

AGENDA FOR THE REGULAR MEETING OF COUNCIL TO COMMENCE AT 6:00 PM, IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14<sup>TH</sup> STREET, NORTH VANCOUVER, BC, ON MONDAY, JULY 8, 2019

#### MONDAY, JULY 8, 2019 COUNCIL MEETING – 6:00 PM

"Live" Broadcast via City Website <u>www.cnv.org/LiveStreaming</u> Complete Agenda Package available at <u>www.cnv.org/CouncilMeetings</u>

#### CALL TO ORDER

#### APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, July 8, 2019

#### ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, June 24, 2019

#### PUBLIC INPUT PERIOD

#### DELEGATION

Sioned Dyer, Executive Director, North Shore Restorative Justice Society – Information and Statistics Sharing

Item 3 refers.

#### CORRESPONDENCE

- 3. Sioned Dyer, Executive Director, North Shore Restorative Justice Society – Information and Statistics Sharing, June 3, 2019
- 4. Stephen Smith, Library Board Chair, North Vancouver City Library Provincial Support for Public Libraries, June 24, 2019

#### **REPORTS**

- 5. "Reclaiming Power and Place" Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIWG)
- 6. Development Variance Permit Application: 230 West Keith Road (Board of Education, School District No. 44)

Item 7 refers.



Page 2

#### BYLAW – FIRST AND SECOND READINGS

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

#### **REPORT**

8. Rezoning Application: 1126 Heywood Street (Behrouz Aghai / Bill Curtis & Associates Design Ltd.)

Item 9 refers.

#### BYLAW – FIRST AND SECOND READINGS

9. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729" (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street)

#### BYLAWS – THIRD READING

10. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street)

Public Hearing waived.

11. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment)

Public Hearing waived.

#### PUBLIC CLARIFICATION PERIOD

#### COUNCIL INQUIRIES

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

#### NOTICES OF MOTION

#### <u>ADJOURN</u>



#### CALL TO ORDER

#### APPROVAL OF AGENDA

1. Regular Council Meeting Agenda, July 8, 2019

#### ADOPTION OF MINUTES

2. Regular Council Meeting Minutes, June 24, 2019

#### PUBLIC INPUT PERIOD

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

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

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

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

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

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

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

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



#### DELEGATION

Sioned Dyer, Executive Director, North Shore Restorative Justice Society

Re: Information and Statistics Sharing

Item 3 refers.

#### CORRESPONDENCE

3. Sioned Dyer, Executive Director, North Shore Restorative Justice Society, June 3, 2019 – File: 01-0230-20-0046/2019

Re: Information and Statistics Sharing

#### **RECOMMENDATION:**

THAT the correspondence from Sioned Dyer, Executive Director, North Shore Restorative Justice Society, dated June 3, 2019, regarding "Information and Statistics Sharing", be received with thanks.

- 4. Stephen Smith, Library Board Chair, North Vancouver City Library, June 24, 2019 – File: 01-0360-20-0070/2019
  - Re: Provincial Support for Public Libraries

#### **RECOMMENDATION:**

THAT the correspondence from Stephen Smith, Library Board Chair, North Vancouver City Library, dated June 24, 2019, regarding "Provincial Support for Public Libraries", be received with thanks.



Page 5

#### **REPORTS**

5. "Reclaiming Power and Place" – Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIWG) – File: 01-0400-01-0001/2019

Report: Interim Director, Community and Partner Engagement, June 27, 2019

#### **RECOMMENDATION:**

PURSUANT to the report of the Interim Director, Community and Partner Engagement, dated June 27, 2019, entitled " 'Reclaiming Power and Place' – Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIWG)":

THAT staff be directed to review the Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIWG) to identify Calls for Justice that relate to municipal jurisdiction;

AND THAT staff report back with recommended actions that the City of North Vancouver might take to respond to those Calls for Justice to help prevent future abuses and violations against indigenous women and girls.

6. Development Variance Permit Application: 230 West Keith Road (Board of Education, School District No. 44) – File: 08-3090-20-0246/1

Report: Planner 1, June 26, 2019

#### **RECOMMENDATION:**

PURSUANT to the report of the Planner 1, dated June 26, 2019, entitled "Development Variance Permit Application: 230 West Keith Road (Board of Education, School District No. 44)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8727" (DA Architects + Planners, 230 West Keith Road, CD-558 Text Amendment) be considered and the Public Hearing be waived;

THAT DVP2019-00003 be considered for issuance under Section 498 of the *Local Government Act* and the Public Meeting be waived;

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

Item 7 refers.



Page 6

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

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

#### **RECOMMENDATION:**

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8727" (DA Architects + Planners, 230 West Keith Road, CD-558 Text Amendment) be given first and second readings.

#### <u>REPORT</u>

8. Rezoning Application: 1126 Heywood Street (Behrouz Aghai / Bill Curtis & Associates Design Ltd.) – File: 08-3360-20-0468/1

Report: Manager, Planning, June 26, 2019

#### **RECOMMENDATION:**

PURSUANT to the report of the Manager, Planning, dated June 26, 2019, entitled "Rezoning Application: 1126 Heywood Street (Behrouz Aghai / Bill Curtis & Associates Design Ltd.)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729" (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street) be considered and referred to a Public Hearing;

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

Item 9 refers.

#### BYLAW – FIRST AND SECOND READINGS

9. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729" (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street)

#### **RECOMMENDATION:**

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729" (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street) be given first and second readings.



Page 7

#### **BYLAWS – THIRD READING**

10. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street)

#### **RECOMMENDATION:**

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street) be given third reading.

#### Public Hearing waived.

11. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment)

#### **RECOMMENDATION:**

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment) be given third reading.

Public Hearing waived.

#### PUBLIC CLARIFICATION PERIOD

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

#### **COUNCIL INQUIRIES**

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

NOTICES OF MOTION

<u>ADJOURN</u>

#### THIS PAGE INTENTIONALLY LEFT BLANK



**MINUTES** OF THE REGULAR MEETING OF COUNCIL HELD IN THE COUNCIL CHAMBER, CITY HALL, 141 WEST 14<sup>TH</sup> STREET, NORTH VANCOUVER, BC, ON **MONDAY, JUNE 24, 2019** 

#### PRESENT

#### COUNCIL MEMBERS

Mayor L. Buchanan Councillor H. Back Councillor D. Bell Councillor A. Girard Councillor T. Hu Councillor J. McIlroy (joined the meeting at 6:49 pm) Councillor T. Valente

#### **STAFF MEMBERS**

- L. McCarthy, CAO
- K. Graham, City Clerk
- C. Baird, Deputy City Clerk
- J. Peters, Assistant City Clerk
- B. Pearce, Director, Strategic and Corporate Services
- R. Skene, Manager, Facilities and Real Estate
- S. Antoniali, Section Manager, Real Estate
- B. Themens, Director, Finance
- V. Wen, Manager, Internal Control and Performance
- C. Fernandes, Manager, Accounting and Reporting
- L. Orr, Manager, Business and Community Partnerships
- M. Epp, Director, Planning and Development
- S. Galloway, Manager, Planning and Development
- H. Evans, Community Planner
- D. Johnson, Development Planner
- E. Macdonald, Planning Technician 2
- T. Ryce, Assistant Manager, Inspections
- K. Magnusson, Deputy Director, Engineering, Parks and Environment

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

#### APPROVAL OF AGENDA

Moved by Councillor Back, seconded by Councillor Valente

1. Regular Council Meeting Agenda, June 24, 2019

#### **CARRIED UNANIMOUSLY**

#### ADOPTION OF MINUTES

Moved by Councillor Valente, seconded by Councillor Bell

2. Regular Council Meeting Minutes, June 17, 2019

Moved by Councillor Valente, seconded by Councillor Back

THAT the Public Input Period be extended to hear more than 5 speakers listed on the sign-up sheet.

#### **CARRIED UNANIMOUSLY**

#### PUBLIC INPUT PERIOD

- Ron Sostad, 231 East 15<sup>th</sup> Street, North Vancouver, spoke regarding social housing strategy.
- Monica Ahlroos, 711 West 20<sup>th</sup> Street, North Vancouver, spoke regarding environmental impact of tree cutting for new developments.
- Sarah Baldwin, Owner/Operator of Brainstem Learning, 730 Marine Drive, North Vancouver, spoke regarding the rezoning application for 725 West 14<sup>th</sup> Street, North Vancouver.
- Brian Riedlinger, 2583 Swinburne Avenue, North Vancouver, spoke regarding the rezoning application for 221 West 1<sup>st</sup> Street, North Vancouver.
- Joe Marston, 303-317 Bewicke Avenue, North Vancouver, spoke regarding the rezoning application for 725 West 14<sup>th</sup> Street, North Vancouver.
- Heather Deris, Owner, Ava Music & Art Centre, 734 Marine Drive, North Vancouver, spoke regarding the rezoning application for 725 West 14<sup>th</sup> Street, North Vancouver.
- Phil Dupesquier, 891 Old Lillooet Road, North Vancouver, spoke regarding the material used for election signs.

#### CONSENT AGENDA

Items \*3, \*4, \*5, \*6 and \*7 are listed in the Consent Agenda and may be considered separately or in one motion.

Moved by Councillor Girard, seconded by Councillor Bell

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

#### CARRIED UNANIMOUSLY

#### START OF CONSENT AGENDA

#### **BYLAWS – ADOPTION**

\*3. "Development Cost Charge (Transportation) Reserve Fund Bylaw, 2018, No. 8623, Amendment Bylaw, 2019, No. 8722" (Funding Reallocation)

Moved by Councillor Girard, seconded by Councillor Bell

THAT "Development Cost Charge (Transportation) Reserve Fund Bylaw, 2018, No. 8623, Amendment Bylaw, 2019, No. 8722" (Funding Reallocation) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

#### CONSENT AGENDA – Continued

#### **BYLAWS – ADOPTION – Continued**

\*4. "Development Cost Charge (Transportation) Reserve Fund Bylaw, 2018, No. 8625, Amendment Bylaw, 2019, No. 8723" (Funding Reallocation)

Moved by Councillor Girard, seconded by Councillor Bell

THAT "Development Cost Charge (Transportation) Reserve Fund Bylaw, 2018, No. 8625, Amendment Bylaw, 2019, No. 8723" (Funding Reallocation) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

#### (CARRIED UNANIMOUSLY)

\*5. "Development Cost Charge (Transportation) Reserve Fund Bylaw, 2018, No. 8690, Amendment Bylaw, 2019, No. 8724" (Funding Reallocation)

Moved by Councillor Girard, seconded by Councillor Bell

THAT "Development Cost Charge (Transportation) Reserve Fund Bylaw, 2018, No. 8690, Amendment Bylaw, 2019, No. 8724" (Funding Reallocation) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

#### (CARRIED UNANIMOUSLY)

#### CORRESPONDENCE

- \*6. Board in Brief, Metro Vancouver Regional District, May 24, 2019 - File: 01-0400-60-0006/2019
  - Re: Metro Vancouver Board in Brief

Moved by Councillor Girard, seconded by Councillor Bell

THAT the correspondence of Metro Vancouver, dated May 24, 2019, regarding the "Metro Vancouver – Board in Brief", be received and filed.

#### (CARRIED UNANIMOUSLY)

#### <u>REPORT</u>

\*7. 2018 Statement of Financial Information (SOFI) – File: 05-1880-20-0008/2018

Report: Manager, Accounting and Reporting, June 12, 2019

Moved by Councillor Girard, seconded by Councillor Bell

PURSUANT to the report of the Manager, Accounting and Reporting, dated June 12, 2019, entitled "2018 Statement of Financial Information (SOFI)":

#### CONSENT AGENDA – Continued

#### **REPORT** – Continued

\*7. 2018 Statement of Financial Information (SOFI) – File: 05-1880-20-0008/2018 – Continued

THAT the Statement of Financial Information be approved and forwarded to the Ministry of Municipal Affairs and Housing.

#### (CARRIED UNANIMOUSLY)

#### END OF CONSENT AGENDA

#### PRESENTATION

Anne Rodgers, Communications Coordinator, North Vancouver Recreation and Culture Commission – Our Community Story 2019.

Re: Our Community Story 2019

Heather Turner, Director, and Anne Rodgers, Communications Coordinator, North Vancouver Recreation and Culture Commission provided a presentation regarding "Our Community Story 2019" and responded to questions of Council.

Moved by Councillor Bell, seconded by Councillor Valente

THAT the meeting recess to the Public Meeting regarding the 2018 Annual Municipal Report.

#### CARRIED UNANIMOUSLY

The meeting recessed to the Public Meeting at 6:40 pm and reconvened at 6:59 pm.

Councillor McIlroy joined the meeting at 6:49 pm.

#### **REPORTS**

8. 2018 Annual Municipal Report – File: 01-0640-20-0001/2018

Report: Manager, Internal Control and Performance, June 12, 2019

Moved by Councillor Bell, seconded by Councillor Valente

PURSUANT to the report of the Manager, Internal Control and Performance, dated June 12, 2019, entitled "2018 Annual Municipal Report":

THAT Council approve the 2018 Annual Municipal Report.

9. 2019 Round One Community Grant Recommendations - File: 05-1850-20-0005/2019

Moved by Councillor Valente, seconded by Councillor Girard

PURSUANT to the report of the Chair, Social Planning Advisory Committee, and the Community Planner, dated June 12, 2019, entitled "2019 Round One Community Grant Recommendations":

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

Athletics for Kids Financial Assistance (B.C.) Society (Operating)	\$1,500
Athletics for Kids Financial Assistance (B.C.) Society (Program – A4K Youth Sports Funding)	\$2,000
Avalon Recovery Society (Operating)	\$7,000
Avalon Recovery Society (Program – Child-Minding)	\$3,000
Avalon Recovery Society (Program – Health and Education)	\$1,000
Avalon Recovery Society (Program – Peer Support)	\$1,000
Big Brothers of Greater Vancouver (Program – Adult In-School Mentoring)	\$1,000
Big Brothers of Greater Vancouver (Program – (The) Community Mentoring Program)	\$1,000
Big Brothers of Greater Vancouver (Program – Teen Mentoring)	\$1,000
Big Sisters of BC Lower Mainland (Program – North Shore Mentoring Programs)	\$2,000
Camp Kerry Society (Program – Beyond One Voice Workshop Series)	\$1,500
Camp Kerry Society (Program – Camp Kerry BC Family Retreat)	\$1,000
Camp Kerry Society (Program – Circles of Strength: Family Grief Support System)	\$500

Report: Chair, Social Planning Advisory Committee, and Community Planner, June 12, 2019

9. 2019 Round One Community Grant Recommendations - File: 05-1850-20-0005/2019 - Continued

Canadian Mental Health Assn. – North and West Vancouver Branch (Operating)	\$1,400
Canadian Mental Health Assn. – North and West Vancouver Branch (Program – Isolation Reduction Initiative)	\$1,500
Canadian Mental Health Assn. – North and West Vancouver Branch (Program – Steps Youth Program)	\$2,000
Canadian Red Cross (Program – Health Equipment Loan Program (HELP))	\$2,000
Community First Foundation (Program – Backpack Buddies)	\$2,500
Crisis Intervention & Suicide Prevention Centre of BC (Program – SAFE Talk)	\$1,500
Crisis Intervention & Suicide Prevention Centre of BC (Program – YouthInBC.com)	\$1,500
Family Services of the North Shore (Program – Companioning Community Care)	\$1,750
Family Services of the North Shore (Program – I hope family centre)	\$3,000
Friend 2 Friend Learning Society (Program – Autism Demystification and Integrated Play Group Programs)	\$1,000
Friend 2 Friend Learning Society (Program – Play Centre for Children with Autism Program)	\$2,000
Greater Vancouver Law Students' Legal Advice Society (Program – Law Students' Legal Advice Program)	\$1,000
Highlands United Church (Program – Saturday Lunch Program)	\$2,000
Highlands United Church (Program – Shelter to Home)	\$2,000
Hollyburn Family Services Society (Operating)	\$5,000
Hollyburn Family Services Society (Program – Aboriginal Mental Health Court Outreach Worker)	\$1,800
Hollyburn Family Services Society (Program – Supporting Seniors at Housing Risk)	\$1,200
Hollyburn Family Services Society (Program – Supporting Seniors to Remain Housed)	\$1,200

9. 2019 Round One Community Grant Recommendations - File: 05-1850-20-0005/2019 - Continued

Lionsview Seniors' Planning Society (Operating)	\$2,600
Living Systems: Family Systems Counselling, Education, Training & Research Society (Program – Play Therapy and Parent Counselling Program)	\$2,000
Lookout Housing and Health Society (Operating)	\$5,000
North Shore ConneXions Society (Program – Education and Community Awareness)	\$1,500
North Shore ConneXions Society (Program – Friendship Circles)	\$500
North Shore Disability Resource Centre (Program – Adapted & Accessible Yoga)	\$390
North Shore Disability Resource Centre (Program – Information & Advocacy Program)	\$5,000
North Shore Disability Resource Centre (Program – Parent Information Events: Transition & Employment)	\$700
North Shore Disability Resource Centre (Program – Summery Bursary Program)	\$1,500
North Shore Keep Well Society (Operating)	\$1,500
North Shore Meals on Wheels Society (Operating)	\$6,000
North Shore Multicultural Society (Operating)	\$6,000
North Shore Multicultural Society (Program – NEONology)	\$1,000
North Shore Polish Association Belweder (Operating)	\$1,500
North Shore Stroke Recovery Centre (Operating)	\$2,000
North Shore Stroke Recovery Centre (Program – Art Therapy)	\$500
North Shore Stroke Recovery Centre (Program – Speech Language Therapy Assistant)	\$1,100
North Shore Stroke Recovery Centre (Program – Stroke Survivor Peer Support)	\$2,000
North Shore Volunteers for Seniors (Operating)	\$900
North Shore Women's Centre (Program – North Shore Coordinating Committee to End Violence Against Women in Relationships)	\$2,000

#### **REPORTS** – Continued

9. 2019 Round One Community Grant Recommendations - File: 05-1850-20-0005/2019 - Continued

	-
Pacific Post Partum Support Society (Childcare at Postpartum Support Groups)	\$2,000
Pathways Serious Mental Illness Society (Operating)	\$1,750
Quest Outreach Society (Program – Food Recovery and Redistribution Program)	\$2,500
Sharing Abundance Association (Program – Sharing Abundance Community and Senior Meal Programs)	\$3,500
Special Olympics British Columbia Society – North Shore (Operating)	\$750
Special Olympics British Columbia Society – North Shore (Program – SOBC – North Shore Sports Programs)	\$1,000
St. John the Evangelist Anglican Church (Program – Queen Mary Family Learning Program)	\$9,000
Vancouver Adaptive Snow Sports (Program – Adaptive Learn to Ski)	\$2,000
Volunteer Cancer Drivers Society (Program – Cancer Patient Transportation for CNV and DNV Residents)	\$1,500
Washington Kids Foundation (Operating)	\$5,000
TOTAL	\$130,540

AND THAT the following organizations be notified that their application for 2019 Community Grants will not be funded:

Alano Club of the North Shore (Operating)

Avalon Recovery Society (Program – Volunteer Training & Staff Development Program)

BC Pets and Friends (Operating)

Big Brothers of Greater Vancouver (Operating)

Capilano Community Services (Program – Norgate Summer Program)

(The) Cinderella Project (Program – Cinderella Project Boutique Day) Community First Foundation (Operating)

Crisis Intervention & Suicide Prevention Centre of BC (Operating)

District of North Vancouver Fire Fighters Charitable Society (Program – Time to Talk)

#### **REPORTS** – Continued

9. 2019 Round One Community Grant Recommendations - File: 05-1850-20-0005/2019 - Continued

FamilySmart – The Institute of Families for Child & Youth Mental Health
(Program – FamilySmart Parent in Residence, North Shore)
Greater Vancouver Youth Unlimited (North Shore) (Program – Creative Life)
Lionsview Seniors' Planning Society (Program – Age Friendly Seniors Action
Tables)
Lionsview Seniors' Planning Society (Program – Older & Wiser Column –
Media Support for Seniors on the North Shore)
Lionsview Seniors' Planning Society (Program – Services to Seniors Coalition /
Planning Table)
Lower Lonsdale Community Gardens (Program – Replacement of
Deteriorating Infrastructure)
North Shore Disability Resource Centre (Program – North Shore Community
Response Network)
North Shore Multicultural Society (Program – Community Bridging)
Pacific Post Partum Support Society (Operating)
Pathways Serious Mental Illness Society (Program – Family-to-Family
Education)
St. Catherine's Anglican Church, Capilano (Program – Community
Thanksgiving Dinner)
Upper Lonsdale Preschool (ULP) Society (Program – ULP Outdoor Education
Program)
Vancouver Adaptive Snow Sports (Operating)
Vancouver Adaptive Snow Sports (Program – Bluestreaks Adaptive Race
Program)

#### CARRIED UNANIMOUSLY

10. Proposed Amendments to Mobile Food Cart Policy 2017-002 - File: 01-0340-50-0027/1

Report: Manager, Business and Community Partnerships, June 12, 2019

Moved by Councillor McIlroy, seconded by Councillor Girard

PURSUANT to the report of the Manager, Business and Community Partnerships, dated June 12, 2019, entitled "Proposed Amendments to Mobile Food Cart Policy 2017-002":

THAT the proposed amendments to the Mobile Food Cart Policy 2017-002 be approved.

#### CARRIED UNANIMOUSLY

Councillor Girard left the meeting at 7:12 pm and returned at 7:14 pm.

11. BC Tall Wood Mass Timber Construction Early Adoption Initiative - File: 09-3760-01-0001/2019

Report: Assistant Manager, Inspections, June 12, 2019

Moved by Mayor Buchanan, seconded by Councillor McIlroy

PURSUANT to the report of the Assistant Manager, Inspections, dated June 12, 2019, entitled "BC Tall Wood Mass Timber Construction Early Adoption Initiative":

THAT Council support participation in the Province of British Columbia's Tall Wood Early Adoption Initiative;

AND THAT Council request the Province of British Columbia to include the City of North Vancouver as a participating local authority in the regulation for the Tall Wood Early Adoption Initiative.

#### CARRIED UNANIMOUSLY

12. Alternative Approval Process – Sunrise Parkland Adjustment – Petition Results – File: 09-4250-01-20-0004/1

Report: Corporate Officer, June 18, 2019

Moved by Councillor Bell, seconded by Councillor Girard

PURSUANT to the report of the Corporate Officer, dated June 18, 2019, entitled "Alternative Approval Process – Sunrise Park – Petition Results":

THAT the Corporate Officer's Certification for the Alternative Approval Process Opportunity regarding "Parks Dedication Bylaw, 2004, No. 7628, Amendment Bylaw, 2019, No. 8706" (Sunrise Parkland Adjustment) be received and filed;

AND THAT "Parks Dedication Bylaw, 2004, No. 7628, Amendment Bylaw, 2019, No. 8706" (Sunrise Parkland Adjustment) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

#### **CARRIED UNANIMOUSLY**

#### **BYLAW – ADOPTION**

13. "Parks Dedication Bylaw, 2004, No. 7628, Amendment Bylaw, 2019, No. 8706" (Sunrise Parkland Adjustment)

Moved by Councillor Bell, seconded by Councillor Girard

THAT "Parks Dedication Bylaw, 2004, No. 7628, Amendment Bylaw, 2019, No. 8706" (Sunrise Parkland Adjustment) be adopted, signed by the Mayor and City Clerk and affixed with the corporate seal.

14. Rezoning Application: 410 West 15<sup>th</sup> Street (Angelo Cusano / Bill Curtis & Associates Design Ltd.) – File: 08-3360-20-0455/1

Report: Planner 1, June 12, 2019

Moved by Councillor Bell, seconded by Councillor Girard

PURSUANT to the report of the Planner 1, dated June 12, 2019, entitled "Rezoning Application: 410 West 15<sup>th</sup> Street (Angelo Cusano / Bill Curtis & Associates Design Ltd.)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street) 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

15. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street)

Moved by Councillor Bell, seconded by Councillor Girard

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street) be given first and second readings.

#### CARRIED UNANIMOUSLY

#### <u>REPORT</u>

16. Rezoning Application: 132 West Esplanade (132 Esplanade Holdings Ltd., CD-179 Text Amendment) – File: 08-3360-20-0499/1

Report: Planner 1, June 12, 2019

Moved by Councillor McIlroy, seconded by Councillor Girard

PURSUANT to the report of the Planner 1, dated June 12, 2019, entitled "Rezoning Application: 132 West Esplanade (132 Esplanade Holdings Ltd., CD-179 Text Amendment)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment) be considered and the Public Hearing be waived;

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

#### BYLAW – FIRST AND SECOND READINGS

17. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment)

Moved by Councillor McIlroy, seconded by Councillor Girard

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment) be given first and second readings.

#### CARRIED UNANIMOUSLY

#### <u>REPORT</u>

18. Rezoning Application: 725 West 14<sup>th</sup> Street (City Cannabis / Krystian Wetulani)
 – File: 08-3360-20-0492/1

Report: Development Planner, June 12, 2019

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Development Planner, dated June 12, 2019, entitled "Rezoning Application: 725 West 14<sup>th</sup> Street (City Cannabis / Krystian Wetulani)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8713" (City Cannabis / Krystian Wetulani, 725 West 14<sup>th</sup> Street, CD-720) be considered and referred to a Public Hearing;

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

AND THAT a copy of the resolution be forwarded to the Provincial Liquor and Cannabis Regulation Branch.

#### CARRIED UNANIMOUSLY

#### BYLAW – FIRST AND SECOND READINGS

19. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8713" (City Cannabis / Krystian Wetulani, 725 West 14<sup>th</sup> Street, CD-720)

Moved by Councillor Girard, seconded by Councillor Hu

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8713" (City Cannabis / Krystian Wetulani, 725 West 14<sup>th</sup> Street, CD-720) be given first and second readings.

20. Rezoning Application: 1717 Lonsdale Avenue (The Herb Co. / Scott Hamilton) - File: 08-3360-20-0494/1

Report: Development Planner, June 12, 2019

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Development Planner, dated June 12, 2019, entitled "Rezoning Application: 1717 Lonsdale Avenue (The Herb Co. / Scott Hamilton)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714" (The Herb Co. / Scott Hamilton, 1717 Lonsdale Avenue, CD-721) be considered and referred to a Public Hearing;

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

AND THAT a copy of the resolution be forwarded to the Provincial Liquor and Cannabis Regulation Branch.

#### CARRIED UNANIMOUSLY

#### BYLAW – FIRST AND SECOND READINGS

21. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714" (The Herb Co. / Scott Hamilton, 1717 Lonsdale Avenue, CD-721)

Moved by Councillor Girard, seconded by Councillor Hu

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8714" (The Herb Co. / Scott Hamilton, 1717 Lonsdale Avenue, CD-721) be given first and second readings.

22. Rezoning Application: 221 West 1<sup>st</sup> Street (1<sup>st</sup> Cannabis / 1174707 BC Ltd.) - File: 08-3360-20-0493/1

Report: Development Planner, June 12, 2019

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Development Planner, dated June 12, 2019, entitled "Rezoning Application: 221 West 1<sup>st</sup> Street (1<sup>st</sup> Cannabis / 1174707 BC Ltd.)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8715" (1<sup>st</sup> Cannabis / 1174707 BC Ltd., 221 West 1<sup>st</sup> Street, CD-454 Text Amendment) be considered and referred to a Public Hearing;

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

AND THAT a copy of the resolution be forwarded to the Provincial Liquor and Cannabis Regulation Branch.

#### CARRIED UNANIMOUSLY

#### BYLAW – FIRST AND SECOND READINGS

23. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8715" (1<sup>st</sup> Cannabis / 1174707 BC Ltd., 221 West 1<sup>st</sup> Street, CD-454 Text Amendment)

Moved by Councillor Girard, seconded by Councillor Hu

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8715" (1<sup>st</sup> Cannabis / 1174707 BC Ltd., 221 West 1<sup>st</sup> Street, CD-454 Text Amendment) be given first and second readings.

24. Rezoning Application: 315 Lonsdale Avenue (Lonsdale Cannabis Co. / 1120364 BC Ltd.) – File: 08-3360-20-0495/1

Report: Development Planner, June 12, 2019

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Development Planner, dated June 12, 2019, entitled "Rezoning Application: 315 Lonsdale Avenue (Lonsdale Cannabis Co. / 1120364 BC Ltd.)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8716" (Lonsdale Cannabis Co. / 1120364 BC Ltd., 315 Lonsdale Avenue, CD-341 Text Amendment) be considered and referred to a Public Hearing;

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

AND THAT a copy of the resolution be forwarded to the Provincial Liquor and Cannabis Regulation Branch.

#### CARRIED UNANIMOUSLY

#### BYLAW – FIRST AND SECOND READINGS

25. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8716" (Lonsdale Cannabis Co. / 1120364 BC Ltd., 315 Lonsdale Avenue, CD-341 Text Amendment)

Moved by Councillor Girard, seconded by Councillor Hu

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8716" (Lonsdale Cannabis Co. / 1120364 BC Ltd., 315 Lonsdale Avenue, CD-341 Text Amendment) be given first and second readings.

26. Rezoning Application: 1200 Lonsdale Avenue (Mark Long / BC Liquor Distribution Branch) – File: 08-3360-20-0497/1

Report: Development Planner, June 12, 2019

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Development Planner, dated June 12, 2019, entitled "Rezoning Application: 1200 Lonsdale Avenue (Mark Long / BC Liquor Distribution Branch)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8717" (Mark Long / BC Liquor Distribution Branch, 1200 Lonsdale Avenue, CD-722) be considered and referred to a Public Hearing;

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

AND THAT a copy of the resolution be forwarded to the Provincial Liquor and Cannabis Regulation Branch.

