Vancouver. Sound levels at the majority of locations that were specifically selected because of concerns about noise did show higher noise levels overall than other sites.

Figure 3, is a map of the final predicted daytime noise levels based on traffic and land use regression modelling combined. The traffic noise dominates the map, there are higher levels in the downtown core and some areas near the highways. Areas of parkland and ravines have the lowest estimated noise levels. Figure 4 is the average predicted night time noise levels, and demonstrates a similar pattern as the daytime results. At night, the roads still dominate and the downtown core is still relatively loud, but the overall noise levels are lower.

Figure 3 - Predicted daytime (Leq_{16}) noise levels in Toronto

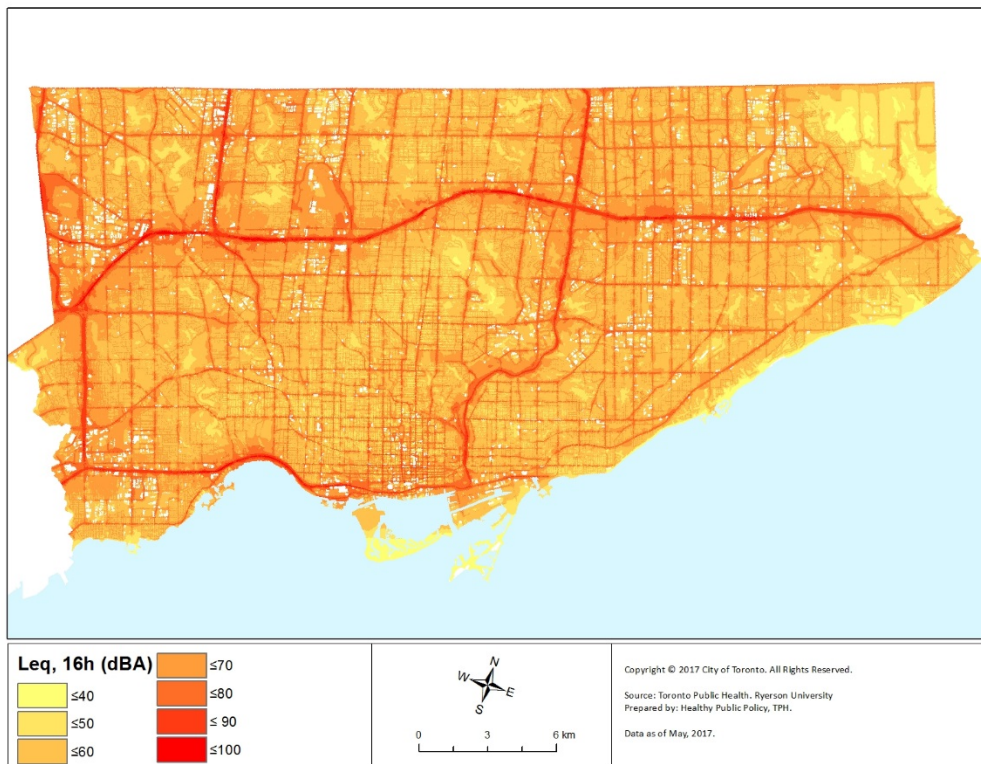
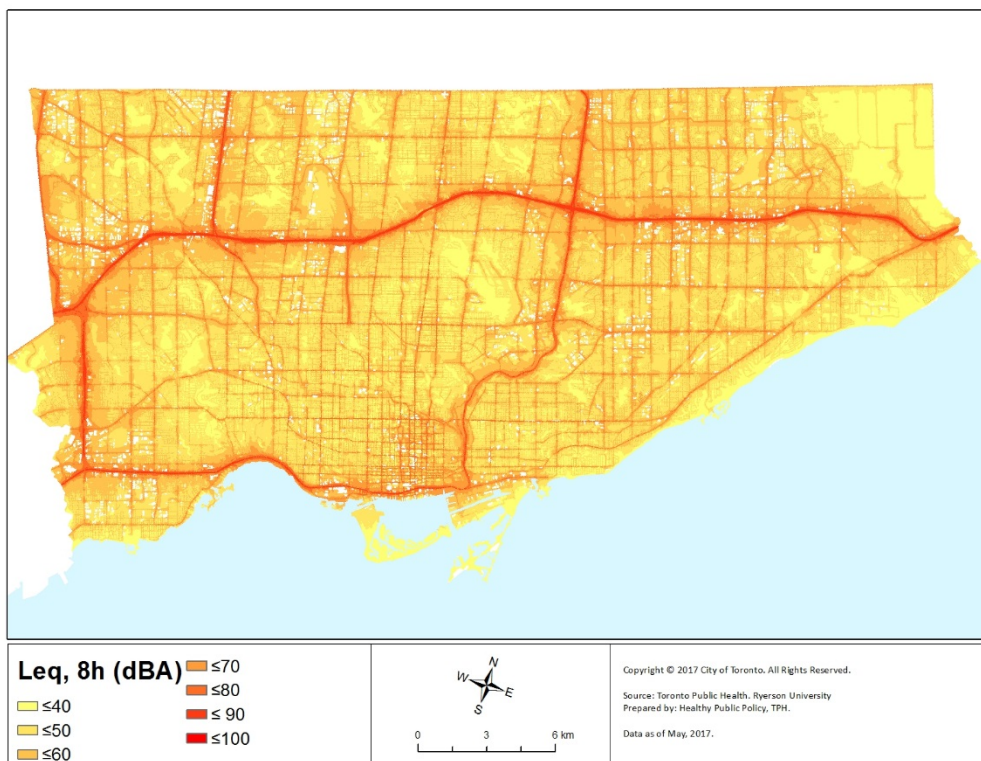


Figure 4 - Predicted nighttime (Leq8) noise levels in Toronto



Populations Affected

Table 4, has the percent of the estimated population exposed to certain noise levels at various time periods. For example, 88.7% of the population is estimated to be exposed to levels above 55 dBA during the day, and 43.4% is estimated to be exposed to above this level at night.

Table 4 – Estimated Population Exposed to Noise above selected noise exposure levels

Noise Threshold	Number of people exposed above the threshold (millions)	Percentage of people exposed above the threshold
L _{Aeq} , 24h, 65 dBA	0.85	30.1%
L _{Aeq} , 24h, 55 dBA	2.03	72.2%
L _{Aeq} 16, day, 65 dBA	1.09	38.8%
L _{Aeq} 16, day, 55 dBA	2.49	88.7%
L _{Aeq} 8 ,night, 55 dBA	1.22	43.4%
L _{Aeq} 8, night, 45 dBA	2.60	92.3%

Dissemination areas in the lowest income quintile are nearly 11 times more likely have 50% of their residents exposed to a nighttime noise above 55 dBA than do residents in dissemination areas in the highest income quintile (Table 5). Overall, a large percentage of residents in Toronto are exposed to noise that exceed objectives for outdoor noise, especially nighttime exposure at home. People living near major arterial roads or in areas with mixed commercial and residential uses are also more exposed.

Table 5 – Logistic regression predicting dissemination areas with 50% of residents exposed to nighttime noise levels exceeding 55 dBA. (Source: Oiamo et al., 2017).

	Odds Ratio**	95% Confidence Interval
Highest Income Quintile (Reference Category)		
4	1.84	1.38-2.44
3	2.18	1.64-2.89
2	3.76	2.87-4.92
Lowest income Quintile	10.99	8.42-14.36

** significant at $p < 0.0001$

Mitigation and Regulation

Noise Regulation in Ontario

Health Canada does not have any exposure guidelines for environmental noise. The 8-hour workplace permissible exposure limit in Ontario is 85 dBA. Some hearing loss can still be expected at this level of exposure.

The Ontario Environmental Noise Guideline, from the Ministry of Environment and Climate Change is applicable to stationary and transportation sources of noise (NPC-300) identifies various limits depending on area, source of noise, time of day, and type of noise. Noise sensitive land uses include residential properties, hotels, schools, hospitals, and community centres.

For example, the MOECC guidelines indicate that for road-related noise, control measures (such as sound proofing and ensuring adequate ventilation so that windows or doors can be kept closed) is not be required if the sound level in the plane of a bedroom or living/dining room window is less than or equal to 55 dBA (daytime) and 50 dBA (night-time). If the sound level in the plane of a bedroom or living/dining room window is greater than 65 dBA (daytime) or 60 dBA (night-time), noise mitigation is required, which may include installation of central air conditioning to maintain adequate ventilation, so that noise levels are kept below an average of 45 dBA in living areas, with a provision of night-time average levels of 40 dBA in sleeping quarters due to road-related noise; the corresponding values for rail-related noise are 40 and 35 dBA.

NPC-300 also includes a graduated scale for impulse noise (short burst of loud noise) depending on number of impulses per hour ranging from 80-50 dBA (impulse, outdoor), with a provision for higher allowable noise levels in Class 4 areas (areas where new sensitive land uses are built next to existing stationary source of noise).

The current City of Toronto noise bylaw sets out specific rules for noise depending on the location and time of day. The bylaw covers a variety of noise sources including amplified sound, construction noise and general noise. The bylaw regulates types of noise not covered in other regulations, and includes provisions for quiet zones and times. Other common sources of noise such as transportation, rail, industrial and workplace noise are regulated through provincial or federal instruments.

Mitigation Best Practice

There are a number of strategies available to help mitigate impacts from environmental noise. Land-use planning is a preferred choice, which includes separating loud land uses from sensitive ones and site design and building layouts that site sleeping areas away from noise sources. In developed urban environments this option is not always available to planners.

Controlling the noise at the source would be the next best choice in mitigation practice. This can include enclosing it, use of silencers or mufflers, and limiting the times of operation. Amplified sound for events such as large scale concerts or outdoor events, noise leakage can be

mitigated through specific time limitation, speaker layout and design and other noise insulation strategies, such as soundproofing or using tents.

Creating barriers to reduce the amount of sound that reaches the receiver is also a common approach. This includes noise barriers, setback requirements, and mounds and trenches. Controls on the receiver of the noise generally are related to building design, such as sound insulation, window glazing, and enclosed balcony to buffer noise. Codes may require stronger attenuation requirements for buildings near major noise sources to reduce the intrusion on occupants.

Many jurisdictions have noise level limits for road noise which may vary according to the adjacent land use. Most commonly limits are between 55-70 dBA, for daytime road traffic noise levels near residential land uses. In addition to physical noise barriers, walls and buffers for traffic noise, dynamic traffic management has been suggested as an effective mitigation strategy. This could include traffic restrictions around vulnerable populations (schools, hospitals), reduced nighttime vehicle operations, coordinated traffic signals, and street design that favours non-automobile uses. Higher vehicle speeds results in higher road noise; for example, there is an effective doubling of noise levels from 30km/h to 50km/h (Department of Transportation, 1998). Updates in paving materials can create smoother surfaces and thus result in less road noise.

The way things are built and the materials used can have a large impact on the noise levels being produced from all sources of environmental noise. For example, wheel and tire design and materials can lower noise levels by 2-15 dBA; new paving materials can reduce road noise; and, the electrification of cars, buses, trains and trucks are expected to reduce traffic noise.

Some construction noise levels can be reduced through method and equipment choices, noise barriers and scheduling both time of day and limiting the number of concurrent noise sources. Generally electric versions of small equipment are quieter than their gas powered counterparts. The requirement for noise ratings and labelling can encourage and facilitate the purchase of and use of more quiet equipment.

The European Union noise directive (European Commission, 2002) requires urban areas with population of over 100,000 to assess their noise environment on a regular basis, including the impact road, rail, and airport noise. Municipalities are also required to develop noise management action plans in consultation with the public. These plans cover the exposure to environmental noise, prevention and reduction strategies and preserving environmental noise quality where levels are good¹. A review of this requirement has found this practice effective as it has brought attention to the importance of noise as a public health risk (European Commission, 2016).

¹ For a Step by step approach for developing noise Action Plans, see Kloth, M and colleagues (2008) <http://www.noiseineu.eu/fr/3527-a/homeindex/file?objectid=3161&objectypeid=0>

Conclusions

The health impacts associated with environmental noise are both acute and chronic in nature. In addition to noise-induced hearing loss, there is growing body of evidence that shows an association between environmental noise and health impacts including cardiovascular disease cognitive impairment in adults and children, sleep disturbance and mental health impacts. Emerging evidence suggests that exposure to environmental noise could lead to adverse pulmonary effects increased mortality from diabetes, and negative impact on behaviour in children.

The health evidence suggests that older adults and young children may be more at risk. Furthermore, in Toronto lower income populations who are already experience poorer health are also more likely exposed to more noise than people with higher income.

Results of the noise monitoring and modelling study indicate that noise levels in Toronto are above the World Health Organization's limits for both daytime and nighttime exposure, and thus likely to contribute to the burden of illness in the city. Given the ubiquitous nature of this exposure a comprehensive approach to noise management in the city will be required to effectively limit unnecessary exposure to noise and ensure that noise exposures do not increase over time.

Approaches that can be used to reduce exposure to noise include choosing technologies that are quieter, setting planning requirements, adopting improved building codes, implementing traffic management measures, and prescribing limits and noise mitigation measures in the noise bylaw.

Given that almost 60% of the noise in Toronto can be attributed to traffic noise, implementing measures to reduce exposure to noise from transportation sources should be a priority. Maintaining a quality outdoor noise environment will contribute to better health and wellbeing. Not only will such an environment promote it a more active lifestyle (walking, cycling and active recreation), which can reduce noise levels from transportation, it will also contribute to a reduction in the risk of chronic disease, making Toronto a healthier city for all.

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Appendix: Health Impacts of Environmental Noise Exposure: Literature Review Evidence Summary Table

Reference	Noise Source	Adjustment for Air Pollution	Noise Detail	Threshold, or Mean and Range measured, or Lowest effect level (as available)	Findings
Cardiovascular mortality (overall)					
Recio et al., 2016	All	Yes	Leq night (0-8h)	Mean (SD) = 60.2 (1.0) Range = 56.2 – 69.9 dB(A)	RR = 1.033 (95% CI: 1.017, 1.049) per 1 dB(A) increase in Leqn at lag 0, ≥ 65 age
					RR = 1.050 (95% CI: 1.004, 1.098) per 1 dB(A) increase in Leqn at lag 0, < 65 years of age
Myocardial infarction morbidity or mortality					
Recio et al., 2016	All	Yes	Lmax night (0-8h)	Mean (SD) = 63.9 (1.7) Range = 58.7 - 76.3 dB(A)	RR = 1.035 (95% CI: 1.011,1.061) (mortality rate of myocardial infarction) per 1 dB(A) increase in Lnmax at lag 0, ≥ 65 age
			Leq night (0-8h)	Mean (SD) = 60.2 (1.0) Range = 56.2 – 69.9 dB(A)	RR = 1.11 (95% CI: 1.042,1.192) (mortality rate of myocardial infarction) per 1 dB(A) increase in Leqn at lag 0, < 65 years of age
Sorensen et al., 2012	Road	Yes	Lden	Range = 42–84 dB	IRR = 1.12 (myocardial infarction) per 10 dB(A) increase for both yearly exposure at the time of diagnosis (95% CI: 1.02, 1.22) and 5 years, time-weighted mean (95% CI: 1.02, 1.23) preceding the diagnosis
Seidler et al., 2016a	Road	No	Leq (24h) The evaluation was performed on the basis of the	Increased risk estimates can be seen starting from a road traffic noise level of 55 dB. The	OR = 1.028 (95% CI: 1.25, 4.5) per 10 dB(A) increase in Leq (24h) (myocardial infarction)

			continuous 24-hour noise level and the categorized noise level (in 5 decibel classes).	OR reaches statistical significance at a noise level between 60 dB and <65 dB (OR = 1.09 (95% CI: 1.02, 1.16)); the highest OR of 1.13 (95% CI: 1.00, 1.27) is found with a 24-hour continuous noise level ≥ 70 dB. For night-time hours between 10 p.m. and 6 a.m., the risk increases when road traffic noise increases above 50 dB (statistically significant in some cases).	
	Rail			For rail traffic, in the 50 to <55 dB category there is a statistically borderline significantly raised OR of 1.05 (95% CI: 1.00, 1.10); in the 55 to <60 dB category the OR is 1.04 (95% CI: 0.97, 1.12); while in the highest sound level category, 70 dB and upwards, the OR is 1.16 (95% CI: 0.93, 1.46). For night-time hours from 10 p.m. to 6 a.m, the ORs begin to rise notably at noise levels of ≥ 60 dB (OR = 1.10 (95% CI: 1.01, 1.20)).	OR = 1.023 (95% CI: 0.5, 4.2) per 10 dB(A) increase in Leq (24h) (myocardial infarction)
Hypertensive heart disease					