#### CARRIED UNANIMOUSLY

#### BYLAW – FIRST AND SECOND READINGS

27. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8717" (Mark Long / BC Liquor Distribution Branch, 1200 Lonsdale Avenue, CD-722)

Moved by Councillor Girard, seconded by Councillor Hu

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8717" (Mark Long / BC Liquor Distribution Branch, 1200 Lonsdale Avenue, CD-722) be given first and second readings.

28. Rezoning Application: 333 Brooksbank Avenue (Mark Long / BC Liquor Distribution Branch) – File: 08-3360-20-0496/1

Report: Development Planner, June 12, 2019

Moved by Councillor Girard, seconded by Councillor Hu

PURSUANT to the report of the Development Planner, dated June 12, 2019, entitled "Rezoning Application: 333 Brooksbank Avenue (Mark Long / BC Liquor Distribution Branch)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8718" (Mark Long / BC Liquor Distribution Branch, 333 Brooksbank Avenue, CD-131 Text Amendment) be considered and referred to a Public Hearing;

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

AND THAT a copy of the resolution be forwarded to the Provincial Liquor and Cannabis Regulation Branch.

#### CARRIED UNANIMOUSLY

#### BYLAW – FIRST AND SECOND READINGS

29. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8718" (Mark Long / BC Liquor Distribution Branch, 333 Brooksbank Avenue, CD-131 Text Amendment)

Moved by Councillor Girard, seconded by Councillor Hu

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8718" (Mark Long / BC Liquor Distribution Branch, 333 Brooksbank Avenue, CD-131 Text Amendment) be given first and second readings.

#### CARRIED UNANIMOUSLY

#### PUBLIC CLARIFICATION PERIOD

Mayor Buchanan declared a recess at 7:39 pm for the Public Clarification Period and reconvened the meeting immediately after.

Heather Deris, Owner, Ava Music & Art Centre, 734 Marine Drive, North Vancouver, requested clarification regarding the public hearing process.

#### **COUNCIL INQUIRIES**

Nil.

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

Nil.

#### NOTICES OF MOTION

Nil.

#### CITY CLERK'S RECOMMENDATION:

Moved by Councillor McIlroy, seconded by Councillor Back

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

#### CARRIED UNANIMOUSLY

The meeting recessed to the Committee of the Whole, Closed session, at 7:42 pm and reconvened at 8:23 pm.

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

- 30. 1555 Forbes Avenue Information Related to UBCM Child Care Application File: 10-4750-01-0001/2019
  - Report: Community Planner and Manager, Facilities and Real Estate, June 12, 2019

Moved by Councillor Back, seconded by Councillor McIlroy

PURSUANT to the report of the Community Planner and Manager, Facilities and Real Estate, dated June 12, 2019, entitled "1555 Forbes Avenue – Information Related to UBCM Child Care Application":

THAT Council resubmit, if applicable, an application for a UBCM Community Child Care Space Creation Grant with respect to property located at 364 East 1st Street;

THAT Council commit to allocating \$5 million within the City budget for a "Child Care Strategy and Implementation Project" for children under the age of 5 years throughout the City.

THAT staff, through the Child Care Strategy, identify potential City sites in the next 6 months where child care can be created over the next 3 years;

THAT staff be directed to apply for Provincial New Spaces Child Care grants to the identified sites;

AND THAT the report of the Community Planner and Manager, Facilities and Real Estate, dated June 12, 2019, remain in the Closed session.

#### **ADJOURN**

Moved by Councillor McIlroy, seconded by Councillor Hu

THAT the meeting adjourn.

#### The meeting adjourned at 8:24 pm.

"Certified Correct by the City Clerk"

CITY CLERK

#### THIS PAGE INTENTIONALLY LEFT BLANK

## The North Shore Restorative Justice Society

Restorative Justice is a philosophy that looks at crime and conflict as a breakdown between people and relationships. Restorative Justice acknowledges that when a crime occurs it impacts the victim, community, and offender, and therefore in order to resolve or to start to heal the harm, all people affected need to be part of the conversation.

Restorative

Justice

Sioned Dyer Executive Director <u>sioned@nsrj.ca</u> <u>www.nsrj.ca</u>

### The North Shore Restorative Justice Society

SUMMARY:

- Community based non-profit since 1997 (gained charity status in 2010)
- Volunteer-based organization with 40+ active volunteers
- Seven staff

Restorative Justice

- Offices located at North Vancouver RCMP & West Vancouver Police Department
- Funding sources include municipal, grants, fundraising

PROGRAMS:

- Restorative Response- police diversion program
- Schools Initiative- strengths-based education program
  - Preventative component in response to high numbers of youth files from Restorative Response program
- 'Community Dialogue' Series
- Youth 'Speak-Out' Series
- Elders at risk of abuse and neglect programs

# RJ is recognized in the Criminal Code of Canada

s. 717(1) permits "alternative measures" (ie not judicial proceedings) to be used when:

Not inconsistent with the protection of society and
 it is appropriate for V, O and interest of society
 V&O fully and freely consents to participate
 O accepts responsibility for alleged offence
 There is sufficient evidence to proceed with prosecution

## RJ in the Youth Criminal Justice Act

- 1. Alternative measures ... "often the most appropriate and effective way to address youth crime" (s.4(a))
- 2. s.6(1) A police officer SHALL, before starting judicial proceedings consider whether it would be sufficient to:
  - Take no further action
  - Warn the young person / administer a caution
  - Refer to a program that may assist the youth not to commit offences = NSRJ!

### Asking Different Questions...

A restorative justice process asks:

Who has been hurt?

What are their NEEDS?

How can all students/staff involved be part of meeting these needs?

What needs to happen to start to heal people and relationships?

• Traditional (punitive) discipline asks:

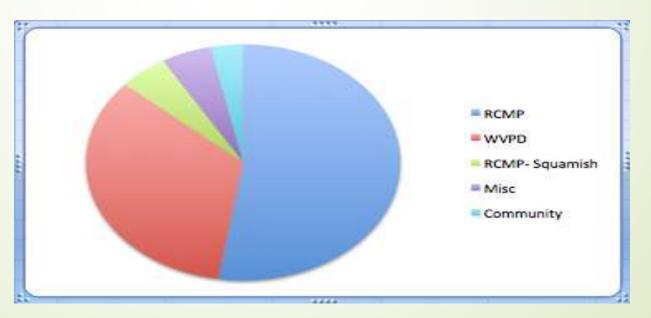
What school rule or law has been broken?

Who did it?

What punishment (isolation, detention, expulsion, etc) do they deserve?

### Stats - 2018

- People Served = 173
- Individual Meetings = 143
- Types of files:
  - assaults/ sex assaults/ domestic violence/ stalking
  - shoplifting/ theft/ fraud
  - neighbourhood disputes/
  - mischief/ property damage/ arson/ B&E
- Referrals from:



# Quality $\sqrt{}$

(Survey Responses)

- 90% process served their needs well
- 80% greater understanding of the situation
- 90% outcome was fair
- 95% facilitators were neutral & respectful
- 78% of V's process helped heal
- 83% of O's unlikely to cause this harm again
- 90% would choose RJ again in similar circumstances



Bragging!



"Without this process, I don't know where I'd be."

"I truly appreciate the help and great work that you have done for me to heal..."

"Thank you ... closure is very important."

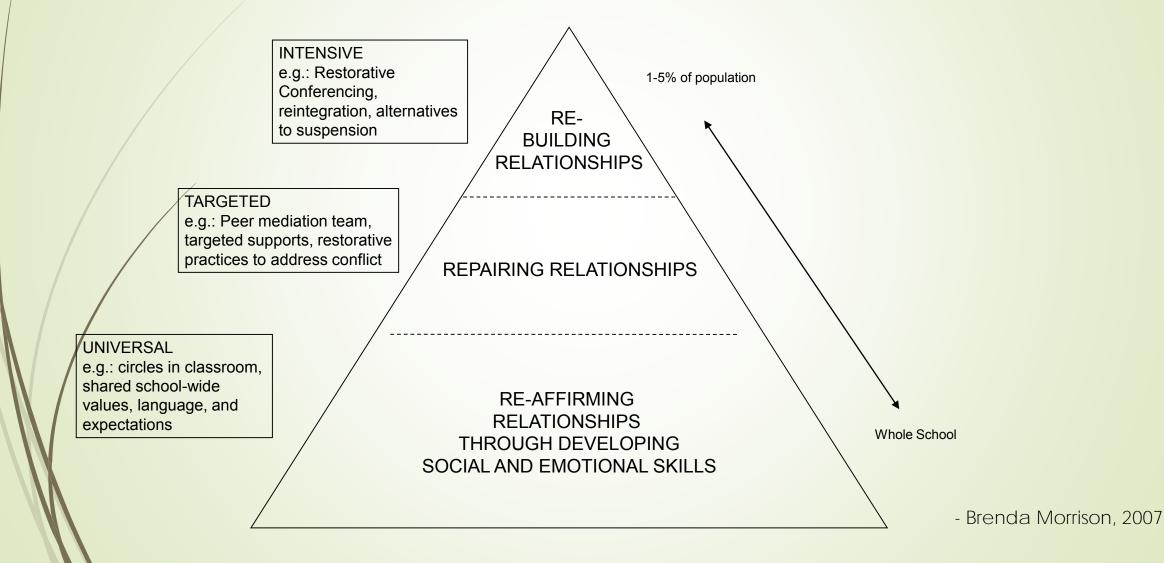
"I would like to thank NSRJ for their efforts making the community a better place and I am proud to be their partner."

# Schools Initiative

- Started in 2013
- Pilot program in one elementary school and one alternative high school
- 17 Weekly Circles in 2018/2019 with additional supports (teacher Circles, Pro-D, parent Circles)



# Whole-School Restorative Justice



# Circles In Schools fosters healthy classroom environments

- Self-awareness Communication skills Sense of belonging and **c**ommunity Social emotional development Empathy Conflict resolution and problem solving skills
- Positive relationships



# Positive Relationships

# "Positive relationships provide the most potent protective factors for vulnerable teens."

Building Resilience in Vulnerable Youth, McCreary Centre, 2006

# What do students say?

"I liked that we can communicate and share our lives and ideas" - Gr 4 student

"I liked that we could learn how other people feel. I think Circles really made me a better person." – Gr 6 student

"I learned a lot of words for feeling and thinking." - Gr 3 student

Circles is such a warm welcoming space - even the most shy students have opened up here and I am so grateful to have witnessed that!" – Gr 11 student

"I really liked the activities we did. I think it really helped to express ourselves" - Gr 5 student

"What I enjoyed most about circles was the freedom to share my opinion" - Gr 6 student

"I enjoyed everything about circle. It was great to learn new things about myself and open up and talk about things I wouldn't normally" – Gr 9 student

# Questions?

# Admissions in RJ won't come back to bite them!

# Admissions not admissible in evidence

CCC s.717(3): "No admission, confession or statement accepting responsibility for a given act or omission made by a person alleged to have committed an offence as a condition of the person being dealt with by alternative measures is admissible in evidence against that person in any civil or criminal proceedings."

# Protection for RJ in BC's Apology Act

(1) An apology made by or on behalf of a person in connection with any matter

(a) does not constitute ...admission of fault or liability by the person in connection with that matter...

(2) ...evidence of an apology made by or on behalf of a person in connection with any matter is **not admissible in any court as evidence of the fault or liability** of the person in connection with that matter.

(s.2)

#### **Christine Baird**

#### Subject:

FW: Delegation to City of North Van Mayor and Council

From: Sioned Dyer <sioneddyernsrj@gmail.com> Sent: June-03-19 2:22 PM To: Christine Baird <cbaird@cnv.org> Subject: Re: Delegation to City of North Van Mayor and Council

#### Hi Christine,

On behalf of the North Shore Restorative Justice Society, I would like to present at an upcoming Council meeting to provide the following information:

- review of restorative justice
- updated program summary
- current stats for North Vancouver
- an appreciation to the ongoing support of the City of North Vancouver

Please confirm that we are schedule to speak at 8th Council meeting as discussed previously.

Please note I will be away on holidays from June 4-19th and not responding to emails but will respond upon my return.

Thank you, Sioned

Sioned Dyer Executive Director North Shore Restorative Justice Society <u>604-619-9462</u> | <u>sioned@nsrj.ca</u>



Facebook | Twitter | Instagram

I acknowledge that I work on the traditional, ancestral, and unceded territory of the x<sup>w</sup>məθkwəỷəm (Musqueam), Skwxwú7mesh (Squamish), and Səlílwəta?/Selilwitulh (Tsleil-Waututh) Nations.

Reviewed by:	100	
e de la cherte de	VVI	
	CAO	

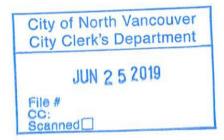
ų,

# THIS PAGE INTENTIONALLY LEFT BLANK



June 24, 2019

Mayor Linda Buchanan City of North Vancouver 141 West 14<sup>th</sup> Street North Vancouver, BC V7M 1H9



Dear Mayor Buchanan:

Provincial funding to public libraries has been frozen at \$14 million since 2009. Over the past several years, the Library Partners (Association of BC Public Library Directors, BC Libraries Association, BC Library Trustees Association and the BC Libraries Cooperative) have made concerted efforts to appeal to the provincial government for increased funding. In 2016, 2017 and 2018, the Select Standing Committee on Finance and Government Services made specific recommendations for public libraries. While these recommendations increased understanding of the need for adequate and reliable provincial funding for public libraries, they did not result in increased funding.

Between 2014 and 2019, provincial grants to North Vancouver City Library decreased 12.6% from \$137,663 to \$120,311 despite increases to cost of living and population growth.

Therefore, the Library Board respectfully requests that Council consider a motion to strongly appeal for increased provincial support for public libraries. A draft Council motion is attached below for your consideration.

Sincerely,

Stephen Smith Library Board Chair

Reviewed by:	
///	211 281
CA	0

Cc: Karla Graham, Corporate Officer

Motion: Restoring Provincial Support for Public Libraries

WHEREAS public libraries require continuous and increasing investment to provide opportunities for life-long learning, build community, and increase equity and social inclusion;

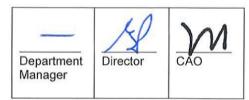
AND WHEREAS restoring funding to public libraries supports the BC Government's agenda to eliminate poverty, improve access to education, and address social justice in BC;

AND WHEREAS provincial funding for public libraries has remained unchanged since 2009 while costs to deliver services and public demand for library services have increased, demonstrating a regressive approach of shifting costs to municipal property tax payers;

THEREFORE BE IT RESOLVED that the Mayor, on behalf of Council, write a letter to Minister Fleming asking that the BC Government restore library funding to a minimum of \$20 million annually to reflect inflationary and population increases and recommit to a progressive funding approach, reflecting the role of public libraries in achieving the goals of the Province and our communities.

BE IT FURTHER RESOLVED that Council support resolutions appealing for increased provincial funding for public libraries at the upcoming UBCM meeting.

Reviewed by:
 CAO





#### The Corporation of THE CITY OF NORTH VANCOUVER COMMUNITY & PARTNER ENGAGEMENT DEPARTMENT

REPORT

#### To: Mayor Linda Buchanan and Members of Council

From: Gary Penway, Interim Director

Subject: "RECLAIMING POWER AND PLACE" - FINAL REPORT OF THE NATIONAL ENQUIRY INTO MISSING AND MURDERED INDIGENOUS WOMEN AND GIRLS (MMIWG)

Date: June 27, 2019

File No: 01-0400-01-0001/2019

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

#### **RECOMMENDATION:**

PURSUANT to the report of the Interim Director, dated June 27, 2019, entitled "Reclaiming Power and Place - The Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIGW)":

THAT staff be directed to review the Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIGW) to identify Calls for Justice that relate to municipal jurisdiction;

AND THAT staff report back with recommended actions that the City of North Vancouver might take to respond to those Calls for Justice to help prevent future abuses and violations against Indigenous women and girls.

#### ATTACHMENTS:

 "Reclaiming Power and Place"- The Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIWG): excerpt "Calls for Justice".

# DISCUSSION:

The Final Report of the National Enquiry into Missing and Murdered Indigenous Women and Girls (MMIWG) was released in June, 2019 after a very involved process that lasted over two years. Over 2,380 family members, survivors, experts and Knowledge Keepers were involved in the process. Fifteen Community Hearings and 9 Knowledge Keeper, Expert and Institutional Hearings were held. The result is a report that contains 231 Calls for Justice that are presented in the following categories:

- Calls for Justice for All Levels of Government
- Calls for Justice: Industries, Institutions, Services and Partnerships
- Calls for Justice for All Canadians
- Calls for Justice: Distinction-Based Calls
- Metis-Specific Calls for Justice
- 2SLGBTQQIA-Specific Calls for Justice

The report has been released in two volumes. The full report is available on the National Inquiry web site at <u>www.mmiwg-ffada.ca/final-report</u>. Readers are encouraged to refer to the full documents for more information. Due to its size, it is not attached to this report. The Calls for Justice themselves have been released in a separate document, which is presented as Attachment # 1.

While aspects of the report are targeted at the Canadian justice system, many others are aimed at the conditions that led these women and girls finding themselves in such vulnerable conditions. The following is an excerpt from the web site for this project:

As documented in the Final Report, testimony from family members and survivors of violence spoke about a surrounding context marked by multigenerational and intergenerational trauma and marginalization in the form of poverty, insecure housing or homelessness and barriers to education, employment, health care and cultural support. Experts and Knowledge Keepers spoke to specific colonial and patriarchal policies that displaced women from their traditional roles in communities and governance and diminished their status in society, leaving them vulnerable to violence.

Many of the Calls for Justice contained in the report are directed at senior levels of government. However, there are a number of specific references to municipalities. There are also Calls for Justice directed to Canadians in general. Staff are proposing to review the Calls for Justice to identify ways in which the City of North Vancouver or its agencies may be able to respond to these Calls. There are likely a number of specific actions that could have a meaningful impact.

At this time, staff have not undertaken the analysis to determine which Calls for Action are relevant to our local government, nor what actions would be possible. That work would be done over the coming months and include seeking guidance from the Squamish Nation and Tsleil-Waututh Nation. Staff from various departments including City Hall, Operations Centre, RCMP, Fire, Library, NVRC and others would be involved.

It is anticipated that staff would be reporting back before the end of 2019 to allow time for community and staff engagement. The report would identify both areas of municipal influence and possible actions.

#### FINANCIAL IMPLICATIONS:

None for this report. Staff time would be required which is already funded. The next report may have financial implications depending upon the actions identified. They are unknown at this time but would be addressed in that report.

#### INTER-DEPARTMENTAL IMPLICATIONS:

This process would involve most departments. The Leadership Team is aware that this work is being recommended.

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

The Official Community Plan chapter on Community Well-being includes the following goals:

Goal 3.1 Enhance well-being and quality of life for all community members Goal 3.2 Safeguard the community and protect life, property and the environment

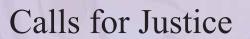
#### STRATEGIC PLAN IMPLICATIONS:

This work is consistent with the vision of being a healthy city.

RESPECTFULLY SUBMITTED:

nud Garv Penway Interim Director

GP/jb



As the evidence demonstrates, human rights and Indigenous rights abuses and violations committed and condoned by the Canadian state represent genocide against Indigenous women, girls, and 2SLGBTQQIA people. These abuses and violations have resulted in the denial of safety, security, and human dignity. They are the root causes of the violence against Indigenous women, girls, and 2SLGBTQQIA people that generate and maintain a world within which Indigenous women, girls, and 2SLGBTQQIA people are forced to confront violence on a daily basis, and where perpetrators act with impunity.

The steps to end and redress this genocide must be no less monumental than the combination of systems and actions that has worked to maintain colonial violence for generations. A permanent commitment to ending the genocide requires addressing the four pathways explored within this report, namely:

- historical, multigenerational, and intergenerational trauma;
- social and economic marginalization;
- maintaining the status quo and institutional lack of will; and
- ignoring the agency and expertise of Indigenous women, girls, and 2SLGBTQQIA people.



Addressing these four pathways means full compliance with all human and Indigenous rights instruments, as well as with the premise that began this report: that the daily encounters with individuals, institutions, systems, and structures that compromise security must be addressed with a new view toward relationships.

Although we have been mandated to provide recommendations, it must be understood that these recommendations, which we frame as "Calls for Justice," are legal imperatives – they are not optional. The Calls for Justice arise from international and domestic human and Indigenous rights laws, including the *Charter*, the Constitution, and the Honour of the Crown. As such, Canada has a legal obligation to fully implement these Calls for Justice and to ensure Indigenous women, girls, and 2SLGBTQQIA people live in dignity. We demand a world within which First Nations, Inuit, and Métis families can raise their children with the same safety, security, and human rights that non-Indigenous families do, along with full respect for the Indigenous and human rights of First Nations, Inuit, and Métis families.

As we noted in our *Interim Report*, there has been very limited movement to implement recommendations from previous reports. What little efforts have been made have focused more on reactive rather than preventative measures.<sup>1</sup> This is a significant barrier to addressing the root causes of violence. Further, insufficient political will continues to be a roadblock across all initiatives. We maintain now, as we did then, that proper prioritization and resourcing of solutions by Canadian governments must come with real partnerships with Indigenous Peoples that support self-determination, in a decolonizing way.<sup>2</sup>

In presenting these Calls for Justice, we begin, first, by setting out the principles for change that have informed our work throughout the National Inquiry, and that represent the building blocks for meaningful and permanent transformation. These basic principles permeate and inform all of our Calls for Justice, and should be considered guiding principles for interpreting and implementing all of the Calls for Justice.

Next, we articulate our Calls for Justice as imperatives for redress that go beyond one area or issue and that touch on all of the abuses and violations that family members and survivors of violence identified in sharing their truths.

These Calls for Justice represent important ways to end the genocide and to transform systemic and societal values that have worked to maintain colonial violence.

Our Calls for Justice aren't just about institutions, or about governments, although they have foundational obligations to uphold; there is a role for everyone in the short and the long term. Individuals, institutions, and governments can all play a part; we encourage you, as you read these recommendations, to understand and, most importantly, to act on yours.



# Principles for Change

Our Calls for Justice are based on a solid foundation of evidence and law. Witnesses who shared their truths with us also explained that there are many important principles and ideas that must inform the implementation of any of the Calls for Justice in order for them to be effective and meaningful.

#### A Focus on Substantive Equality and Human and Indigenous Rights

Indigenous women, girls, and 2SLGBTQQIA people are holders of inherent Indigenous rights, constitutional rights, and international and domestic human rights. In addition, many Indigenous Peoples in Canada are rights holders under various Treaties, land claims, and settlement agreements.

As this report affirms, and as the Canadian Human Rights Commission has pointed out:

A fundamental premise of this approach is that Indigenous women and girls should not be treated solely as victims but as independent human rights holders.... A human rights-based approach would be a critical element in efforts to bring about a paradigm shift in Canada's relationship with Indigenous Peoples, particularly Indigenous women and girls. This is because such an approach would reframe issues of importance related to Indigenous women and girls as a "denial of rights" instead of "unfulfilled needs". Exposure to violence would then be seen as a systemic violation of the rights to gender equality and non-discrimination requiring broad structural changes (i.e. policing practices, judicial), instead of a symptom of service gaps requiring temporary solutions.

This approach would reaffirm Canada's commitment to uphold and to promote the human rights of people in vulnerable circumstances. It would also constitute a significant step towards the implementation of Canada's obligations enshrined in international human rights conventions and declarations (e.g. the Convention on the Elimination of All Forms of Discrimination Against Women, Convention on the Elimination of all Forms of Racial Discrimination, and the United Nations Declaration on the Rights of Indigenous Peoples). These obligations were further outlined in the recommendations made by various international bodies, such as the Committee on the Elimination of All Forms of Discrimination Against Women and the Inter-American Commission on Human Rights.<sup>3</sup>

Throughout this report we have also pointed to other legal instruments, including the *Convention* on the Prevention and Punishment of the Crime of Genocide (PPCG), that must be considered in terms of viewing Indigenous women, girls, and 2SLGBTQQIA people as rights holders. Please note that, due to the complexity of the issue of genocide, a supplementary report will be available on our website that explores this finding in greater detail within a legal framework of analysis. Throughout these Calls, we maintain that all actions and remediation to address root causes of violence must be human and Indigenous rights-based with a focus on substantive equality for Indigenous Peoples.



Indigenous women speak out: there can be no true reconciliation without justice. Credit: Ben Powless

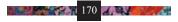
"Substantive equality" is a legal principle that refers to the achievement of true equality in outcomes. It is required in order to address the historical disadvantages, intergenerational trauma, and discrimination experienced by a person to narrow the gap of inequality that they are experiencing in order to improve their overall well-being. In addition, the fundamental principle that human rights are interconnected means that none of the issues addressed in this report, though separated for ease of reading and

comprehension, should be considered in isolation; all are key to achieving and maintaining substantive equality and in implementing measures that uphold rights and create safety. In these Calls for Justice, we frequently call upon "all governments"; in the interpretation of these Calls, **"all governments" refers to federal, provincial, territorial, municipal, and Indigenous governments.** 

#### **A Decolonizing Approach**

Implementation of these Calls for Justice must include a decolonizing approach. As we explained in our *Interim Report*:

A decolonizing approach aims to resist and undo the forces of colonialism and to re-establish Indigenous Nationhood. It is rooted in Indigenous values, philosophies, and knowledge systems. It is a way of doing things differently that challenges the colonial influence we live under by making space for marginalized Indigenous perspectives. The National Inquiry's decolonizing approach also acknowledges the rightful power and place of Indigenous women and girls.<sup>4</sup>



Decolonizing approaches involve recognizing inherent rights through the principle that Indigenous Peoples have the right to govern themselves in relation to matters that are internal to their communities; integral to their unique cultures, identities, traditions, languages, and institutions; and with respect to their special relationship to their resources, which many witnesses described as their relatives.

Our approach honours and respects Indigenous values, philosophies, and knowledge systems. It is a strengths-based approach, focusing on the resilience and expertise of individuals and communities themselves.

#### **Inclusion of Families and Survivors**

The implementation of the Calls for Justice must include the perspectives and participation of Indigenous women, girls, and 2SLGBTQQIA people with lived experience, including the families of the missing and murdered and survivors of violence. The definition of "family" is not limited to a nuclear family. "Family" must be understood to include all forms of familial kinship, including but not limited to biological families, chosen families, and families of the heart.<sup>5</sup>

We centre their contributions throughout the report, because we know that this inclusion is key to healing and to understanding the strength and resilience that lie at the heart of each person, each family, and each community from whom we heard. We maintain the need for this approach to the implementation of all Calls for Justice, ensuring that the specific measures taken fully engage these perspectives and this expertise.

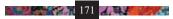
#### Self-Determined and Indigenous-Led Solutions and Services

Services and solutions must be led by Indigenous governments, organizations, and people. This is based on the self-determination and self-governance of Indigenous Peoples, as defined per articles 3 and 4 of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP):

Article 3: "Indigenous Peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development."

Article 4: "Indigenous Peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions."

Though defined by these articles, self-determination actually represents an inherent right that exists independent of any statute or legislation. The colonial mindset by which Indigenous leaders ask for permission and the state gives permission has to end. Further, the exclusion of Indigenous women, girls, 2SLGBTQQIA people, Elders, and children from the exercise of Indigenous self-determination must end.



Where Indigenous Peoples and non-Indigenous governments have to work together to create solutions and deliver services, it must be in true partnership that respects Indigenous self-determination in all matters. Within this, we maintain that solutions should stem from Indigenous communities and Nations, and that these solutions must be prioritized and sustainably and equitably resourced.

#### **Recognizing Distinctions**

Indigenous women, girls, and 2SLGBTQQIA people come from diverse First Nations, Métis, and Inuit communities. The Calls for Justice must be interpreted and implemented in an equitable and non-discriminatory way, addressing the needs of distinct Indigenous Peoples, and taking into account factors that make them distinct. These include, but are not limited to:

- Self-identification
  - ✓ First Nation
  - 🖌 Inuit
  - ✓ Métis
- Geographical- or regional-specific information
  - ✓ North, South, East, West
  - $\checkmark$  Proximity to urban centres, oceans, water, and natural resources
  - $\checkmark$  Locations of traditional territories and homelands
  - ✓ Municipal, provincial, and territorial boundaries
- Residency
  - ✓ On-reserve/off-reserve
  - ✓ Rural/urban
  - $\checkmark$  Remote and northern
  - ✓ Communities and settlements
- A gendered lens and framework that ensures that impacts on women, girls, and 2SLGBTQQIA individuals are taken into account. This also includes understanding the differences and diversity among 2SLGBTQQIA people and understanding that the needs, within communities of individuals, may not necessarily be the same.



#### **Cultural Safety**

The interpretation and implementation of the Calls for Justice must include the necessity for cultural safety. Cultural safety goes beyond the idea of cultural "appropriateness" and demands the incorporation of services and processes that empower Indigenous Peoples. The creation of cultural safety requires, at a minimum, the inclusion of Indigenous languages, laws and protocols, governance, spirituality, and religion.

#### **Trauma-Informed Approach**

Incorporating knowledge of trauma into all policies, procedures, and practices of solutions and services is crucial to the implementation of the Calls for Justice. It is fundamental to recognizing the impacts of trauma and to responding appropriately to signs of trauma. Interpretation and implementation of the Calls for Justice must include funding to ensure all necessary steps to create a trauma-informed approach and to deliver trauma-informed services are viable.

The interpretation and implementation of our Calls for Justice must take into account all of these approaches and principles, because they are interconnected and inseparable. All Calls for Justice are aimed at ending genocide, tackling root causes of violence, and improving the quality of life of Indigenous women, girls, and 2SLGBTQQIA people. This is the only way forward.