Babisch et al., 2014a	Road	Yes	<p>Lden</p> <p>Unit scale was 10 dB(A). For graphical presentation of the results the noise levels were categorized in 5-dB(A) categories using ≤45 dB(A) as a reference category [noise level categories: ≤ 45, 46–50, 51–55, 56–60, 61–65, ≥ 66 dB(A)].</p>	Range = 31–80 dB(A)	OR = 1.43 (95% CI: 1.10, 1.86) per 10 dB(A) increase in Lden (isolated systolic hypertension)
Seidler et al., 2016b	Road	No	<p>Leq (24h)</p> <p>For all continuous analyses, a starting point of 35 dB was chosen for noise in the range virtually indiscernible from background noise, below 40 dB.</p>	The categorical analysis showed a nearly monotonous risk increase, reaching statistical significance from 55 dB upwards.	OR = 1.024 (95% CI: 1.016, 1.032) per 10 dB(A) increase in Leq (24h) (hypertensive heart failure)
	Rail		<p>The continuous sound levels for each traffic noise source were grouped in 5 dB categories.</p>		OR = 1.031 (95% CI: 1.022, 1.041) per 10 dB(A) increase in Leq (24h) (hypertensive heart disease)
	Aircraft		<p>For the analysis of road and railway traffic noise, cases and control subjects with noise exposure of less than 40 dB were grouped into the reference category.</p> <p>For the analysis of aircraft noise, individuals exposed to a continuous sound pressure level below 40 dB with the nightly maximum level exceeding 50 dB six or more times (NAT 6) were grouped into a</p>	<p>In the categorical analysis, the OR was significantly elevated to 1.07 (95%CI 1.04–1.09) at 45 to <50 dB sound levels.</p> <p>For individuals with 24-h continuous aircraft noise levels <40 dB and nightly maximum aircraft noise levels exceeding 50 dB six or more times, a significantly increased risk was observed.</p>	OR = 1.016 (95% CI: 1.003, 1.030) per 10 dB(A) increase in Leq (24h) (hypertensive heart disease)

			separate exposure category.		
Banerjee et al., 2014	Road	No	Lden Noise exposure was grouped into two categories (<60 dB(A)) according to the facade Lden levels. The choice of 60 dB(A) as cutoff point was due the fact that, firstly, it was close to the median Lden value (62.5 dB(A)) and, secondly, most studies have reported 60 dB(A) for similar investigations.	>65 dB(A) Lden (for men) >60 dB(A) Lden (for women)	OR = 1.99 (95% CI: 1.66, 2.39) per 5 dB(A) increase in Lden (hypertension)
Foraster et al., 2014	Road	Yes	Lnight	Median indoor sound modelled = 27.1 dB(A)	OR = 1.06 (95% CI: 0.99, 1.13) per 5 dB(A) increase in Lnight (hypertension)
				Median sound modeled at bedroom façade = 53.5 dB(A)	OR = 1.07 (95% CI: 1.01, 1.14) per 5 dB(A) increase in Lnight (hypertension)
				Median sound modeled outdoors = 56.7 dB(A)	OR = 1.19 (95% CI: 1.02, 1.40) per 5 dB(A) increase in Lnight (hypertension)
Ischemic heart disease morbidity and mortality					
Recio et al., 2016	All	Yes	Lmax night (0-8h)	Mean (SD) = 63.9 (1.7) Range = 58.7 - 76.3 dB(A)	RR = 1.029 (95% CI: 1.010, 1.048) (mortality rate of ischemic heart disease) per 1 dB(A) increase in Lnmax at lag 0, ≥ 65 age
			Leq night (0-8h)	Mean (SD) = 60.2 (1.0) Range = 56.2 – 69.9 dB(A)	RR = 1.108 (95% CI: 1.042, 1.177) (mortality rate of ischemic heart disease) per 1 dB(A) increase in Leqn at lag 0, < 65 years of age

Sorensen et al., 2011a	Road	Yes	Lden Linear and categorical analyses performed with seven noise exposure categories (55–58, 58–61, 61–64, 64–67, 67–70, 70–73, and >73 dB) and a reference category (≤55 dB). 55 dB used as the reference because this is often the limit value for noise in outdoor residential areas, and used exposure categories of 3 dB because this difference is a doubling in acoustical energy. IRRs were calculated for above and below 64.5 years of age, corresponding to the median age at stroke diagnosis among the cases.		IRR = 1.14 (95% CI: 1.03, 1.25) (ischaemic stroke) per 10 dB increase in Lden
				Mean exposure < 64.5 years = 57.8 dB Mean exposure ≥ 64.5 years = 58.2 dB	IRR = 1.27 (95% CI: 1.13, 1.43), (ischaemic stroke) per 10 dB increase in Lden, ≥ 64.5 years of age
Systolic blood pressure					
Foraster et al., 2014	Road	Yes	Ln _{night}	Median indoor sound modelled = 27.1 dB(A)	β = 0.72 (95% CI: 0.29, 1.15) per 5 dB(A) increase in Ln _{night} (systolic blood pressure)
Cerebrovascular disease morbidity or mortality					
Recio et al., 2016	All	Yes	L _{max} night (0-8h)	Mean (SD) = 63.9 (1.7) Range = 58.7 - 76.3 dB(A)	RR = 1.024 (95% CI 1.001,1.048) (mortality rate of cerebrovascular disease) per 1 dB(A) increase in Ln _{max} at lag 0, ≥ 65 age
Sorensen et al., 2011a	Road	Yes	Lden Linear and categorical analyses performed with seven noise exposure categories (55–58, 58–61, 61–64, 64–67, 67–70, 70–73, and >73 dB) and a		IRR = 1.14 (95% CI: 1.03, 1.25) (ischaemic stroke) per 10 dB increase in Lden

			reference category (≤ 55 dB). 55 dB used as the reference because this is often the limit value for noise in outdoor residential areas, and used exposure categories of 3 dB because this difference is a doubling in acoustical energy.		
			IRRs were calculated for above and below 64.5 years of age, corresponding to the median age at stroke diagnosis among the cases.	Mean exposure < 64.5 years = 57.8 dB(A) Mean exposure \geq 64.5 years = 58.2 dB(A)	IRR = 1.27 (95% CI: 1.13, 1.43), (ischemic stroke) per 10 dB increase in Lden, \geq 64.5 years of age
Coronary heart disease mortality					
Gan et al., 2011	Road	Yes	Lden Continuous variable to calculate the relative risks of CHD mortality associated with a 10-dB(A) elevation in noise levels and categorical variable to examine exposure-response relations by dividing study subjects into deciles based on noise levels	Mean (SD) = 63.4 (5.0) Range = 33.0 – 90.0 Median (Interquartile Range) = 62.4 (59.8–66.4)	RR = 1.13 (95% CI: 1.06, 1.21) per 10 dB(A) increase in Lden (Coronary Heart Disease mortality when adjusting for PM _{2.5})
					RR = 1.29 (95% CI: 1.11, 1.50) per 10 dB(A) increase in Lden, noise > 70 dB(A) (Coronary Heart Disease mortality when adjusting for PM _{2.5})
					RR = 1.09 (95% CI: 1.01, 1.18) per 10 dB(A) increase in Lden (Coronary Heart Disease mortality when adjusting for PM _{2.5} and black carbon)
					RR = 1.22 (95% CI: 1.04, 1.43) per 10 dB(A) increase in Lden, noise > 70 dB(A) (Coronary Heart Disease mortality when adjusting for

					PM _{2.5} and black carbon)
Cognitive impairment (children)					
Pujol et al., 2013	All	No	The school average outdoor L _{Aeq, day} was selected for analysis.	Mean (SD) = 51.5 (4.5) Range = 38 – 58 dB	$\beta = -0.44$ (95% CI: -0.85, -0.02) (Math test scores) per 10 dB increase in L _{Aeq, day} , ages 8-9 $\beta = -0.44$ (95% CI: -0.85, -0.02) (French test scores) per 10 dB increase in L _{Aeq, day} , ages 8-9
van Kempen et al., 2012	Road	Yes	Leq (7-23h)	Mean (SD) = 48.7 (8.6) Range = 34.0 – 62.0	$\beta = 0.30$ (95% CI: 0.10, 0.50) (Attention scores: SAT, arrow)
	Aircraft			Mean (SD) = 48.6 (7.1) Range = 36.3 – 62.8	$\beta = 0.92$ (95% CI: -0.02, -1.850) (Attention scores: SAT, switch)
Matheson et al., 2010	Road	No	Leq16h	Range = 32 to 71 dB	$\beta = 0.065$ (95% CI: 0.02, 0.11) (conceptual recall) per 5 dB(A) Leq16h increase, 8-10 years of age
Sleep disturbance					
Chum et al, 2015	Road	Used local traffic data (together with noise as a control variable) as a proxy for air pollution (common in other studies)	Self-reported level of noise disturbance	Neither agree or disagree - disturbed by noise at home	OR = 1.13 (95% CI: 1.01, 1.28) (≤ 6 vs. 7 hrs sleep)
				Agree - disturbed by noise at home)	OR = 1.66 (95% CI: 1.39, 1.98) (≤ 6 vs. 7 hrs sleep)
				Strongly agree - disturbed by noise at home	OR = 2.24 (95% CI: 1.77, 2.84) (≤ 6 vs. 7 hrs sleep)
				Disagree -disturbed by noise at home	OR = 1.15 (95% CI: 1.00, 1.31) (any vs. none: sleep problems)
				Neither agree or disagree - disturbed by noise at home	OR = 1.84 (95% CI: 1.65, 2.04) (any vs. none: sleep problems)
				Agree - disturbed by noise at home	OR = 2.74 (95% CI: 2.25, 3.34) (any vs. none: sleep problems)




				Strongly agree - disturbed by noise at home	OR = 3.03 (95% CI: 2.26, 4.07) (any vs. none: sleep problems)
Schreckenberg et al., 2010	Aircraft	No	L _{Aeq} , 16h	Sleep quality is worst for residents exposed to 50 to 60 dB(A) at daytime and 50 to 55 dB(A) at night-time than for residents with less or higher noise exposure.	OR = 0.95 (95% CI: 0.93, 0.97) (bad sleep quality)
Annoyance among adults					
Dratva, et al., 2010	Road		Self-Reported Noise Exposures	The degree of noise annoyance was measured by a thermometer scale ranging from 0 (not at all) to 10 (strong and unbearable, Fig. 2) [10, 37–39]. We created a dichotomous noise annoyance variable, defining high noise annoyance as a value of >6 on the original 11-point scale, similar to the dichotomization presented by Li et al. and Conzelmann-Auer et al. [10, 37].	OR = 0.42 (95% CI: 0.24, 0.74) (high annoyance), countryside vs. heavy traffic location
					OR = 1.82 (95% CI: 1.38, 2.39) (high annoyance), moderate vs. light traffic
					OR = 1.46 (95% CI: 1.09, 1.95) (high annoyance), infrequent truck noise vs. no truck noise
					OR = 3.20 (95% CI: 2.17, 4.82) (high annoyance), constant truck noise vs. no truck noise
de Kluizenaar et al., 2011	Road	No	L _{den} (without quiet side dwelling) <45 defined as reference category	45 – 50 dB(A)	OR = 1.19 (95% CI: 1.03, 1.39)
				45 – 52.5 dB(A)	OR = 1.26 (95% CI: 1.09, 1.44)
				50 – 55 dB(A)	OR = 1.74 (95% CI: 1.47, 2.05)
				52.5 – 57.5 dB(A)	OR = 2.23 (95% CI: 1.87, 2.66)
				55 – 60 dB(A)	OR = 2.75 (95% CI: 2.27, 3.34)
				57.5 – 62.5 dB(A)	OR = 3.83 (95% CI: 3.09, 4.74)
				>60 dB(A)	OR = 6.93 (95% CI: 5.65, 8.50)
				>62.5 dB(A)	OR = 8.00 (95% CI: 6.30, 10.16)
			L _{den} (with quiet side dwelling)	50 – 55 dB(A)	OR = 1.63 (95% CI: 1.25, 2.13)

			<45 defined as reference category	52.5 – 57.5 dB(A)	OR = 2.05 (95% CI: 1.67, 2.52)
				55 – 60 dB(A)	OR = 2.38 (95% CI: 1.99, 2.84)
				57.5 – 62.5 dB(A)	OR = 2.96 (95% CI: 2.52, 3.48)
				>60 dB(A)	OR = 5.30 (95% CI: 4.63, 6.07)
				>62.5 dB(A)	OR = 6.54 (95% CI: 5.64, 7.58)
Chronic obstructive pulmonary disease mortality					
Recio et al., 2016	All	Yes	Lmax night (0-8h)	Mean (SD) = 63.9 (1.7) Range = 58.7 - 76.3 dB(A)	RR = 1.04 (95% CI: 1.010, 1.070) (mortality rate of Chronic Obstructive Pulmonary Disease) per 1 dB(A) increase in Lnmax at lag 1 , ≥ 65 age
Pneumonia mortality					
Recio et al., 2016	All	Yes	Lmax night (0-8h)	Mean (SD) = 63.9 (1.7) Range = 58.7 - 76.3 dB(A)	RR = 1.03 (95% CI: 1.002, 1.058) (mortality rate of pneumonia) per 1 dB(A) increase in Lnmax at lag 1 when NO2 > 30µg/m³, ≥ 65 age
Diabetes mortality					
Recio et al., 2016	All	Yes	Leq night (0-8h)	Mean (SD) = 60.2 (1.0) Range = 56.2 – 69.9 dB(A)	RR = 1.11 (95% CI: 1.040, 1.192) (mortality rate of diabetes) per 1 dB(A) increase in Leqn at lag1, ≥ 65 age
Depression					
Orban, et al., 2016	Road	No	Lden High noise exposure was defined as annual mean 24-hr noise levels > 55 dB(A) (High noise at night was also defined as >50 dB(A) Lnight and in general had similar associations)		RR = 1.29 (95% CI: 1.03, 1.62) (high depressive symptoms), middle-age
Quality of Life scores					

Schreckenberget al., 2010	Aircraft	No	L _{Aeq} , 16h	HQoL with regard to vitality and mental health decreases with increasing aircraft sound level at daytime from <45 dB(A) up to the sound level class 50–55 dB(A), but then increases again for residents exposed to higher sound level classes at daytime.	OR = 0.95 (95% CI: 0.93, 0.97) (vitality)
					OR = 0.96 (95% CI: 0.94, 0.98) (mental health)
Adverse behaviour among children					
Hjortebjerg et al., 2016	Road	Yes	Time-weighted mean exposure from birth to 7 years of age	For time-weighted mean exposure from birth to 7 years of age, estimated that a 10-dB higher exposure to road traffic noise was associated with a 7% increase in abnormal total difficulties scores (95% CI: 1.00, 1.14) (Table 2), which seemed to follow a monotonic exposure–response relationship until 60–65 dB, after which the curve leveled off (Figure 1A).	RR per 10 dB(A) increase (age 7, exposure from birth) = <ul style="list-style-type: none">• 1.07 (95% CI: 1.00, 1.14) (abnormal vs. normal total difficulties)• 1.05 (95% CI: 1.00, 1.10) ("borderline and abnormal hyperactivity")• 1.09 (95% CI: 1.03, 1.18) ("borderline and abnormal inattention")• 1.05 (95% CI: 0.98, 1.14) ("abnormal conduct problems")• 1.06 (95% CI: 0.99, 1.12) ("peer relationship problems")
	Rail			≤ 60 dB In the cohort as a whole, exposure to railway noise ≤ 60 dB at the time of birth was positively associated with abnormal emotional	OR = 1.11 (95% CI: 1.00, 1.23) (abnormal emotional symptom scores), exposure at time of birth

				<p>symptom scores (OR = 1.11; 95% CI: 1.00, 1.23 compared with unexposed children) but this outcome was not associated with railway noise > 60 dB (OR = 1.01; 95% CI: 0.83, 1.22).</p>	
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 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
FINANCE DEPARTMENT

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Ben Themens, Director of Finance

Subject: 2020 Project Plan – Funding Appropriations #2068 – #2075 and Bylaws No.8803 and No.8804

Date: October 14, 2020 File No: 05-1705-30-0019/2020

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

RECOMMENDATION:

PURSUANT to the report of the Director of Finance, dated October 14, 2020, entitled "2020 Project Plan – Funding Appropriations #2068 – #2075 and Bylaws No.8803 and No.8804":

THAT (Funding Appropriation #2068) an amount of \$288,073 be appropriated from the Tax Sale Land Interest Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2069) an amount of \$15,000 be appropriated from the General Building Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2070) an amount of \$47,968 be appropriated from the General Equipment Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2071) an amount of \$39,140 be appropriated from the Justice Administration Building Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2072) an amount of \$1,512,200 be appropriated from the Civic Amenity Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2073) an amount of \$1,387,713 be appropriated from the Annual Budget –Transfer to General Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2074) an amount of \$484,500 be appropriated from the General Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT (Funding Appropriation #2075) an amount of \$12,500 be appropriated from the Sustainable Transportation Reserve Fund for the purpose of funding the 2020 Project Plan;

THAT “Development Cost Charge (Parks) Reserve Fund Bylaw, 2020, No. 8803” (2020 Project Plan Funding) a Bylaw to appropriate an amount of \$99,000 from DCC (Parks) Reserve Fund to fund 2020 Project Plan, be considered;

THAT “Development Cost Charge (Transportation) Reserve Fund Bylaw, 2020, No. 8804” (2020 Project Plan Funding) a Bylaw to appropriate an amount of \$118,800 from DCC (Transportation) Reserve Fund to fund 2020 Project Plan, be considered;

AND THAT should any of the above amounts remain unexpended as at December 31, 2023, the unexpended balances shall be returned to the credit of the respective fund.