Sarah Birmingham is the mother of Mary Ann Birmingham, killed in 1986. When she remembers her daughter, she always remembers her smiling. Now she's participating in the #SacredMMIWG education and awareness campaign to make change. Credit: Nadya Kwandibens



# **Overarching Findings**

While we have included findings specific to particular themes, issues and communities through the second section of this report, we maintain that there are many truths that we heard that make it clear how these areas are connected and are inseparable, where the actions or inactions of particular groups, institutions, and governments have served to promote violence and perpetuate genocide.

Overarching findings include:

The significant, persistent, and deliberate pattern of systemic racial and gendered human rights and Indigenous rights violations and abuses – perpetuated historically and maintained today by the Canadian state, designed to displace Indigenous Peoples from their land, social structures, and governance and to eradicate their existence as Nations, communities, families, and individuals – is the cause of the disappearances, murders, and violence experienced by Indigenous women, girls, and 2SLGBTQQIA people, and is genocide. This colonialism, discrimination, and genocide explains the high rates of violence against Indigenous women, girls, and 2SLGBTQQIA people.

An absolute paradigm shift is required to dismantle colonialism within Canadian society, and from all levels of government and public institutions. Ideologies and instruments of colonialism, racism, and misogyny, past and present, must be rejected.

Canada has signed and ratified many international declarations and treaties that affect Indigenous women's, girls', and 2SLGBTQQIA people's rights, protection, security, and safety. Canada has failed to meaningfully implement the provisions of these legal instruments, including PPCG, ICESCR, ICCPR, UNCRC, CEDAW, and UNDRIP.

Further, the Canadian state has enacted domestic laws, including but not limited to section 35 of the Constitution, the *Charter of Rights and Freedoms*, and human rights legislation, to ensure the legal protection of human rights and Indigenous rights. All governments, including Indigenous governments, have an obligation to uphold and protect the Indigenous and human rights of all Indigenous women, girls, and 2SLGBTQQIA people as outlined in these laws. Canada has failed to protect these rights and to acknowledge and remedy the human rights violations and abuses that have been consistently perpetrated against Indigenous women, girls, and 2SLGBTQQIA people.

There is no accessible and reliable mechanism within the Canadian state for Indigenous women, girls, and 2SLGBTQQIA people to seek recourse and remedies for the violations of their domestic and international human rights and Indigenous rights. The Canadian legal system fails to hold the state and state actors accountable for their failure to meet domestic and international human rights obligations.

The Canadian state has displaced Indigenous women and 2SLGBTQQIA people from their traditional roles in governance and leadership and continues to violate their political rights. This has been done through concerted efforts to destroy and replace Indigenous governance systems with colonial and patriarchal governance models, such as the *Indian Act*, and through the imposition of laws of general application throughout Canada. Indigenous governments or bands as established under the *Indian Act* or through local municipal governments do not have the full trust of Indigenous women, girls, and 2SLGBTQQIA people. Indigenous bands and councils and community leadership who have authority through colonial law are generally seen as not representing all of the interests of Indigenous women, girls, and 2SLGBTQQIA people.

We recognize self-determination and self-governance as fundamental Indigenous and human rights and a best practice. Indigenous self-determination and self-governance in all areas of Indigenous society are required to properly serve and protect Indigenous women, girls, and 2SLGBTQQIA people. This is particularly true in the delivery of services.

Efforts by Indigenous women, girls, and 2SLGBTQQIA people to be self-determining face significant barriers. Many Indigenous women's advocacy organizations and grassroots organizations engaging in essential work to support survivors of violence and families of missing or lost loved ones, and working toward restoring safety, are underfunded and undersupported by current funding formulas and systems.

Temporary and deficit-based approaches do not increase capacity for self-determination or self-governance, and fail to adequately provide protection and safety, as well as substantive equality. Short-term or project-based funding models in service areas are not sustainable, and represent a violation of inherent rights to self-governance and a failure to provide funding on a needs-based approach, equitably, substantively, and stably.



 $\overline{\mathbf{A}}$ 

Clifford Crowchild honours the memory of his mother, Jacqueline Crazybull, killed in 2007. The #SacredMMIWG awareness campaign was developed by Eagle Vision and shot by renowned Anishinaabe photographer Nadya Kwandibens. Credit: Nadya

2000 - 2000 175 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 20

# Calls For Justice For All Governments

The National Inquiry heard many truths connected with the deliberate actions and inactions of all levels of government. In addition, the evidence makes clear that changing the structures and the systems that sustain violence in daily encounters is not only necessary to combat violence, but is an essential legal obligation of all governments in Canada. We target many of our Calls for Justice at governments for this reason, and identify how governments can work to honour Indigenous women, girls, and 2SLGBTQQIA people, and to protect their human and Indigenous rights, in the thematic areas examined within this report.

#### Human and Indigenous Rights and Governmental Obligations

1.1 We call upon federal, provincial, territorial, municipal, and Indigenous governments (hereinafter "all governments"), in partnership with Indigenous Peoples, to develop and implement a National Action Plan to address violence against Indigenous women, girls, and 2SLGBTQQIA people, as recommended in our *Interim Report* and in support of existing recommendations by other bodies of inquiry and other reports.<sup>6</sup> As part of the National Action Plan, we call upon all governments to ensure that equitable access to basic rights such as employment, housing, education, safety, and health care is recognized as a fundamental means of protecting Indigenous and human rights, resourced and supported as rights-based programs founded on substantive equality. All programs must be no-barrier, and must apply regardless of Status or location.

Governments should:

- i Table and implement a National Action Plan that is flexible and distinctions-based, and that includes regionally specific plans with devoted funding and timetables for implementation that are rooted in the local cultures and communities of diverse Indigenous identities, with measurable goals and necessary resources dedicated to capacity building, sustainability, and long-term solutions.
- ii Make publicly available on an annual basis reports of ongoing actions and developments in measurable goals related to the National Action Plan.
- 1.2 We call upon all governments, with the full participation of Indigenous women, girls, and 2SLGBTQQIA people, to immediately implement and fully comply with all relevant rights instruments, including but not limited to:
  - i ICCPR, ICESCR, UNCRC, CEDAW, and ICERD, as well as all optional protocols to these instruments, including the 3rd Protocol to the *United Nations Convention on the Rights of the Child* (UNCRC).



- ii American Convention on Human Rights: specifically, that Canada ratify the American Convention on Human Rights and the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women.
- iii All the recommendations of the 2015 UN CEDAW *Inquiry Report* and cooperation with the UN Committee on the Elimination of Discrimination against Women on all follow-up procedures.
- iv All recommendations made by international human rights bodies, including treatymonitoring bodies, on causes and recommendations to address violence against all, but specifically Indigenous women, girls, and 2SLGBTQQIA individuals.
- v UNDRIP, including recognition, protection, and support of Indigenous self-governance and self-determination, as defined by UNDRIP and by Indigenous Peoples, including that these rights are guaranteed equally to women and men, as rights protected under section 35 of the Constitution. This requires respecting and making space for Indigenous self-determination and self-governance, and the free, prior, and informed consent of Indigenous Peoples to all decision-making processes that affect them, eliminating gender discrimination in the *Indian Act*, and amending the Constitution to bring it into conformity with UNDRIP.
- 1.3 We call upon all governments, in meeting human and Indigenous rights obligations, to pursue prioritization and resourcing of the measures required to eliminate the social, economic, cultural, and political marginalization of Indigenous women, girls, and 2SLGBTQQIA people when developing budgets and determining government activities and priorities.
- 1.4 We call upon all governments, and in particular Indigenous governments and Indigenous representative organizations, to take urgent and special measures to ensure that Indigenous women, girls, and 2SLGBTQQIA people are represented in governance and that their political rights are respected and upheld. We call upon all governments to equitably support and promote the role of Indigenous women, girls, and 2SLGBTQQIA people in governance and leadership. These efforts must include the development of policies and procedures to protect Indigenous women, girls, and 2SLGBTQQIA people against sexism, homophobia, transphobia, and racism within political life.
- 1.5 We call upon all governments to immediately take all necessary measures to prevent, investigate, punish, and compensate for violence against Indigenous women, girls, and 2SLGBTQQIA people.
- 1.6 We call upon all governments to eliminate jurisdictional gaps and neglect that result in the denial of services, or improperly regulated and delivered services, that address the social, economic, political, and cultural marginalization of, and violence against, Indigenous women, girls, and 2SLGBTQQIA people.



Vanessa Brooks's sister, Tanya Brooks, was killed in 2009. As part of the #SacredMMIWG portrait series, she remembers how her life was with Tanya in it: peaceful, serene, her sacred space. Credit: Nadya Kwandibens

1.7 We call upon the federal, provincial, and territorial governments, in partnership with Indigenous Peoples, to establish a National Indigenous and Human Rights Ombudsperson, with authority in all jurisdictions, and to establish a National Indigenous and Human Rights Tribunal. The ombudsperson and tribunal must be independent of governments and have the authority to receive complaints from Indigenous individuals as well as Indigenous communities in relation to Indigenous and human rights violations, and to conduct thorough and independent evaluations of government services for First Nations, Inuit, and Métis people and communities to determine compliance with human and Indigenous rights laws.

The ombudsperson and the tribunal must be given sufficient resources to fulfill their mandates and must be permanent.

- 1.8 We call upon all governments to create specific and long-term funding, available to Indigenous communities and organizations, to create, deliver, and disseminate prevention programs, education, and awareness campaigns designed for Indigenous communities and families related to violence prevention and combatting lateral violence. Core and sustainable funding, as opposed to program funding, must be provided to national and regional Indigenous women's and 2SLGBTQQIA people's organizations.
- 1.9 We call upon all governments to develop laws, policies, and public education campaigns to challenge the acceptance and normalization of violence.
- 1.10 We call upon the federal government to create an independent mechanism to report on the implementation of the National Inquiry's Calls for Justice to Parliament, annually.
- 1.11 We call upon the federal government specifically, Library and Archives Canada and the Privy Council Office to maintain and to make easily accessible the National Inquiry's public record and website.



#### Calls for Justice for All Governments: Culture

- 2.1 We call upon all governments to acknowledge, recognize, and protect the rights of Indigenous Peoples to their cultures and languages as inherent rights, and constitutionally protected as such under section 35 of the Constitution.
- 2.2 We call upon all governments to recognize Indigenous languages as official languages, with the same status, recognition, and protection provided to French and English. This includes the directives that:
  - i Federal, provincial, and territorial governments must legislate Indigenous languages in the respective territory as official languages.
  - ii All governments must make funds available to Indigenous Peoples to support the work required to revitalize and restore Indigenous cultures and languages.
- 2.3 We call upon all governments to ensure that all Indigenous women, girls, and 2SLGBTQQIA people are provided with safe, no-barrier, permanent, and meaningful access to their cultures and languages in order to restore, reclaim, and revitalize their cultures and identities. These are rights held by all segments of Indigenous communities, from young children to Elders. The programs and services that provide such access should not be tied exclusively to government-run cultural or educational institutions. All governments must further ensure that the rights of Indigenous children to retain and be educated in their Indigenous language are upheld and protected. All governments must ensure access to immersion programs for children from preschool into post-secondary education.
- 2.4 We call upon all governments to provide the necessary resources and permanent funds required to preserve knowledge by digitizing interviews with Knowledge Keepers and language speakers. We further call upon all governments to support grassroots and community-led Indigenous language and cultural programs that restore identity, place, and belonging within First Nations, Inuit, and Métis communities through permanent, no-barrier funding and resources. Special measures must include supports to restore and revitalize identity, place, and belonging for Indigenous Peoples and communities who have been isolated from their Nations due to colonial violence, including 2SLGBTQQIA people and women who have been denied Status.
- 2.5 We call upon all governments, in partnership with Indigenous Peoples, to create a permanent empowerment fund devoted to supporting Indigenous-led initiatives for Indigenous individuals, families, and communities to access cultural knowledge, as an important and strength-based way to support cultural rights and to uphold self-determined services. This empowerment fund should include the support of land-based educational programs that can assist in foundational cultural learning and awareness. This empowerment fund will also assist in the revitalization of distinct cultural practices as expressed by Indigenous women, girls, and 2SLGBTQQIA people, with eligibility criteria and decision making directly in their hands.



- 2.6 We call upon all governments to educate their citizens about, and to confront and eliminate, racism, sexism, homophobia, and transphobia. To accomplish this, the federal government, in partnership with Indigenous Peoples and provincial and territorial governments, must develop and implement an Anti-Racism and Anti-Sexism National Action Plan to end racist and sexualized stereotypes of Indigenous women, girls, and 2SLGBTQQIA people. The plan must target the general public as well as public services.
- 2.7 We call upon all governments to adequately fund and support Indigenous-led initiatives to improve the representation of Indigenous Peoples in media and pop culture.

#### Calls for Justice for All Governments: Health and Wellness

- 3.1 We call upon all governments to ensure that the rights to health and wellness of Indigenous Peoples, and specifically of Indigenous women, girls, and 2SLGBTQQIA people, are recognized and protected on an equitable basis.
- 3.2 We call upon all governments to provide adequate, stable, equitable, and ongoing funding for Indigenous-centred and community-based health and wellness services that are accessible and culturally appropriate, and meet the health and wellness needs of Indigenous women, girls, and 2SLGBTQQIA people. The lack of health and wellness services within Indigenous communities continues to force Indigenous women, girls, and 2SLGBTQQIA people to relocate in order to access care. Governments must ensure that health and wellness services are available and accessible within Indigenous communities and wherever Indigenous women, girls, and 2SLGBTQQIA people reside.
- 3.3 We call upon all governments to fully support First Nations, Inuit, and Métis communities to call on Elders, Grandmothers, and other Knowledge Keepers to establish community-based trauma-informed programs for survivors of trauma and violence.
- 3.4 We call upon all governments to ensure that all Indigenous communities receive immediate and necessary resources, including funding and support, for the establishment of sustainable, permanent, no-barrier, preventative, accessible, holistic, wraparound services, including mobile trauma and addictions recovery teams. We further direct that trauma and addictions treatment programs be paired with other essential services such as mental health services and sexual exploitation and trafficking services as they relate to each individual case of First Nations, Inuit, and Métis women, girls, and 2SLGBTQQIA people.
- 3.5 We call upon all governments to establish culturally competent and responsive crisis response teams in all communities and regions, to meet the immediate needs of an Indigenous person, family, and/or community after a traumatic event (murder, accident, violent event, etc.), alongside ongoing support.

2002/2002/2007 180 // 2002/2007/2007

- 3.6 We call upon all governments to ensure substantive equality in the funding of services for Indigenous women, girls, and 2SLGBTQQIA people, as well as substantive equality for Indigenous-run health services. Further, governments must ensure that jurisdictional disputes do not result in the denial of rights and services. This includes mandated permanent funding of health services for Indigenous women, girls, and 2SLGBTQQIA people on a continual basis, regardless of jurisdictional lines, geographical location, and Status affiliation or lack thereof.
- 3.7 We call upon all governments to provide continual and accessible healing programs and support for all children of missing and murdered Indigenous women, girls, and 2SLGBTQQIA people and their family members. Specifically, we call for the permanent



establishment of a fund akin to the Aboriginal Healing Foundation and related funding. These funds and their administration must be independent from government and must be distinctions-based. There must be accessible and equitable allocation of specific monies within the fund for Inuit, Métis, and First Nations Peoples.

Rinelle Harper is a survivor and advocate who refused to let people ignore the issue of violence against Indigenous women, girls, and 2SLGBTQQIA people. She says: "I want people to know that change starts with us." Credit: Nadya Kwandibens

#### Calls for Justice for All Governments: Human Security

- 4.1 We call upon all governments to uphold the social and economic rights of Indigenous women, girls, and 2SLGBTQQIA people by ensuring that Indigenous Peoples have services and infrastructure that meet their social and economic needs. All governments must immediately ensure that Indigenous Peoples have access to safe housing, clean drinking water, and adequate food.
- 4.2 We call upon all governments to recognize Indigenous Peoples' right to self-determination in the pursuit of economic social development. All governments must support and resource economic and social progress and development on an equitable basis, as these measures are required to uphold the human dignity, life, liberty, and security of Indigenous women, girls, and 2SLGBTQQIA people. All governments must support and

181 Martin 181

resource community-based supports and solutions designed to improve social and economic security, led by Indigenous women, girls, and 2SLGBTQQIA people. This support must come with long-term, sustainable funding designed to meet the needs and objectives as defined by Indigenous Peoples and communities.

- 4.3 We call upon all governments to support programs and services for Indigenous women, girls, and 2SLGBTQQIA people in the sex industry to promote their safety and security. These programs must be designed and delivered in partnership with people who have lived experience in the sex industry. We call for stable and long-term funding for these programs and services.
- 4.4 We call upon all governments to provide supports and resources for educational, training, and employment opportunities for all Indigenous women, girls, and 2SLGBTQQIA people. These programs must be available within all Indigenous communities.
- 4.5 We call upon all governments to establish a guaranteed annual livable income for all Canadians, including Indigenous Peoples, to meet all their social and economic needs. This income must take into account diverse needs, realities, and geographic locations.
- 4.6 We call upon all governments to immediately commence the construction of new housing and the provision of repairs for existing housing to meet the housing needs of Indigenous women, girls, and 2SLGBTQQIA people. This construction and provision of repairs must ensure that Indigenous women, girls, and 2SLGBTQQIA people have access to housing that is safe, appropriate to geographic and cultural needs, and available wherever they reside, whether in urban, rural, remote, or Indigenous communities.
- 4.7 We call upon all governments to support the establishment and long-term sustainable funding of Indigenous-led low-barrier shelters, safe spaces, transition homes, secondstage housing, and services for Indigenous women, girls, and 2SLGBTQQIA people who are homeless, near homeless, dealing with food insecurity, or in poverty, and who are fleeing violence or have been subjected to sexualized violence and exploitation. All governments must ensure that shelters, transitional housing, second-stage housing, and services are appropriate to cultural needs, and available wherever Indigenous women, girls, and 2SLGBTQQIA people reside.
- 4.8 We call upon all governments to ensure that adequate plans and funding are put into place for safe and affordable transit and transportation services and infrastructure for Indigenous women, girls, and 2SLGBTQQIA people living in remote or rural communities. Transportation should be sufficient and readily available to Indigenous communities, and in towns and cities located in all of the provinces and territories in Canada. These plans and funding should take into consideration:
  - ways to increase safe public transit;
  - ways to address the lack of commercial transit available; and
  - special accommodations for fly-in, northern, and remote communities.



#### Calls for Justice for All Governments: Justice

- 5.1 We call upon all governments to immediately implement the recommendations in relation to the Canadian justice system in: *Bridging the Cultural Divide: A Report on Aboriginal People and Criminal Justice in Canada,* Royal Commission on Aboriginal Peoples (1996); and the *Report of the Aboriginal Justice Inquiry of Manitoba: Public Inquiry into the Administration of Justice and Aboriginal People* (1991).
- 5.2 We call upon the federal government to review and amend the *Criminal Code* to eliminate definitions of offences that minimize the culpability of the offender.
- 5.3 We call upon the federal government to review and reform the law about sexualized violence and intimate partner violence, utilizing the perspectives of feminist and Indigenous women, girls, and 2SLGBTQQIA people.
- 5.4 We call upon all governments to immediately and dramatically transform Indigenous policing from its current state as a mere delegation to an exercise in self-governance and self-determination over policing. To do this, the federal government's First Nations Policing Program must be replaced with a new legislative and funding framework, consistent with international and domestic policing best practices and standards, that must be developed by the federal, provincial, and territorial governments in partnership with Indigenous Peoples. This legislative and funding framework must, at a minimum, meet the following considerations:
  - i Indigenous police services must be funded to a level that is equitable with all other non-Indigenous police services in this country. Substantive equality requires that more resources or funding be provided to close the gap in existing resources, and that required staffing, training, and equipment are in place to ensure that Indigenous police services are culturally appropriate and effective police services.
  - ii There must be civilian oversight bodies with jurisdiction to audit Indigenous police services and to investigate claims of police misconduct, including incidents of rape and other sexual assaults, within those services. These oversight bodies must report publicly at least annually.
- 5.5 We call upon all governments to fund the provision of policing services within Indigenous communities in northern and remote areas in a manner that ensures that those services meet the safety and justice needs of the communities and that the quality of policing services is equitable to that provided to non-Indigenous Canadians. This must include but is not limited to the following measures:
  - i With the growing reliance on information management systems, particularly in the area of major and interjurisdictional criminal investigations, remote communities must be ensured access to reliable high-speed Internet as a right.

- ii Major crime units and major case management must be more accessible to remote and northern communities on a faster basis than the service is being delivered now.
- iii Capacity must be developed in investigative tools and techniques for the investigation of sexualized violence, including but not limited to tools for the collection of physical evidence, such as sexual assault kits, and specialized and trauma-informed questioning techniques.
- iv Crime-prevention funding and programming must reflect community needs.
- 5.6 We call upon provincial and territorial governments to develop an enhanced, holistic, comprehensive approach for the provision of support to Indigenous victims of crime and families and friends of Indigenous murdered or missing persons. This includes but is not limited to the following measures:
  - i Guaranteed access to financial support and meaningful and appropriate trauma care must be provided for victims of crime and traumatic incidents, regardless of whether they report directly to the police, if the perpetrator is charged, or if there is a conviction.
  - ii Adequate and reliable culturally relevant and accessible victim services must be provided to family members and survivors of crime, and funding must be provided to Indigenous and community-led organizations that deliver victim services and healing supports.
  - iii Legislated paid leave and disability benefits must be provided for victims of crime or traumatic events.
  - iv Guaranteed access to independent legal services must be provided throughout court processes. As soon as an Indigenous woman, girl, or 2SLGBTQQIA person decides to report an offence, before speaking to the police, they must have guaranteed access to legal counsel at no cost.
  - v Victim services must be independent from prosecution services and police services.
- 5.7 We call upon federal and provincial governments to establish robust and well-funded Indigenous civilian police oversight bodies (or branches within established reputable civilian oversight bodies within a jurisdiction) in all jurisdictions, which must include representation of Indigenous women, girls, and 2SLGBTQQIA people, inclusive of diverse Indigenous cultural backgrounds, with the power to:
  - i Observe and oversee investigations in relation to police negligence or misconduct, including but not limited to rape and other sexual offences.
  - ii Observe and oversee investigations of cases involving Indigenous Peoples.
  - iii Publicly report on police progress in addressing findings and recommendations at least annually.

- 5.8 We call upon all provincial and territorial governments to enact missing persons legislation.
- 5.9 We call upon all governments to ensure that protection orders are available, accessible, promptly issued, and effectively serviced and resourced to protect the safety of Indigenous women, girls, and 2SLGBTQQIA people.
- 5.10 We call upon all governments to recruit and retain more Indigenous justices of the peace, and to expand their jurisdictions to match that of the Nunavut Justice of the Peace.
- 5.11 We call upon all governments to increase accessibility to meaningful and culturally appropriate justice practices by expanding restorative justice programs and Indigenous Peoples' courts.
- 5.12 We call upon federal, provincial, and territorial governments to increase Indigenous representation in all Canadian courts, including within the Supreme Court of Canada.
- 5.13 We call upon all provincial and territorial governments to expand and adequately resource legal aid programs in order to ensure that Indigenous women, girls, and 2SLGBTQQIA people have access to justice and meaningful participation in the justice system. Indigenous women, girls, and 2SLGBTQQIA people must have guaranteed access to legal services in order to defend and assert their human rights and Indigenous rights.
- 5.14 We call upon federal, provincial and territorial governments to thoroughly evaluate the impact of mandatory minimum sentences as it relates to the sentencing and over-incarceration of Indigenous women, girls, and 2SLGBTQQIA people and to take appropriate action to address their over-incarceration.
- 5.15 We call upon federal, provincial, and territorial governments and all actors in the justice system to consider Gladue reports as a right and to resource them appropriately, and to create national standards for Gladue reports, including strength-based reporting.
- 5.16 We call upon federal, provincial, and territorial governments to provide communitybased and Indigenous-specific options for sentencing.
- 5.17 We call upon federal, provincial, and territorial governments to thoroughly evaluate the impacts of Gladue principles and section 718.2(e) of the *Criminal Code* on sentencing equity as it relates to violence against Indigenous women, girls, and 2SLGBTQQIA people.
- 5.18 We call upon the federal government to consider violence against Indigenous women, girls, and 2SLGBTQQIA people as an aggravating factor at sentencing, and to amend the *Criminal Code* accordingly, with the passage and enactment of Bill S-215.
- 5.19 We call upon the federal government to include cases where there is a pattern of intimate partner violence and abuse as murder in the first degree under section 222 of the *Criminal Code*.

- 5.20 We call upon the federal government to implement the Indigenous-specific provisions of the *Corrections and Conditional Release Act* (SC 1992, c.20), sections 79 to 84.1.
- 5.21 We call upon the federal government to fully implement the recommendations in the reports of the Office of the Correctional Investigator and those contained in the Auditor General of Canada (*Preparing Indigenous Offenders for Release*, Fall 2016); the *Calls to Action of the Truth and Reconciliation Commission of Canada* (2015); the report of the Standing Committee on Public Safety and National Security, *Indigenous People in the Federal Correctional System* (June 2018); the report of the Standing Committee on the Status of Women, *A Call to Action: Reconciliation with Indigenous Women in the Federal Justice and Corrections Systems* (June 2018); and the *Commission of Inquiry into certain events at the Prison for Women in Kingston* (1996, Arbour Report) in order to reduce the gross overrepresentation of Indigenous women and girls in the criminal justice system.
- 5.22 We call upon the federal government to return women's corrections to the key principles set out in *Creating Choices* (1990).
- 5.23 We call upon the federal government to create a Deputy Commissioner for Indigenous Corrections to ensure corporate attention to, and accountability regarding, Indigenous issues.
- 5.24 We call upon the federal government to amend data collection and intake-screening processes to gather distinctions-based and intersectional data about Indigenous women, girls, and 2SLGBTQQIA people.
- 5.25 We call upon all governments to resource research on men who commit violence against Indigenous women, girls, and 2SLGBTQQIA people.



# Calls for Justice: Industries, Institutions, Services, and Partnerships

As this report has demonstrated, so much of the violence shared in the truths of those who testified began with an encounter between a person and an institution or a service that could have ultimately contributed to wellness, if it had occurred differently. In this section of our Calls for Justice, we identify important industries, institutions and services that are featured in testimony throughout this report. We include the idea of partnership, because so many of these services and institutions operated in partnership with governments at all levels; these Calls, therefore, while aimed at service providers, must be interpreted with an insistence on proper resourcing and interjurisdictional cooperation, in order to ensure safety for Indigenous women, girls, and 2SLGBTQQIA people.

#### Calls for Media and Social Influencers:

- 6.1 We call upon all media, news corporations and outlets, and, in particular, governmentfunded corporations and outlets; media unions, associations, and guilds; academic institutions teaching journalism or media courses; governments that fund such corporations, outlets, and academic institutions; and journalists, reporters, bloggers, film producers, writers, musicians, music producers, and, more generally, people working in the entertainment industry to take decolonizing approaches to their work and publications in order to educate all Canadians about Indigenous women, girls, and 2SLGBTQQIA people. More specifically, this includes the following:
  - i Ensure authentic and appropriate representation of Indigenous women, girls, and 2SLGBTQQIA people, inclusive of diverse Indigenous cultural backgrounds, in order to address negative and discriminatory stereotypes.



Winnipeg Police Chief Danny Smyth participates in the National Inquiry's #SacredMMIWG art project/portrait series. He and many others continue to bring light to the issue of missing and murdered Indigenous women, girls, and 2SLGBTQQIA people. Credit: Nadya Kwandibens



- ii Support Indigenous people sharing their stories, from their perspectives, free of bias, discrimination, and false assumptions, and in a trauma-informed and culturally sensitive way.
- iii Increase the number of Indigenous people in broadcasting, television, and radio, and in journalist, reporter, producer, and executive positions in the entertainment industry, including, and not limited to, by:
  - providing educational and training opportunities aimed at Indigenous inclusion; and
  - providing scholarships and grants aimed at Indigenous inclusion in media, film, and music industry-related fields of study.
- iv Take proactive steps to break down the stereotypes that hypersexualize and demean Indigenous women, girls, and 2SLGBTQQIA people, and to end practices that perpetuate myths that Indigenous women are more sexually available and "less worthy" than non-Indigenous women because of their race or background.

### Calls for Health and Wellness Service Providers:

- 7.1 We call upon all governments and health service providers to recognize that Indigenous Peoples – First Nations, Inuit, and Métis, including 2SLGBTQQIA people – are the experts in caring for and healing themselves, and that health and wellness services are most effective when they are designed and delivered by the Indigenous Peoples they are supposed to serve, in a manner consistent with and grounded in the practices, world views, cultures, languages, and values of the diverse Inuit, Métis, and First Nations communities they serve.
- 7.2 We call upon all governments and health service providers to ensure that health and wellness services for Indigenous Peoples include supports for healing from all forms of unresolved trauma, including intergenerational, multigenerational, and complex trauma. Health and wellness programs addressing trauma should be Indigenous-led, or in partnership with Indigenous communities, and should not be limited in time or approaches.
- 7.3 We call upon all governments and health service providers to support Indigenous-led prevention initiatives in the areas of health and community awareness, including, but not limited to programming:
  - for Indigenous men and boys
  - related to suicide prevention strategies for youth and adults
  - related to sexual trafficking awareness and no-barrier exiting
  - specific to safe and healthy relationships
  - specific to mental health awareness
  - related to 2SLGBTQQIA issues and sex positivity

**2022/2022/2020** 188

- 7.4 We call upon all governments and health service providers to provide necessary resources, including funding, to support the revitalization of Indigenous health, well-ness, and child and Elder care practices. For healing, this includes teachings that are land-based and about harvesting and the use of Indigenous medicines for both ceremony and health issues. This may also include: matriarchal teachings on midwifery and post-natal care for both woman and child; early childhood health care; palliative care; Elder care and care homes to keep Elders in their home communities as valued Knowledge Keepers; and other measures. Specific programs may include but are not limited to correctional facilities, healing centres, hospitals, and rehabilitation centres.
- 7.5 We call upon governments, institutions, organizations, and essential and non-essential service providers to support and provide permanent and necessary resources for specialized intervention, healing and treatment programs, and services and initiatives offered in Indigenous languages.
- 7.6 We call upon institutions and health service providers to ensure that all persons involved in the provision of health services to Indigenous Peoples receive ongoing training, education, and awareness in areas including, but not limited to:
  - the history of colonialism in the oppression and genocide of Inuit, Métis, and First Nations Peoples;
  - anti-bias and anti-racism;
  - local language and culture; and
  - local health and healing practices.
- 7.7 We call upon all governments, educational institutions, and health and wellness professional bodies to encourage, support, and equitably fund Indigenous people to train and work in the area of health and wellness.
- 7.8 We call upon all governments and health service providers to create effective and wellfunded opportunities, and to provide socio-economic incentives, to encourage Indigenous people to work within the health and wellness field and within their communities. This includes taking positive action to recruit, hire, train, and retain long-term staff and local Indigenous community members for health and wellness services offered in all Indigenous communities.
- 7.9 We call upon all health service providers to develop and implement awareness and education programs for Indigenous children and youth on the issue of grooming for exploitation and sexual exploitation.

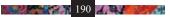


### **Calls for Transportation Service Providers and the Hospitality Industry:**

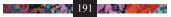
8.1 We call upon all transportation service providers and the hospitality industry to undertake training to identify and respond to sexual exploitation and human trafficking, as well as the development and implementation of reporting policies and practices.

#### **Calls for Police Services:**

- 9.1 We call upon all police services and justice system actors to acknowledge that the historical and current relationship between Indigenous women, girls, and 2SLGBTQQIA people and the justice system has been largely defined by colonialism, racism, bias, discrimination, and fundamental cultural and societal differences. We further call upon all police services and justice system actors to acknowledge that, going forward, this relationship must be based on respect and understanding, and must be led by, and in partnerships with, Indigenous women, girls, and 2SLGBTQQIA people.
- 9.2 We call upon all actors in the justice system, including police services, to build respectful working relationships with Indigenous Peoples by knowing, understanding, and respecting the people they are serving. Initiatives and actions should include, but are not limited to, the following measures:
  - i Review and revise all policies, practices, and procedures to ensure service delivery that is culturally appropriate and reflects no bias or racism toward Indigenous Peoples, including victims and survivors of violence.
  - ii Establish engagement and partnerships with Indigenous Peoples, communities, and leadership, including women, Elders, youth, and 2SLGBTQQIA people from the respective territories and who are resident within a police service's jurisdiction.
  - iii Ensure appropriate Indigenous representation, including Indigenous women, girls, and 2SLGBTQQIA people, on police services boards and oversight authorities.
  - iv Undertake training and education of all staff and officers so that they understand and implement culturally appropriate and trauma-informed practices, especially when dealing with families of missing and murdered Indigenous women, girls, and 2SLGBTQQIA people.
- 9.3 We call upon all governments to fund an increase in recruitment of Indigenous Peoples to all police services, and for all police services to include representation of Indigenous women, girls, and 2SLGBTQQIA people, inclusive of diverse Indigenous cultural backgrounds, within their ranks. This includes measures such as the following:
  - i Achieve representative First Nations, Inuit, and Métis diversity and gender diversity within all police services through intensive and specialized recruitment across Canada.



- ii Ensure mandatory Indigenous language capacity within police services.
- iii Ensure that screening of recruits includes testing for racial, gender, gender identity, and sexual orientation bias.
- iv Include the Indigenous community in the recruitment and hiring committees/process.
- v In training recruits, include: history of police in the oppression and genocide of Indigenous Peoples; anti-racism and anti-bias training; and culture and language training. All training must be distinctions-based and relevant to the land and people being served; training must not be pan-Indigenous.
- vi Retain Indigenous officers through relevant employment supports, and offer incentives to Indigenous officers to meet their unique needs as Indigenous officers serving Indigenous communities, to ensure retention and overall health and wellness of the service.
- vii End the practice of limited-duration posts in all police services, and instead implement a policy regarding remote and rural communities focused on building and sustaining a relationship with the local community and cultures. This relationship must be led by, and in partnership with, the Indigenous Peoples living in those remote and rural communities.
- 9.4 We call upon non-Indigenous police services to ensure they have the capacity and resources to serve and protect Indigenous women, girls, and 2SLGBTQQIA people. We further call upon all non-Indigenous police services to establish specialized Indigenous policing units within their services located in cities and regions with Indigenous populations.
  - i Specialized Indigenous policing units are to be staffed with experienced and welltrained Indigenous investigators, who will be the primary investigative teams and officers overseeing the investigation of cases involving Indigenous women, girls, and 2SLGBTQQIA people.
  - ii Specialized Indigenous policing units are to lead the services' efforts in community liaison work, community relationship building, and community crime-prevention programs within and for Indigenous communities.
  - iii Specialized Indigenous policing units, within non-Indigenous police services, are to be funded adequately by governments.
- 9.5 We call upon all police services for the standardization of protocols for policies and practices that ensure that all cases of missing and murdered Indigenous women, girls, and 2SLGBTQQIA people are thoroughly investigated. This includes the following measures:



- i Establish a communication protocol with Indigenous communities to inform them of policies, practices, and programs that make the communities safe.
- ii Improve communication between police and families of missing and murdered Indigenous women, girls, and 2SLGBTQQIA people from the first report, with regular and ongoing communication throughout the investigation.
- iii Improve coordination across government departments and between jurisdictions and Indigenous communities and police services.
- iv Recognize that the high turnover among officers assigned to a missing and murdered Indigenous woman's, girl's, or 2SLGBTQQIA person's file may negatively impact both progress on the investigation and relationships with family members; police services must have robust protocols to mitigate these impacts.
- V Create a national strategy, through the Canadian Association of Chiefs of Police, to ensure consistency in reporting mechanisms for reporting missing Indigenous women, girls, and 2SLGBTQQIA people. This could be developed in conjunction with implementation of a national database.
- vi Establish standardized response times to reports of missing Indigenous persons and women, girls, and 2SLGBTQQIA people experiencing violence, and conduct a regular audit of response times to monitor and provide feedback for improvement.
- vii Lead the provincial and territorial governments to establish a nationwide emergency number.
- 9.6 We call upon all police services to establish an independent, special investigation unit for the investigation of incidents of failures to investigate, police misconduct, and all forms of discriminatory practices and mistreatment of Indigenous Peoples within their police service. This special investigation unit must be transparent in practice and report at least annually to Indigenous communities, leadership, and people in their jurisdiction.
- 9.7 We call upon all police services to partner with front-line organizations that work in service delivery, safety, and harm reduction for Indigenous women, girls, and 2SLGBTQQIA people to expand and strengthen police services delivery.
- 9.8 We call upon all police services to establish and engage with a civilian Indigenous advisory committee for each police service or police division, and to establish and engage with a local civilian Indigenous advisory committee to advise the detachment operating within the Indigenous community.
- 9.9 We call upon all levels of government and all police services for the establishment of a national task force, comprised of an independent, highly qualified, and specialized team of investigators, to review and, if required, to reinvestigate each case of all unresolved



files of missing and murdered Indigenous women, girls, and 2SLGBTQQIA people from across Canada. Further, this task force must disclose to families and to survivors all non-privileged information and findings.

- 9.10 We call upon all police services to voluntarily produce all unresolved cases of missing or murdered Indigenous women, girls, and 2SLGBTQQIA people to the national task force.
- 9.11 We call upon all police services to develop and implement guidelines for the policing of the sex industry in consultation with women engaged in the sex industry, and to create a specific complaints mechanism about police for those in the sex industry.

### Calls for Attorneys and Law Societies:

- 10.1 We call upon the federal, provincial, and territorial governments, and Canadian law societies and bar associations, for mandatory intensive and periodic training of Crown attorneys, defence lawyers, court staff, and all who participate in the criminal justice system, in the area of Indigenous cultures and histories, including distinctions-based training. This includes, but is not limited to, the following measures:
  - i All courtroom officers, staff, judiciary, and employees in the judicial system must take cultural competency training that is designed and led in partnership with local Indigenous communities.
  - ii Law societies working with Indigenous women, girls, and 2SLGBTQQIA people must establish and enforce cultural competency standards.
  - iii All courts must have a staff position for an Indigenous courtroom liaison worker that is adequately funded and resourced to ensure Indigenous people in the court system know their rights and are connected to appropriate services.

### **Calls for Educators:**

11.1 We call upon all elementary, secondary, and post-secondary institutions and education authorities to educate and provide awareness to the public about missing and murdered Indigenous women, girls, and 2SLGBTQQIA people, and about the issues and root causes of violence they experience. All curriculum development and programming should be done in partnership with Indigenous Peoples, especially Indigenous women, girls, and 2SLGBTQQIA people. Such education and awareness must include historical and current truths about the genocide against Indigenous Peoples through state laws, policies, and colonial practices. It should include, but not be limited to, teaching Indigenous history, law, and practices from Indigenous perspectives and the use of *Their Voices Will Guide Us* with children and youth.



11.2 We call upon all educational service providers to develop and implement awareness and education programs for Indigenous children and youth on the issue of grooming for exploitation and sexual exploitation.

### Calls for Social Workers and Those Implicated in Child Welfare:

- 12.1 We call upon all federal, provincial, and territorial governments to recognize Indigenous self-determination and inherent jurisdiction over child welfare. Indigenous governments and leaders have a positive obligation to assert jurisdiction in this area. We further assert that it is the responsibility of Indigenous governments to take a role in intervening, advocating, and supporting their members impacted by the child welfare system, even when not exercising jurisdiction to provide services through Indigenous agencies.
- 12.2 We call upon on all governments, including Indigenous governments, to transform current child welfare systems fundamentally so that Indigenous communities have control over the design and delivery of services for their families and children. These services must be adequately funded and resourced to ensure better support for families and communities to keep children in their family homes.
- 12.3 We call upon all governments and Indigenous organizations to develop and apply a definition of "best interests of the child" based on distinct Indigenous perspectives, world views, needs, and priorities, including the perspective of Indigenous children and youth. The primary focus and objective of all child and family services agencies must be upholding and protecting the rights of the child through ensuring the health and well-being of children, their families, and communities, and family unification and reunification.
- 12.4 We call upon all governments to prohibit the apprehension of children on the basis of poverty and cultural bias. All governments must resolve issues of poverty, inadequate and substandard housing, and lack of financial support for families, and increase food security to ensure that Indigenous families can succeed.
- 12.5 We call upon all levels of government for financial supports and resources to be provided so that family or community members of children of missing and murdered Indigenous women, girls, and 2SLGBTQQIA people are capable of caring for the children left behind. Further, all governments must ensure the availability and accessibility of specialized care, such as grief, loss, trauma, and other required services, for children left behind who are in care due to the murder or disappearance of their caregiver.
- 12.6 We call upon all governments and child welfare services to ensure that, in cases where apprehension is not avoidable, child welfare services prioritize and ensure that a family member or members, or a close community member, assumes care of Indigenous children. The caregivers should be eligible for financial supports equal to an amount that might otherwise be paid to a foster family, and will not have other government financial

**2000 194** 

support or benefits removed or reduced by virtue of receiving additional financial supports for the purpose of caring for the child. This is particularly the case for children who lose their mothers to violence or to institutionalization and are left behind, needing family and belonging to heal.

- 12.7 We call upon all governments to ensure the availability and accessibility of distinctionsbased and culturally safe culture and language programs for Indigenous children in the care of child welfare.
- 12.8 We call upon provincial and territorial governments and child welfare services for an immediate end to the practice of targeting and apprehending infants (hospital alerts or birth alerts) from Indigenous mothers right after they give birth.
- 12.9 We call for the establishment of a Child and Youth Advocate in each jurisdiction with a specialized unit with the mandate of Indigenous children and youth. These units must be established within a period of one year of this report. We call upon the federal government to establish a National Child and Youth Commissioner who would also serve as a special measure to strengthen the framework of accountability for the rights of Indigenous children in Canada. This commissioner would act as a national counterpart to the child advocate offices that exist in nearly all provinces and territories.
- 12.10 We call upon the federal, provincial, and territorial governments to immediately adopt the Canadian Human Rights Tribunal 2017 CHRT 14 standards regarding the implementation of Jordan's Principle in relation to all First Nations (Status and non-Status), Métis, and Inuit children. We call on governments to modify funding formulas for the provision of services on a needs basis, and to prioritize family support, reunification, and prevention of harms. Funding levels must represent the principle of substantive equity.
- 12.11 We call upon all levels of government and child welfare services for a reform of laws and obligations with respect to youth "aging out" of the system, including ensuring a complete network of support from childhood into adulthood, based on capacity and needs, which includes opportunities for education, housing, and related supports. This includes the provision of free post-secondary education for all children in care in Canada.
- 12.12 We call upon all child and family services agencies to engage in recruitment efforts to hire and promote Indigenous staff, as well as to promote the intensive and ongoing training of social workers and child welfare staff in the following areas:
  - history of the child welfare system in the oppression and genocide of Indigenous Peoples
  - anti-racism and anti-bias training
  - local culture and language training
  - sexual exploitation and trafficking training to recognize signs and develop specialized responses



- 12.13 We call upon all governments and child welfare agencies to fully implement the Spirit Bear Plan.<sup>7</sup>
- 12.14 We call upon all child welfare agencies to establish more rigorous requirements for safety, harm-prevention, and needs-based services within group or care homes, as well as within foster situations, to prevent the recruitment of children in care into the sex industry. We also insist that governments provide appropriate care and services, over the long term, for children who have been exploited or trafficked while in care.
- 12.15 We call upon child welfare agencies and all governments to fully investigate deaths of Indigenous youth in care.

### **Calls for Extractive and Development Industries:**

- 13.1 We call upon all resource-extraction and development industries to consider the safety and security of Indigenous women, girls, and 2SLGBTQQIA people, as well as their equitable benefit from development, at all stages of project planning, assessment, implementation, management, and monitoring.
- 13.2 We call upon all governments and bodies mandated to evaluate, approve, and/or monitor development projects to complete gender-based socio-economic impact assessments on all proposed projects as part of their decision making and ongoing monitoring of projects. Project proposals must include provisions and plans to mitigate risks and impacts identified in the impact assessments prior to being approved.
- 13.3 We call upon all parties involved in the negotiations of impact-benefit agreements related to resource-extraction and development projects to include provisions that address the impacts of projects on the safety and security of Indigenous women, girls, and 2SLGBTQQIA people. Provisions must also be included to ensure that Indigenous women and 2SLGBTQQIA people equitably benefit from the projects.
- 13.4 We call upon the federal, provincial, and territorial governments to fund further inquiries and studies in order to better understand the relationship between resource extraction and other development projects and violence against Indigenous women, girls, and 2SLGBTQQIA people. At a minimum, we support the call of Indigenous women and leaders for a public inquiry into the sexual violence and racism at hydroelectric projects in northern Manitoba.
- 13.5 We call upon resource-extraction and development industries and all governments and service providers to anticipate and recognize increased demand on social infrastructure because of development projects and resource extraction, and for mitigation measures to be identified as part of the planning and approval process. Social infrastructure must be expanded and service capacity built to meet the anticipated needs of the host communities in advance of the start of projects. This includes but is not limited to ensuring that policing, social services, and health services are adequately staffed and resourced.

**2000 196** 196

### **Calls for Correctional Service Canada:**

- 14.1 We call upon Correctional Service Canada to take urgent action to establish facilities described under sections 81 and 84 of the *Corrections and Conditional Release Act* to ensure that Indigenous women, girls, and 2SLGBTQQIA people have options for decarceration. Such facilities must be strategically located to allow for localized placements and mother-and-child programming.
- 14.2 We call upon Correctional Service Canada to ensure that facilities established under sections 81 and 84 of the *Corrections and Conditional Release Act* receive funding parity with Correctional Service Canada-operated facilities. The agreements made under these sections must transfer authority, capacity, resources, and support to the contracting community organization.
- 14.3 We call upon Correctional Service Canada to immediately rescind the maximum security classification that disproportionately limits federally sentenced Indigenous women classified at that level from accessing services, supports, and programs required to facilitate their safe and timely reintegration.
- 14.4 We call upon Correctional Service Canada to evaluate, update, and develop security classification scales and tools that are sensitive to the nuances of Indigenous back-grounds and realities.
- 14.5 We call upon Correctional Service Canada to apply Gladue factors in all decision making concerning Indigenous women and 2SLGBTQQIA people and in a manner that meets their needs and rehabilitation.
- 14.6 We call upon Correctional Service Canada and provincial and territorial services to provide intensive and comprehensive mental health, addictions, and trauma services for incarcerated Indigenous women, girls, and 2SLGBTQQIA people, ensuring that the term of care is needs-based and not tied to the duration of incarceration. These plans and services must follow the individuals as they reintegrate into the community.
- 14.7 We call upon Correctional Service Canada to prohibit transfer of federally incarcerated women in need of mental health care to all-male treatment centres.
- 14.8 We call upon Correctional Service Canada to ensure its correctional facilities and programs recognize the distinct needs of Indigenous offenders when designing and implementing programming for First Nations, Inuit, and Métis women. Correctional Service Canada must use culturally safe, distinctions-based, and trauma-informed models of care, adapted to the needs of Indigenous women, girls, and 2SLGBTQQIA people.
- 14.9 We call upon Correctional Service Canada, in order to support reintegration, to increase opportunities for meaningful vocational training, secondary school graduation, and post-secondary education.



- 14.10 We call upon Correctional Service Canada to increase and enhance the role and participation of Elders in decision making for all aspects of planning for Indigenous women and 2SLGBTQQIA people.
- 14.11 We call upon Correctional Service Canada to expand mother-and-child programming and to establish placement options described in sections 81 and 84 of the *Corrections and Conditional Release Act* to ensure that mothers and their children are not separated.
- 14.12 We call upon Correctional Service Canada and provincial and territorial correctional services to provide programming for men and boys that confronts and ends violence against Indigenous women, girls, and 2SLGBTQQIA people.
- 14.13 We call upon Correctional Service Canada to eliminate the practice of strip-searches.



Marlene Jack, sister of Doreen Jack, missing since 1989. Of the missing, she says: "I just want to bring them home. Find them and bring them home, where they belong." Credit: Nadya Kwandibens



# Calls for Justice for All Canadians

As this report has shown, and within every encounter, each person has a role to play in order to combat violence against Indigenous women, girls, and 2SLGBTQQIA people. Beyond those Calls aimed at governments or at specific industries or service providers, we encourage every Canadian to consider how they can give life to these Calls for Justice.

We call on all Canadians to:

- 15.1 Denounce and speak out against violence against Indigenous women, girls, and 2SLGBTQQIA people.
- 15.2 Decolonize by learning the true history of Canada and Indigenous history in your local area. Learn about and celebrate Indigenous Peoples' history, cultures, pride, and diversity, acknowledging the land you live on and its importance to local Indigenous communities, both historically and today.
- 15.3 Develop knowledge and read the *Final Report*. Listen to the truths shared, and acknowledge the burden of these human and Indigenous rights violations, and how they impact Indigenous women, girls, and 2SLGBTQQIA people today.
- 15.4 Using what you have learned and some of the resources suggested, become a strong ally. Being a strong ally involves more than just tolerance; it means actively working to break down barriers and to support others in every relationship and encounter in which you participate.
- 15.5 Confront and speak out against racism, sexism, ignorance, homophobia, and transphobia, and teach or encourage others to do the same, wherever it occurs: in your home, in your workplace, or in social settings.
- 15.6 Protect, support, and promote the safety of women, girls, and 2SLGBTQQIA people by acknowledging and respecting the value of every person and every community, as well as the right of Indigenous women, girls, and 2SLGBTQQIA people to generate their own, self-determined solutions.
- 15.7 Create time and space for relationships based on respect as human beings, supporting and embracing differences with kindness, love, and respect. Learn about Indigenous principles of relationship specific to those Nations or communities in your local area and work, and put them into practice in all of your relationships with Indigenous Peoples.
- 15.8 Help hold all governments accountable to act on the Calls for Justice, and to implement them according to the important principles we set out.



#### Suggested Resources for Learning:

National Inquiry into Missing and Murdered Indigenous Women and Girls. *Our Women and Girls Are Sacred: The Interim Report of the National Inquiry into Missing and Murdered Women and Girls.* http://www.mmiwg-ffada.ca/publications/.

National Inquiry into Missing and Murdered Indigenous Women and Girls. *Their Voices Will Guide Us: Student and Youth Engagement Guide*. http://www.mmiwg-ffada.ca/publications/.

Transcripts, testimonies, and public statements offered during the Truth-Gathering Process, available at www.mmiwg-ffada.ca/transcripts/ and http://www.mmiwg-ffada.ca/part-ii-and-part-iii-knowledge-keeper-expert-and-institutional-hearing-transcripts/.

In addition, please consult our bibliography for a list of all sources used in this report.

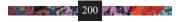
#### Suggested Resources for Allyship:

Amnesty International. "10 Ways to Be a Genuine Ally to Indigenous Communities." https://www.amnesty.org.au/10-ways-to-be-an-ally-to-indigenous-communities/.

Dr. Lynn Gehl. "Ally Bill of Responsibilities." http://www.lynngehl.com/uploads/5/0/0/4/5004954/ally bill of responsibilities poster.pdf.

Indigenous Perspectives Society. "How to Be an Ally to Indigenous People." https://ipsociety.ca/news/page/7/.

Montreal Urban Aboriginal Community Strategy Network. "Indigenous Ally Toolkit." https://gallery.mailchimp.com/86d28ccd43d4be0cfc11c71a1/files/102bf040-e221-4953-a9ef-9f0c5efc3458/Ally\_email.pdf.





Lorne Cardinal, from Squamish, BC, reminds us that it's not over – there are still missing and murdered women in this country, and still work to be done. Credit: Nadya Kwandibens

# Calls for Justice: Distinctions-Based Calls

As we have maintained throughout the National Inquiry, and within this report, while many Indigenous women, girls, and 2SLGBTQQIA people share experiences of violence in common, the distinctions among these communities are important in understanding some of the specific ways, beyond the Calls for Justice already articulated, in which their rights to safety can be upheld by all governments, institutions and service providers. While the time limitations imposed upon the National Inquiry have not permitted an in-depth analysis based on regional or local specificity, we extend these Calls for Justice in relation to particular Indigenous communities – Inuit, Métis and First Nations as well as to Indigenous 2SLGBTQQIA people – whose distinctive needs must be addressed.

## **Inuit-Specific Calls for Justice:**

### Principles and guidelines for interpretation and implementation

#### **Distinctions-Based Approach**

Inuit, Métis, and First Nations are distinct peoples. Implementation of all recommendations in this *Final Report* and actions taken to ensure safety and social, economic, political, and cultural health and prosperity of Inuit women, girls, and 2SLGBTQQIA people must be done in a manner that is distinctions-based, recognizing and reflecting the distinct needs and governance structures of Inuit and reflective of the distinct relationship between Inuit and the Crown. They must also respect and appreciate the internal diversity within Inuit communities, including the diverse history, languages, dialects, and spiritual and religious beliefs.



#### **Decision Making through Inuit Self-Determination**

All actions taken to ensure the safety and well-being of Inuit women, girls, and 2SLGBTQQIA people must include the participation of Inuit women, girls, and 2SLGBTQQIA people and those with lived experience. Further, they must recognize and implement Inuit self-determination. All actions must be Inuit-led, rooted in Inuit laws, culture, language, traditions, and societal values. Implementation efforts will succeed only through the recognition and respect of Inuit knowledge, wisdom, and expertise.

Improving the safety and the social, economic, and cultural health and prosperity of Inuit women, girls, and 2SLGBTQQIA people can be achieved only through the sustained, wholesome, and transparent collaborative action of all governments (federal, provincial, and territorial) in full partnership with Inuit. Inuit society is artificially compartmentalized and divided through colonial geopolitical boundaries. Therefore, federal, provincial, and territorial jurisdictions must work with Inuit self-determination mechanisms to ensure appropriate decision making regarding intervention programs and services. Further, all governments must not use jurisdiction as an excuse to impede actions required to eliminating the social, economic, political, and cultural inequality and infrastructure gaps that are resulting in increased violence against Inuit women, girls, and 2SLGBTQQIA people.

#### **Substantive Equality**

State recognition, protection, and compliance with the human rights and Indigenous rights of Inuit are a legal imperative. Efforts by all governments are required to achieve substantive equality for Inuit. There must be true equality in outcomes. Nothing less than substantive equality is required to address the historical disadvantages, intergenerational trauma, and discrimination experienced by Inuit women, girls, and 2SLGBTQQIA people in order to ensure their social, economic, political, and cultural prosperity. In order to obtain substantive equality, all the specific needs of Inuit must be met in a culturally appropriate way and include equitable, sustainable and long-term resourcing and funding.

### **Calls for Justice for Inuit**

Testimony shared by Inuit witnesses, experts, and Elders, and submissions by Inuit representative organizations, along with existing reports and research, demonstrated that Inuit have unique and distinct experiences of colonial oppression and violence. Further, witnesses emphasized distinct areas of concern and priority areas for Inuit women, girls, and 2SLGBTQQIA people that require distinct recommendations.

16.1 We call upon all governments to honour all socio-economic commitments as defined in land claims agreements and self-government agreements between Inuit and the Crown. These commitments must be upheld and implemented. Articles 23 and 24 of the Nunavut Land Claims Agreement, and commitments by governments to provide for the housing and economic needs of Inuit, must be fully complied with and implemented.

202

- 16.2 We call upon all governments to create laws and services to ensure the protection and revitalization of Inuit culture and language. All Inuit, including those living outside Inuit Nunangat, must have equitable access to culture and language programs. It is essential that Elders are included in the development and delivery of these programs.
- 16.3 We call upon all governments with jurisdiction in Inuit Nunangat to recognize Inuktut as the founding language, and it must be given official language status through language laws. Inuktut must be afforded the same recognition and protection and promotion as English and French within Inuit Nunangat, and all governments and agencies providing services to Inuit must ensure access to services in Inuktut, and invest in the capacity to be able to do so. Furthermore, all government and agency service providers must be culturally competent and educated in Inuit culture, laws, values, and history, also well as the history of colonial violence perpetuated by the Canadian state and government agents against Inuit.
- 16.4 Given that the intergenerational transfer of Inuit knowledge, values, and language is a right that must be upheld, we call upon all governments to fund and support the recording of Inuit knowledge about culture, laws, values, spirituality, and history prior to and since the start of colonization. Further, this knowledge must be accessible and taught to all Inuit, by Inuit. It is imperative that educational institutions prioritize the teaching of this knowledge to Inuit children and youth within all areas of the educational curriculum.
- 16.5 Given that reliable high-speed Internet services and telecommunications are necessary for Inuit to access government services and to engage in the Canadian economic, cultural, and political life, we call upon all governments with jurisdiction in Inuit Nunangat to invest the infrastructure to ensure all Inuit have access to high-speed Internet.
- 16.6 We call upon all governments and Inuit organizations to work collaboratively to ensure that population numbers for Inuit outside of the Inuit homeland are captured in a disaggregated manner, and that their rights as Inuit are upheld. These numbers are urgently needed to identify the growing, social, economic, political, and cultural needs of urban Inuit.
- 16.7 We call upon all governments to ensure the availability of effective, culturally appropriate, and accessible health and wellness services within each Inuit community. The design and delivery of these services must be inclusive of Elders and people with lived experience. Closing the service and infrastructure gaps in the following areas is urgently needed, and requires action by all governments. Required measures include but are not limited to:
  - i The establishment and funding of birthing centres in each Inuit community, as well as the training of Inuit midwives in both Inuit and contemporary birthing techniques.

203

- ii The establishment and funding of accessible and holistic community wellness, health, and mental health services in each Inuit community. These services must be Inuit-led and operate in accordance with Inuit health and wellness values, approaches, and methods.
- iii The establishment and funding of trauma and addictions treatment and healing options in each Inuit community.
- 16.8 We call upon all governments to invest in the recruitment and capacity building of Inuit within the medical, health, and wellness service fields. Training and competency in both contemporary and Inuit medical, health, and wellness practices and methodologies are essential for effective services in these fields.
- 16.9 We call upon the Government of Canada, in partnership with Inuit, to establish and resource an Inuit Healing and Wellness Fund to support grassroots and community-led programs. This fund must be permanently resourced and must be administered by Inuit and independent from government.
- 16.10 We call upon all governments to develop policies and programs to include healing and health programs within educational systems. These programs must be Inuit-led and must provide the resources to teach Inuit children Inuit-appropriate socio-emotional coping skills, pride, and capacity.
- 16.11 Given that healing occurs through the expression of art and culture, we call upon all governments within Inuit Nunangat to invest in Inuit artistic expression in all its forms through the establishment of infrastructure and by ensuring sustainable funds are available and accessible for Inuit artists.
- 16.12 We call upon all governments and service providers to ensure that Inuit men and boys are provided services that are gender- and Inuit-specific to address historic and ongoing trauma they are experiencing. These programs must be Inuit-led and -run, and must be well resourced and accessible.
- 16.13 We call upon all governments to take all measures required to implement the National Inuit Suicide Prevention Strategy with Inuit nationally and regionally, through Inuit Tapiriit Kanatami (ITK).
- 16.14 We call upon all federal, provincial, and territorial governments to review and amend laws in relation to child and family services to ensure they uphold the rights of Inuit children and families and conform to Inuit laws and values. Inuit parents and guardians must be provided access to Inuit-specific parenting and caregiving teachings and services.
- 16.15 In light of the multijurisdictional nature of child and family services as they currently operate for Inuit in Canada, we call upon the federal government, in partnership with Inuit, to establish and fund an Inuit Child and Youth Advocate with jurisdiction over all



Inuit children in care. In the absence of a federally mandated Inuit Child and Youth Advocate, we call on all provinces and territories with Inuit children in their care to each establish Inuit-specific child and youth advocates.