ATTACHMENT

1. 2020 Project Budget Funding Allocation Detail by Source (CityDoc # [1966821](#))
2. Preliminary Bylaw No. 8803 (CityDoc # [1966665](#))
3. Preliminary Bylaw No. 8804 (CityDoc # [1966659](#))
4. 2020 Project Sheets (CityDoc # [1967005](#))
5. Information Report from the Manager-Public Realm Infrastructure, entitled “Priority Mobility Network Improvements”, dated October 14,2020 (CityDoc # [1967059](#))

DISCUSSION

These projects are deemed essential. The attached Project Sheets (**Attachment 4**) provide additional information regarding each project.

FINANCIAL IMPLICATIONS

Funding is included in the 2020 Project Budget or has been made available from completed projects and is available for appropriation.

RESPECTFULLY SUBMITTED



Ben Themens
Director of Finance

**2020 PROJECT BUDGET
FUNDING ALLOCATION
DETAIL BY SOURCE**

Attachment 1

Funding from Reserves

Tax Sale Land Reserve Fund - Interest - Appropriation # 2068

Manager

Living City Tree Planting Program	96,073	Bench, Craig
Integrated Survey Monument Update	35,000	Matsubara, David
Great Streets - Corridor Studies	75,000	Draper, Jennifer
Community Recreation Strategy	67,000	Reinhold, Heather
CNV4ME - School The City Implementation	15,000	Herman, Leah
	288,073	

Total Tax Sale Land Reserve Fund - Interest - Appropriation # 2068

288,073

General Building Reserve Fund - Appropriation # 2069

Maintenance & Replacement for Civic Centre	15,000	Roy, Joel
	15,000	

Total General Building Reserve Fund - Appropriation # 2069

15,000

General Equipment Replacement Fund - Appropriation # 2070

Gerry Brewer Furniture	47,968	Roy, Joel
	47,968	

Total General Equipment Replacement Fund - Appropriation # 2070

47,968

Justice Administration Building Fund - Appropriation # 2071

Maintenance & Replacement for Gerry Brewer Building	39,140	Roy, Joel
	39,140	

Total Justice Administration Building Fund - Appropriation # 2071

39,140

Civic Amenity Reserve Fund - Appropriation # 2072

Upper Levels Greenway - Lonsdale to Lynn Valley Road	50,500	Magnusson, Karyn
Semisch Greenway (W3rd to Semisch Park)	50,500	Vasilevich, Adam
Public School Playground Funding	150,000	Vasilevich, Adam
Priority Mobility Network Improvements	850,000	Hall, Justin
New Street Activation	25,000	Hall, Justin
Moodyville Traffic Signals	121,200	Kuzmanovski, Kliment
Micro Mobility (E-Bike Docking)	50,000	Hall, Justin
Mahon Park Beach Volleyball	35,000	Hunter, Michael
Central Lonsdale Wayfinding	30,000	Hall, Justin
Active Transportation Wayfinding Program	150,000	Hall, Justin
	1,512,200	

Total Civic Amenity Reserve Fund - Appropriation # 2072

1,512,200

Annual Budget - Transfer to General Reserve - Appropriation # 2073

Wooden Bridge and Stair Replacement	25,000	Priestley, Derek
St. Andrews Park Infrastructure Replacement	300,000	Vasilevich, Adam
Room Divider Replacement	135,000	Roy, Joel
Mickey McDougall Community Recreation Centre	10,000	Houg, Gary
Maintenance & Replacement for Gerry Brewer Building	172,906	Roy, Joel
Maintenance & Replacement for Civic Library	89,880	Roy, Joel

**2020 PROJECT BUDGET
FUNDING ALLOCATION
DETAIL BY SOURCE**

Maintenance & Replacement for City Owned/Non-City Used Buildings Living	26,000	Roy,Joel
City Tree Planting Program	23,927	Bench, Craig
Greenwood Park Trail and Forest Restoration	250,000	Vasilevich,Adam
Furniture and Equipment	107,000	Roy,Joel
CNV Website Refresh	50,000	Sweeney,Edward
Chafer Beetle Turf Restoration	45,000	Priestley, Derek
Centennial Theatre	35,000	Houg, Gary
Automated Traffic Counters	50,000	Kuzmanovski,Kliment
Automated Materials Handling & RFID System Replacements	18,000	Koep,Deborah
Parks Furnishings and Signage (Previously appropriated:\$20,000)	15,000	Hunter, Michael
John Braithwaite Community Centre (Previously appropriated:\$40,000)	35,000	Houg, Gary
	<u>1,387,713</u>	

Total Annual Budget - Transfer to Gen Reserve Fund - Appropriation # 2073	1,387,713
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General Reserve - Appropriation # 2074

Traffic Signal Pre-Emption for Fire Emergency Vehicles	80,000	Kuzmanovski,Kliment
Street Banner And Furnishing Program	5,000	Klochnyk,Jeff
Open Data & GIS 3D Modeling	120,000	Sweeney,Edward
Mobility Plan	100,000	Draper,Jennifer
INSTPP Implementation (Previously appropriated:\$75,000)	87,500	Devlin,Andrew
Bus Speed and Reliability	50,000	Kuzmanovski,Kliment
Bicycle Master Plan Update & Bicycle Route Conceptual Design	30,000	Watson, Daniel
Harry Jerome Complex - Major Repairs (Previously appropriated:\$25,000)	12,000	Houg, Gary
	<u>484,500</u>	

Total General Reserve Fund - Appropriation # 2074	484,500
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Sustainable Transportation Reserve Fund - Appropriation # 2075

INSTPP Implementation (Previously known as North Shore Transportation Improvements)	<u>12,500</u>	Devlin,Andrew
	12,500	

Total Sustainable Transportation Reserve Fund - Appropriation # 2075	12,500
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Parks DCC Fund - Bylaw 8803

Upper Levels Greenway - Lonsdale to Lynn Valley Road	49,500	Magnusson,Karyn
Semisich Greenway (W3rd to Semisich Park)	<u>49,500</u>	Vasilevich,Adam
	99,000	

Total Parks DCC Fund - Bylaw 8803	99,000
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Transportation DCC Fund - Bylaw 8804

Moodyville Traffic Signals	<u>118,800</u>	Kuzmanovski,Kliment
	118,800	

Total Transportation DCC Fund - Bylaw 8804	118,800
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Total Funding From Reserves	4,004,894
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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8803

**A Bylaw to authorize the expenditure of monies from the
Development Cost Charge (Parks) Reserve Fund
for the 2020 Project Plan Appropriations.**

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

AND WHEREAS the development of park land is a capital cost permitted to be paid using Development Cost Charge funds under Section 566 of the *Local Government Act*;

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

1. This Bylaw shall be known and cited for all purposes as “**Development Cost Charge (Parks) Reserve Fund Bylaw, 2020, No. 8803**” (2020 Project Plan Funding).
2. The following amounts are hereby appropriated from the Development Cost Charge (Parks) Reserve Fund for the purpose of funding:
 - A. \$49,500 for the “Semisch Greenway (West 3rd Street to Semisch Park)” project; and
 - B. \$49,500 for the “Upper Levels Greenway – Lonsdale Avenue to Lynn Valley Road” project.

READ a first time on the <> day of <>, 2020.

READ a second time on the <> day of <>, 2020.

READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8804

**A Bylaw to authorize the expenditure of monies from the
Development Cost Charge (Transportation) Reserve Fund
for the 2020 Project Plan Appropriations.**

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

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

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

1. This Bylaw shall be known and cited for all purposes as “**Development Cost Charge (Transportation) Reserve Fund Bylaw, 2020, No. 8804” (2020 Project Plan Funding)**.”
2. The following amount is hereby appropriated from the Development Cost Charge (Transportation) Reserve Fund for the purpose of funding:
 - A. \$118,800 for the “Moodyville Traffic Signals” project.

READ a first time on the <> day of <>, 2020.

READ a second time on the <> day of <>, 2020.

READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

Project Name:	Living City Tree Planting Program											2020 - 2029 Project Plan		
Department:	Engineering: Streets											Project Type:	On-Going Program/Project	
Project Manager:	Craig Bench											Date:	4-Jul-19	Base Program
Description:	Implementation of the Capital Street Tree Planting program as per the Street Tree Master Plan. This is a 50% increase over past years and is all that can be achieved without triggered more staff/ vehicles etc.													
Purpose:	To plant trees on streets which currently have few or no street trees and provide street trees on present and future greenways, bike routes and pedestrian corridors. The master plan will guide implementation in terms of species selection and tree type to be planted.													
Alignment With Official Community Plan:	4.1.3 Increase the City's resilience to future impacts of climate change through proactive implementation of adaptation measures; 4.2.1 Maintain and enhance the biodiversity and ecological health in the City; 4.2.12 Sustain and expand the urban forest through sound management strategies which enhance their potential as carbon sinks while increasing the health, diversity and resiliency of the City's natural areas.													
Strategic Plan :	This project will contribute to creating a Livable City by accelerating the expansion of the urban tree canopy.													
Outcome: (Customer Satisfaction)	Increased number of street trees, reduction in CO2 in the air, more leafy, shaded streets.													
Impact If Project Does Not Proceed:	Increase in the number of trees will happen more gradually, only with new developments. Benefits to air quality, aesthetics and GHG reductions will not be realized.													
External Funding :	<div style="display: flex; justify-content: space-between;"> <i>Other Contribution</i> <i>Unsecured Contribution</i> Specify Funding Agency/Program: BC Hydro </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Use of fuel to transport trees, plant trees with the equipment used to plant them. Increasing sequestration of GHG with the growth of newly planted trees. Realize significant carbon off-sets through the planting of street trees thus supporting the City in attaining its GHG reduction targets.													
Milestones:	Approximately 170 trees planted per year with two years of watering and follow-up maintenance (pruning, weeding, fertilizing) per tree.											Director Approval: Approved by D. Pope November 20, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements														
City Funding (Fund Appropriation)	\$ 377,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000	\$ 1,200,000		
External Funding/Contributions	\$ 37,300	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 50,000		
Total Project Expenditures	\$ 414,300	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 125,000	\$ 1,250,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		3%	3%	3%	3%	3%	3%	3%	3%	3%	3%			
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
Expenses net of recoveries (Include staffing)	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	4,000		
Total	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	\$ (4,000)	(4,000)		
Staffing (FTE)														
Regular	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Integrated Survey Monument Update											2020 - 2029 Project Plan		
Department:	Engineering: Streets											Project Type:	Maintenance & Replacement	
Project Manager:	David Matsubara											Date:	4-Jul-19	Base Program
Description:	The City operates a network of integrated survey monuments that support infrastructure and development projects and are used to help maintain the City's mapping systems and construction quality control. In 2013, the Province revised the survey vertical datum, and the City needs to re-survey all of the monuments to a high level of precision to adapt to the new datum. The budget will support the use of high precision GPS survey equipment and provision of auxiliary staff to support the group during the project													
Purpose:	To update and keep the City's survey monument system current with Province standards													
Alignment With Official Community Plan:	Chapter 8 Municipal Services & Infrastructure (provide the community with public infrastructure that protects the natural environment at an affordable cost); Chapter 2 Transportation, Mobility & Access (support a safe, accessible, resilient and affordable transportation system).													
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all.													
Outcome: (Customer Satisfaction)	The update of survey monuments would support both internal and external City projects for a smoother and more reliable mapping and spatial tracking of projects													
Impact If Project Does Not Proceed:	The survey monument system will fall further behind standards and there will be greater chances of errors in using two datums.													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.														
Milestones:												Director Approval: Approved by D. Pope November 20, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
<u>Funding Requirements</u>														
City Funding (Fund Appropriation)	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,000		
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ -	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
<u>Impact on Operations/Maintenance</u> (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Great Streets - Corridor Studies											2020 - 2029 Project Plan		
Department:	Planning & Development: Transportation											Project Type:	One-Time Study	
Project Manager:	Jennifer Draper											Date:	4-Jul-19	New Initiative
Description:	Review of the zoning bylaw by establishing a street character classification system and integrated public realm design approach for responding to developments in a manner that connects the transportation needs of street to the landuse. Two major long-range corridor planning exercises will inform the ultimate bylaw updates: Main-Marine and Lonsdale-29th, both inclusive of long-term rapid transit services and intelligent integration of modes and emerging curbside management practices.													
Purpose:	1) Two recongize that streets are an important part of the character of the City and are not simply for the movement of people, vehicles and goods. 2) Provide clear guidance for new developments and capital projects by designing streets to meet a broader range of needs. 3) Implement a Great Streets vision and objectives for the City's two main transit corridors by guiding long-range transportation planning efforts.													
Alignment With Official Community Plan:	2.2.2 Strategically manage on-street and off-street transportation facilities to prioritize more sustainable forms of transportation through a variety of measures (e.g. providing bicycle end-of-trip facilities and pedestrian-level lighting, reducing parking developments in close proximity to transit, on-street pay parking, electric vehicle charging stations, and parking spaces for car-share, carpool and low-emission vehicles); 2.2.5 Optimize the use of the existing road network and consider roadway expansion only if it furthers the objectives of increasing sustainable means of transportation, or contributes to the overall livability of the neighbourhood; 2.1.5 Work with TransLink to improve accessibility to transit, complete projects identified in the 2040 North Shore Area Transit Plan, expand the Frequent Transit Network, provide rapid transit services on Marine Drive/3rd Street and Lonsdale/29th Street, and increase Seabus frequency; 2.1.6 Implement transit priority treatments such as signal coordination, bus bulges, intersection queue jumpers and dedicated bus lanes to reduce transit travel times and improve transit reliability; 2.3.5 Collaborate with neighbouring municipalities and other levels of government to improve the safety, security, accessibility and connectivity of the transportation system within the City and the North Shore; 2.3.6 Work with government, transit agencies and other partners to enhance the affordability of transit. 2.3.10 Coordinate with neighbouring municipalities and other levels of government on key road network improvements to facilitate pedestrian, cycling, transit, goods, emergency and vehicle movements in the City and the North Shore.													
Strategic Plan :	A Connected City - this project will complete Lonsdale Transit Corridor Study													
Outcome: (Customer Satisfaction)	Increased innovation and guidance for staff and developers to deliver leading street, public realm and development designs. Great Street vision and strategies for the City's two main transit corridors.													
Impact If Project Does Not Proceed:	Updated zoning bylaw work leading towards a unified code is dependant upon this project moving forward. Street character design will need to be considered individually for each capital project and development, not addressing our corporate objective of reducing development review times and reducing uncertainty for capital projects. Missed opportunities for significant external funding opportunities to support rapid transit services.													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: <small>Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily</small>	By promoting a sustainable transportation system that supports a compact, complete community and is safe, accessible, resilient, and affordable, the community's GHG emissions will decrease. Improving the level of service for Transit including reduced travel times, reduced wait times and providing a more reliable service will increase the competitiveness of Transit as a mode of Transportation. Residents using transit as a mode of transportation produce significantly less GHG's than those using automobiles.													
Milestones:	Project Launch Q4 2019											Director Approval: Approved by M. Epp November 21, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements														
City Funding (Fund Appropriation)	\$ 240,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000		
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ 240,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,000		
Overhead Staffing (Engineering/Facilities) <small>Specify as a percentage of funds appropriated</small>		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Impact on Operations/Maintenance <small>(Incremental to 2018 Base Year Operating Budget)</small>														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Community Recreation Strategy											
Department:	Strategic & Corporate Services											
Project Manager:	Heather Reinhold											
	<div style="display: flex; justify-content: space-between;"> <div> Project Type: Base Program </div> <div> 2020 - 2029 Project Plan Other Projects </div> </div>											
Description:	The Community Recreation Strategy will be undertaken in three phases: The initial phase will compile and summarize existing assets, confirm the City's recreation and community wellness vision and establish a decision making framework for prioritizing renewal, replacement and provision of amenities. The second and third phases will review, assess and prioritize indoor, outdoor and cultural amenities.											
Purpose:	To provide a decision-making framework to aid in the prioritization of the renewal, replacement and provision of recreational amenities - indoor, outdoor and cultural - city wide.											
Alignment With Official Community Plan:												
Strategic Plan :	A Vibrant City. The Community Recreation Strategy will help prioritize the renewal, replacement and provision of recreational and cultural services to provide diverse opportunities for engagement, social connection, recreation and community wellness.											
Outcome: (Customer Satisfaction)	The outcome will be the identification of goals and priorities which can be communicated to the public.											
Impact If Project Does Not Proceed:	Decreased ability for Council and staff to evaluate, prioritize and advance individual initiatives.											
External Funding :	<div style="display: flex; justify-content: space-between;"> <div>N/A</div> <div>N/A</div> <div>Specify Funding Agency/Program:</div> </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	The impacts on GHG will depend on objectives set within the plans											
Milestones:	Phase One: Inventory and framework (2019 / 2020) Phase Two: Review and prioritization of indoor recreational amenities (2019 / 2020) Phase Three: Review and prioritization of outdoor and cultural amenities (2021)										Director Approval: Approved by B. Pearce November 20, 2019	
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$	67,000	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 102,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 67,000	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 102,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Expenses net of recoveries	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
(Include staffing)	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	CNV4ME - School The City Implementation										
Department:	Community & Partner Engagement										
Project Manager:	<div style="display: flex; justify-content: space-between;"> <div> Leah Herman <small>Date: 4-Jul-19</small> </div> <div> Project Type: 2020 - 2029 Project Plan On-Going Program/Project Base Program </div> </div>										
Description:	To ensure the goals and objectives of the Council-adopted CNV4ME Strategy are met, a school and community based implementation project entitled 'School the City' (STC), was created and piloted in 2018/19. STC connects youth and educators to City Hall through workshops, projects and place based learning to provide feedback on municipal projects and plans, as well as generate ideas on how to make our City more inclusive from a Child, Youth and Family lens. Next steps: Promotion and Education. The next phase of STC will focus on promoting and implementing the program directly in City schools in collaboration with SD44, and identify inter-departmental opportunities at City Hall and early learning centres. Funding will go to cover consultant fees to deliver the program in schools, as well as act as a liaison between the City and the community - connecting municipal staff with young people to provide feedback on projects, policies and plans. A portion of these funds will also be used for printing, promotion and distribution costs of 'STC Activity Books and Toolkits' for City schools, as well as to implement a select number of ideas generated by students. In addition, the City has expanded it's partnership with Cinematheque to utilize film and smartphone technology to engage youth in CNV4ME and STC initiatives.										
Purpose:	To use the CNV4ME Strategy as the foundation to build out the community based project STC, and increase Child, Youth and Family friendliness in the City. To deliver place-based learning opportunities in the City that increase awareness of civic government and foster opportunities for civic engagement and connection. To strengthen our relationship with SD44 and community partners through working collaboratively on CNV4ME and STC. To utilize creative mediums such as film, placemaking, programs, workshops and inter-departmental opportunities at City Hall to implement, educate and promote CNV4ME and STC. To review and ensure progress reports on action items in the CNV4ME Strategy are achieved interdepartmentally and align with the pending Integrated Planning Strategies - Community Well-Being Strategy.										
Alignment With Official Community Plan:	The OCP contains a number of goals and objectives relating specifically to children, youth and families, including to: Promote an inclusive environment, reduce barriers and support the growth and development of young people to be active, self-reliant and empowered members of the community, and to support the pursuit of individual well-being and shared community needs, values and aspirations by community members from all ethnocultural backgrounds, ages and abilities through equal access to City services and resources and by fostering inclusion.										
Strategic Plan :	Aligns with A City for People and A Vibrant City, that are in part guided by the CNV4ME Child, Youth and Family Friendly Strategy. The School The City community based project supports the Strategic Plan's goal to enhance social connections and build a strong sense of belonging throughout the City; a City that is welcoming, inclusive, and supports the well-being of all.										
Outcome: (Customer Satisfaction)	Providing a forum for children, youth and families to become involved in shaping their communities, increases community well-being. Encouraging a highly collaborative environment in which community partners work together, we achieve positive outcomes for children, youth and families. Public satisfaction increases as citizens feel their input is included, valued and heard on civic issues, projects, plans and community spaces. Young families increasingly willing to settle, or remain settled in the City.										
Impact If Project Does Not Proceed:	With limited resources to progress, the Council-adopted CNV4ME Strategy and STC Community Program will have less capacity to build civic awareness early and increase participation in civic affairs. The potential decrease in engagement levels amongst this population group will have negative impacts on overall community well-being. Children, youth and families with decreased accessibility to a wide variety of programs, designed and delivered in ways that build community health and connection, will impact the City's vibrancy and livability.										
External Funding :	<div style="display: flex; justify-content: space-between;"> <div>N/A</div> <div>N/A</div> <div>Specify Funding Agency/Program:</div> </div>										
GHG Implications: <small>Discuss GHG considerations for all projects. Provide figures for Fleet</small>	The exact GHG implications will depend on the projects developed and implemented by the students. Increasing awareness of sustainable development, walkable and accessible neighbourhoods, active transportation, and how to live more sustainably in an urban setting can reduce GHG emissions.										
Milestones:	1- RFP circulated to hire consultants to deliver Pilot in-school program 2- Consultant selected 3- School workshops 4 – presentations and meetings at City Hall 2018 5- Applicable project(s) proposed by students presented 6 - STC Project Annual Report delivered to Council Nov 21, 2018 and STC implementation approved 7- presentations and meetings at City Hall 2019 8 -Hire consultant for 2019/20 implementation phase 7- Prepare School the City Toolkits and resources for distribution to City schools in SD44 8- Implementation of STC over 2019/21 8- Progress report on CNV4ME and STC Nov, 2019							Director Approval: <small>Approved by R. Skene November 20, 2019</small>			
2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements											
City Funding (Fund Appropriation) \$ 100,000	\$ 15,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	30,000
External Funding/Contributions \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total Project Expenditures \$ 100,000	\$ 15,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	30,000
Overhead Staffing (Engineering/Facilities) <small>Specify as a percentage of funds appropriated</small>	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance <small>(Incremental to 2018 Base Year Operating Budget)</small>											
<small>Revenues</small>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
<small>Expenses net of recoveries (Include staffing)</small>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Staffing (FTE)											
<small>Regular</small>	-	-	-	-	-	-	-	-	-	-	-
<small>Temporary</small>	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Maintenance & Replacement for Civic Centre											2020 - 2029 Project Plan
Department:	Facilities											Project Type:
Project Manager:	Joel Roy											Maintenance & Replacement
Description:	Planned equipment and component replacement and repair for Civic Centre.											
Purpose:	Maintenance and replacement of the current building system components											
Alignment With Official Community Plan:	Maintenance and replacement of the current building system components											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all.											
Outcome: (Customer Satisfaction)	Continue operation and preservation of the City's assets											
Impact If Project Does Not Proceed:	The continued deterioration of the value of the current assets. Unplanned building system component failures with the associated operational disruption											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	To deliver present and future programs at an appropriate public standard in an economical and environment friendly mode of operations and maintenance											
Milestones:											Director Approval: Approved by B. Pearce November 20, 2019	
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 927,497	\$ 222,560	\$ 252,520	\$ 342,400	\$ 38,520	\$ 56,710	\$ 51,360	\$ 54,570	\$ 70,620	\$ 32,100	\$ 38,520	\$ 1,159,880
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ 927,497	\$ 222,560	\$ 252,520	\$ 342,400	\$ 38,520	\$ 56,710	\$ 51,360	\$ 54,570	\$ 70,620	\$ 32,100	\$ 38,520	\$ 1,159,880
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Gerry Brewer Furniture											2020 - 2029 Project Plan
Department:	Facilities											Project Type:
Project Manager:	Joel Roy											On-Going Program/Project
	Date: 4-Jul-19											Base Program
Description:	2020 Budgetary provision for replacement/purchase of furniture and office equipment in GB building.											
Purpose:	Allow for the replacement of furniture and replacement of equipment											
Alignment With Official Community Plan:	Goal 8.2: Employ a proactive approach to infrastructure maintenance and upgrades.											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all.											
Outcome: (Customer Satisfaction)	General poor appearance, working conditions and WCB ergonomics claims											
Impact If Project Does Not Proceed:	Impact if not funded is possible work safe claims from employees with ergonomic needs.											
External Funding :	Specify Funding Agency/Program:											
	N/A N/A											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily												
Milestones:												Director Approval: Approved by B. Pearce November 20, 2019
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ -	\$ 47,968	\$ 47,968	\$ 47,968	\$ 47,968	\$ 47,968	\$ 47,968	\$ 23,984	\$ 23,984	\$ 23,984	\$ 23,984	\$ 383,745
External Funding/Contributions	\$ -	\$ 59,032	\$ 59,032	\$ 59,032	\$ 59,032	\$ 59,032	\$ 59,032	\$ 29,516	\$ 29,516	\$ 29,516	\$ 29,516	\$ 472,255
Total Project Expenditures	\$ -	\$ 107,000	\$ 107,000	\$ 107,000	\$ 107,000	\$ 107,000	\$ 107,000	\$ 53,500	\$ 53,500	\$ 53,500	\$ 53,500	\$ 856,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Maintenance & Replacement for Gerry Brewer Building											
Department:	Facilities											
Project Manager:	<div> <div> Joel Roy </div> <div> Date: 4-Jul-19 </div> <div> Project Type: Base Program </div> <div> 2020 - 2029 Project Plan Maintenance & Replacement </div> </div>											
Description:	Planned equipment and component replacement and repair											
Purpose:	Maintenance and replacement of the current building system components											
Alignment With Official Community Plan:	Goal 8.2: Employ a proactive approach to infrastructure maintenance and upgrades.											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all.											
Outcome: (Customer Satisfaction)	Continue operation and preservation of the City's assets											
Impact If Project Does Not Proceed:	The continued deterioration of the value of the current assets. Unplanned building system component failures with the associated operational disruption											
External Funding :	<div> <div>N/A</div> <div>N/A</div> <div>55.95% new rate Feb 2020</div> <div>Specify Funding Agency/Program:</div> </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily												
Milestones:	<div> <div></div> <div> Director Approval: Approved by B. Pearce November 20, 2019 </div> </div>											
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 683,224	\$ 212,046	\$ 323,224	\$ 506,131	\$ 83,384	\$ 45,278	\$ 83,384	\$ 29,588	\$ 45,278	\$ 54,244	\$ 38,554	\$ 1,421,111
External Funding/Contributions	\$ 824,540	\$ 260,954	\$ 397,776	\$ 622,869	\$ 102,616	\$ 55,722	\$ 102,616	\$ 36,412	\$ 55,722	\$ 66,756	\$ 47,446	\$ 1,748,889
Total Project Expenditures	\$ 1,507,764	\$ 473,000	\$ 721,000	\$ 1,129,000	\$ 186,000	\$ 101,000	\$ 186,000	\$ 66,000	\$ 101,000	\$ 121,000	\$ 86,000	\$ 3,170,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Upper Levels Greenway - Lonsdale to Lynn Valley Road										2020 - 2029 Project Plan		
Department:	Engineering: Streets										Project Type:		New Capital Asset
Project Manager:	Justin Hall										Date: 4-Jul-19		New Initiative
Description:	Implementation of greenway connections between Upper Lonsdale and Lynn Valley Road via Tempe Heights Park, with connections to existing District trail systems. The greenway would consist of a combination of enhanced streetscape environments and possibly a separated multi-use trail (approx. 1.5km length) and will eventually connect the north City neighbourhoods with the Green Necklace and the City's town centre at several locations.												
Purpose:	This project is a component of a multi-year plan to complete the City's Upper Levels greenway system. Improved linkages between parks and open spaces, improved pedestrian safety, provision of multi-mode alternative transportation and recreation routes, reduction of resource consumption.												
Alignment With Official Community Plan:	This project supports the goals in Chapters 2, 3 and 5 (Transportation, Mobility & Access; Community Well-being; and Parks, Recreation & Open Space). Greenways enhance the walkability of the City, connecting people to parks and other amenities, while providing enhanced recreational opportunities, promoting safe, alternative means of transportation, and reducing greenhouse gas emissions.												
Strategic Plan :	Supports a Connected City . Provides active and sustainable ways for people to move to, from and within the City safely and efficiently. Results in the increase of active transportation mode share and supports health and well-being of all.												
Outcome: (Customer Satisfaction)	Demonstration of the goals, objectives and policies of the Parks and Greenways Plan, continuation of a cohesive, identifiable greenway network throughout the City, improved recreation and habitat values through networking of existing parks and open spaces, opportunities for community involvement.												
Impact If Project Does Not Proceed:	Loss of momentum of the City's Greenways Plan; lack of multi-modal routes north of the highway; discontinuous Greenway system; and lack of connection for the portion of our community north of the highway.												
External Funding :	<div style="display: flex; justify-content: space-between;"> <div> <i>Provincial Contribution</i> </div> <div> <i>Unsecured Contribution</i> </div> <div> Specify Funding Agency/Program: Translink / Provincial </div> </div>												
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Short term: Some GHG emissions generation associated with construction. Long term: in the long-term, the construction of greenways should promote the increased use of non-vehicular transportation, and should therefore help to reduce overall community-wide GHG emissions.												
Milestones:	Early community engagement to commence in 2019 with conceptual design and construction starting in 2020/21.										Director Approval: Approved by D. Pope November 20, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL	
Funding Requirements													
City Funding (Fund Appropriation)	\$ 40,000	\$ 100,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,100,000	
External Funding/Contributions		\$ -	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000	
Total Project Expenditures	\$ 40,000	\$ 100,000	\$ 3,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,100,000	
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	7%	0%	0%	0%	0%	0%	0%	0%	0%		
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)													
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ (25,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)													
Regular	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	0.2500	-	-	-	-	-	-	-	-	-		
Total Staffing	-	0.2500	-	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Semisch Greenway (W3rd to Semisch Park)										2020 - 2029 Project Plan	
Department:	Engineering: Streets										Project Type:	
Project Manager:	Adam Vasilevich										Date: 4-Jul-19	
Description:	Provide a safe and continuous accessible pedestrian route from W. 3rd Street to Esplanade. Recent planning and design work for Semisch Park improvements has identified a number of safety and access issues for people crossing W2nd Street and on Semisch Avenue south of W3rd Street. Joining the two sections of Semisch Park across W2nd Street is an opportunity to improve the local pedestrian network, increase public open space and address a number of safety issues. Formalizing the streetscape for Semisch Avenue south of W3rd Street can provide a safe pedestrian space and organized street parking to complete an accessible connection to local parks and open space.											
Purpose:	Improve local infrastructure and provide safe pedestrian facilities and public open space in the area. Currently, there are no sidewalks or curbs and the pavement is in poor condition on Semisch Avenue, south of W. 3rd Street. Parking is unregulated and irregular without any formal infrastructure in place. There are public complaints about vehicle speed and volume on the 200 block of W. 2nd Street and a desire to join the two sections of Semisch Park. This new infrastructure will provide a safe, continuous and more accessible pedestrian route from W 3rd to Esplanade and connect local parks.											
Alignment With Official Community Plan:	1.3.10: Encourage active, healthy lifestyles and the opportunity for more social connections through planning and active design principles that encourage physical activity and contribute to enhanced walkability and active streets, sidewalks and public spaces; 1.4.3 Consider recreational, cultural and other community spaces as aspects of informal community living rooms, and essential 'social' infrastructure, particularly in high-density neighbourhoods like Central/Lower Lonsdale 2.1.1. Invest in cycling and pedestrian networks and facilities to make these more attractive, safer, and convenient transportation choices for all ages and abilities with an aim to increase these ways of travelling over single-occupant vehicle use; 2.1.3 Invest in public realm improvements and locate public art in public places, trails and greenways to enhance the character of the walking and cycling environment.											
Strategic Plan :	Supports a Connected City . Provides active and sustainable ways for people to move to, from and within the City safely and efficiently and improves livability through increased access to green spaces. Results in the increase of active transportation mode share and protects the health of our environment.											
Outcome: (Customer Satisfaction)	Improved public realm and pedestrian network that will connect to local parks in a high density area of the City.											
Impact If Project Does Not Proceed:	Documented feedback on the current access and safety issues on Semisch Avenue south of W. 3rd Street and crossing of W. 2nd Street. Local residents will continue to request improvements. ACDI assessment of Semisch Avenue identified barriers to public access currently exist.											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short-term: Limited GHG emissions associated with construction (fuel and materials). Long-term: reduction of GHGs anticipated through provision of alternative transportation and increased trail connectivity.											
Milestones:	2020 planning, traffic study, design + public engagement. Implementation 2021.										Director Approval: Approved by D. Pope November 20, 2019	
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 100,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 100,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 400,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Public School Playground Funding											
Department:	Engineering: Parks & Environment											
Project Manager:	Adam Vasilevich											
	<div style="display: flex; justify-content: space-between;"> <div> Project Type: New Initiative </div> <div> 2020 - 2029 Project Plan New Capital Asset </div> </div>											
Description:	Council approved the Public Elementary School Playground Enhancements Revised Policy on October 7, 2019. This provides funding to specific schools to a maximum of \$75,000 each over a 10 year period.											
Purpose:	Support the development of enhanced outdoor school yards to benefit the community.											
Alignment With Official Community Plan:	This policy and specific project will support goal 3.1 of the OCP - Enhance well-being and quality of life for all community members.											
Strategic Plan :	This project supports two priorities A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. A Vibrant City - is where dynamic public spaces and places provide opportunities for connection and enable residents to engage with their community and celebrate their culture and history.											
Outcome: (Customer Satisfaction)	Greater access to play equipment and public open spaces around each community school.											
Impact If Project Does Not Proceed:	Fewer opportunities for families and children to interact, engage in healthy activities outdoors. Decline in resident satisfaction and quality of life.											
External Funding :	<div style="display: flex; justify-content: space-between;"> <div>N/A</div> <div>Specify Funding Agency/Program:</div> </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short-term: Limited GHG emissions associated with construction (fuel and materials).											
Milestones:	<div style="display: flex; justify-content: space-between;"> <div></div> <div>Director Approval: Approved by D. Pope November 20, 2019</div> </div>											
2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL	
Funding Requirements												
City Funding (Fund Appropriation)	\$ 150,000	\$ 150,000	\$ 150,000	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 487,500	
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Project Expenditures	\$ -	\$ 150,000	\$ 150,000	\$ 150,000	\$ 37,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 487,500	
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
(Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Priority Mobility Network Improvements										2020 - 2029 Project Plan		
Department:	Engineering: Streets										Project Type:		New Capital Asset
Project Manager:	Justin Hall										Date: 4-Jul-19		New Initiative
Description:	Construction of high priority All Ages and Abilities (AAA) active transportation infrastructure "mobility lanes" to the 2019 Provincial Active transportation Design Guidelines provide protection and separation from people walking and motor vehicle traffic for active modes like bikes, and other people-powered and electric assist devices along critical corridors throughout the City of North Vancouver.												
Purpose:	To promote cycling as a safe and convenient mode of transportation by improving and completing facilities for cyclists												
Alignment With Official Community Plan:	2.1.1 Invest in cycling and pedestrian networks and facilities to make these more attractive, safer, and convenient transportation choice for all ages and abilities with an aim to increase these ways of travelling over single-occupant vehicle use; 2.1.2 Invest in pedestrian and cycling facilities on the routes to and around schools, and work with the North Vancouver School District to promote active transportation, healthy lifestyles, and sustainable travel behaviour among children and youth.												
Strategic Plan :	Supports a Connected City . Provides active and sustainable ways for people to move to, from and within the City safely and efficiently. Results in the increase of kilometers of protected bike lanes and increased cycling mode share.												
Outcome: (Customer Satisfaction)	Increased kilometers of protected bike lanes; increase drivers' awareness of cyclists; completed cycling network to support the existing and future mobility demand along these corridors.												
Impact If Project Does Not Proceed:	Implementation of the Bicycle Master Plan will not proceed.												
External Funding :	<div style="display: flex; justify-content: space-between;"> <i>Other Contribution</i> <i>Unsecured Contribution</i> </div> Specify Funding Agency/Program: TransLink												
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	By encouraging cycling, we can help reduce our community's GHG emissions. Every cycling trip is virtually GHG emission free, with many of those trips otherwise taken by a motorised vehicle. Fuel used and waste generated during construction will result in minimal increase in GHG emissions during the period of work.												
Milestones:	Critical priorities to be completed in 2020/2021; remainder to be completed by 2024.										Director Approval: Approved by D. Pope November 20, 2019		
2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements													
City Funding (Fund Appropriation)	\$ 850,000	\$ 450,000	\$ 1,750,000	\$ 4,250,000	\$ 1,300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,600,000		
External Funding/Contributions	\$ 600,000	\$ 600,000	\$ 2,050,000	\$ 1,900,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,350,000		
Total Project Expenditures	\$ -	\$ 1,450,000	\$ 1,050,000	\$ 3,800,000	\$ 6,150,000	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ 14,950,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	7%	7%	7%	7%	7%	0%	0%	0%	0%	0%			
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)													
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expenses net of recoveries (Include staffing)	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -			
Total	\$ (50,000)	\$ (50,000)	\$ (50,000)	\$ (50,000)	\$ (50,000)	\$ -	\$ -	\$ -	\$ -	\$ -			
Staffing (FTE)													
Regular	-	-	-	-	-	-	-	-	-	-			
Temporary	0.5000	0.5000	0.5000	0.5000	0.5000	-	-	-	-	-			
Total Staffing	0.5000	0.5000	0.5000	0.5000	0.5000	-	-	-	-	-			