- 16.16 We call upon all government agencies providing child and family services to Inuit children to enumerate and report on the number of Inuit children in their care. This data must be disaggregated and the reports must be shared with Inuit organizations and Inuit child and youth advocates.
- 16.17 We call upon all governments to prioritize supporting Inuit families and communities to meet the needs of Inuit children, recognizing that apprehension must occur only when absolutely required to protect a child. Placement of Inuit children with extended family and in Inuit homes must be prioritized and resourced. Placement outside of their communities and outside their homelands must be restricted.
- 16.18 We call upon all governments to respect the rights of Inuit children and people in care, including those who are placed in care outside of their Inuit homelands. All governments must ensure that children and people in care have access to their families and kinship systems and have meaningful access to their culture and language and to culturally relevant services. All child and family services agencies must work with Inuit communities within their jurisdiction to meet their obligations to Inuit children in their care. We call upon all governments to immediately invest in safe, affordable, and culturally appropriate housing within Inuit communities and for Inuit outside of their homelands, given the links between the housing crisis and violence, poor health (including tuberculosis) and suicide. Immediate and directed measures are required to end the crisis.
- 16.19 We call upon all governments to develop and fund safe houses, shelters, transition houses, and second-stage housing for Inuit women, girls, and 2SLGBTQQIA people fleeing violence. These houses and shelters are required in all Inuit communities and in urban centres with large Inuit populations. Shelters must not require full occupancy to remain open and to receive funding. Further, they must be independent from child and family services agencies, as women may not seek shelter due to fear of agency involvement. This action includes the establishment and funding of shelters and safe spaces for families, children, and youth, including Inuit who identify as 2SLGBTQQIA, who are facing socio-economic crises in all Inuit communities and in urban centres with large Inuit populations.
- 16.20 We call upon all governments to support the establishment of programs and services designed to financially support and promote Inuit hunting and harvesting in all Inuit communities. All governments with jurisdiction in Inuit Nunangat must immediately increase minimum wage rates and increase social assistance rates to meet the needs of Inuit and to match the higher cost of living in Inuit communities. A guaranteed annual livable income model, recognizing the right to income security, must be developed and implemented.

205

- 16.21 We call upon all governments to ensure equitable access to high-quality educational opportunities and outcomes from early childhood education to post-secondary education within Inuit communities. Further, all governments must invest in providing Inuit women, girls, and 2SLGBTQQIA people with accessible and equitable economic opportunities.
- 16.22 We call upon all governments to fund and to support culturally and age-appropriate programs for Inuit children and youth to learn about developing interpersonal relationships. These programs could include, for example, training in developing healthy relationships and personal well-being and traditional parenting skills. Furthermore, Inuit children and youth must be taught how to identify violence through the provision of age-appropriate educational programs like the Good Touch/Bad Touch program offered in Nunavik.
- 16.23 We call upon all governments to work with Inuit to provide public awareness and education to combat the normalization of domestic violence and sexualized violence against Inuit women, girls, and 2SLGBTQQIA people; to educate men and boys about the unacceptability of violence against Inuit women, girls, and 2SLGBTQQIA people; and to raise awareness and education about the human rights and Indigenous rights of Inuit.
- 16.24 We call upon all governments to fund and to support programs for Inuit children and youth to teach them how to respond to threats and identify exploitation. This is particularly the case with respect to the threats of drugs and drug trafficking as well as sexual exploitation and human trafficking. This awareness and education work must be culturally and age-appropriate and involve all members of the community, including 2SLGBTQQIA Inuit.
- 16.25 We call upon all educators to ensure that the education system, from early childhood to post-secondary, reflects Inuit culture, language, and history. The impacts and history of colonialism and its legacy and effects must also be taught. Successful educational achievements are more likely to be attained and be more meaningful for Inuit when they reflect their socio-economic, political, and cultural reality and needs. Further, we call upon all governments with jurisdiction over education within the Inuit homeland to amend laws, policies, and practices to ensure that the education system reflects Inuit culture, language, and history.
- 16.26 We call upon all governments to establish more post-secondary options within Inuit Nunangat to build capacity and engagement in Inuit self-determination in research and academia. We call on all governments to invest in the establishment of an accredited university within Inuit Nunangat.
- 16.27 We call upon all governments to ensure that in all areas of service delivery including but not limited to policing, the criminal justice system, education, health, and social services – there be ongoing and comprehensive Inuit-specific cultural competency training for public servants. There must also be ongoing and comprehensive training in such

206

areas as trauma care, cultural safety training, anti-racism training, and education with respect to the historical and ongoing colonialism to which Inuit have been and are subjected.

- 16.28 Given that the failure to invest in resources required for treatment and rehabilitation has resulted in the failure of section 718(e) of the *Criminal Code* and the Gladue principles to meet their intended objectives, we call upon all governments to invest in Inuit-specific treatment and rehabilitation services to address the root causes of violent behaviour. This must include but is not limited to culturally appropriate and accessible mental health services, trauma and addictions services, and access to culture and language for Inuit. Justice system responses to violence must ensure and promote the safety and security of all Inuit, and especially that of Inuit women, girls, and 2SLGBTQQIA people.
- 16.29 We call upon all governments and service providers, in full partnership with Inuit, to design and provide wraparound, accessible, and culturally appropriate victim services. These services must be available and accessible to all Inuit and in all Inuit communities.
- 16.30 We call upon Correctional Service Canada and provincial and territorial corrections services to recognize and adopt an Inuit Nunangat model of policy, program, and service development and delivery. This is required to ensure that Inuit in correctional facilities get the Inuit-specific treatment and rehabilitation programs and services they need. Further, it will ensure that Inuit women can remain within their Inuit homelands and are able to maintain ties with their children and families. Correctional Service Canada and provincial and territorial correctional services must ensure that effective, needs-based, and culturally and linguistically appropriate correctional services are made available for Inuit women, girls, and 2SLGBTQQIA people in custody. Inuit men and boys in custody must also receive specialized programs and services to address their treatment and rehabilitation needs and to address the root causes of violent behaviour. We call upon Correctional Service Canada to support and equitably fund the establishment of facilities and spaces as described in section 81 and section 84 of the *Corrections and Conditional Release Act*, within all Inuit regions.
- 16.31 We call upon Correctional Service Canada and provincial and territorial correctional services to amend their intake and data-collection policies and practices to ensure that distinctions-based information about Inuit women, girls, and 2SLGBTQQIA people is accurately captured and monitored. All correctional services must report annually to Inuit representative organizations on the number of Inuit women within correctional services' care and custody.
- 16.32 We call upon police services, in particular the Royal Canadian Mounted Police (RCMP), to ensure there is Inuit representation among sworn officers and civilian staff within Inuit communities. Inuit are entitled to receive police services in Inuktut and in a culturally competent and appropriate manner. The RCMP must ensure they have the capacity



to uphold this right. Within the Nunavut Territory, and in accordance with Article 23 of the Nunavut Land Claims Agreement, the RCMP has obligations to recruit, train, and retain Inuit. The RCMP must take immediate and directed measures to ensure the number of Inuit within the RCMP in Nunavut, and throughout the Inuit homelands, is proportionally representative.

- 16.33 We call upon all governments to invest in capacity building, recruitment, and training to achieve proportional representation of Inuit throughout public service in Inuit home-lands.
- 16.34 Within the Nunavut Territory, we call upon the federal and territorial governments to fully implement the principles and objectives of Article 23 of the Nunavut Land Claims Agreement. Proportional representation is an imperative in the arenas of public services and, in particular, the child welfare system, social services, the criminal justice system, police services, the courts, and corrections throughout Inuit Nunangat.
- 16.35 We call upon the federal government and the Province of Quebec to ensure the intent and objectives of the policing provisions of the James Bay Northern Quebec Agreement are fully implemented, including Inuit representation, participation, and control over policing services within Nunavik. The federal government and the government of Quebec must ensure the Kativik Regional Police Force (KRPF) is resourced and provided with the legal capacity to provide Nunavik Inuit with effective and substantively equitable policing services. Urgent investments are required to ensure that the KRPF has the infrastructure and human resource capacity to meet its obligations to provide competent, Inuit-specific policing services.
- 16.36 We call upon all governments to ensure there are police services in all Inuit communities.



From Salluit, Nunavik, Elisapie Isaac is an Inuk singer/songwriter, mother, filmmaker and producer. She reminds us that lost loved ones are "Taken, Not Forgotten." Credit: Nadya Kwandibens

208

- 16.37 We call upon all governments within Inuit Nunangat to amend laws, policies, and practices to reflect and recognize Inuit definitions of "family," "kinship," and "customs" to respect Inuit family structures.
- 16.38 We call upon all service providers working with Inuit to amend policies and practices to facilitate multi-agency interventions, particularly in cases of domestic violence, sexualized violence, and poverty. Further, in response to domestic violence, early intervention and prevention programs and services must be prioritized.
- 16.39 We call upon all governments to support and fund the establishment of culturally appropriate and effective child advocacy centres like the Umingmak Centre, the first child advocacy centre in Nunavut, throughout the Inuit homeland.
- 16.40 We call upon all governments to focus on the well-being of children and to develop responses to adverse childhood experiences that are culturally appropriate and evidence-based. This must include but is not limited to services such as intervention and counselling for children who have been sexually and physically abused.
- 16.41 We call upon governments and Inuit representative organizations to work with Inuit women, girls, and 2SLGBTQQIA people to identify barriers and to promote their equal representation within governance, and work to support and advance their social, economic, cultural, and political rights. Inuit women, Elders, youth, children, and 2SLGBTQQIA people must be given space within governance systems in accordance with their civil and political rights.
- 16.42 We call upon the federal government to ensure the long-term, sustainable, and equitable funding of Inuit women's, youths', and 2SLGBTQQIA people's groups. Funding must meet the capacity needs and respect Inuit self-determination, and must not be tied to the priorities and agenda of federal, provincial, or territorial governments.
- 16.43 We call upon all governments and service providers within the Inuit homelands to ensure there are robust oversight mechanisms established to ensure services are delivered in a manner that is compliant with the human rights and Indigenous rights of Inuit. These mechanisms must be accessible and provide for meaningful recourse.
- 16.44 We call upon all governments to ensure the collection of disaggregated data in relation to Inuit to monitor and report on progress and the effectiveness of laws, policies, and services designed to uphold the social, economic, political, and cultural rights and wellbeing of Inuit women, girls, and 2SLGBTQQIA people. Monitoring and data collection must recognize Inuit self-determination and must be conducted in partnership with Inuit. Within any and all mechanisms established to oversee and monitor the implementation of the National Inquiry's recommendations, we call upon all governments to ensure the equitable and meaningful involvement of Inuit governments and representative organizations, including those of Inuit women, girls, and and 2SLGBTQQIA people.



- 16.45 We call upon the federal government to acknowledge the findings of the Qikiqtani Truth Commission and to work to implement the recommendations therein in partnership with Qikiqtani Inuit Association and the Inuit of the Qikiqtaaluk region.
- 16.46 Many people continue to look for information and the final resting place of their lost loved one. The federal government, in partnership with Inuit, has established the Nanilavut project. We recognize the significance of the project as an important step in healing and Inuit self-determination in the healing and reconciliation process. We call upon the federal government to support the work of the Nanilavut project on a long-term basis, with sustained funding so that it can continue to serve Inuit families as they look for answers to the questions of what happened to their loved ones. We further insist that it must provide for the option of repatriation of the remains of lost loved ones once they are located.

## **Métis-Specific Calls for Justice:**

The Calls for Justice in this report must be interpreted and implemented in a distinctions-based manner, taking into account the unique history, culture and reality of Métis communities and people. This includes the way that Métis people and their issues have been ignored by levels of government, which has resulted in barriers to safety for Métis women, girls, and 2SLGBTQQIA people. The diversity of the experiences of Métis women, girls, and 2SLGBTQQIA people, both among themselves, and as between other Indigenous women, girls, and 2SLGBTQQIA people, must be fully recognized and understood.

All actions taken to ensure the safety and well-being of Métis women, girls, and 2SLGBTQQIA people must include their participation, including those with lived experience. In addition, the recognition and protection of, and compliance with, the human rights and Indigenous rights of Métis women, girls, and 2SLGBTQQIA people on a substantively equal basis is a legal imperative.

Métis witnesses who testified at the National Inquiry, and Parties with Standing's closing submissions, emphasized the need for greater awareness of Métis issues and distinctive realities, and practical supports for Métis families. They also focused on guiding principles such as: Métis self-determination, and the need for culturally-specific solutions; respect for human rights; prevention in relation to violence and child welfare, and substantively equal governmental support for Métis children and families; and, inclusion of all Métis perspectives in decision making, including 2SLGBTQQIA people and youth.

17.1 We call upon the federal government to uphold its constitutional responsibility to Métis people and to non-Status people in the provision of all programs and services that fall under its responsibility.



- 17.2 We call upon the federal government to pursue the collection and dissemination of disaggregated data concerning violence against Métis women, girls, and 2SLGBTQQIA people, including barriers they face in accessing their rights to safety, informed by Métis knowledge and experiences. We also call upon the federal government to support and fund research that highlights distinctive Métis experiences, including the gathering of more stories specific to Métis perspectives on violence.
- 17.3 We call upon all governments to ensure equitable representation of Métis voices in policy development, funding, and service delivery, and to include Métis voices and perspectives in decision-making, including Métis 2SLGBTQQIA people and youth, and to implement self-determined and culturally specific solutions for Métis people.
- 17.4 We call upon all governments to fund and support Métis-specific programs and services that meet the needs of Métis people in an equitable manner, and dedicated Métis advocacy bodies and institutions, including but not limited to Métis health authorities and Métis child welfare agencies.
- 17.5 We call upon all governments to eliminate barriers to accessing programming and services for Métis, including but not limited to barriers facing Métis who do not reside in their home province.
- 17.6 We call upon all governments to pursue the implementation of a distinctions-based approach that takes into account the unique history of Métis communities and people, including the way that many issues have been largely ignored by levels of government and now present barriers to safety.
- 17.7 We call upon all governments to fund and to support culturally appropriate programs and services for Métis people living in urban centres, including those that respect the internal diversity of Métis communities with regards to spirituality, gender identity, and cultural identity.
- 17.8 We call upon all governments, in partnership with Métis communities, organizations, and individuals, to design mandatory, ongoing cultural competency training for public servants (including staff working in policing, justice, education, health care, social work, and government) in areas such as trauma-informed care, cultural safety training, anti-racism training, and understanding of Métis culture and history.
- 17.9 We call upon all governments to provide safe transportation options, particularly in rural, remote, and northern communities, including "safe rides" programs, and to monitor high recruitment areas where Métis women, girls, and 2SLGBTQQIA individuals may be more likely to be targeted.
- 17.10 We call upon all governments to respect Métis rights and individuals' self-identification as Métis.



- 17.11 We call upon all governments to support and fund dialogue and relationships between Métis and First Nations communities.
- 17.12 We call upon police services to build partnerships with Métis communities, organizations, and people to ensure culturally safe access to police services.
- 17.13 We call upon police services to engage in education about the unique history and needs of Métis communities.
- 17.14 We call upon police services to establish better communication with Métis communities and populations through representative advisory boards that involve Métis communities and address their needs.
- 17.15 We call upon all governments to fund the expansion of community-based security models that include Métis perspectives and people, such as local peacekeeper officers or programs such as the Bear Clan Patrol.
- 17.16 We call upon all governments to provide support for self-determined and culturally specific needs-based child welfare services for Métis families that are focused on prevention and maintenance of family unity. These services will also focus on: avoiding the need for foster care; restoring family unity and providing support for parents trying to reunite with children; healing for parents; and developing survivor-led programs to improve family safety. These services include culturally grounded parenting education and interventions that support the whole family, such as substance abuse treatment programs that accommodate parents with children and that are specifically suited to Métis needs and realities. We also call upon all governments to provide long-term stable funding for wraparound services and exceptional programs aimed at keeping Métis families together.
- 17.17 We call upon all governments to provide more funding and support for Métis child welfare agencies and for child placements in Métis homes.
- 17.18 We call upon all governments to establish and maintain funding for cultural programming for Métis children in foster care, especially when they are placed in non-Indigenous or non-Métis families.
- 17.19 We call upon all governments to address Métis unemployment and poverty as a way to prevent child apprehension.
- 17.20 We call upon all governments to fund and support programs for Métis women, girls, and 2SLGBTQQIA people, including more access to traditional healing programs, treatment centres for youth, family support and violence prevention funding and initiatives for Métis, and the creation of no-barrier safe spaces, including spaces for Métis mothers and families in need.



- 17.21 We call upon the federal government to recognize and fulfill its obligations to the Métis people in all areas, especially in health, and further call upon all governments for services such as those under FNIHB to be provided to Métis and non-Status First Nations Peoples in an equitable manner consistent with substantive human rights standards.
- 17.22 We call upon all governments to respect and to uphold the full implementation of Jordan's Principle with reference to the Métis.
- 17.23 We call upon all governments to provide Métis-specific programs and services that address emotional, mental, physical, and spiritual dimensions of well-being, including coordinated or co-located services to offer holistic wraparound care, as well as increased mental health and healing and cultural supports.
- 17.24 We call upon all governments and educators to fund and establish Métis-led programs and initiatives to address a lack of knowledge about the Métis people and culture within Canadian society, including education and advocacy that highlights the positive history and achievements of Métis people and increases the visibility, understanding, and appreciation of Métis people.
- 17.25 We call upon all governments to fund programs and initiatives that create greater access to cultural knowledge and foster a positive sense of cultural identity among Métis communities. These include initiatives that facilitate connections with family, land, community, and culture; culturally specific programming for Métis 2SLGBTQQIA people and youth; events that bring Métis Elders, Knowledge Keepers and youth together; and mentorship programs that celebrate and highlight Métis role models.



Sharon Johnson is sister to Sandra Johnson, killed in 1992. Every year she organizes a Valentine's Day Memorial Walk in Thunder Bay to honour and remember those who are no longer with us. Credit: Nadya Kwandibens



- 17.26 We call upon all governments to fund and support cultural programming that helps to revitalize the practise of Métis culture, including integrating Métis history and Métis languages into elementary and secondary school curricula, and programs and initiatives to help Métis people explore their family heritage and identity and reconnect with the land.
- 17.27 We call upon all governments to pursue the development of restorative justice and rehabilitation programs, including within correctional facilities, specific to Métis needs and cultural realities, to help address root causes of violence and reduce recidivism, and to support healing for victims, offenders, and their families and communities.
- 17.28 We call upon all governments to provide increased victim support services specific to Métis needs to help Métis victims and families navigate the legal system and to support their healing and well-being throughout the process of seeking justice.
- 17.29 We call upon all actors within the justice system to engage in education and training regarding the history and contemporary realities of Métis experiences.

## **2SLGBTQQIA-Specific Calls for Justice:**

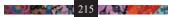
Witnesses who testified at the National Inquiry emphasized the need for greater awareness of 2SLGBTQQIA issues, including the important history and contemporary place of 2SLGBTQQIA people within communities and ceremony, and practical supports and safe places for 2SLGBTQQIA people. Several priority areas were identified, including policing, education, justice, socio-economic priorities, health and healing, and child welfare. Witnesses also focused on guiding principles such as self-determined and culturally-specific solutions for 2SLGBTQQIA people, respect for human rights, prevention in relation to violence and child welfare, and inclusion of all perspectives in decision making, including youth.

Submissions made to the National Inquiry, specific to 2SLGBTQQIA peoples, reflected the need for a distinctions-based approach that takes into account the unique challenges to safety for 2SLGBTQQIA individuals and groups, including youth.

- 18.1 We call upon all governments and service providers to fund and support greater awareness of 2SLGBTQQIA issues, and to implement programs, services, and practical supports for 2SLGBTQQIA people that include distinctions-based approaches that take into account the unique challenges to safety for 2SLGBTQQIA individuals and groups.
- 18.2 We call upon all governments and service providers to be inclusive of all perspectives in decision making, including those of 2SLGBTQQIA people and youth.
- 18.3 We call upon all governments, service providers, and those involved in research to change the way data is collected about 2SLGBTQQIA people to better reflect the presence of individuals and communities, and to improve the inclusion of 2SLGBTQQIA people in research, including 2SLGBTQQIA-led research.



- 18.4 We call upon all governments, service providers, and those involved in research to modify data collection methods to:
  - i Increase accurate, comprehensive statistical data on 2SLGBTQQIA individuals, especially to record the experiences of trans-identified individuals and individuals with non-binary gender identities.
  - ii Eliminate "either-or" gender options and include gender-inclusive, gender-neutral, or non-binary options – for example, an "X-option" – on reporting gender in all contexts, such as application and intake forms, surveys, Status cards, census data and other data collection.
  - iii Increase precision in data collection to recognize and capture the diversity of 2SLGBTQQIA communities: for example, the experiences of Two-Spirit women/ lesbians, and differentiations between Two-Spirit and trans-identified individuals and between trans-masculine and trans-feminine experiences.
- 18.5 We call upon all governments and service providers to ensure that all programs and services have 2SLGBTQQIA front-line staff and management, that 2SLGBTQQIA people are provided with culturally specific support services, and that programs and spaces are co-designed to meet the needs of 2SLGBTQQIA clients in their communities.
- 18.6 We call upon all governments and service providers to fund and support youth programs, including mentorship, leadership, and support services that are broadly accessible and reach out to 2SLGBTQQIA individuals.
- 18.7 We call upon all governments and service providers to increase support for existing successful grassroots initiatives, including consistent core funding.
- 18.8 We call upon all governments and service providers to support networking and community building for 2SLGBTQQIA people who may be living in different urban centres (and rural and remote areas), and to increase opportunities for 2SLGBTQQIA networking, collaboration, and peer support through a national organization, regional organizations, advocacy body, and/or a task force dedicated to advancing action to support the well-being of Indigenous 2SLGBTQQIA persons in Canada.
- 18.9 We call upon First Nations, Métis, and Inuit leadership and advocacy bodies to equitably include 2SLGBTQQIA people, and for national Indigenous organizations to have a 2SLGBTQQIA council or similar initiative.
- 18.10 We call upon all governments and service providers to provide safe and dedicated ceremony and cultural places and spaces for 2SLGBTQQIA youth and adults, and to advocate for 2SLGBTQQIA inclusion in all cultural spaces and ceremonies. These 2SLGBTQQIA-inclusive spaces must be visibly indicated as appropriate.



- 18.11 We call upon all governments, service providers, industry, and institutions to accommodate non-binary gender identities in program and service design, and offer gender-neutral washrooms and change rooms in facilities.
- 18.12 We call upon all police services to better investigate crimes against 2SLGBTQQIA people, and ensure accountability for investigations and handling of cases involving 2SLGBTQQIA people.
- 18.13 We call upon all police services to engage in education regarding 2SLGBTQQIA people and experiences to address discrimination, especially homophobia and transphobia, in policing.
- 18.14 We call upon all police services to take appropriate steps to ensure the safety of 2SLGBTQQIA people in the sex industry.
- 18.15 We call upon all governments, educators, and those involved in research to support and conduct research and knowledge gathering on pre-colonial knowledge and teachings about the place, roles, and responsibilities of 2SLGBTQQIA people within their respective communities, to support belonging, safety, and well-being.
- 18.16 We call upon all governments and educators to fund and support specific Knowledge Keeper gatherings on the topic of reclaiming and re-establishing space and community for 2SLGBTQQIA people.
- 18.17 We call upon all governments, service providers, and educators to fund and support the re-education of communities and individuals who have learned to reject 2SLGBTQQIA people, or who deny their important history and contemporary place within communities and in ceremony, and to address transphobia and homophobia in communities (for example, with anti-transphobia and anti-homophobia programs), to ensure cultural access for 2SLGBTQQIA people.
- 18.18 We call upon all governments and service providers to educate service providers on the realities of 2SLGBTQQIA people and their distinctive needs, and to provide mandatory cultural competency training for all social service providers, including Indigenous studies, cultural awareness training, trauma-informed care, anti-oppression training, and training on 2SLGBTQQIA inclusion within an Indigenous context (including an understanding of 2SLGBTQQIA identities and Indigenous understandings of gender and sexual orientation). 2SLGBTQQIA people must be involved in the design and delivery of this training.
- 18.19 We call upon all governments, service providers, and educators to educate the public on the history of non-gender binary people in Indigenous societies, and to use media, including social media, as a way to build awareness and understanding of 2SLGBTQQIA issues.



- 18.20 We call upon provincial and territorial governments and schools to ensure that students are educated about gender and sexual identity, including 2SLGBTQQIA identities, in schools.
- 18.21 We call upon federal and provincial correctional services to engage in campaigns to build awareness of the dangers of misgendering in correctional systems and facilities and to ensure that the rights of trans people are protected.
- 18.22 We call upon federal and provincial correctional services to provide dedicated 2SLGBTQQIA support services and cultural supports.
- 18.23 We call upon coroners and others involved in the investigation of missing and murdered Indigenous trans-identified individuals and individuals with non-binary gender identities to use gender-neutral or non-binary options, such as an X-marker, for coroners' reports and for reporting information related to the crimes, as appropriate.
- 18.24 We call upon all governments to address homelessness, poverty, and other socioeconomic barriers to equitable and substantive rights for 2SLGBTQQIA people.
- 18.25 We call upon all governments to build safe spaces for people who need help and who are homeless, or at risk of becoming homeless, which includes access to safe, dedicated 2SLGBTQQIA shelters and housing, dedicated beds in shelters for trans and non-binary individuals, and 2SLGBTQQIA-specific support services for 2SLGBTQQIA individuals in housing and shelter spaces.
- 18.26 We call upon health service providers to educate their members about the realities and needs of 2SLGBTQQIA people, and to recognize substantive human rights dimensions to health services for 2SLGBTQQIA people.
- 18.27 We call upon health service providers to provide mental health supports for 2SLGBTQQIA people, including wraparound services that take into account particular barriers to safety for 2SLGBTQQIA people.
- 18.28 We call upon all governments to fund and support, and service providers to deliver, expanded, dedicated health services for 2SLGBTQQIA individuals including health centres, substance use treatment programs, and mental health services and resources.
- 18.29 We call upon all governments and health service providers to create roles for Indigenous care workers who would hold the same authority as community mental health nurses and social workers in terms of advocating for 2SLGBTQQIA clients and testifying in court as recognized professionals.
- 18.30 We call upon federal, provincial, and territorial governments and health service providers to reduce wait times for sex-reassignment surgery.



- 18.31 We call upon all governments and health service providers to provide education for youth about 2SLGBTQQIA health.
- 18.32 We call upon child welfare agencies to engage in education regarding the realities and perspectives of 2SLGBTQQIA youth; to provide 2SLGBTQQIA competency training to parents and caregivers, especially to parents of trans children and in communities outside of urban centres; and to engage in and provide education for parents, foster families, and other youth service providers regarding the particular barriers to safety for 2SLGBTQQIA youth.

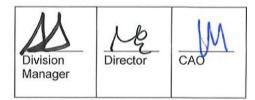
2 Ibid.

- 3 Canadian Human Rights Commission, "Submission by the Canadian Human Rights Commission to the Government of Canada Pre-Inquiry Design Process."
- 4 National Inquiry into Missing and Murdered Indigenous Women and Girls, Interim Report, 22.
- 5 National Inquiry into Missing and Murdered Indigenous Women and Girls, Interim Report.
- 6 Ibid.
- 7 Available at https://fncaringsociety.com/spirit-bear-plan



<sup>1</sup> National Inquiry into Missing and Murdered Indigenous Women and Girls, Interim Report.

# THIS PAGE INTENTIONALLY LEFT BLANK





### 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: DEVELOPMENT VARIANCE PERMIT APPLICATION: 230 WEST KEITH ROAD (BOARD OF EDUCATION SCHOOL DISTRICT NO. 44)

Date: June 26, 2019

File No: 08-3090-20-0246/1

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

#### **RECOMMENDATION:**

PURSUANT to the report of the Planner 1, dated June 26, 2019, entitled "Development Variance Permit Application: 230 West Keith Road (Board Of Education School District No. 44)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8727" (DA Architects + Planners, 230 West Keith Road, CD-558 Text Amendment) be considered and the Public Hearing be waived;

THAT DVP2019-00003 be considered for issuance under Section 498 of the *Local Government Act* and the Public Meeting be waived;

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

### ATTACHMENTS:

- 1. Context Map (1800487)
- 2. Architectural Plans, dated June 13, 2019 (1794292)
- 3. Design Rationale (1800492)
- 4. Public Consultation Summary (1800490)
- 5. Update to page 2 of Schedule 86 (Density Record) within CD-558 Zone (1800710)
- 6. Development Variance Permit (1800553)
- 7. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8727" (1800703)

### PROJECT DESCRIPTION

The project would include the addition of two portables at 230 West Keith Road (Queen Mary Elementary) on the west side of the site. The portables would be sited within the minimum setbacks from the property lines along West Keith Road and East 13<sup>th</sup> Street. The Design Rationale (Attachment 3) describes the reason for siting the portables within the required setbacks. The area where the portables would be sited is currently a field with goal posts for soccer and fencing for softball. The primary reason for siting the portables within the required setbacks is to reduce the impact they will have on the existing play space.

The proposal would comply with all requirements of the existing Zone with the exception of siting requirements.

	Current Designation/Regulation	Proposed Designation/Regulation	
Zone	CD-558	CD-558 with DVP	
Setbacks (metres)			
- From 13th Street	7.6 m	1.6 m	
- From West Keith Road	7.6 m	1.6 m	

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

The proposed timeline for the installation of the portables would be summer 2019 for the one sited closest to West 13<sup>th</sup> Street and summer 2020 for the one sited closest to West Keith Road.

A Zoning Bylaw Amendment forms part of this application as the current CD-558 Zone specifically lists the available density on the school site. There is more than enough density available for the proposed portables but the Density Record should be updated to reflect the new buildings on the school site. The main school building is excluded from the density calculation as it is a registered heritage building. The new on-site density will be the total of the existing and proposed portables, totalling 262.4 sq. m. (2,824 sq. ft.). There will be no change to the total permitted density on the site and no additional permissions will be granted by this amendment.

### POLICY FRAMEWORK

The requested variances conform with the Official Community Plan.

### PLANNING ANALYSIS

#### Site Context

The buildings and uses immediately surrounding the subject site are described in Table 2 below.

### Table 2. Surrounding Uses

Direction	Address	Description	Zoning
North	West 13 <sup>th</sup> Street, 200 block	Townhouses	Various CD Zones
North	West 13 <sup>th</sup> Street, 300 block	Duplexes	Mix of RT-1 and CD Zones
South	West Keith Rd, 200 block	Mix of Duplexes and Single- family Dwellings	RT-1 and CD Zones
East	West Keith Rd, 300 block	Mix of one-, two- and three- unit dwellings	RT-1 and CD Zone
West	217 West 8 <sup>th</sup> St. and 717 Chesterfield Ave.	Four-storey apartment buildings	CD-558 Zone

#### <u>Use</u>

No Change.

### Intensity

The addition of portables to the Queen Mary site will help to accommodate a growing student population. The proposal is within the permitted height, lot coverage and density for the site.

### Form

While portables are not an ideal form of building for school sites, they provide the necessary space for students and allow the School District to respond to increasing demand for space within a relatively short timeframe. The proposed siting of the portables will have minimal or no impact on the surrounding sites in terms of shadowing and visual impact. Views from the Mahon Avenue-East 13<sup>th</sup> Street intersection of Downtown Vancouver will still be maintained and the portable near 13<sup>th</sup> Street will be screened by a cedar hedge. The portable near the south property line will be screened by existing trees and is separated from the street by a 30 metre boulevard. Impact on play space has been minimized by locating the portables near the property lines. Siting of the portables also takes into account views of the main school which is a significant heritage building. The proposed siting will not obstruct views of the heritage building.

### COMMUNITY CONSULTATION

A public information session was held on June 13, 2019. The Public Consultation Summary (Attachment 4) describes the outcome of the session. Seven people signed in and three of the attendees completed comment forms, all expressing support for the proposal. There was no opposition to the proposed project or to the requested variances to setbacks. No emails or other correspondence has been received regarding the application to date.

Because of the support heard for the proposal at the information session, staff are recommending that the Public Meeting be waived.

Should Council wish to hold a Public Meeting, the second to last active clause of the resolution should be substituted:

**"THAT** DVP2019-00003 be considered for issuance under Section 498 of the *Local Government Act* and a Public Meeting be scheduled;

#### CONCLUSION

Should the proposed variance be granted, the portables will be sited in areas that will have minimal or no impact on surrounding properties. The key reason for locating the portables near the property lines is to preserve play space. Considering Planning principals of the effective and efficient use of space, the preservation of play areas, and consideration of the Public Interest, the proposed siting is preferable to that which would comply with the Zoning Bylaw.

RESPECTFULLY SUBMITTED:

End thelk

Emily Macdonald Planner 1





#### DRAWING LIST

ARCHITECTURAL A0.00 Cover Sheet A1.01 Site Plan A1.02 Context Drawings A1.03 Portable Drawings A1.04 Portable Drawings

#### PROJECT CONTACTS:

OWNERS SCHOOL DISTRICT 44 (NORTH VANCOUVER) CONTACT: Mike Chapman Assistant Director of Facilities and Planning 2121 Lonsdale Ave, North Vancouver,BC V7M2K6

ARCHITECTURAL DA ARCHITECTS + PLANNERS 200 - 1014 Homer Street, Vancouver, BC V68 2W99 P. 604-685-6912 F. 604-685-6988 Contacts : Jamas Kao Emails: jkao@da-architects.ca



# QUEEN MARY ELEMENTARY NEW PORTABLE ADDITION 230 WEST KEITH ROAD,NORTH VANCOUVER, BC

ISSUED FOR HAP & DVP JUNE 13, 2019

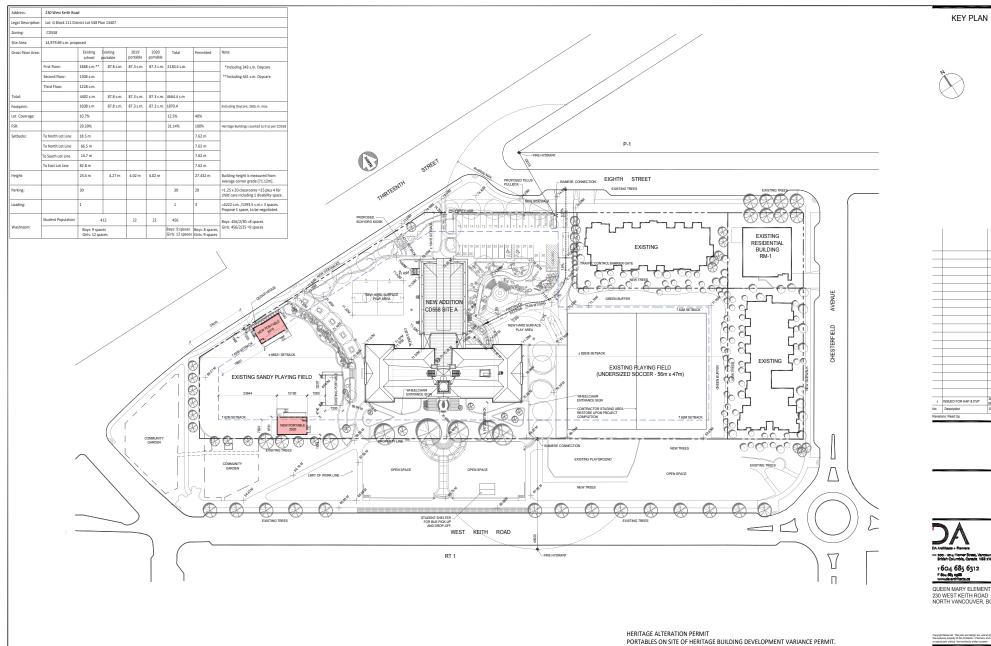


QUEEN MARY ELEMENTARY 230 WEST KEITH ROAD NORTH VANCOUVER, BC

> right/Baarwod. This plan and design say, and st all times remain scalave spages/ Tale Architects - Banenz, and cannot be used produced without the Architect's writter consent.

Job No.	2610-400	Sheet No.
Scale		
Drawn		10.00
Checked		A0.00
Approved		
Date	2019.05.09	Revision .

2610-400 A1.01 Site Plan



DEVELOPMENT VARIANCE PERMIT NEW PORTABLES ARE WITHIN 7.62M SETBACK.

7 604 685 6312 F 604 685 0588 QUEEN MARY ELEMENTARY 230 WEST KEITH ROAD NORTH VANCOUVER, BC

2019

06.13 Date Dr.

### Job No. 2810-400 Scale 1:400 Down Chicked Approved Date 2019.05.09 A1.01

2610-400 A1.01 Site Plan

SITE PLAN

Checked Aproved Date 2019.05.09 Revis

A1.02

604 685 631

Sheet Tile CONTEXT DRAWINGS

QUEEN MARY ELEMENTARY 230 WEST KEITH ROAD NORTH VANCOUVER, BC

3 EXISTING WESTNORTH SIDE VIEW







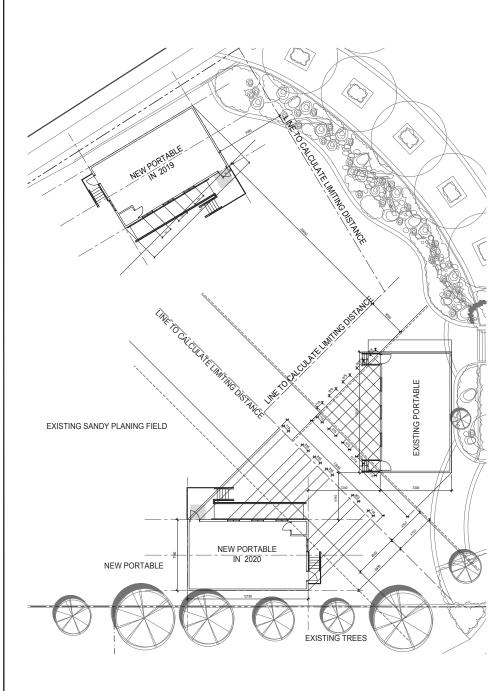
NEW PORTABLES

EXISTING PORTABLE





NEW PORTABLE IN 2019



#### Building Classification:

Group A, Division 2, One storey (3.2.2.28)
 Permitted to be combustible or non- combustible.
 Is not more than 1 storey in building height.
 Building area less than 400sm if facing one street.

#### Limiting distance (Table 3.2.3.1-B):

#### \_ . . . . . . . .

Existing portable Southwest Area: 52.13 sm L/H = 13.718 / 3.800 = 3.6 Wall construction rating = 45 min Unprotected opening = 6.85 sm Unprotected opening % = 13.2% Limiting distance = 4m Maxi. area of unprotected opening permitted 25%-50%

#### New portables in 2020 Northeast

 Area: 48.05 sm

 L/H = 13.683 / 3.512 = 3.9

 Unprotected opening = 6.12 sm

 Unprotected opening % = 12.74%

 Limiting distance = 4.5m

 Maxi. area of unprotected opening permitted 25%-50%

 Mini. required fire - resistance rating = 45 min

 Type of construction required : Combustible or Noncombustible

 Type of cladding required : Noncombustible

#### New portables in 2020 South

Area: 42.8 sm L/H = 12.19 / 3.512 = 3.5 Unprotected opening = 0 sm Unprotected opening % = 0 % Limiting distance = 38.77m (To the middle line of road) Maxi. area of unprotected opening permitted 100% Minir, required fire - resistance rating = 0 Type of construction required : Combustible or Noncombustible Type of cladding required : Combustible or Noncombustible

#### New portables in 2020 West

Area: 25.15 sm L/H = 7.160 / 3.512 = 2.04 Unprotected opening = 4.0 sm Unprotected opening % =15.80 % Limiting distance = 78.62m (To the middle line of road) Maxi. area of unprotected opening permitted 100% Mini. required fire - resistance rating = 0 Type of construction required : Combustible or Noncombustible Type of clading required : Combustible or Noncombustible

#### Limiting distance (Table 3.2.3.1-B): Existing portable Northwest

Area: 52.13 sm L/H = 13.718 / 3.800 = 3.6Wall construction rating = 45 min Unprotected opening = 6.85 sm Unprotected opening % = 13.2% Limiting distance = 4m Maxi. area of unprotected opening permitted 25%-50%

#### New portables in 2019 South

Area: 47.6sm L/H = 13.546/3.512 = 3.9 Unprotected opening = 5.2 sm Unprotected opening % = 10.92% Limiting distance = 20.04m Maxi. area of unprotected opening permitted 100% Mini. required fire - resistance rating = 0 min Type of construction required : Combustible or Noncombustible Type of cladding required : Combustible or Noncombustible

#### New portables in 2019 North

Area: 42.8 sm L/H = 12.19 / 3.512 = 3.5 Unprotected opening = 0 sm Unprotected opening % = 0 % Limiting distance = 16.17m (To the middle line of road) Maxi. area of unprotected opening permitted 100% Mini. required fire - resistance rating = 0 Type of construction required : Combustible or Noncombustible Type of construction required : Combustible or Noncombustible

#### New portables in 2019 West

Area: 25.15 sm L/H = 7.160 / 3.512 = 2.04 Unprotected opening = 4.0 sm Unprotected opening % = 15.90 % Limiting distance = 77.19m (To the middle line of road) Maxi. area of unprotected opening permitted 100% Mini. required fire - resistance rating = 0 Type of construction required : Combustible or Noncombustible Type of cladding required : Combustible or Noncombustible

#### New portables in 2019 East

 Årea: 25.15 sm

 LH = 7.160 / 3.512 = 2.04

 Unprotected opening = 0 sm

 Unprotected opening % = 0 %

 Limiting distance = 7m (Set up a line for calculation)

 Max. area of unprotected opening permitted 100%

 Mini. required fire - resistance rating = 0

 Type of construction required : Combustible or Noncombustible

 Type of cladding required : Combustible or Noncombustible

SUED FOR HAP & DVP

QUEEN MARY ELEMENTARY 230 WEST KEITH ROAD NORTH VANCOUVER, BC

#### pyright seasoned. This pain and design are, and at a times remain a exclusive properly of DA Architects + Planmers, and cannot be used reproduced without the Architect's written consent.

LIMITING DISTANCE CALCULATION

Sheet No.
A1.03
A1.05
Revision *

2610-400 A1.01 Site Plan

2010-400 A1 01 5its Flat

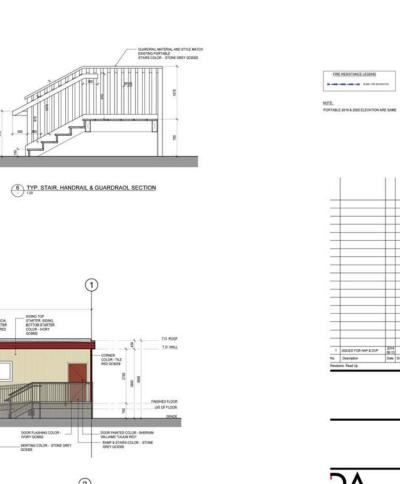
ELE	ATIONS A	ND SRTAIRS	
1876	2010-400	Direct No.	
t-m	-	1.000	
Dien -		A1.04	
Anni			
200	2019.05.08	Name of Street	

fre exclusive or reproduced	naves of (in Antiberty - Harvers, and annual to used allow the Activer's written context.
DOPT	BLE ADDITION PLAN
	TIONS AND SPTAIDS

QUEEN MARY ELEMENTARY 230 WEST KEITH ROAD NORTH VANCOUVER, BC



1	SSUED FOR HAP & DVP Description	2018 06.13 Date	
_		-	
_		+	ŀ
		1	
_	-	-	H
-		-	ŀ
-		-	ŀ
-			ŀ
_			
			[
			ľ
-		-	ŀ
-		+	ŀ
-			ŀ
-			ŀ
_		-	ŀ
_			L
_		-	







ry Schoo

June 13, 2019

Development Variance Permit: Design Rationale for portables at Queen Mary Elementary School 230 Keith Rd W, North Vancouver, BC V7M 1L8

School District 44 (SD44) proposes to locate 2 new portables within the 7.62m setbacks at Keith Road and 13<sup>th</sup> Street. The portable at 13<sup>th</sup> Street is proposed for September 2019 and the portable at Keith is proposed for September 2020.

At Keith Road, there is a 30 meter City right of way between West Keith Road and the south property line of Queen Mary School. Effectively the setback from the street is 30m. Visually the portables will appear distant from the street and will be screened by mature trees.

At 13<sup>th</sup> Avenue there is a depression on the school side of the fence that reduces the apparent height of the portable. The existing public sidewalk also deviates away from the portable as a response to the grade change. The North Vancouver School District has agreed to provide additional screening by planting a cedar hedge between the fence and the portable.

The reason for encroaching into the property line is to retain as much of the play area as possible. The soccer nets will need to be relocated to best suit the reconfigured playfield.

James Kao Architect AIBC DA Architects + Planners

cc: p:\2610-400 queen mary portable addition\4.0 city corres\03 development permit\dvp\design rationale for dvp june 13, 2019.docx

>> 200 - 1014 Homer Street, Vancouver, British Columbia, Canada V6B 2W9 T 604 685 6312 F 604 685 0988 Mark Ehman Architect AIBC, Partner Randy Knill Architect AIBC, Partner James Kao Architect AIBC, Partner



From:James KaoTo:Emily MacdonaldCompany:City of North Vancouver

Transmittal

Date: June 14, 2019

Re:	Queen Mary Elementary portable addition	Project No: 2610-4	00
	Public DIS Meeting held June 13 at Queen Mary	/ Gym	File Code No: 000

#### Dear Emily,

We confirm the following is a summary of the public DIS meeting:

- Present for the presenters was Michael Chapman for the North Vancouver School District and James Kao from DA Architects. Emily MacDonald was present to represent the CNV. The scheme that was presented had the 2019 portable within the 13<sup>th</sup> Street setback and the 2020 portable within the Keith Road setback. The purpose of the intrusion into the setback was to preserve as much playfield as possible.
- 2. A total of 7 people signed in between 6pm and 8pm. Of the 7people, 3 left written comments.
- 3. Of the written comments, there was general support for the proposal. However, there was concern about the portables not having any sinks for drinking and handwashing. One person had a particular concern about the loss of the soccer field and asked that the soccer nets be reinstalled. Two people wanted the new portable to be ready by the first day of school in September 2019. One person expressed hope that a new school would be built soon.
- 4. Aside from the written comments, there was a verbal discussion of the proposal.
  - In general, people would prefer a new school or an addition to a portable but they understood that a portable could potentially be removed from the site, once it was no longer needed.
  - b. In general there was a consensus that pushing the portables into the setbacks was beneficial as it allowed more playfield to be retained.
  - c. The desire to relocate the soccer nets was discussed by one family.

cc:

p:\2610-400 queen mary portable addition\4.0 city corres\03 development permit\queen mary elementary portable addition summary of public meeting on june 13, 2019.docx

>> 200 - 1014 Homer Street, Vancouver, British Columbia, Canada V6B 2W9 T 604 685 6312 F 604 685 0988

Mark Ehman Architect AIBC, Partner James Kao Architect AIBC, Partner Randy Knill Architect AIBC, Consulting Partner



- d. The request for sinks in the portables was discussed. Michael Chapman stated that aside from Kindergarten classes, it is not standard practice to have sinks in classrooms.
- e. One person stated that the portable should be for older kids rather than younger kids.
- f. One person had a concern that the retaining wall with the mural would be torn down but was reassured that the wall and mural would not be affected.
- g. People were concerned that the portable would not be ready for the beginning of the next school year.

Yours truly,

James Kao DA Architects + Planners

CD-558 Amendment Bylaw No. 7935		Sche	edule 86	Page 2 of 2
721 CHESTERFIEL	D AVENUE			
DENSITY RECORD	)			
The following table records the density assignment for 721 Chesterfield Avenue (The "Donor Site"), which is zoned CD-558. As per section (B1) of the CD-558 Zone, the maximum density within the CD-558 Zone (Site A) is 1.0 times the lot area (14,979.69 sq.m./ 161,240 sq.ft.), excluding buildings listed in the City's Heritage Registry. This table maintains a record of any residual density on Site "A" (Donor Site) transferred from Site "A" to a Recipient site through a rezoning process. The following table lists the total density approved for Site A, density transfers approved and the remaining residual density potential on Site A.				
Donor Site	Total CD-558 Site A Permitted Gross Floor Area (1.0 FSR)		On-site Built Gross Floor Area	Residual Site A Density
721 Chesterfield Avenue/ Queen Mary School (Site A)	14,979.69 sq. m. (161,240 sq. ft.)		<del>0 sq. m.</del> 262.4 sq. m. <del>(0 sq. ft.)</del> (2,824 sq. ft.)	<del>14,979.69 sq. m.</del> 14,717.3 sq. m. <del>(161,240 sq. ft.)</del> (158,416 sq. ft.)
	RECO	RD OF	DENSITY TRANSFE	R
Recipient Sites Approved Through Density Transfers	Transferred Gro Floor Area	DSS	Zoning Amendment Bylaw #	Remaining Residual Density on Site A (Donor Site)
721 Chesterfield Avenue (Site B)	554.45 sq. m. (5,968 sq. ft.)		7935	<del>14,425.24 sq.m.14,162.8 sq. m. (155,272 sq. ft.)</del> (152,447 sq. ft.)
721 Chesterfield Avenue (Site C)	693.52 sq. m. (7,465 sq. ft.)		7935	<del>13,731.72 sq.m.</del> 13,469.3 sq. m. <del>(147,807 sq. ft.)</del> (144,982 sq. ft.)



THE CORPORATION OF THE CITY OF NORTH VANCOUVER

### DEVELOPMENT VARIANCE PERMIT

Permit No. DVP2019-00003

File: 08-3090-20-0246/1

### Issued to owner(s): The Board of Education of School District No. 44

Respecting the lands located at **230 West Keith Road**, North Vancouver, BC, legally described as:

### LOT G BLOCK 111 DISTRICT LOT 548 GROUP 1 NEW WESTMINSTER DISTRICT PLAN 13407 EXCEPT PLAN BCP51308 PID: 008-638-357

(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 804(2)(c) shall be varied so that two portable classroom buildings may be sited 1.6 m (5.2 ft.) from a Lot line.

### Special Terms and Conditions of Use:

- 3. The Buildings and Structures shall be developed in accordance with the plans dated and listed on the attached Schedule A "List of Plans" and filed in the offices of the City, approved by Council, and in compliance with the regulations and conditions listed hereunder including:
  - A. Building Permits shall be obtained for all portable classroom buildings
- 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. DVP2019-00003.

Notice filed the \_\_\_\_\_\_day of \_\_\_\_\_\_, 20\_\_\_\_\_.

THIS IS NOT A BUILDING PERMIT

Schedule A		
List of Plans – 230 West Keith Road		

Designer	Project Name	Sheet Description	Sheet No.	Sheet Date	CityDocs File Number
DA Architects + Planners	Queen Mary Elementary New Portable Addition	Site Plan	A1.01	June 13, 2019	1794292
DA Architects + Planners	Queen Mary Elementary New Portable Addition	Context Drawings	A1.02	June 13, 2019	1794292
DA Architects + Planners	Queen Mary Elementary New Portable Addition	Limiting Distance Calculations	A1.03	June 13, 2019	1794292
DA Architects + Planners	Queen Mary Elementary New Portable Addition	Elevations and Stairs	A1.01	June 13, 2019	1794292

### THE CORPORATION OF THE CITY OF NORTH VANCOUVER

#### **BYLAW NO. 8727**

#### A Bylaw to amend "Zoning Bylaw, 1995, No. 6700"

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

- 1. This Bylaw shall be known and cited for all purposes as "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8727" (DA Architects + Planners, 230 West Keith Road, CD-558 Text Amendment).
- 2. Part 11 of Division V: Comprehensive Development Regulations of Document "A" of "Zoning Bylaw, 1995, No. 6700" is hereby amended by:
  - A. In Section 1100, within the designation "CD-558 Comprehensive Development 558 Zone", deleting Page 2 of Schedule 86 in its entirety and replacing it with the Page 2 of Schedule 86 attached to this bylaw.

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

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

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

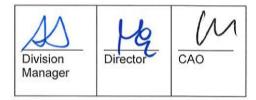
ADOPTED on the <> day of <>, 2019.

MAYOR

CITY CLERK

w No. 7935	Schedule 86	Page 2 of 2		
D AVENUE				
records the density od CD-558. As per one (Site A) is 1.0 listed in the City's Site "A" (Donor Sit	times the lot area (14,979) Heritage Registry. This ta e) transferred from Site "A	58 Zone, the maximum density 0.69 sq. m. / 161,240 sq. ft.), ble maintains a record of any " to a Recipient site through a		
Donor SiteTotal CD-558 Site A Permitted Gross Floor AreaOn-site Built Gross Floor AreaResidual Site A Densite Floor Area				
· · ·		14,717.3 sq. m. (158,416 sq. ft.)		
RECO	RD OF DENSITY TRANSI	ER		
	5	Remaining Residual Density on Site A (Donor Site)		
		14,162.8 sq. m. (152,447 sq. ft.)		
693.52 sq. m (7,465 sq. ft.		13,469.3 sq. m. (144,982 sq. ft.)		
	D AVENUE records the density d CD-558. As per one (Site A) is 1.0 isted in the City's Site "A" (Donor Sit ists the total densi- lensity potential or Total CD-558 Si Permitted Gro Floor Area (1.0 14,979.69 sq. (161,240 sq. ft) RECOR Transferred Gr Floor Area 554.45 sq. m (5,968 sq. ft.	w No. 7935D AVENUErecords the density assignment for 721 Chess d CD-558. As per section (B1) of the CD-55 one (Site A) is 1.0 times the lot area (14,979) isted in the City's Heritage Registry. This ta Site "A" (Donor Site) transferred from Site "Aists the total density approved for Site A, der lensity potential on Site A.Total CD-558 Site A Permitted Gross Floor Area (1.0 FSR)14,979.69 sq. m. (161,240 sq. ft.)262.4 sq. m. (2,824 sq. ft.)Transferred Gross Floor AreaTransferred Gross Floor Area554.45 sq. m. (5,968 sq. ft.)554.45 sq. m. (5,968 sq. ft.)693.52 sq. m.7935		





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

REPORT

To: Mayor Linda Buchanan and Members of Council

From: Sean Galloway, Manager, Planning

Subject: REZONING APPLICATION: 1126 HEYWOOD STREET (BEHROUZ AGHAI / BILL CURTIS & ASSOCIATES DESIGN LTD.)

Date: June 26, 2019

File No: 08-3360-20-0468/1

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

#### **RECOMMENDATION:**

PURSUANT to the report of the Manager, Planning, dated June 26, 2019, entitled "Rezoning Application: 1126 Heywood Street (Behrouz Aghai / Bill Curtis & Associates Design Ltd.)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729" (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street) be considered and referred to a Public Hearing;

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

### ATTACHMENTS:

- 1. Context Map (Doc #1801541)
- 2. Architectural and Landscape Plans, dated May 9, 2018 (Doc #1801730)
- 3. Public Consultation Summary (Doc #1801586)
- 4. Zoning Amendment Bylaw No. 8729 (Doc #1801555)

#### PROJECT DESCRIPTION

The project proposes the subdivision of a single lot (width 19.5 m) into two lots with one single family dwelling and secondary suite on each. The new lots will be will 9.7 m wide. The current and proposed zoning are described in Table 1 below.

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

	Current Designation/Regulation	Proposed Designation/Regulation	
Zone	RS-1	RS-2	

#### POLICY FRAMEWORK

The subject site is designated "Residential Level 1 (Low Density)" or 'R1' within the Official Community Plan. This designation permits ground-oriented housing with non-strata uses and includes secondary suites and coach houses.

Metro 2040				
Goal 1 Create a Compact Urban Area	Intensifying this site with infill that is consistent and scaled to the surrounding neighbourhood, ensures the highest and best use of the land promoting a compact urban area.			
Goal 2 Support a Sustainable Economy	Infill on this site promotes housing forms that can support a diversity of income levels and ensure people live close to where they work.			
Goal 4 Develop Complete Communities	The proposed development ensures the neighbourhood will have a diversity of housing stock that will promote the ability to age-in-place allowing people to stay in their neighbourhood throughout all of their lifecycles.			
Goal 5 Support Sustainable Transportation Choices	Intensification of this site will support future rapid transit investment along East 3 <sup>rd</sup> Street. This site is well situated to provide the occupants with a variety of transportation choices across the north shore and the greater region.			

Official Community Plan	
Policy 1.1.2 Align growth with the development community amenities and infrastructure	Intensification of the site supports the future frequent transit infrastructure investment.
Policy 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	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 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	The proposed building has similar roof lines and massing as the surrounding dwellings. The overall form is smaller in nature, but does not detract from the surrounding neighbourhood.
Policy 1.3.6 Encourage architecture that responds to the unique context of the City in a sensitive, sustainable, and aesthetically compatible manner	The proposed architectural massing of the new dwelling is consistent with the surrounding urban form as a single family dwelling.
Policy 1.5.1 Provide opportunities for a range of housing densities, diversified in type, size and location.	The proposed development is a narrower housing form that provides more diverse housing stock in a neighbourhood and is accessible to frequent transit network.

### PLANNING ANALYSIS

#### Site Context

The surrounding land uses are identified in Table 2 below.

### Table 2. Surrounding Uses

Direction	Address	Description	Zoning
North	1033 Shavington Street	1 storey back split (two storeys fronting the lane) with two units	RS-1
South	- Alexandra A	Park Space	P-1
East	1124 Heywood Street	2.5 storey single-family dwelling	RS-1
West	1138 Heywood Street	2 storey single-family dwelling	RS-1

Generally, the surrounding neighbourhood is made up of single family homes. There is a significant north-south slope that elevates the buildings and the average front yard setback for this block of Heywood Street is 8.05 metres.

#### Use

The policy framework applicable to the subject site supports the proposed single family residential use. The site is located in close proximity to transit. Additionally, units will provide a diversity of housing stock in the area.

#### Intensity

The proposed intensification on the site is appropriate for the neighbourhood given the surrounding uses and community infrastructure. The proposal provides four units in total, two lots with two units per lot in a single family dwelling form, the second units on each lot are secondary suites situated in the basement. There are instances of this form in the neighbourhood particularly the property directly to the north of the site.

### Form

The urban form proposed for the site satisfies the policy intent of ensuring any new development is consistent with the character of the surrounding neighbourhood. The overall massing and height of the new building is sympathetic to the buildings adjacent to the site and along Heywood Street. Visual bulk is minimized, by using a diversity of materials, step backs and large windows, reducing the impact on neighbouring sites.