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	New Street Activation											2020 - 2029 Project Plan			
Department:	Engineering: Traffic											Project Type:		New Capital Asset	
Project Manager:	Justin Hall											Date:		4-Jul-19	New Initiative
Description:	Working with the CNV Play group - This project includes installation of parklets in small urban spaces and other streetscape activations for civic enjoyment and activity. Street activations provide opportunities for more pedestrian activities on the street by providing aesthetic and practical enhancements such as benches, tables, umbrellas, planters and art. These activations are a solution to provide more accessible park and social space in the urban environment. Possible solutions could see parklets located near cafes, providing additional seating as well as a meeting place at popular locations.														
Purpose:	To encourage more pedestrian engagement with the street and connect with the environment.														
Alignment With Official Community Plan:	1.3.10: Encourage active, healthy lifestyles and the opportunity for more social connections through planning and active design principles that encourage physical activity and contribute to enhanced walkability and active streets, sidewalks and public spaces; 2.1.3 Invest in public realm improvements and locate public art in public places, trails and greenways to enhance the character of the walking and cycling environment.														
Strategic Plan :	Creates vibrant public spaces and places providing opportunities for connection.														
Outcome: (Customer Satisfaction)	Parklets encourage walking and civic engagement whereby pedestrians are encouraged to pause, meet, sit, talk and interact in the streetscape.														
Impact If Project Does Not Proceed:	None.														
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>														
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Implementation of this program will increase opportunities for walking in dense urban areas of the City.														
Milestones:	1st Design competition and installation in 2022.											Director Approval: Approved by D. Pope November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL			
<u>Funding Requirements</u>															
City Funding (Fund Appropriation)	\$ 25,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 700,000			
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Total Project Expenditures	\$ -	\$ 25,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 700,000			
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%				
<u>Impact on Operations/Maintenance</u> (Incremental to 2018 Base Year Operating Budget)															
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expenses net of recoveries (Include staffing)	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500			
Total	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)	\$ (1,500)			
Staffing (FTE)															
Regular	-	-	-	-	-	-	-	-	-	-	-	-			
Temporary	-	-	-	-	-	-	-	-	-	-	-	-			
Total Staffing	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000				

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Moodyville Traffic Signals											
Department:	Engineering: Traffic											
Project Manager:	Kliment Kuzmanovski											
	<div style="display: flex; justify-content: space-between;"> <div>Date: 4-Jul-19</div> <div>Project Type: New Initiative</div> <div>2020 - 2029 Project Plan New Capital Asset</div> </div>											
Description:	Improvements to support the Moodyville rezoning. The funding will be used for construction of the new traffic signals on East 3rd Street at Ridgeway, East 3rd Street at Queensbury, East 3rd Street at Moody.											
Purpose:	Provide the appropriate transportation infrastructure to serve the residents of the Moodyville Neighbourhood and those passing through it, including the new B-Line bus service.											
Alignment With Official Community Plan:	2.1.4 Reduce crossing barriers at locations such as intersections, creeks, highways and rail crossings so that walking and cycling are more convenient and attractive; 2.2.5 Optimize the use of the existing road network and consider roadway expansion only if it furthers the objectives of increasing sustainable means of transportation, or contributes to the overall livability of the neighbourhood.											
Strategic Plan :	This supports a Connected City .											
Outcome: (Customer Satisfaction)	Maintain access to the Neighbourhood following redevelopment, maintain the capacity of the East 3rd Street arterial road.											
Impact If Project Does Not Proceed:	Traffic leaving in the Moodyville neighbourhood will experience congestion, possibly resulting in speed compliance issues and short cutting. Movement of the Transmission Lines is required for the future 3rd Street Corridor plan including transit infrastructure upgrades. 3rd Street will become a major barrier for pedestrians traveling north, south or to the adjacent bus stops.											
External Funding :	<div style="display: flex; justify-content: space-between;"> <div>N/A</div> <div>N/A</div> <div>Specify Funding Agency/Program:</div> </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	With the new traffic signals, more vulnerable road users crossing busy roads will be encouraged to select sustainable mode of transportation, so GHG emission would be reduced.											
Milestones:	Signal design 2019; Signal construction 2019-2023										Director Approval: Approved by D. Pope November 20, 2019	
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 630,000	\$ 240,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,000
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ 630,000	\$ 240,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ 3,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ 3,100	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	0.0384	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	0.0384	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Micro Mobility (E-Bike Docking)											2020 - 2029 Project Plan				
Department:	Engineering: Streets											Project Type:		New Capital Asset		
Project Manager:	Justin Hall											Date:	4-Jul-19	New Initiative		
Description:	This funding will be used to construct additional e-bike charging stations to support the new bike share system as directed by Planning's work on the program															
Purpose:	To construct new E-Bike charging stations.															
Alignment With Official Community Plan:	2.1.1 Invest in cycling and pedestrian networks and facilities to make these more attractive, safer, and convenient transportation choices for all ages and abilities with an aim to increase these ways of travelling over single-occupant vehicle use; 2.3.5 Collaborate with neighbouring municipalities and other levels of government to improve the safety, security, accessibility and connectivity of the transportation system within the City and the North Shore;															
Strategic Plan :	Supports a Connected city by implementing innovative transportation options to support active transpiration in the region.															
Outcome: (Customer Satisfaction)	Providing additional supportive infrastructure for the e-bike share pilot program.															
Impact If Project Does Not Proceed:	Inconvenient access to docking locations reducing the effectiveness of the e-bike share pilot program.															
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>															
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Approximately half of the City's community greenhouse gas emissions are attributed to transportation. This program is expected to reduce our community's GHG emissions, by enabling non-polluting sustainable transportation options that offer a viable alternative to driving alone.															
Milestones:	Identify and prioritize new dock locations 2020 and construction 2020/2021										Director Approval: Approved by D. Pope November 20, 2019					
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL				
<u>Funding Requirements</u>																
City Funding (Fund Appropriation)	\$	50,000	\$	50,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	100,000
External Funding/Contributions	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Project Expenditures	\$	-	\$	50,000	\$	50,000	\$	-	\$	-	\$	-	\$	-	\$	100,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%		0%		0%		0%		0%		0%		0%		0%
<u>Impact on Operations/Maintenance</u> (Incremental to 2018 Base Year Operating Budget)																
Revenues	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Expenses net of recoveries (Include staffing)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Staffing (FTE)																
Regular		-		-		-		-		-		-		-		-
Temporary		-		-		-		-		-		-		-		-
Total Staffing		-		-		-		-		-		-		-		-

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Project Name:	Mahon Park Beach Volleyball											2020 - 2029 Project Plan		
Department:	Engineering: Parks & Environment											Project Type:	New Capital Asset	
Project Manager:	Mike Hunter											Date:	4-Jul-19	New Initiative
Description:	Installation of two beach volleyball courts in Mahon Park													
Purpose:	There are currently only two beach volleyball courts in the City. The courts are located at Kings Mill Walk and are often booked for summer camps and league play. Installing Beach Volleyball courts was discussed as part of the recent improvements to Mahon Park and there was some public support for the addition of beach volleyball in a multi-use facility.													
Alignment With Official Community Plan:	This project supports a variety of OCP goals, such as encouraging active, healthy lifestyles and the opportunity for more social connections through planning and active design principles that encourage physical activity and contribute to enhanced walkability and active streets, sidewalks and public spaces; investing in public realm improvements													
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. A Vibrant City - is where dynamic public spaces and places provide opportunities for connection and enable residents to engage with their community and celebrate their culture and history.													
Outcome: (Customer Satisfaction)	Enhanced programming, improved health, safety, comfort and aesthetics of urban open spaces; Increased diversity of environments for a diverse and dense population; Improved passive security and surveillance of parks through increased use; Continued use of park and urban open spaces.													
Impact If Project Does Not Proceed:	Continued degradation of parks; Declining use due to unappealing and unsafe environment; Decline in resident satisfaction and quality of life.													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily														
Milestones:												Director Approval: Approved by D. Pope November 20, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements														
City Funding (Fund Appropriation)	\$	35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,000		
External Funding/Contributions	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ -	\$ 35,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		1%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
Expenses net of recoveries (Include staffing)	\$	-	\$ 2,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
Total	\$	-	\$ (2,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