Landscaping, particularly within the front setback, includes terracing and plantings to maintain "green" sloping topography found along the street. Additionally, the front yard setbacks on both proposed lots are consistent with the average setback for front yards noted above (8.05 m). The site layout provides for private amenity spaces for each dwelling unit. Parking is appropriately placed adjacent to the laneway. The units on site have been designed to ensure individualized entrances and access to the street. As well as the onsite works, all works within the public realm will be to the satisfaction of the City Engineer.

### COMMUNITY CONSULTATION

The applicant hosted a Development Information Session (DIS) on September 12, 2018 to present the proposed lot creation and single family dwelling development. The meeting was attended by 11 members of the public.

The results of the DIS as summarized by the applicant are included as Attachment #3. The overall comments indicated concerns over construction activity, parking and traffic within the neighbourhood.

REPORT: Rezoning Application: 1126 Heywood Street (Behrouz Aghai / Bill Curtis & Associates Ltd.) Date: June 26, 2019

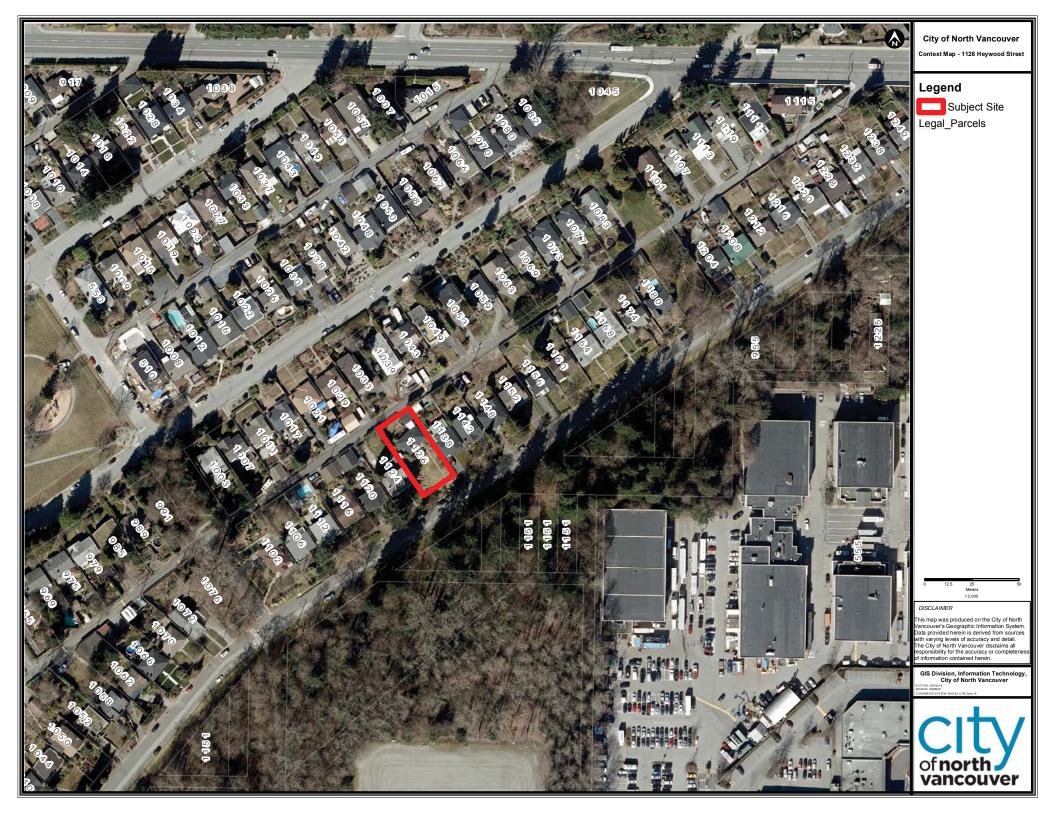
#### CONCLUSION

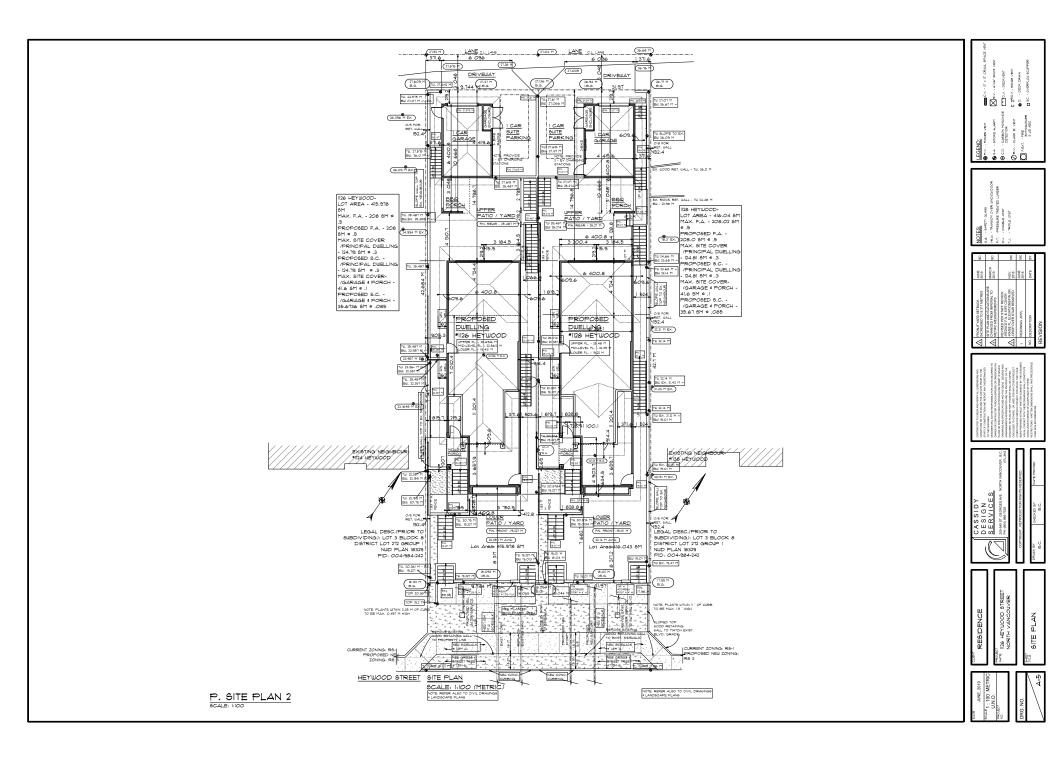
The proposed application represents good planning. Intensification adjacent to a future frequent transit corridor (East 3<sup>rd</sup> Street) is appropriate. The requested zoning changes and development proposal are consistent with the Region and City's planning policies. Overall, the application advances a development that fits the surrounding neighbourhood character and provides sensitive infill in an appropriate location.

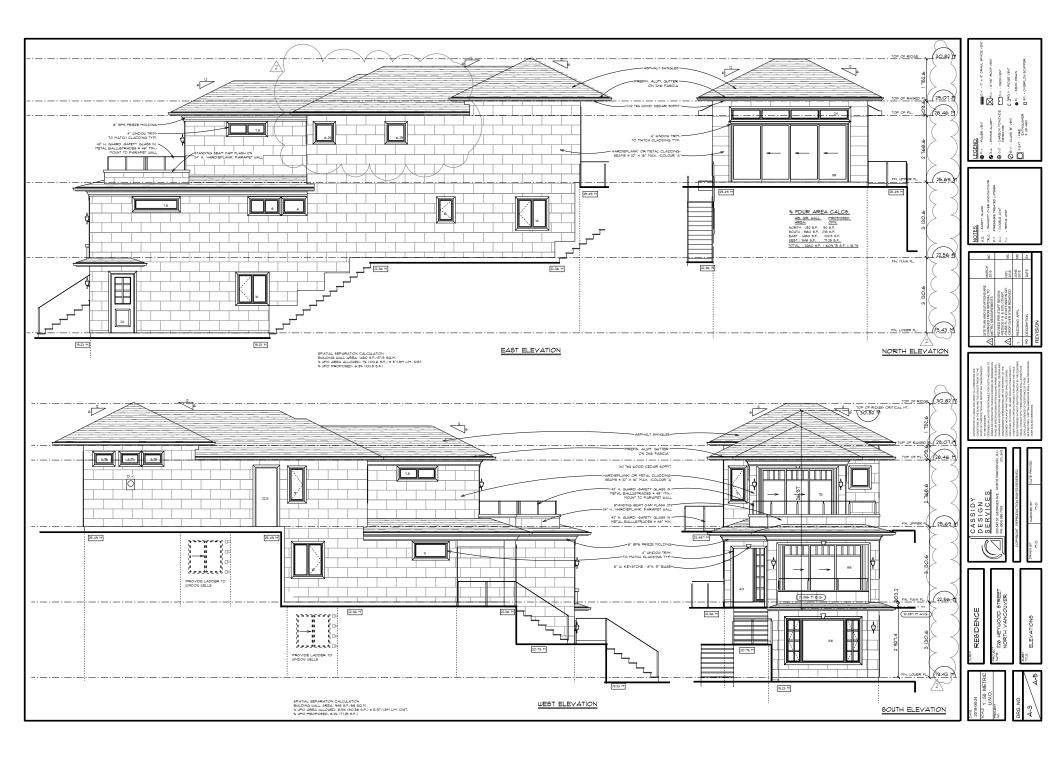
RESPECTFULLY SUBMITTED:

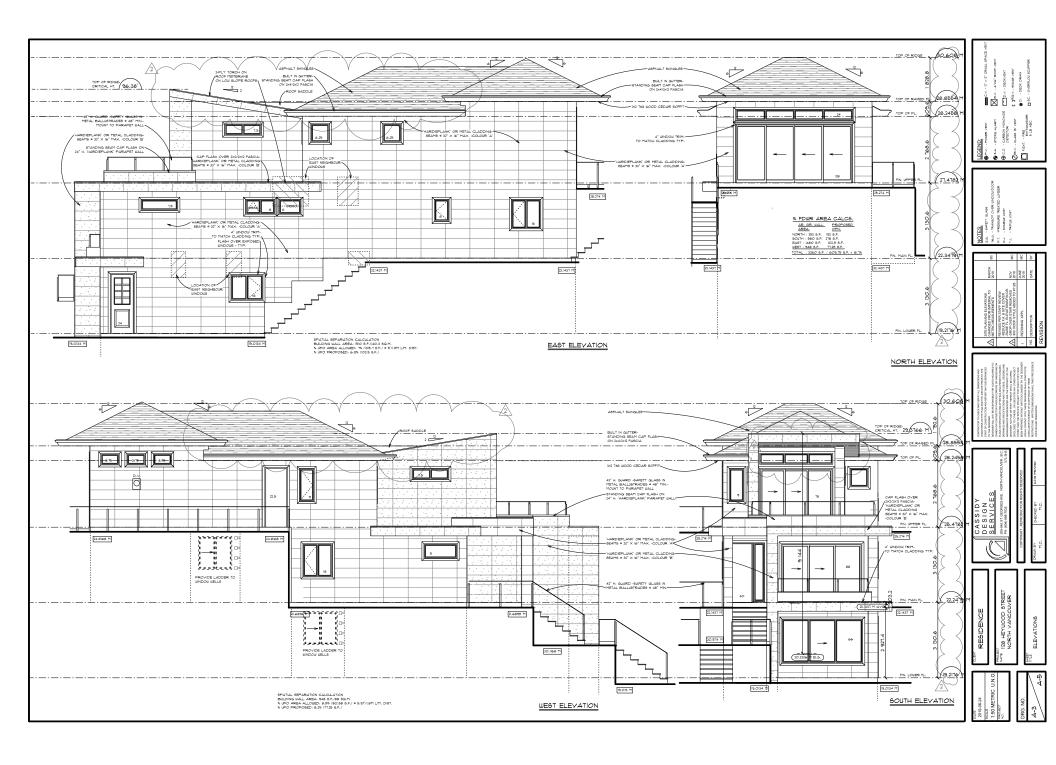
Sean Galloway, MCIP, RPP Manager, Planning

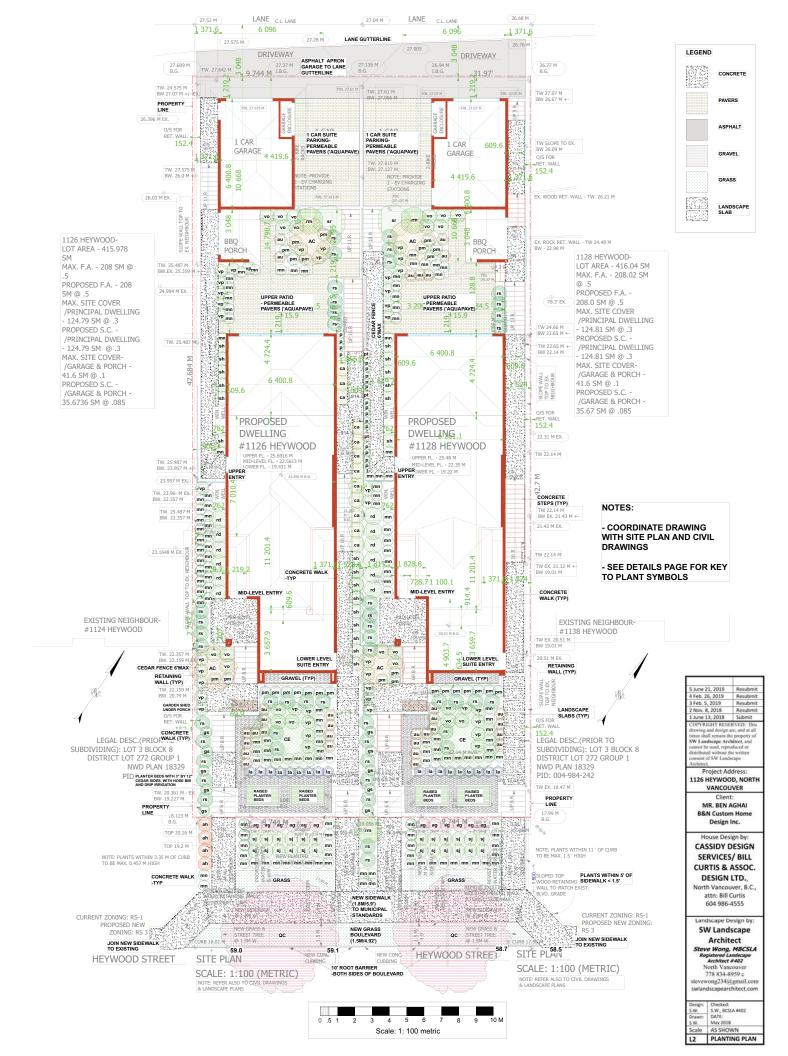
SG/rf/eb











#### LANDSCAPE STATEMENT OF INTENT

The intent of the landscape design is to have a landscape treatment that meets the sustainable development guidelines for the City of North Vancouver, as well as being attractive and low maintenance. The majority of the plant species are native to the Pacific Northwest temperate rainforest zone. The palette of naturalized plants should result in a restored habitat that is butterfly and bird friendly. The area of grass is greatly reduced in order to provide the maximum area for a rich, diverse habitat.

There will be water efficient irrigation system that utilizes efficient zoning of the irrigation system and the use of low flow nozzles. The raised planting beds encourage the planting of an edible landscape and result in an active design that encourages the dwellers of the units to meet in a central area for enjoying some physical and social activity and interaction.

The use of permeable pavers such as "AquaPave" in the car parking space and the upper patio, and gravel adjacent to the building and in the raised planter area will increase the permeability of the site and result in a more sustainable design.

#### LANDSAPE MATERIALS LIST

PLANT MATERIAL: All plant material are to meet current BCLNTA #1 standard and installed according to current BCLNTA standards.

GROWING MEDIUM: by Harvest Power or equivalent, to BCLNTA standards and prepared off site: Garden Blend, 75% compost/25% sand, 12" min for shrub beds: Turf Blend, 50% compost/25% sand, 6 \* min for lawn areas, over scarified base

PERMAEABLE PAVERS: "Aquapave" by Abbotsford Concrete Products

WOOD FENCE: 1X6 inch cedar boards, finished with Sikkens semi-transparent cedar stain

GRAVEL: 3 inch drain rock around house; 3/8" granite screenings in raised bed area

IRRIGATION: Rainbird ESP-mw WiFi compatible controller, 4-22 stations, or equivalent with outdoor control box, mounted on side of the house, with electrical plug-in. Shrub spray, turf heads and valves to be Rainbird, and installed per IIABC standards for residential installations for a low flow water efficient system.

#### GENERAL NOTES

- · Contractor and their subcontractors and workers to be sufficiently insured and have WCB coverage
- · Work to be done by the industry certified personnel
- · Contractor to adhere to safe work practices on site
- Contractor to confirm location of all utilities and to protect throughout construction
- · Contractor to verify layout dimensions, measurements and grades prior to bidding and construction
- · All work to be done to meet or exceed industry standards
- · The landscape drawings are intended to meet municipal Zoning and Building By-Laws only The Contractor is responsible for obtaining approved Engineering drawings and sign-off for all structural and geotechnical work, including all retaining walls over 4 feet in height, or where there are issues with soil stability
- · Segmental block walls/stairs, pavers and all manufactured products to be installed per manufacturer's instructions
- · If there are retained trees on site, all work to be outside the tree protection zone unless approved by certified ISA arborist

#### LANDSCAPE NOTES

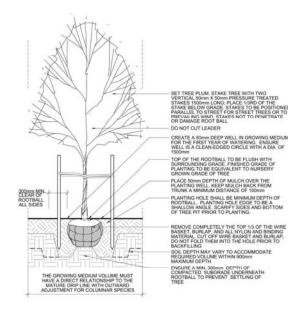
- · All grades to meet adjacent grades at property line
- · All stormwater is to be contained on site and away from adjacent properties
- · All hard surfaces to be sloped a minimum of 1.0% to avoid standing water
- · All lawns to be sloped a minimum of 2% to avoid standing water
- · No slopes to be greater than 2.5 horizontal : 1 vertical
- · All plant material to meet BCLNTA #1 specifications
- All growing medium to meet BCLNTA #1specifications
- · All shrub beds to contain minimum 12" (300) mm of approved growing medium
- · All lawn areas to contain minimum 6" (150) mm of approved growing medium
- · Plant installation to meet latest BCLNTA specifications
- · Installation to be by BCLNTA certified landscape contractor
- Installation to be under the direction of a registered Landscape Architect

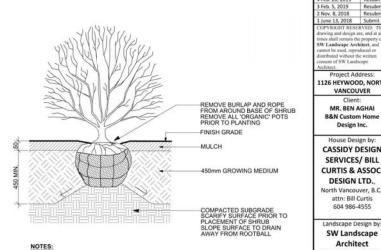
PLANT LIST HEY	NOOD ST.,	NV
----------------	-----------	----

Botanical Name	Common Name	No.	Size	Spacing	Symbo
TREES (Onsite)					
Acer circinatum	Vine maple	4	3.5 m tall	as shown	AC
Cornus 'Eddie's White Wonder'	Flowering dogwood	2	6 cm cal.		CE
STREET TREES		+	<u> </u>		
Quercus coccinea	Scarlet oak	2	6 cm cal.	as shown	QC
SHRUBS					
Azalea 'Girard Fuchsia'	Azalea	12	#2 pot	as shown	ag
Azalea 'Homebush'	Azalea	4	#2 pot	as shown	ah
Cornus alba 'Elegantissima'	Variegated dogwood	12	#2 pot	as shown	ca
Rhododendron 'Dora Amateis'	Rhododendron	12	#5 pot	as shown	rd
Rhododendron macrophyllum	Pacific rhododendron	3	#10 pot	as shown	rm
Ribes sanguinium	Red flowering currant	44	#2 pot	as shown	rs
Sambucus recemosa	Red elderberry	2	#10 pot	as shown	sr
Sarcococca hookeriana humilis	Sweet box	21	#2 pot	as shown	sh
Spiraea japonica 'Goldflame'	Spiraea	24	#2 pot	as shown	sj
Vaccinium ovatum	Evergreen huckleberry	22	#2 pot	as shown	vo
Vaccinium parvifolium	fed huckleberry	41	#2 pot	as shown	vp
VINES, GROUND COVERS AND HERBACE	OUS PERENNIALS				
Arctostaphylos uva-ursi	Kinnickinnick	28	#1 pot	as shown	au
Gaultheria shallon	Salal	9	#1 pot	as shown	
Lavendula angustifolia	Lavender	18	#1 pot	as shown	
Mahonia nervosa	Dull Oregon grape	135	#1 pot	as shown	mn
Pachysandra terminalis	Japanese spurge	18	#1 pot	as shown	p
Parthenocissus tricuspidata 'Veitchii'	Veitchii Boston Ivy	3	#1 pot	as shown	pt
Polystichum munitum	Western sword fern	21	#1 pot	as shown	pm

Contractor to be certified by BCLNTA

All plants and installation to meet or exceed latest BCLNA #1 standards Contractor to verify numbers and placement of plants prior to installation





1. SHRUB TO BE PLANTED WITH ELEVATION OF TOP OF ROOTBALL OR POT LEVEL WITH 1. SINGB TO BE POWIED WITH ELEVATION OF TOP OF NOOTBALL OR POT LEVEL WITH FINSH GRADE OF GROWING MEDIUM. 2. COMPOSTED BARK MULCH AT 50mm DEPTH TO BE KEPT AT LEAST 50mm AWAY FROM STEMS OF SHRUB. 3. PLANTING PIT MUST BE FREE DRAINING

SHRUB	PL/	١N٦	ΓIN	G
DETAIL				

	5 June 21, 2019	Resubmit	
	4 Feb. 26, 2019	Resubmit	
	3 Feb. 5, 2019	Resubmit	
	2 Nov. 8, 2018	Resubmit	
	1 June 13, 2018	Submit	
	COPYRIGHT RESI drawing and design times shall remain the SW Landscape Are cannot be used, repe distributed without t consent of SW Land Architect.	are, and at all to property of hitect, and oduced or he written	
	Project Ac	idress:	
	1126 HEYWOO VANCOU		
OPE SHRUB POTS	Clien MR. BEN B&N Custor Design	AGHAI n Home	
	House Des		
	CASSIDY	DESIGN	
	SERVICES	S/ BILL	
ЛМ	CURTIS & ASSOC.		
	DESIGN LTD.		
	North Vanco		

attn: Bill Curtis 604 986-4555

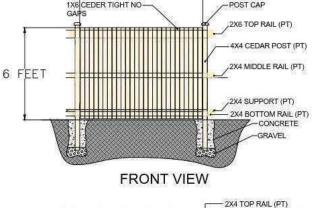
SW Landscape Architect

#### Steve Wong, MBCSLA Registered Landscape Architect #402 North Vancouver 778 834-8959 c

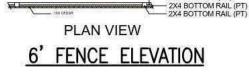
stevewong234@	gmail	.com
swlandscapear	chitect	com

13	DETAILS	
Scale	AS SHOWN	
Drawn: S.W.	DATE: May 2018	
Design: S.W.	Checked: S.W., BCSLA #402	

ŀ	TRE	ΕP	LA	NTIN	١G
Į	DET	AIL			



-8 FEET



Subject:	Summary of Development Information Session Held on September 12, 2018 at John Braithwaite Community Centre
RE:	PROPOSED SUBDIVISION - 1126 HEYWOOD STREET, NORTH VANCOUVER
Cc:	Mr. Ben Aghai Property Owner
То:	Andrew Yu - Planning Technician 2 Planning Department – CITY OF NORTH VANCOUVER
From:	Michael Cassidy - Project Designer CASSIDY DESIGN SERVICES
Date:	September 20, 2018

During the two-hour session offered for neighbourhood input regarding the proposed subdivision at 1126 Heywood Street, a total of 11 residents representing 9 properties were in attendance.

Only 3 residents representing 3 properties were within the 40m radius of the subject site. They were attentive, inquisitive and engaged in the process.

Of these, the immediate neighbour to the east at 1138 Heywood (Ischa Hicks) had specific concerns regarding the proposed height of the buildings. It was noted that in fact, a new single-family home on the 64' wide lot would have a much higher elevation (around 6' higher) due to higher allowable building grades at the south property. Mr. Aghai filed for this building permit application last December which was virtually approved with some minor comments and is on hold pending the outcome of the sub-division application. Once the outline for this much larger, taller home was presented against the outline of the two proposed smaller dwellings, there was stronger support in favour of the subdivision as the lower building heights would be less impactful in relationship to the neighbourhood. It was also noted to everyone that the proposed new lot widths at 32 feet are just one foot under the required minimum lot width of 33 feet, which would not require rezoning.

Another resident had some thoughtful comments about the reduction of green space due to the increased density. They were reassured that the scale of the new planting scheme/landscaping would more than compensate for that as compared to currently existing landscaping.

There was also concern from one resident with respect to the front yard set backs. The proposed dwellings are about eight feet further south than the adjacent neighbours' houses. There is however, a neighbour to the east that has a deck that projects approximately six feet from the house toward the south.

The remaining 8 residents in attendance, representing 6 properties in the neighbourhood, were outside the 40m radius of the subject site. These residents were generally split into two groups.

One group was opposed to any type of rezoning that increased density and were not even interested in looking at the proposal at all.

The other group was concerned about construction activity in the area in general and its impact on traffic. The North Shore has been heavily impacted by rapid development leading to traffic congestion, especially in this area close to the Ironworkers Memorial Bridge.

All who attended had concerns about parking availability on the street, as the additional basement suites will bring the total number of dwellings to four. One resident living along Shavington had concerns about extra parking at the north lane. They were advised that two parking spaces are required per unit that had to be accessed from the north lane. Also, there always seems to be an abundance of parking along this section of Heywood Street.

The information session was a robust discussion of the concerns of the neighbourhood and resulted in the positive interaction and clarification of these concerns. Out of the 3 property owners within the 40m radius that were in attendance, 1 owner was in favour of the development and filled out a comment sheet while 2 owners had concerns that were addressed and did not fill out a comment sheet.

In addition to this session, an early consultation with a materials package presented to the neighbours resulted in 5 property owners indicating their support for the proposed subdivision. Only 1 of these properties were represented at this information session.

To summarize the overall support of the 13 property owners within the 40m radius of the subject site, 5 property owners have indicated support for the proposed subdivision. These neighbours are directly adjacent to the East, West and North of the subject site. An additional 2 had concerns but did not comment negatively, while 6 property owners did not participate in any consultation process at any level.

Thank you for your consideration of the application for approval of the proposed subdivision at 1126 Heywood Street, North Vancouver. Should you require any further information or clarification, please do not hesitate to contact me at Cassidy Design Services - by e-mail at <u>cassidykiss@shaw.ca</u> or by phone at 604-988-7035.

Sincerely,

Michael Cassidy – Project Designer CASSIDY DESIGN SERVICES

## **Development Information Session**

#### SIGN IN SHEET

Please Note: This form will become part of the staff report to City Council on this development proposal and will be publically available. If you do not wish to be identified, please do not include your name on the form, only your address.

DEVELOPMENT: 1126 Heywood Street

DATE: 9/12/2018

TIME: 6-8pm

DIS LOCATION: John Braithwaite Community Centre

No.	Name	Address	Time
1	ESTHER MACPHERSON	1174 HEYWOODST. N.VAN	1800
2	ESTHER MACPHERSON DON MACPHERSON	M N N L	1800
3	ISCHA HICKS	1138 HEYWOOD ST	- 6:10
4	Ashlea Earl	1180 Heywood St	6:30
5	JOSDAN RARNOCC	1254, Heyward &d	6:23 6
6	This Alle-	125 Geyman Ed 1164 Hermond St.	111.00
7	JASON MELAZEN	168 HEYWOOD ST	1900
8	DOUG MULAREN	1168 HEFLICODST	1900
9	Nelly Collora)	1254 Heywood 1116 Heywood St	6:23
10	Swe whitted	1116 Hey ployd St.	6:30 -
11	Bill Gilmartin	1021 Shavington Street	7:30
12		V	
13			
14		<u>`````````````````````````````````````</u>	
15			
16			
17			
18			
19		2	
20			
21			
22			
23			
24			
25		5	12

4

Document: 1193016-v1

#### 1126 Heywood Street

### **Development Information Session**

Please Note: Should you provide your name and address, this form will become part of the staff report to City Council on this development proposal and will be publically available. If you do not wish to be identified, please do not include your name on the form, only your address. Your comments will be taken into consideration by City staff in its review of the application; however it will not be viewed by City Council or the public.

	September 12, 2018 6-8pm	
Name: TERRY AND ISCHA	A HICKS	
Address: 1138 HEYWOOD	ST.	
1. Do you support the proposed project?		
YES	TWO SMALLER HOMES ARE BETTER THAN I HUGE	HOME
2. What do you like most about the proposed project?		
	SEE #1	
3. Do you have any concerns about the proposed project?	LOSING LIGHT AND SUNSHINE ONCE THE HOMES ARE BUILT. THEY WILL BE CONSIDERABLY HIGHER THAN OUR HOME.	
4. What would you suggest to improve or enhance the proposed project?	NOT SURE HOW THE LARGE CEMENT FRONTAGE WILL FIT WITH THE LOOK OF THE STREET / NEIGHBORHOD	D
5. Please provide any additional comments.	AS OUR HOME IS GOING TO SUFFER THE MOST FROM THIS BUILD WE WOULD SUPPORT 100% THE BUILD OF TWO SMALLER HOMES OPPOSED TO ONE 5800 SR. FT. HOME. AFTER SEEING THE DRAWINGS, THE SINGLE HOME WOULD	-Tub

AN ADDITIONAL 6 FT, IN ITEIGHT, OVER THE PROPOSED Comments will be delivered to the City of North Vancouver for consideration. Alternatively, you may mail or email your comments to either the City of North Vancouver or to the developer. All comments will be forwarded to the City.