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Project Name:	Central Lonsdale Wayfinding											2020 - 2029 Project Plan
Department:	Planning & Development: Transportation											New Capital Asset
Project Manager:	Justin Hall											Date: 13-Nov-19
Description:	New Initiative											
Purpose:	Wayfinding for pedestrians improves the navigability of the public realm helping residents and visitors alike confidently reach their destination in the Central Lonsdale area.											
Alignment With Official Community Plan:	To provide pedestrian wayfinding signage to direct people to locations of civil importance such as City Hall, the library, RCMP and Lions Gate Hospital.											
Strategic Plan :	This project supports the goals in Chapters 2,3 and 5 (Transportation, Mobility & Access and Community Well-bring) by adding to new and existing public infrastructure and amenities.											
Outcome: (Customer Satisfaction)	Supports a Connected City. Provides active and sustainable ways for people to recreate and move to, from and within the City. Results in the increase of active transportation mode share and supports health and well-being of all.											
Impact If Project Does Not Proceed:	Increased navigability of the public realm											
External Funding :	Finding points of civil importance in Central Lonsdale is more difficult.											
	N/A											Specify Funding Agency/Program:
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet.	N/A											
Milestones:	Production and insallation of signage or other wayfinding elements											Director Approval: Approved by M. Epp November 21, 2019
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 30,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Active Transportation Wayfinding Program											2020 - 2029 Project Plan		
Department:	Engineering: Streets											Project Type:	New Capital Asset	
Project Manager:	Justin Hall											Date:	4-Jul-19	New Initiative
Description:	Wayfinding for active transportation users improves the navigability of the public realm helping residents and visitors alike confidently reach their destination. The program will develop a strategy and implimentation plan to introduce wayfinding signage, stencils, kioks and other tools across the City.													
Purpose:	To develop an active transportation wayfinding strategy for the City and support the implimentation of the strategy to improve the navigability of the City.													
Alignment With Official Community Plan:	This project supports the goals in Chapters 2,3 and 5 (Transportation, Mobility & Access; Community Well-bring; and Parks, Recreation & Open Space) by adding to new and existing public infrastructure and amenities.													
Strategic Plan :	Supports a Connected City . Provides active and sustainable ways for people to recreate and move to, from and within the City. Results in the increase of active transportation mode share and supports health and well-being of all.													
Outcome: (Customer Satisfaction)	Improved navigability of the public realm, create unique identity for corridors.													
Impact If Project Does Not Proceed:	Ambiguity and possible confusion for users. Loss of opportunity to provide a unique identity for the pedestrian and cyclist corridors.													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short-term: Limited GHG emissions associated with installation (fuel and materials). Reduction of GHG's anticipated through increased adoption of active travel modes.													
Milestones:	Develop Wayfinding Strategy - 2020, Implimentation in 2021											Director Approval: Approved by D. Pope November 20, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements														
City Funding (Fund Appropriation)	\$ 20,000	\$ 150,000	\$ 100,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 490,000		
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ 20,000	\$ 150,000	\$ 100,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 490,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		7%	7%	7%	7%	7%	7%	7%	7%	7%	7%			
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500		
Total Staffing	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500	0.0500		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Wooden Bridge and Stair Replacement											
Department:	Engineering: Parks & Environment											
Project Manager:	Derek Priestley <div style="float: right;"> Project Type: 2020 - 2029 Project Plan On-Going Program/Project </div>											
	<div style="float: right;"> Base Program </div>											
Description:	This project consists of the replacement of aging wooden structures, such as stairs, bridges and boardwalks, throughout the City's park system.											
Purpose:	A number of wooden structures, such as small bridges, stairs, boardwalks and retaining walls in the City's Parks (Tempe Heights, Mosquito Creek, and Mahon) have deteriorated and create unsafe conditions for users. The purpose of this project is to gradually replace these structures over the course of the next three years on a priority basis.											
Alignment With Official Community Plan:	This project supports the goals and objectives of Chapters 5 and 8 of the OCP, by protecting and maintaining new and existing public infrastructure and amenities, and enhancing the natural and built environment. The improvements will also enhance community safety and offer improved recreational facilities.											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. A Vibrant City - is where dynamic public spaces and places provide opportunities for connection and enable residents to engage with their community and celebrate their culture and history. Expansion of the urban tree canopy and enhancing habitat to augment ecosystem services.											
Outcome: (Customer Satisfaction)	Increased user safety and accessibility of parks, trails and related open space amenities.											
Impact If Project Does Not Proceed:	Continued deterioration of City's assets, increased unsafe conditions in City parks and decreased accessibility by park users.											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short term: limited GHG emissions associated with construction (fuel and materials).											
Milestones:	Replacement on a priority basis .								Director Approval: Approved by D. Pope November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 305,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ 305,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	St. Andrews Park Infrastructure Replacement											2020 - 2029 Project Plan		
Department:	Engineering: Parks & Environment											Project Type:	Maintenance & Replacement	
Project Manager:	Adam Vasilevich											Date:	4-Jul-19	Base Program
Description:	Renovated in 2002, St. Andrew's Park's focus on natural systems and non-prescriptive play has made it one of the most popular playgrounds on the North Shore. In addition to intensive community use, this small park also supports two schools and a daycare, and after 17 years there are features in the park that require improvements in order to continue to be safe, fun, and functional.													
Purpose:	A public open house was held in June 2014 to understand how the park is used today. While the feedback from the public and schools was overwhelmingly positive, some items were highlighted that the City could improve: updated play equipment, more seating areas, and improved turf/landscaping were the most popular items. St. Andrew's Park has not seen any substantial upgrades since its opening in 2002. Improvements to the entry and adjacent street frontage will help to address safety concerns and access at the park entry.													
Alignment With Official Community Plan:	This project supports the goals of Chapter 3 and 5 of the OCP, by providing a variety of public spaces for community engagement and stewardship, protecting and maintaining new and existing public infrastructure and amenities, enhancing recreational opportunities as a part of a healthy community. The infrastructure upgrades will also enhance community safety.													
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. A Vibrant City - is where dynamic public spaces and places provide opportunities for connection and enable residents to engage with their community and celebrate their culture and history.													
Outcome: (Customer Satisfaction)	As a part of the public consultation in 2014, park users have indicated numerous improvements to the park. Improved health, safety, comfort and aesthetics of urban open spaces; Increased diversity of environments for a diverse and dense population; Improved passive security and surveillance of parks through increased use; Continued use of park and urban open spaces.													
Impact If Project Does Not Proceed:	Continued degradation of parks; Declining use due to unappealing and unsafe environment; Decline in resident satisfaction and quality of life.													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short-term: Limited GHG emissions associated with construction (fuel and materials).													
Milestones:	Design and construction would be scheduled for 2020.										Director Approval: Approved by D. Pope November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements														
City Funding (Fund Appropriation)	\$ 70,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000		
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ 70,000	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		1%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-			
Temporary	-	0.1500	-	-	-	-	-	-	-	-	-			
Total Staffing	-	0.1500	-	-	-	-	-	-	-	-	-			

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Room Divider Replacement											2019 - 2028 Project Plan
Department:	Facilities											Maintenance & Replacement
Project Manager:	Joel Roy											Project Type:
	Date: 4-Jul-19											Base Program
Description:	Replace room dividers in main community meeting room.											
Purpose:	Replace end-of-life room dividers with new partitions that improve functionality and safety and permit increased capacity.											
Alignment With Official Community Plan:	1.4 Enhance quality of life through the provision of amenities 8.2 Employ a proactive approach to infrastructure maintenance and upgrades											
Strategic Plan :	<p>A Vibrant City: This project will replace critical equipment in the library's most well-used community meeting space. New equipment can be installed in a manner that will increase the capacity of the space, thereby increasing availability for library and community use.</p> <p>This work is also consistent with the City Library's Strategic Plan and our aspiration to be a welcoming, vibrant place for everyone.</p>											
Outcome: (Customer Satisfaction)	Meeting room spaces will be reliable and easier to access; installation of new equipment in a manner that increases the capacity of the space will make it possible to increase availability for library and community use.											
Impact If Project Does Not Proceed:	Current equipment will continue to break down. Inability to find reliable repair personnel may mean cancellations of programs or bookings if space cannot be used. Continued risk for injury due to failing parts.											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	N/A											
Milestones:	2020: procure and install replacement room partitions								Director Approval: Approved by B. Pearce November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ -	\$ 135,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 135,000
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 135,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 135,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

Project Name:	Mickey McDougall Community Recreation Centre											2020 - 2029 Project Plan
Department:	NVR&CC											Project Type:
Project Manager:	Gary Houg											2020 - 2029 Project Plan Maintenance & Replacement
	Date: 31-Jul-19											Base Program
Description:	Funding requirements for capital improvements from 2020 to 2029.											
Purpose:	To estimate funds required over a 10 year period. Funding is intended to cover only those extraordinary items that arise to ensure uninterrupted building operations. Funding is not at a level necessary to achieve any extension of the remaining serviceable life. Funding is suspended after 2023 in anticipation that the building will be replaced as a result of the Harry Jerome Complex redevelopment.											
Alignment With Official Community Plan:	OCP Goal 5.2: Support, enhance and maintain recreation as a vital aspect of a healthy community; Objective 5.2.1: Operate, maintain and improve the provision of indoor and outdoor recreation facilities.											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. Mickey McDougall CRC provides an opportunity for people to connect with others and to pursue various activities to support their health and well-being.											
Outcome: (Customer Satisfaction)	Reliable, continuous delivery of community recreation programs, preservation of building condition, and upkeep in standards of appearance.											
Impact If Project Does Not Proceed:	Decrease in recreation programs & service to the public and an increase in maintenance costs as building systems age.											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Well maintained buildings will operate at optimum levels and result in some reduction of GHG emissions.											
Milestones:	Work to be done in 2020.											Director Approval: Approved by H. Turner November 20, 2019
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ -	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 60,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Maintenance & Replacement for Civic Library											2020 - 2029 Project Plan
Department:	Facilities											Project Type:
Project Manager:	Joel Roy											Maintenance & Replacement
Description:	Planned equipment and component replacement and repair											Date: 4-Jul-19 Base Program
Purpose:	Maintenance and replacement of the current building system components											
Alignment With Official Community Plan:	Goal 8.2: Employ a proactive approach to infrastructure maintenance and upgrades.											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all.											
Outcome: (Customer Satisfaction)	Continue operation and preservation of the City's assets											
Impact If Project Does Not Proceed:	The continued deterioration of the value of the current assets. Unplanned building system component failures with the associated operational disruption											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	To deliver present and future programs at an appropriate public standard in an economical and environment friendly mode of operations and maintenance											
Milestones:												Director Approval: Approved by B. Pearce November 20, 2019
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 333,904	\$ 89,880	\$ 96,300	\$ 20,330	\$ 151,940	\$ 14,980	\$ 53,500	\$ 49,220	\$ 26,750	\$ 47,080	\$ 24,610	\$ 574,590
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ 333,904	\$ 89,880	\$ 96,300	\$ 20,330	\$ 151,940	\$ 14,980	\$ 53,500	\$ 49,220	\$ 26,750	\$ 47,080	\$ 24,610	\$ 574,590
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Maintenance & Replacement for City Owned/Non-City Used Buildings							Project Type:		2020 - 2029 Project Plan			
Department:	Facilities							Base Program		Maintenance & Replacement			
Project Manager:	Joel Roy							Date:		4-Jul-19			
Description:	Planned equipment and component replacement and repair												
Purpose:	Maintenance and replacement of the current building system components												
Alignment With Official Community Plan:	Goal 8.2: Employ a proactive approach to infrastructure maintenance and upgrades.												
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all.												
Outcome: (Customer Satisfaction)	Continue operation and preservation of the City's assets												
Impact If Project Does Not Proceed:	The continued deterioration of the value of the current assets. Unplanned building system component failures with the associated operational disruption												
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>												
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	To deliver present and future programs at an appropriate public standard in an economical and environment friendly mode of operations and maintenance												
Milestones:								Director Approval: Approved by B. Pearce November 20, 2019					
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL	
Funding Requirements													
City Funding (Fund Appropriation)	\$ 951,185	\$ 393,760	\$ 688,545	\$ 60,990	\$ 47,615	\$ 48,150	\$ 52,965	\$ 48,150	\$ 42,265	\$ 48,150	\$ 42,265	\$ 1,472,855	
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Project Expenditures	\$ 951,185	\$ 393,760	\$ 688,545	\$ 60,990	\$ 47,615	\$ 48,150	\$ 52,965	\$ 48,150	\$ 42,265	\$ 48,150	\$ 42,265	\$ 1,472,855	
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)													
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)													
Regular	-	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Greenwood Park Trail and Forest Restoration											2020 - 2029 Project Plan		
Department:	Engineering: Parks & Environment											Project Type:	Maintenance & Replacement	
Project Manager:	Adam Vasilevich											Date:	4-Jul-19	Base Program
Description:	The trail system in Greenwood Park has deteriorated and is in need of major repairs. Unsanctioned trails have damaged vegetation, and contributed to the decline of a number of trees, particularly around the old quarry. Trail reconstruction is required to improve safety and usability. Additionally, the improvements will enable the decommissioning of eroding and unsafe trail sections. The Green Necklace Greenway now connects Greenwood park with the greenway network and is it expected to bring more park visitors. There are opportunities to improve the health of the forest while also addressing the increasing risk of fire as the result of dying and diseased trees and increased forests fire fuel levels.													
Purpose:	This project involves reviewing the condition and completing improvements to the popular trails in Greenwood Park ensuring they are safe and usable by the community. The work will require upgrading some trails and decommissioning others to ensure safe access while managing environmental impacts. The project will explore options for new park programming opportunities, formalize park entries and improve the ecological health of the forest by thinning dense areas to increase sunlight, and planting additional shrubs.													
Alignment With Official Community Plan:	This project supports the goals of Chapters 4 and 5 of the OCP, by providing and maintaining outdoor recreation facilities, enhancing the natural and built environment, improving the long-term ecosystem health and an overall healthy community.													
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. Expansion of the urban tree canopy and enhancing habitat to augment ecosystem services.													
Outcome: (Customer Satisfaction)	The neighbourhood has requested improvements to the Greenwood Park trail system, and supports efforts to improve the forest health. The Green Necklace Greenway now connects Greenwood park with the greenway network and will bring more park visitors and the need for better facilities. A volunteer park stewardship group has been actively involved in the care of the park, and this project would help support their efforts through capital improvements to this natural area.													
Impact If Project Does Not Proceed:	Not improving the trails in Greenwood Park will lead to further degradation, increased unsafe conditions and potential need for closure of trails. The Green Necklace Greenway now connects Greenwood park with the greenway network and is it expected to bring more park visitors and park awareness.													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short-term: Limited GHG emissions associated with construction (fuel and materials).													
Milestones:	Biophysical inventory and assessment, and public consultation in 2019, trail and habitat improvements in 2020.										Director Approval: Approved by D. Pope November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements														
City Funding (Fund Appropriation)	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000		
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		1%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Furniture and Equipment												2020 - 2029 Project Plan									
Department:	Facilities												Project Type:	Maintenance & Replacement								
Project Manager:	Joel Roy												Date:	4-Jul-19	Base Program							
Description:	2020 Budgetary provision for replacement/purchase of furniture and office equipment in all civic buildings																					
Purpose:	Allow for the replacement of furniture and replacement of equipment																					
Alignment With Official Community Plan:	Goal 8.2: Employ a proactive approach to infrastructure maintenance and upgrades.																					
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all.																					
Outcome: (Customer Satisfaction)	General poor appearance, working conditions and WCB ergonomics claims																					
Impact If Project Does Not Proceed:	Impact if not funded is possible work safe claims from employees with ergonomic needs.																					
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>																					
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	None																					
Milestones:													Director Approval: Approved by B. Pearce November 20, 2019									
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL										
Funding Requirements																						
City Funding (Fund Appropriation)	\$	107,000	\$	90,950	\$	107,000	\$	90,950	\$	96,300	\$	48,150	\$	48,150	\$	42,800	\$	53,500	\$	53,500	\$	738,300
External Funding/Contributions																					\$	-
Total Project Expenditures	\$	-	\$	107,000	\$	90,950	\$	107,000	\$	90,950	\$	96,300	\$	48,150	\$	48,150	\$	42,800	\$	53,500	\$	738,300
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%		0%
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)																						
Revenues	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Expenses net of recoveries (Include staffing)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Staffing (FTE)																						
Regular		-		-		-		-		-		-		-		-		-		-		-
Temporary		-		-		-		-		-		-		-		-		-		-		-
Total Staffing		-		-		-		-		-		-		-		-		-		-		-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	CNV Website Refresh											
Department:	Information Technology											
Project Manager:	Ed Sweeney											
	<div style="display: flex; justify-content: space-between;"> <div> Project Type: On-Going Program/Project </div> <div> Date: 4-Jul-19 </div> </div>											
Description:	The CNV.org website will not have had a major refresh for five years by 2019. As this is the most significant source of information for the public, it is important that we communicate in the most effective manner available. As the technology that supports website authoring and hosting is constantly evolving and the public expectation is that the city offer contemporary website communication, a refresh of the underlying technology should be scheduled every four to five years, with enhanced functionality available through the use of more advanced communication tools.											
Purpose:	To procure new technologies for authoring and hosting our website, and to author an updated version of cnv.org											
Alignment With Official Community Plan:	AMR IF - 1 - General improvements to internal systems allowing improvements for internal processing and external communication. OCP: 8.2: Employ a proactive approach to infrastructure maintenance and upgrades.											
Strategic Plan :	A Vibrant City: Providing communication tools that assist residents' awareness of community events and assist in their engagement with the City.											
Outcome: (Customer Satisfaction)	The public will experience fewer frustrations with our website which will be more functional and more accessible to a larger number of devices and an increased audience.											
Impact If Project Does Not Proceed:	The standard of our communication with the public will lag behind other local governments and public agencies. This will result in increased calls to Council and staff.											
External Funding : Description	<div style="display: flex; justify-content: space-between;"> <div>N/A</div> <div>N/A</div> <div>Specify Funding Agency/Program:</div> </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Minimal; however the increased use of electronic processes may result in less use of printed reports and greater access to information will cause fewer trips to city hall for the public.											
Milestones:	Work to commence after budget approval.								Director Approval: Approved by B. Pearce November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 50,000	\$ 50,000	\$ -	\$ 75,000	\$ -	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ 450,000	\$ -	\$ 975,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ 50,000	\$ 50,000	\$ -	\$ 75,000	\$ -	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ 450,000	\$ -	\$ 975,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

Project Name:	Chafer Beetle Turf Restoration											2020 - 2029 Project Plan	
Department:	Engineering: Parks & Environment											Project Type:	On-Going Program/Project
Project Manager:	Derek Priestley											Date: 4-Jul-19	Base Program
Description:	City Operations staff has implemented a Chafer Beetle response plan. Damaged grass has been removed and repaired, and an initial nematode application was conducted in July. Since 2018, the recommended strategy is to expand the treatment areas, and implement upgrades to the irrigation systems, to assist with the nematode application process. Moist soil is required to successfully apply the nematodes.												
Purpose:	The nematode treatment typically takes approximately two consecutive years of treatment to be effective, subject to re-infestation. The Chafer Beetle will likely remain a management issue in the area for decades, but by consistently implementing the recommended best practices, the extent of the impact can hopefully be minimised.												
Alignment With Official Community Plan:	This project supports the goals and objectives of Chapters 4 and 5 of the OCP, by protecting and maintaining new and existing public infrastructure and amenities, and enhancing the natural environment, as well as leading by example to educate the public on more sustainable behaviours.												
Strategic Plan :	A Livable City – leads the way in climate action and acts as a steward of the environment for future generations.												
Outcome: (Customer Satisfaction)	Managing the Chafer Beetle using best management practices to limit the spread to parks and private property will be seen as a priority to the residents of the City.												
Impact If Project Does Not Proceed:	Degradation of the City's parks and public open space.												
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>												
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short term: limited GHG emissions associated with removal of destroyed turf, and addition of new soil and seed. (fuel and materials).												
Milestones:	Reduced reoccurring damage in areas over seeded with Chafer resistant seed blends.										Director Approval: Approved by D. Pope November 20, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL	
Funding Requirements													
City Funding (Fund Appropriation)	\$ 215,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 180,000	
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Project Expenditures	\$ 215,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 180,000	
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)													
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)													
Regular	-	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Centennial Theatre												2020 - 2029 Project Plan
Department:	NVR&CC												Project Type:
Project Manager:	Gary Houg												2020 - 2029 Project Plan
	Date: 31-Jul-19												Base Program
Description:	Video surveillance & intrusion alarm upgrade. Gallery hanging & lighting system addition. Apron lighting position addition. Stage camera feed upgrade. Onstage storage renovations.												
Purpose:	To upgrade the existing building security system for staff & patron safety, and protection of the building & its contents. To create a system to hang and display community artwork. To create lighting in front of the stage where no current lighting exists. To upgrade the existing stage camera system so that patrons in the lobby area and performers off-stage can monitor the stage performance. Improve the existing storage areas in the stage wings.												
Alignment With Official Community Plan:	OCP Goal 5.2: Support, enhance and maintain recreation as a vital aspect of a healthy community; Objective 5.2.1: Operate, maintain and improve the provision of indoor and outdoor recreation facilities.												
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. Centennial Theatre provides an opportunity for people to connect with others and to pursue various activities to support their health and well-being.												
Outcome: (Customer Satisfaction)	Protection of staff, patrons, building and contents. Improved display of community artwork. Additional lighting at stage front for performer safety. Improved viewing of on-stage activity by patrons and performers off-stage. Improved storage for onstage equipment.												
Impact If Project Does Not Proceed:													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>												
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Well maintained buildings will operate at optimum levels and result in some reduction of GHG emissions.												
Milestones:	Work to be done in 2020.												Director Approval: Approved by H. Turner November 20, 2019

	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ -	\$ 110,000	\$ 265,000	\$ 140,000	\$ 280,000	\$ 325,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 1,320,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 110,000	\$ 265,000	\$ 140,000	\$ 280,000	\$ 325,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 1,320,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Automated Traffic Counters										2020 - 2029 Project Plan	
Department:	Engineering: Traffic										Project Type:	
Project Manager:	Kliment Kuzmanovski										Maintenance & Replacement	
	Date: 4-Jul-19										Base Program	
Description:	Installation of automated counters for road users, vehicles and cyclists. This may be combined with the Planning contract with connected vehicle data to achieve better information for decision making.											
Purpose:	To allow traffic count data to be collected centrally with minimum staffing effort. The collection of traffic count data allows staff to evaluate changes to the network and land use in the City and to better plan for future changes and developments.											
Alignment With Official Community Plan:	This project supports transportation, mobility and access goals and objectives outlined in Chapter 2 of the OCP.											
Strategic Plan :	This supports a Connected City .											
Outcome: (Customer Satisfaction)	Allows reporting out of traffic conditions, and better predictions of changing traffic volumes in the future.											
Impact If Project Does Not Proceed:	Strategic and OCP goals may not be fulfilled and we wouldn't be able to report on the transportation plan progress.											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Very little direct impact.											
Milestones:	Annual installations.							Director Approval: Approved by D. Pope November 20, 2019				
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 100,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ 100,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		3%	3%	3%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	
Temporary	-	-	-	-	-	-	-	-	-	-	-	
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Automated Materials Handling & RFID System Replacements											2020 - 2029 Project Plan					
Department:	Library											Project Type:		Maintenance & Replacement			
Project Manager:	Wai-Lin Chee											Date:		4-Jul-19		Base Program	
Description:	Replace end-of-life automated materials handling and RFID system components (security gates, sorting machine, bins, and self-service checkouts).																
Purpose:	To minimize loss prevention and ensure ongoing functionality, reliability and compatibility with current, secure systems; to extend the lifespan of critical machinery.																
Alignment With Official Community Plan:	8.2 Employ a proactive approach to infrastructure maintenance and upgrades 8.2.2 Identify and monitor the condition of our infrastructure on a regular basis in order to identify the remaining operation life on individual elements, and to identify and rectify weaknesses before failure, thereby optimizing capital and maintenance program expenditure.																
Strategic Plan :	A Vibrant City - these systems are critical to the day-to-day operations of the City Library, a valued and well-used community asset. By automating repetitive, labour-intensive tasks, these systems enable staff to focus on providing service and programming for community members rather than back-end tasks.																
Outcome: (Customer Satisfaction)	Periodic renewal of essential infrastructure ensures safety, reliability and continuing fitness for purpose. Customers will be able to checkout materials and manage their accounts securely, and return materials automatically and on a 24/7 basis.																
Impact If Project Does Not Proceed:	Increased maintenance costs; inability to find compatible components in the market; increased risk of equipment failure. Risk of injury as machinery and equipment age and fastenings break down. Increased inefficiency in the system. If system is offline, additional staffing will be required to process materials manually. Reduced loss prevention capabilities. Full system replacement estimated at \$350,000 - \$450,000.																
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>																
GHG Implications: <small>Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily</small>	Minimal impact. Expect to see improved energy efficiency with new generations of equipment.																
Milestones:	2020: replace 4-5 sorter bins; 2021: replace 4-5 sorter bins; 2022: replace self-service checkout machines; 2023: partial sorter upgrades; 2; 2026: replace 4-5 sorter bins; 2027: replace 4-5 sorter bins and self-service checkout machines; 2028: replace 4-5 sorter bins and complete sorter upgrades; 2029: replace security gates (see supplemental sheet)										Director Approval: Approved by D. Koep November 20, 2019						
	2009-2018 Budget	2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	TOTAL					
Funding Requirements																	
City Funding (Fund Appropriation)	\$ 43,000	\$ 18,000.00	\$ 18,000	\$ 68,000	\$ 17,000	\$ -	\$ -	\$ 18,000	\$ 86,000	\$ 52,000	\$ 40,000	\$ 317,000					
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
Total Project Expenditures	\$ 43,000	\$ 18,000	\$ 18,000	\$ 68,000	\$ 17,000	\$ -	\$ -	\$ 18,000	\$ 86,000	\$ 52,000	\$ 40,000	\$ 317,000					
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)																	
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
Staffing (FTE)																	
Regular	-	-	-	-	-	-	-	-	-	-	-	-					
Temporary	-	-	-	-	-	-	-	-	-	-	-	-					
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-					

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Parks Furnishings and Signage		2020 - 2029 Project Plan									
Department:	Engineering: Parks & Environment		Project Type: On-Going Program/Project									
Project Manager:	Mike Hunter		Base Program									
	Date: 4-Jul-19											
Description:	Continuation of the City's parks and environmental stewardship signage program, and replacement of aging park furnishings, such as benches and picnic tables.											
Purpose:	An on-going identity, interpretive and regulatory park signage program: informs readers of natural and cultural history; raises awareness of environmental initiatives; promotes sustainable activities; educates on the importance of resource efficiency and environmental protection; unifies the City's parks and open spaces; provides a safe environment for all park users. Replacement of aging park furniture ensures routine maintenance and replacement.											
Alignment With Official Community Plan:	This project supports the goals and objectives of Chapter 5 of the OCP, by protecting and maintaining new and existing public infrastructure and amenities, and enhancing the natural and built environment. The infrastructure upgrades will also enhance community safety.											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. A Vibrant City - is where dynamic public spaces and places provide opportunities for connection and enable residents to engage with their community and celebrate their culture and history. Expansion of the urban tree canopy and enhancing habitat to augment ecosystem services.											
Outcome: (Customer Satisfaction)	Communication of various environmental initiatives builds support and understanding, can result in change in attitudes and behaviour. Awareness of local natural and cultural heritage builds community and sense of place and belonging. Regulation signage provides clarity to users and identity signage provides a unified, cohesive identity for the City's parks system.											
Impact If Project Does Not Proceed:	Lack of communication of parks regulations, frustration and conflict within park user groups, lack of identity of City Parks, misunderstanding of environmental initiatives, loss of support and threats to environmental improvements.											
External Funding :	N/A		Specify Funding Agency/Program:									
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Short-term: Limited GHG emissions associated with construction (fuel and materials).											
Milestones:	This is an on-going program, with replacement on a priority basis.			Director Approval: Approved by D. Pope November 20, 2019								
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ 233,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 350,000
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ 233,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 350,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	John Braithwaite Community Centre											2020 - 2029 Project Plan
Department:	NVR&CC											Project Type:
Project Manager:	Gary Houg											2020 - 2029 Project Plan
	Date: 31-Jul-19											Base Program
Description:	Family Resources Centre (FRC) kitchen refurbishment. Seniors Kitchen dishwasher replacement. Lower floor and Youth Centre resilient flooring replacements.											
Purpose:	The FRC kitchen has been well used over the past 15 years and requires refurbishment. The Seniors Kitchen dishwasher has been in steady use over the past 15 years and requires replacement. The Lower Level floor and Youth Centre floors are showing signs of advanced wear and require replacement.											
Alignment With Official Community Plan:	OCP Goal 5.2: Support, enhance and maintain recreation as a vital aspect of a healthy community; Objective 5.2.1: Operate, maintain and improve the provision of indoor and outdoor recreation facilities.											
Strategic Plan :	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. John Braithwaite CC provides an opportunity for people to connect with others and to pursue various activities to support their health and well-being.											
Outcome: (Customer Satisfaction)	A refurbished FRC kitchen ready for more years of use. A reliable dishwasher that will produce clean and sanitized dishes for Seniors' functions. New resilient floors that are maintainable and will enhance the looks of the Lower Level and Youth Centre areas.											
Impact If Project Does Not Proceed:	An FRC kitchen that cannot function properly and may not meet Health Authority regulations. Seniors Kitchen dishes that may not be consistently cleaned to Health Authority standards. Areas of the facility that will not look well maintained.											
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>											
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	Well maintained buildings will operate at optimum levels and result in some reduction of GHG emissions.											
Milestones:	Work to be done in 2020							Director Approval: Approved by H. Turner November 20, 2019				
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ -	\$ 75,000	\$ 30,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 530,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 75,000	\$ 30,000	\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 530,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Traffic Signal Pre-Emption for Fire Emergency Vehicles										2020 - 2029 Project Plan		
Department:	Engineering: Traffic										Project Type:		
Project Manager:	Carl Ungson										New Initiative		
	Date: 4-Jul-19												
Description:	Traffic signal pre-emption allows a fire truck to communicate with downstream traffic signals increasing its likelihood of receiving a green light. It can also communicate with traffic signals further ahead to get traffic flowing before the truck arrives in order to decrease response times.												
Purpose:	To decrease fire truck response times.												
Alignment With Official Community Plan:	2.2.5 Optimize the use of the existing road network for fire trucks.												
Strategic Plan :	This supports a Connected City												
Outcome: (Customer Satisfaction)	Decreased response times for fire trucks.												
Impact If Project Does Not Proceed:	Response times for fire trucks will remain the same.												
External Funding :	Specify Funding Agency/Program:												
	N/A N/A												
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Slight reduction in fire truck fuel consumption and GHG emissions.												
Milestones:	Procurement and installation in year that funds are allocated.										Director Approval: Approved by D. Pope November 20, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL	
Funding Requirements													
City Funding (Fund Appropriation)	\$ 150,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,000	
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Project Expenditures	\$ 150,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 240,000	
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		3%	3%	3%	0%	0%	0%	0%	0%	0%	0%		
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)													
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ 400	\$ 400	\$ 400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ (400)	\$ (400)	\$ (400)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)													
Regular	0.0058	0.0058	0.0058	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	0.0058	0.0058	0.0058	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Street Banner And Furnishing Program											2020 - 2029 Project Plan			
Department:	Engineering: Streets											Project Type:		On-Going Program/Project	
Project Manager:	Justin Hall											Date: 4-Jul-19		Base Program	
Description:	Installation of streetscape furnishings at various locations throughout the City. Installation of decorative/seasonal banners on streetlight poles at various locations through out the City.														
Purpose:	Provides furnishings to support walkability and activation of the public realm. Provides decoration to streetscape, a venue for local artists, and celebrates a sense of place for residents and businesses.														
Alignment With Official Community Plan:	Aligns with goals and objectives of sections 4.9 and 4.10 (sense of place) in the OCP.														
Strategic Plan :	Supports a Vibrant City. Creates public spaces and places providing opportunities for connection and to build a new vision to revitalize Lonsdale Avenue as a high street.														
Outcome: (Customer Satisfaction)	Residents, businesses, and visitors enjoy the banners while the program also supports local artists.														
Impact If Project Does Not Proceed:	No decoration on street light poles, loss of venue and support for local artists.Unable to provide seating for pedestrians throughout the city.														
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>														
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Production and installation of banners generates GHG's														
Milestones:	Installation of new banners early in year coordinated with removal of Christmas decorations and vice-versa.											Director Approval: Approved by D. Pope November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL			
Funding Requirements															
City Funding (Fund Appropriation)	\$ 300,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 475,000			
External Funding/Contributions		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Total Project Expenditures	\$ 300,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 60,000	\$ 35,000	\$ 475,000			
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)															
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			
Staffing (FTE)															
Regular	-	-	-	-	-	-	-	-	-	-	-	-			
Temporary	-	-	-	-	-	-	-	-	-	-	-	-			
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-			

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Open Data & GIS 3D Modeling												2020 - 2029 Project Plan	
Department:	Information Technology												Project Type:	New Capital Asset
Project Manager:	Ed Sweeney												Date: 4-Jul-19	New Initiative
Description:	To promote Open Government by creating a 'GIS Open Data Catalogue' on the City's public website so that the public can download raw, spatial data (e.g. legal parcels, parks, addresses). This will create the framework for other corporate datasets e.g. business licences to be added by other CNV departments. Specialised software is required to provide an 'on demand' service which delivers datasets tailored to specific parameters entered by the public. A temporary extra staff resource is also needed to help prepare the data for public consumption e.g. the creation of metadata.													
Purpose:	To provide the public with 24/7 access to a catalogue of raw GIS data which they can download and use without restriction; to perform an independent review of the GIS data and services that are made available to the public. This is in line with the commitment made by all levels of government (Government of Canada; Province of B.C.; and municipalities such as the City of Vancouver and Township of Langley) to facilitate greater freedom of access to government data and encourage collaboration and innovation.													
Alignment With Official Community Plan:	The availability of GIS data on the City in its raw format will help to encourage innovation; engagement and in-depth analysis of many different aspects of the community by the community itself. OCP: 8.2: Employ a proactive approach to infrastructure maintenance and upgrades, and, 8.3: Use innovative planning and design to ensure infrastructure longevity.													
Strategic Plan :	A Vibrant City: Providing data and intelligence used to support decisions that promote resident engagement and community spaces. A Connected City: Providing maps and intelligence used to develop mobility and transportation plans.													
Outcome: (Customer Satisfaction)	Public has direct, self serve access to raw spatial data which is in keeping with the current climate of Open Data. The incorporation of the City's data in innovative programs undertaken by independent parties e.g. VanTrash.													
Impact If Project Does Not Proceed:	The City will lag behind other municipalities and government organisations in the move to open up data to the public and make it easily accessible for them.													
External Funding : Description	Specify Funding Agency/Program:													
	N/A N/A													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Data from the City's GIS is currently used in many different studies on sustainability, GHG, transportation and environmental issues in general. Offering this through a 24/7 open data portal may help to support these studies further. Open data generally encourages private sector application developers in their creation of community enrichment applications. Many existing applications can add North Vancouver content fairly simply with open data availability.													
Milestones:	Work to begin following budget approval.										Director Approval: Approved by B. Pearce November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
Funding Requirements														
City Funding (Fund Appropriation)	\$ -	\$ 120,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ 520,000		
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ -	\$ 120,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000	\$ 520,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

Project Name:	Mobility Plan		2020 - 2029 Project Plan									
Department:	Planning & Development: Transportation		Project Type:									
Project Manager:	Jennifer Draper		Other Projects									
	Date: 4-Jul-19		New Initiative									
Description:	An update the Transportation Plan to reflect the changing needs of the transportation system. This update will provide a multi-modal Transportation Plan for the City, incorporating the Pedestrian and Bicycle Plan, along with the traditional modes of Transit, Goods Movement, and Automobiles. The plan will also include shared use transportation including car-share, ride hailing and taxis along with future developments in automated vehicles.											
Purpose:	To maintain a transportation plan in accordance with the City's priorities.											
Alignment With Official Community Plan:	This project supports transportation, mobility and access goals and objectives outlined in section 2.0 of the Chapter 2 of the Official Community Plan. It will reprioritize transportation improvements to align with the land use, social, economic and environmental goals outlined in OCP.											
Strategic Plan :	A Connected City - Contributes to the new Mobility Plan											
Outcome: (Customer Satisfaction)	Updated transportation plan that is better aligned with the new OCP and latest City plans such as pedestrian plan, bicycle master plan, transit plans; and provides vision for the incorporation of ride-share, shared vehicles and automated vehicles.											
Impact If Project Does Not Proceed:	Strategic and OCP goals may not be fulfilled, change in trip mode choice and available transportation modes is not reflected an overall transportation planning document.											
External Funding :	N/A		Specify Funding Agency/Program:									
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	By encouraging non-automobile modes (walking, cycling and transit) the community's GHG emissions will decrease.											
Milestones:	2019 - Begin Study and plan development 2021 - Finalise Mobility Plan		Director Approval: Approved by M. Epp November 21, 2019									
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)												
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)												
Regular	-	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	INSTPP Implementation (Previously known as North Shore Transportation Improvements)											2020 - 2029 Project Plan		
Department:	Planning & Development: Transportation											Project Type:		Other Projects
Project Manager:	Michael Epp											Date: 4-Jul-19		New Initiative
Description:	The funding will be used to advance initiatives identified through the INSTPP process. This includes contribution to the on-going administration of the INSTPP staff and steering committees, advocacy and partner funding for near-term priority studies and staff salary to support advancement of initiatives.													
Purpose:	Through municipal collaboration advance joint North Shore transportation initiatives and individual municipal initiatives.													
Alignment With Official Community Plan:	2.3.5 - Collaborate with neighbouring municipalities and other levels of government to improve the safety, security, accessibility and connectivity of the transportation system within the City and the North Shore; 2.3.10 - Coordinate with neighbouring municipalities and other levels of government on key road network improvements to facilitate pedestrian, cycling, transit, goods, emergency and vehicle movements in the City and the North Shore; 7.2.1 - Seek partnerships and collaboration with the business community, academic institutions, non-profit organizations, neighbouring municipalities, other governments and the Squamish Nation to achieve mutual economic development objectives;													
Strategic Plan :	A Connected City - the projects will explore and pursue innovative solutions to transportation challenges, and continue to intergrate land use and transportation planning to support connectivity across the region.													
Outcome: (Customer Satisfaction)	Shared tri-municipal prioritization of INSTPP's near-term goals and advancement of key studies including rapid transit technical feasibility for future crossing of Burrard Inlet and for planned B-Line corridors through CNV.													
Impact If Project Does Not Proceed:	Lack of a long term solution to address North Shore transportation issues, continued increased congestion at two bridge heads and on the network													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	By promoting a sustainable transportation system that supports a compact, complete community and is safe, accessible, resilient, and affordable, the community's GHG emissions will decrease.													
Milestones:												Director Approval: Approved by M. Epp November 21, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
<u>Funding Requirements</u>														
City Funding (Fund Appropriation)	\$ 175,000	\$ 175,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 950,000		
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ -	\$ 175,000	\$ 175,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 950,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
<u>Impact on Operations/Maintenance</u> (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Bus Speed and Reliability											2020 - 2029 Project Plan		
Department:	Engineering: Traffic											Project Type:		New Capital Asset
Project Manager:	Kliment Kuzmanovski											Date: 4-Jul-19		New Initiative
Description:	Translink has created a new group with grant funding available to improve bus speed and reliability. First phase is for Planning to study and identify problem locations by consultant. This project is to implement recommendations.													
Purpose:	Implement projects that will provide improvements for transit vehicles at problem locations throughout the City.													
Alignment With Official Community Plan:	OCP Goal 2.1 Prioritize walking, cycling, transit and goods movement over single-occupancy vehicles; 2.1.6 Implement transit priority treatments such as signal coordination, bus bulges, intersection queue jumpers and dedicated bus lanes to reduce transit travel times and improve transit reliability; 2.3 Support a safe, accessible, resilient, and affordable transportation system; 2.3.8 Encourage transportation options that reduce fossil fuel use, such as walking, cycling, transit, carpooling, and low-emission vehicles.													
Strategic Plan :	Supports a Connected city by creating safe and efficient transportation options.													
Outcome: (Customer Satisfaction)	Improve reliability of transit and increased attractiveness over single-occupancy vehicles.													
Impact If Project Does Not Proceed:	A decline in transit operating speed impacting the attractiveness of transit over single-occupancy vehicles.													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily available information.	Transit offers significantly less GHG emissions per trip over single occupancy vehicles. Further improvement to reliability will improve the efficiency of transit and attract new riders who otherwise may choose higher emission transportation options.													
Milestones:	Retain consultant (see planning's ask) - spring 2020; Identify and prioritize problem locations - summer 2020; seek TransLink funding - Fall 2020										Director Approval: Approved by D. Pope November 20, 2019			
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
<u>Funding Requirements</u>														
City Funding (Fund Appropriation)	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 500,000		
External Funding/Contributions	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	\$ 500,000		
Total Project Expenditures	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 1,000,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
<u>Impact on Operations/Maintenance</u> (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Bicycle Master Plan Update & Bicycle Route Conceptual Design										2020 - 2029 Project Plan
Department:	Planning & Development: Transportation										New Capital Asset
Project Manager:	Daniel Watson	Date:	4-Jul-19	Project Type:							New Initiative
Description:	Update the Bicycle Master Plan, including inclusion of the AAA network and an updated to the implementation priority list. Conceptual design of the high priority bicycle routes										
Purpose:	The purpose of this work is to: ensure the Bicycle Master Plan incorporates updated best practices; wrap in the AAA network into the plan to provide clarity; update implementation priority list in order to re-prioritize bicycle facility improvements; to provide conceptual route designs for high priority routes that can be used to guide implementation										
Alignment With Official Community Plan:	2.1.2 Invest in pedestrian and cycling facilities on the routes to and around schools, and work with the North Vancouver School District to promote active transportation, healthy lifestyles, and sustainable travel behaviour among children and youth;										
Strategic Plan :	A Connected City - This project will plan and complete conceptual designs to increase kilometers of protect bike lane in the City.										
Outcome: (Customer Satisfaction)	Clear guidance on the North Vancouver Bicycle Network; appropriate infrastructure for routes;										
Impact If Project Does Not Proceed:	Without the updated priority list, investments on bicycle facilities may not be used towards the most needed locations or type of facility design and the bicycle network in North Vancouver may become inconsistent.										
External Funding :	N/A		N/A		Specify Funding Agency/Program:						
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet,	By encouraging cycling we can help reduce our community's GHG emissions. Every trip by bicycle is CO2 free, and would otherwise be taken by motorised vehicle.										
Milestones:	2019 - Initiation 2020 - Completion of Bicycle Master Plan update and report.								Director Approval: Approved by M. Epp November 21, 2019		
2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements											
City Funding (Fund Appropriation)	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Project Expenditures	\$ -	\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 90,000
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Impact on Operations/Maintenance (Incremental to 2018 Base Year Operating Budget)											
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Staffing (FTE)											
Regular	-	-	-	-	-	-	-	-	-	-	-
Temporary	-	-	-	-	-	-	-	-	-	-	-
Total Staffing	-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	Harry Jerome Complex - Major Repairs											
Department:	NVR&CC											
Project Manager:	<div style="display: flex; justify-content: space-between;"> Gary Houg Project Type: 2020 - 2029 Project Plan Maintenance & Replacement </div>											
Description:	<div style="display: flex; justify-content: space-between;"> Date: 31-Jul-19 </div> Base Program											
Purpose:	Major repair projects that have been identified and are required for customer safety and building integrity. Harry Jerome Complex includes Harry Jerome, Memorial and Mickey McDougall Community Recreation Centres.											
Alignment With Official Community Plan:	Major repair projects that have been identified and are required within the next 10 years to ensure safe, reliable operation and to maintain the integrity of the building systems. Funding is discontinued after 2021 in anticipation that the buildings will be replaced as a result of the Harry Jerome Complex redevelopment.											
Strategic Plan :	OCP Goal 5.2: Support, enhance and maintain recreation as a vital aspect of a healthy community; Objective 5.2.1: Operate, maintain and improve the provision of indoor and outdoor recreation facilities.											
Outcome: (Customer Satisfaction)	A City for People - is welcoming, inclusive, safe, accessible and supports the health and well-being of all. Harry Jerome CRC provides an opportunity for people to connect with others and to pursue various activities to support their health and well-being.											
Impact If Project Does Not Proceed:	Safe, reliable, continuous delivery of community recreation programs, preservation of building condition, and upkeep in standards of appearance.											
External Funding :	Unplanned interruptions to community recreation programs. Public dissatisfaction with safety, reliability, condition and appearance of buildings. Decrease in revenues as patrons go elsewhere to have their needs met. Decrease in recreation programs & service to the public and an increase in maintenance costs as building systems age.											
GHG Implications:	Specify Funding Agency/Program:											
	N/A N/A											
Milestones:	<div style="display: flex; justify-content: space-between;"> Deteriorating and decreasing performance of aging building systems (e.g. HVAC, plumbing, lighting, power) will translate to gradually increasing energy consumption and GHG emissions. Well maintained buildings will operate at optimum levels and result in some reduction of GHG emissions. </div>											
	<div style="display: flex; justify-content: space-between;"> Work to be done in 2020. Director Approval: Approved by H. Turner November 20, 2019 </div>											
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL
Funding Requirements												
City Funding (Fund Appropriation)	\$	200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	400,000
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total Project Expenditures	\$ -	\$ 200,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	400,000
Overhead Staffing (Engineering/Facilities)												
Specify as a percentage of funds appropriated		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Impact on Operations/Maintenance												
(Incremental to 2018 Base Year Operating Budget)												
Revenues	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Expenses net of recoveries	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
(Include staffing)	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Staffing (FTE)												
Regular		-	-	-	-	-	-	-	-	-	-	-
Temporary		-	-	-	-	-	-	-	-	-	-	-
Total Staffing		-	-	-	-	-	-	-	-	-	-	-

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.

Project Name:	INSTPP Implementation (Previously known as North Shore Transportation Improvements)											2020 - 2029 Project Plan		
Department:	Planning & Development: Transportation											Project Type:		Other Projects
Project Manager:	Michael Epp											Date: 4-Jul-19		New Initiative
Description:	The funding will be used to advance initiatives identified through the INSTPP process. This includes contribution to the on-going administration of the INSTPP staff and steering committees, advocacy and partner funding for near-term priority studies and staff salary to support advancement of initiatives.													
Purpose:	Through municipal collaboration advance joint North Shore transportation initiatives and individual municipal initiatives.													
Alignment With Official Community Plan:	2.3.5 - Collaborate with neighbouring municipalities and other levels of government to improve the safety, security, accessibility and connectivity of the transportation system within the City and the North Shore; 2.3.10 - Coordinate with neighbouring municipalities and other levels of government on key road network improvements to facilitate pedestrian, cycling, transit, goods, emergency and vehicle movements in the City and the North Shore; 7.2.1 - Seek partnerships and collaboration with the business community, academic institutions, non-profit organizations, neighbouring municipalities, other governments and the Squamish Nation to achieve mutual economic development objectives;													
Strategic Plan :	A Connected City - the projects will explore and pursue innovative solutions to transportation challenges, and continue to intergrate land use and transportation planning to support connectivity across the region.													
Outcome: (Customer Satisfaction)	Shared tri-municipal prioritization of INSTPP's near-term goals and advancement of key studies including rapid transit technical feasibility for future crossing of Burrard Inlet and for planned B-Line corridors through CNV.													
Impact If Project Does Not Proceed:	Lack of a long term solution to address North Shore transportation issues, continued increased congestion at two bridge heads and on the network													
External Funding :	<div style="display: flex; justify-content: space-between;"> N/A N/A Specify Funding Agency/Program: </div>													
GHG Implications: Discuss GHG considerations for all projects. Provide figures for Fleet, Facilities and any project with readily	By promoting a sustainable transportation system that supports a compact, complete community and is safe, accessible, resilient, and affordable, the community's GHG emissions will decrease.													
Milestones:												Director Approval: Approved by M. Epp November 21, 2019		
	2010-2019 Budget	2020 Budget	2021 Budget	2022 Budget	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	TOTAL		
<u>Funding Requirements</u>														
City Funding (Fund Appropriation)	\$ 175,000	\$ 175,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 950,000		
External Funding/Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total Project Expenditures	\$ -	\$ 175,000	\$ 175,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 950,000		
Overhead Staffing (Engineering/Facilities) Specify as a percentage of funds appropriated	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
<u>Impact on Operations/Maintenance</u> (Incremental to 2018 Base Year Operating Budget)														
Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Expenses net of recoveries (Include staffing)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Total	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Staffing (FTE)														
Regular	-	-	-	-	-	-	-	-	-	-	-	-		
Temporary	-	-	-	-	-	-	-	-	-	-	-	-		
Total Staffing	-	-	-	-	-	-	-	-	-	-	-	-		

* Prior to creating new on-going programs, please contact the Manager, Financial Planning. For on-going programs and maintenance & replacement projects, please attach a list of the projects and funding (appropriation) requirements.



 Department Manager	 Director	 CAO
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The Corporation of **THE CITY OF NORTH VANCOUVER**
ENGINEERING, PARKS & ENVIRONMENT DEPARTMENT

INFORMATION REPORT

To: Mayor Linda Buchanan and Members of Council

From: Justin Hall, Manager, Public Realm Infrastructure

Subject: PRIORITY MOBILITY NETWORK IMPROVEMENTS – FUNDING APPROPRIATION

Date: October 14, 2020 File No: 05-1705-30-0019/2020

In 2019, Council endorsed the All Ages and Abilities Priority Mobility Network Strategy – advancing the City’s existing Bicycle Master Plan and All Ages and Abilities Bike Network, while considering users with a broad range of electrified mobility devices. The Strategy focuses on a multi-phased approach to prioritize and implement important north-south and east-west corridors that connect people to key destinations in the City and throughout the region.

The 2020 Financial Plan includes \$850,000 for the Priority Mobility Corridor project. These funds are required to advance projects in Phases 1 and 2 through consultation, design and construction. These projects include: connecting the Green Necklace at West 21st Street to the Jones Overpass on Jones Avenue; and the Mid-Town Connector, linking the Casano-Loutet Overpass to Central Lonsdale and Marine Drive. Other Phase 1 and 2 projects of the Strategy like the 1st Street Mobility Corridor, Casano-Loutet Overpass and Esplanade Complete Street are underway as dedicated items in the Financial Plan.

As with past active transportation projects, the project costs are based on the potential availability of external funding. The City has been successful in accessing these grants for similar active transportation infrastructure projects in the past, and staff will continue to pursue all external funding opportunities.

The AAA Priority Mobility Network Strategy aligns with and advances established City goals and objectives, and moves forward aspects of the key priorities identified in Council’s Strategic Plan and the Safe Mobility Strategy.

RESPECTFULLY SUBMITTED:



Justin Hall
 Manager, Public Realm Infrastructure

THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8803

**A Bylaw to authorize the expenditure of monies from the
Development Cost Charge (Parks) Reserve Fund
for the 2020 Project Plan Appropriations.**

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

AND WHEREAS the development of park land is a capital cost permitted to be paid using Development Cost Charge funds under Section 566 of the *Local Government Act*;

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

1. This Bylaw shall be known and cited for all purposes as “**Development Cost Charge (Parks) Reserve Fund Bylaw, 2020, No. 8803**” (2020 Project Plan Funding).
2. The following amounts are hereby appropriated from the Development Cost Charge (Parks) Reserve Fund for the purpose of funding:
 - A. \$49,500 for the “Semisch Greenway (West 3rd Street to Semisch Park)” project; and
 - B. \$49,500 for the “Upper Levels Greenway – Lonsdale Avenue to Lynn Valley Road” project.

READ a first time on the <> day of <>, 2020.

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READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

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THE CORPORATION OF THE CITY OF NORTH VANCOUVER

BYLAW NO. 8804

**A Bylaw to authorize the expenditure of monies from the
Development Cost Charge (Transportation) Reserve Fund
for the 2020 Project Plan Appropriations.**

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

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

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

1. This Bylaw shall be known and cited for all purposes as “**Development Cost Charge (Transportation) Reserve Fund Bylaw, 2020, No. 8804**” (2020 Project Plan Funding).
2. The following amount is hereby appropriated from the Development Cost Charge (Transportation) Reserve Fund for the purpose of funding:
 - A. \$118,800 for the “Moodyville Traffic Signals” project.

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READ a third time on the <> day of <>, 2020.

ADOPTED on the <> day of <>, 2020.

MAYOR

CITY CLERK

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