#### CONTACTS:

Applicant: Behrouz Aghai City of North Vancouver: Andrew Yu Telephone:604-230-9603 Telephone: 604-990-4217 E-Mail: benaghai@shaw.ca E-Mail: ayu@cnv.org

HOMES WHICH ARE ALREADY SO HIGH! IF ONE OF THESE PLANS ARE TO MOVE FORWARD THE SUBDIVIDING OF THE TWO HOMES IS MOST FAVORABLE,

### 1126 Heywood Street **Development Information Session**

Please Note: Should you provide your name and address, this form will become part of the staff report to City Council on this development proposal and will be publically available. If you do not wish to be identified, please do not include your name on the form, only your address. Your comments will be taken into consideration by City staff in its review of the application; however it will not be viewed by City Council or the public.

	September 12, 2018 6-8pm
Name: Colin & Michelle Address: 1124 Heywood	TEPPINE
1. Do you support the proposed project?	and the design.
2. What do you like most about the proposed project?	We are very happy with the design and the asthetics that it will add to the block
3. Do you have any concerns about the proposed project?	As long 2s the job is completed in 2. timely and pofessional manner we have have have have have have have hav
4. What would you suggest to improve or enhance the proposed project?	nothing to zeld
5. Please provide any additional comments.	

Comments will be delivered to the City of North Vancouver for consideration. Alternatively, you may mail or email your comments to either the City of North Vancouver or to the developer. All comments will be forwarded to the City.

#### CONTACTS:

Applicant: Behrouz Aghai City of North Vancouver: Andrew Yu Telephone:604-230-9603 Telephone: 604-990-4217 E-Mail: benaghai@shaw.ca E-Mail: ayu@cnv.org

### 1126 Heywood Street **Development Information Session**

Please Note: Should you provide your name and address, this form will become part of the staff report to City Council on this development proposal and will be publically available. If you do not wish to be identified, please do not include your name on the form, only your address. Your comments will be taken into consideration by City staff in its review of the application; however it will not be viewed by City Council or the public.

\*\*

	September 12, 2018 6-8pm
Name: Ashlea Earl	
Address: 1180 Heywood St.	
1. Do you support the proposed project?	No.
	<b>b</b> j
2. What do you like most about the proposed project?	-it is nice to have a newer home on the block?
3. Do you have any concerns about the proposed project?	- it does not fit with the look of the neighbourhood at all - it sets a precident for smaller lots in the area which is undesireable. - increased density will exasperate the congested traffic.
4. What would you suggest to improve or enhance the proposed project?	-if we are going to allow for greater population density, I would prefer to see duplexes permitted. The larger lots are a big reason why I bought a home in the area.
5. Please provide any additional comments.	-I feel like the propoged houses ruin the character of the neighbourhood. I would love to live on a street with more MP modern character houses!

Comments will be delivered to the City of North Vancouver for consideration. Alternatively, you may mail or email your comments to either the City of North Vancouver or to the developer. All comments will be forwarded to the City.

#### CONTACTS:

Applicant: Behrouz Aghai City of North Vancouver: Andrew Yu Telephone:604-230-9603 Telephone: 604-990-4217 E-Mail: benaghai@shaw.ca E-Mail: ayu@cnv.org

# Re: Development Proposal for 1126 Heywood Street, North Van.

Please Note: This form will become part of the staff report to City Council on this development proposal and will be publicly available. If you do not wish to be identified, please do not include your name on the form, only your address.

I have reviewed the material presented with this package and have indicated my position below.

1

Map	Name	Address	Please Check One			Check the box below to indicate your position.			Date	]
Key #	Michelle Tapping	(Address of property owned in the affected area, if not the same)	Owner	Co- Owner	Tenant	I am in support	Neutral	l am opposed	<u> </u>	
Comme	nt:	1124 Heywood Street		I		11		e	March	3151
2.	Ischa Hick	5 1138 Heywood			1		-			
Comme	it:	(00000	V		L	LV			Mar	31
3.	Mark Pezerro	1033 Shavington	1		[				0	- 01
Commer 4.					L			31994 BA	Acr	5.4
Commer	TOE DASILYA	1039SHAMAUTON	V			1			april	20
5.	Numelly Control	- 1/24 URANDON	1	-		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			1000	A
Commen	t Support of	2 Sigale Danily In					l	5	min	21,2018
6.	• • • • • •	the formed of	one	)	1					
Commen	E.	1	l				]		L	
Commen	<i>t</i>		T			I		1		
8.				6		d_	l	l		
Comment	t									
9.										
Comment	l.	1								
10.	1		T						-	
Comment	:									

## THIS PAGE INTENTIONALLY LEFT BLANK

### THE CORPORATION OF THE CITY OF NORTH VANCOUVER

### **BYLAW NO. 8729**

### A Bylaw to amend "Zoning Bylaw, 1995, No. 6700"

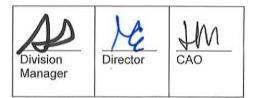
The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

- 1. This Bylaw shall be known and cited for all purposes as "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8729" (Behrouz Aghai / Bill Curtis & Associates Design Ltd., 1126 Heywood Street).
- 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 the RS-2 (One-Unit Residential 2) Zone:

Lots	Block	D.L.	Plan	
3	8	272	18329	from RS-1
		READ	) a first time on the	e <> day of <>, 2019.
		READ 2019.		n the <> day of <>,
		READ	a third time on th	e <> day of <>, 2019.
		ADOF	PTED on the <> da	ay of <>, 2019.
		MAYO	DR	

CITY CLERK

# THIS PAGE INTENTIONALLY LEFT BLANK





### 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: 410 WEST 15<sup>TH</sup> STREET (ANGELO CUSANO / BILL CURTIS & ASSOCIATES DESIGN LTD.)

Date: June 12, 2019

File No: 08-3360-20-0455/1

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

### **RECOMMENDATION:**

PURSUANT to the report of the Planner 1, dated June 12, 2019, entitled "Rezoning Application: 410 West 15<sup>th</sup> Street (Angelo Cusano / Bill Curtis & Associates Design Ltd.)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street) 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# <u>1791284</u>)
- 2. Architectural and Landscape Plans (east lot), dated April 2019 (Doc# 1776422)
- 3. Architectural and Landscape Plans (west lot), dated April 2019 (Doc# 1776418)
- 4. Public Consultation Summary (Doc# 1744002)
- 5. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Doc# 1791289)

### PROJECT DESCRIPTION

The proposal includes the subdivision of a 780 square metre (8400 sq. ft.) lot located at 410 West 15<sup>th</sup> Street into two lots with a frontage of 9.2m (30 feet) each. One new single-family dwelling with suite is proposed on each of the proposed new lots. Two parking spaces are proposed for each lot in the form of a garage/carport, accessed from the lane.

The requested changes to the zoning by-law to permit this development are identified in Table 1 below. The proposed development would comply with all requirements of the RS-2 Zone. No variances are being requested.

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

	Current Designation/Regulation	Proposed Designation/Regulation
Zone	RS-1	RS-2

### POLICY FRAMEWORK

The subject site is designated Residential Level 1 in the Official Community Plan.

Metro 2040	
Goal 1 Create a Compact Urban Area	The proposal presents a form of intensification that is appropriately scaled to the surrounding neighbourhood, and contributes to a compact urban area.
Goal 2 Support a Sustainable Economy	Proposed rental suites provide housing forms that can support a diversity of income levels and ensure people live close to where they work.
Goal 4 Develop Complete Communities	The proposed development provides a diversity of housing stock that will promote the ability to age-in-place allowing people to stay in their neighbourhood throughout all of their lifecycles.
Goal 5 Support Sustainable Transportation Choices	The site is serviced by several major transit routes, including the 240 to Vancouver City Centre. Intensification of the site will allow for more residents to live directly next to transit.

REPORT: Rezoning Application: 410 West 15<sup>th</sup> Street (Angelo Cusano / Bill Curtis & Associates Design Ltd.) Date: June 12, 2019

Official Community Plan	
Policy 1.1.2 Align growth with the development community amenities and infrastructure	Intensification of the site supports the use of existing amenities including the Green Necklace and Mahon Park.
Policy 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	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 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	The surrounding neighbourhood does not have a consistent character. The proposed design is appropriate in character and quality for a Residential Level 1 neighbourhood.
Policy 1.3.6 Encourage architecture that responds to the unique context of the City in a sensitive, sustainable, and aesthetically compatible manner	Design and materials are consistent with those found in the local context. Landscaping includes primarily native plant species.
Policy 1.5.1 Provide opportunities for a range of housing densities, diversified in type, size and location.	The proposed development includes two rental suites which provide a smaller and more affordable housing form.
Housing Action Plan	
Action #5 To increase rental options in lower density areas to support renters and provide homeowners with additional rental income, while retaining neighbourhood scale and character.	The proposed development creates two new principal units of modest size with rental suites. Rental income will help to make the houses more affordable for owners and the rental units will increase the supply of units available in an area that is walkable and well-serviced by transit.
Sustainable Development Guidelines	
Natural Systems The ability of natural systems, both global and local, to support life. Parks and green spaces help regulate the climate, clean and filter water and air, and provide recreational and aesthetic benefits. Maintaining healthy natural systems will reduce strain on municipal infrastructure, support local wildlife and enhance quality of life for community members.	The proposed landscaping is primarily permeable with the exception of a concrete parking pad. Infiltration tanks will retain stormwater on site to help mitigate impact on local water courses and the Burrard Inlet. The majority of plants included in the landscape plan are native species.

### PLANNING ANALYSIS

### Site Context and Surrounding Use

The site is located near Mahon Park and is within 3-5 blocks of mixed-use areas along Lonsdale Avenue and Marine Drive. The neighbourhood has a mix of single-family dwellings, duplexes, and multiple dwellings on one lot. The buildings and uses immediately surrounding the subject site are described in Table 1 below.

Direction	Address	Description	Zoning
	413/415/417 West 16 <sup>th</sup> St.	Three detached dwellings on one lot.	CD-600
North	407 West 16 <sup>th</sup> St.	Single-family dwelling	RS-1
	1551 Jones Ave. / 401 West 16 <sup>th</sup> St.	Duplex	RT-1
-	423 West 15 <sup>th</sup> St.	Single-family dwelling with suite	RS-1
South	417 West 15 <sup>th</sup> St.	Single-family dwelling with suite	RS-1
	407 West 15 <sup>th</sup> St.	Single-family dwelling with suite	RS-1
East	400 West 15 <sup>th</sup> St.	Single-family dwelling	RS-1
	416 West 15 <sup>th</sup> St.	Single-family dwelling	RS-1
West	414 West 15 <sup>th</sup> St.	Single-family dwelling	RS-1

Table	1.	Surround	ling	Uses
-------	----	----------	------	------

### Use

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

### Intensity

The proposed rezoning would allow for the subdivision of the existing lot, creating two new lots of 9.1m (30 ft.) width. The design shows that the proposed lots can accommodate the proposed principal dwellings and suites with required parking. The

REPORT: Rezoning Application: 410 West 15<sup>th</sup> Street (Angelo Cusano / Bill Curtis & Associates Design Ltd.) Date: June 12, 2019

proposed density is consistent with the Official Community Plan at 0.5 FSR and is similar to surrounding properties.

Form

The proposed form of the development complies with the RS-2 Zone requirements and is appropriate in character for the low-density residential context.

### COMMUNITY CONSULTATION

A Developer's Information Session was held on November 1, 2018. There was one attendee. The attendee expressed interest in the project and the rezoning process and completed an input form in support for the project.

Given there have been no concerns identified from the surrounding neighbourhood regarding the proposal, staff is recommending that the Public Hearing be waived. Should Council wish to refer the application to a Public Hearing, the first active clause in the resolution should be amended to read:

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street) be considered and referred to a Public Hearing;.

### CONCLUSION

The subject site's proximity to existing recreational infrastructure, commercial areas and transit make it an appropriate site for densification. The project would result in a net increase of three units (one principal and two accessory units) while maintaining the development form of the surrounding properties (single-family dwellings). The proposed parking is one space per unit, which is more than adequate for this site, given its location next to transit along Jones Avenue (routes 240, 241 and 255) and proximity to commercial and employment areas and schools. Policy and planning analysis supports the proposed rezoning.

**RESPECTFULLY SUBMITTED:** 

End HU

Emily Macdonald Planner 1



### TOPOGRAPHIC SITE PLAN OVER LOT 7 BLOCK 41 DISTRICT LOT 547

### GROUP I NWD PLAN 1061

### CIVIC ADDRESS:

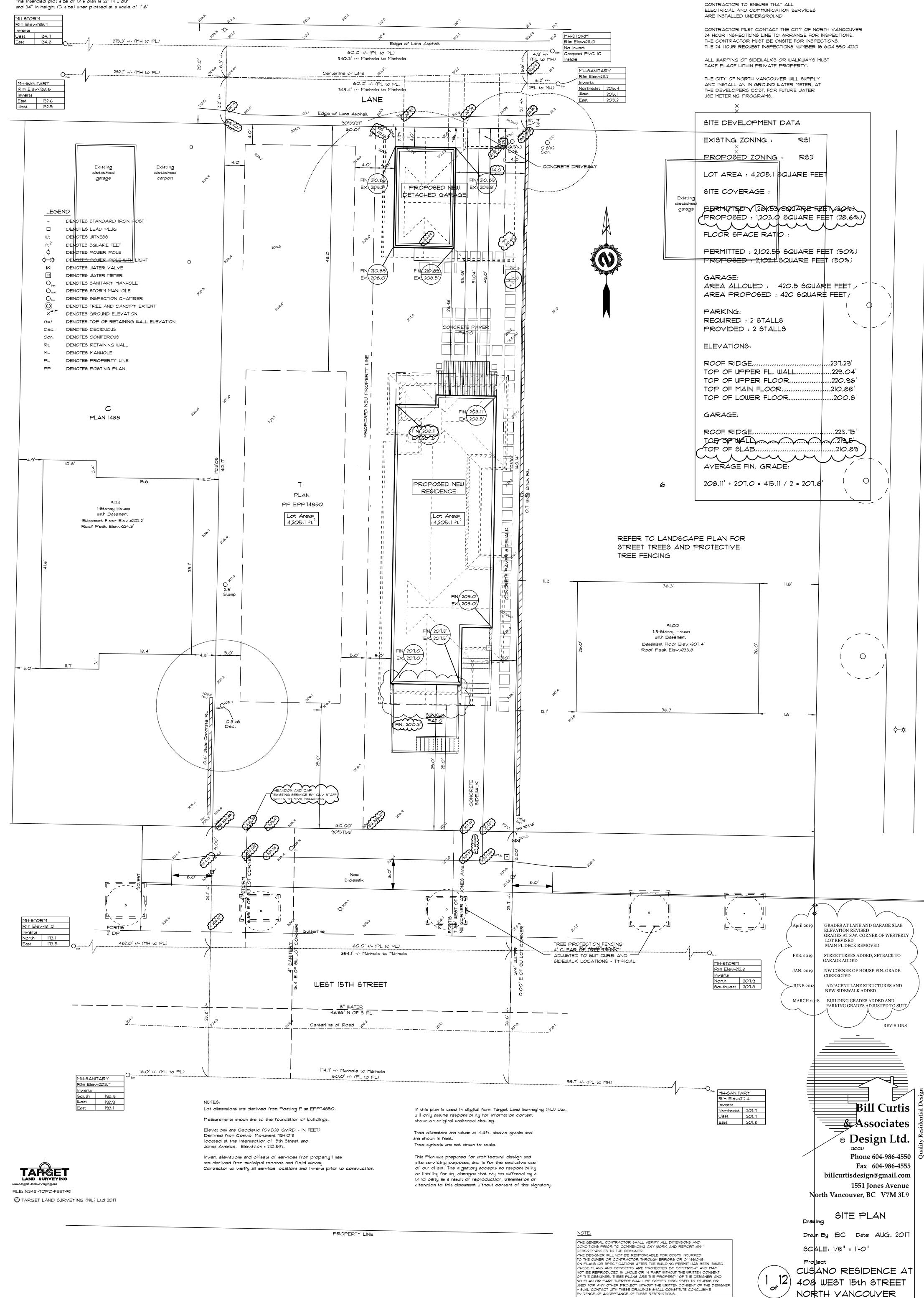
410 West 15th Avenue, City of North Vancouver PID: 014-852-845

### SCALE 1" : 8'

### 5 2.5 0 5 10

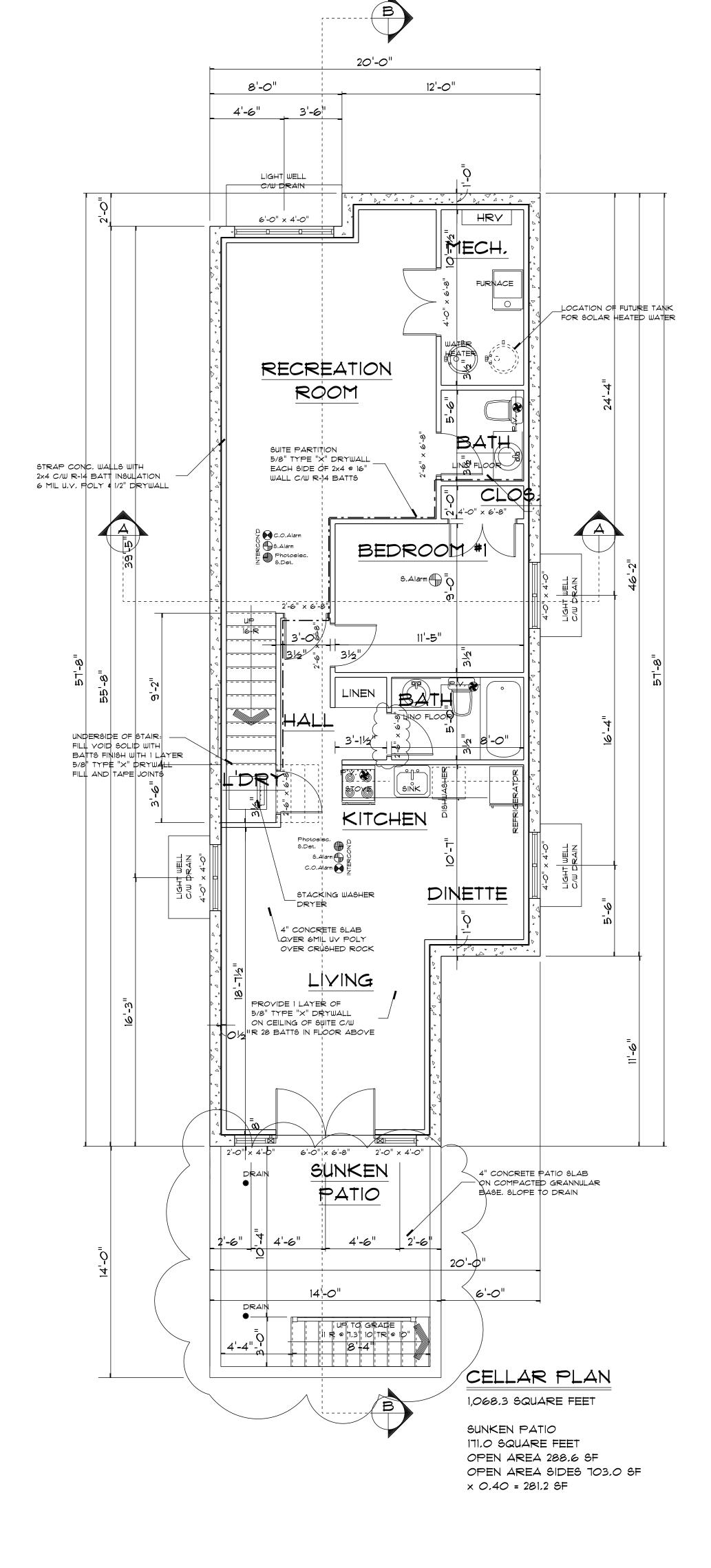
### ALL DISTANCES ARE IN FEET

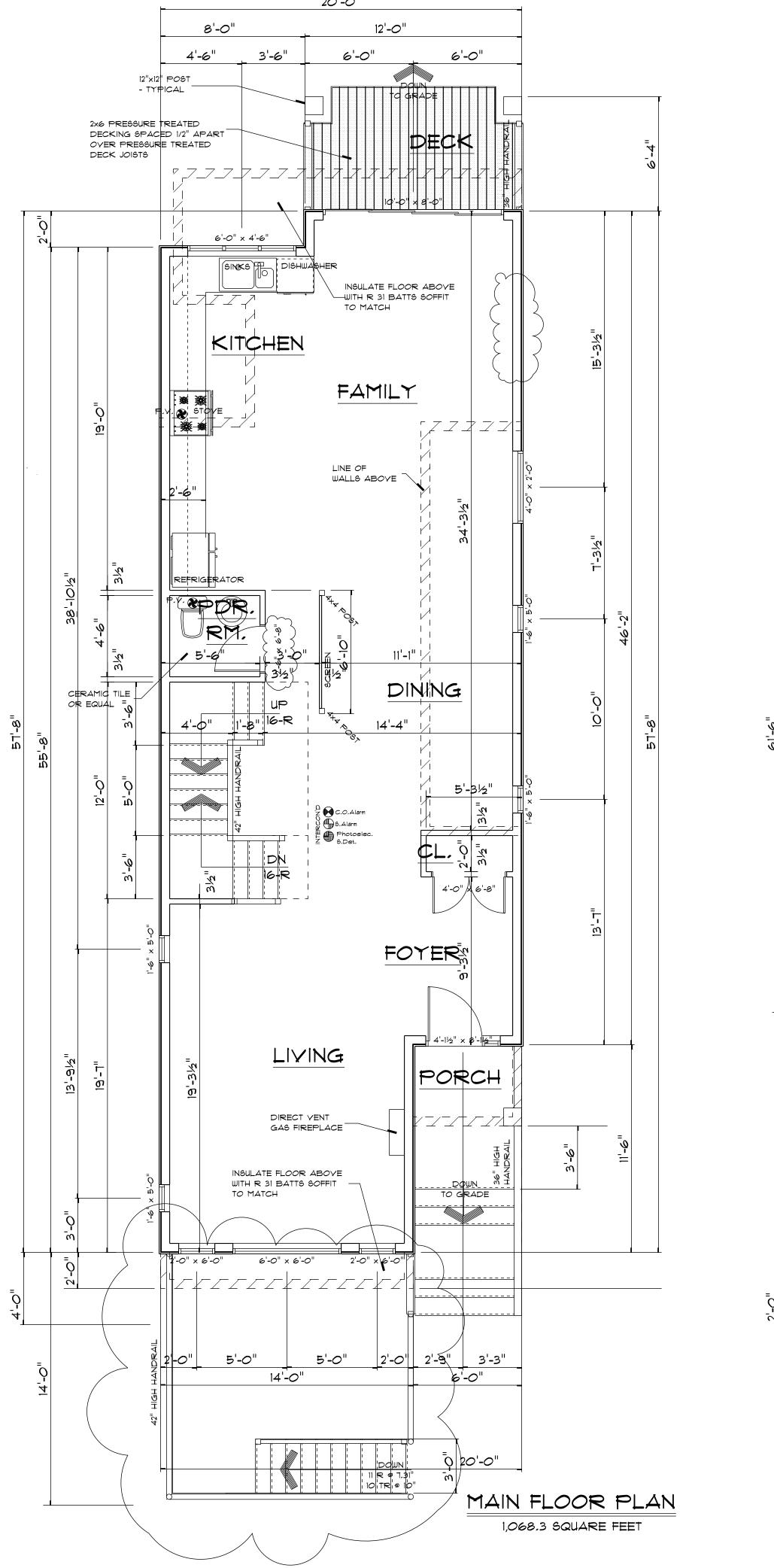
The intended plot size of this plan is 22" in width



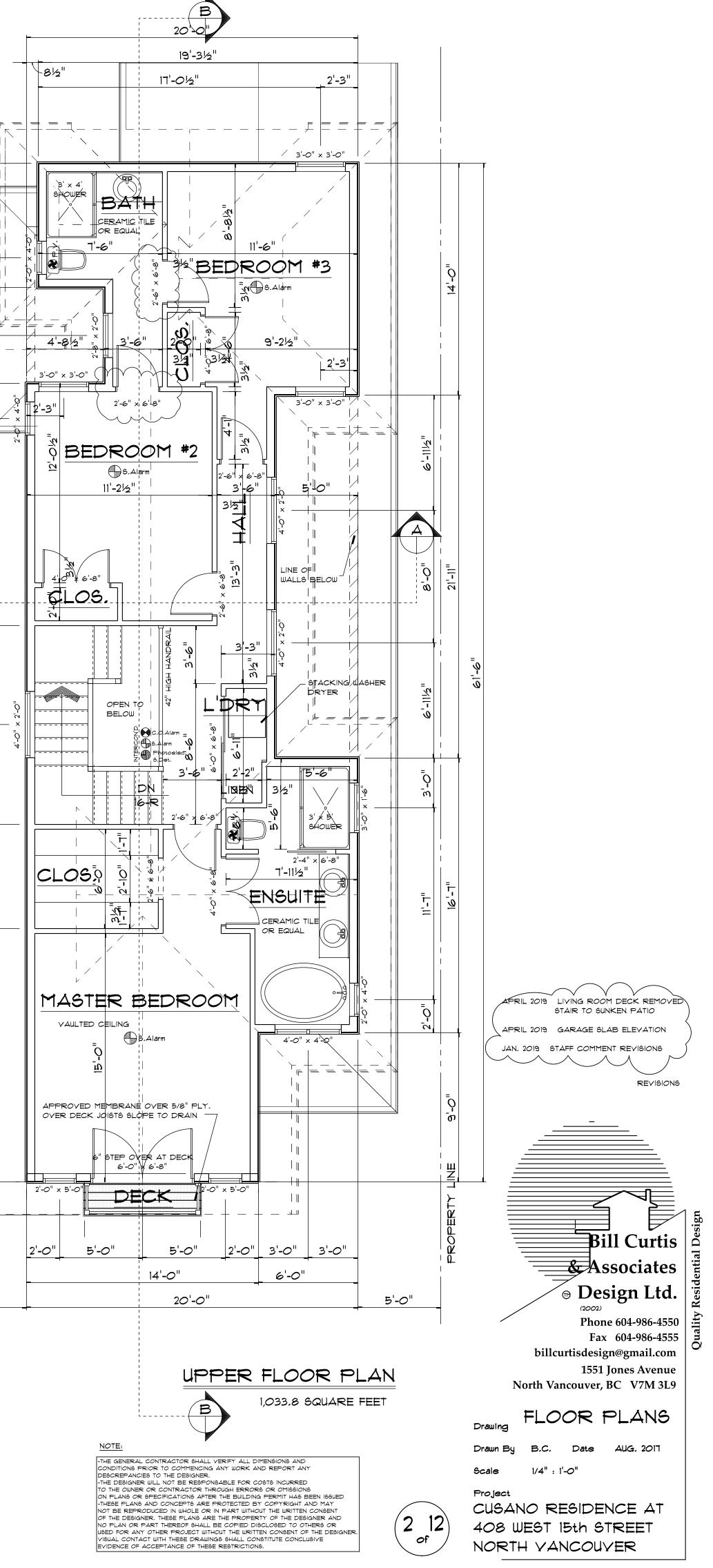
### BLACKTOP TO PROPERTY LINE AT DEVELOPERS COST AND TO CITY OF NORTH VANCOUVER ENGINEERING STANDARDS

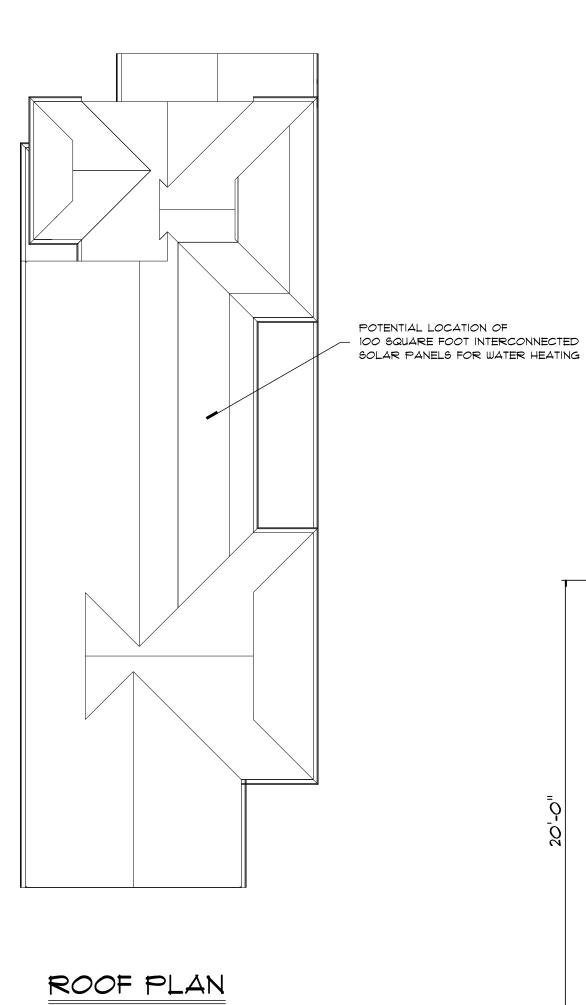
THE CONTRACTOR IS TO CONTACT ENGINEERING, PARKS AND ENVIRONMENT AT 604-983-7333 PRIOR TO POURING ANY FLOOR SLABS ASSOCIATED WITH VEHICULAR OR PEDESTRIAN ACCESS TO THE BUILDING, THE CONTRACTORS SURVEYOR MUST PROVIDE THE CITY WITH AS-BUILT ELEVATIONS AT ALL BUILODING ENTRANCES AT THE FORMING STAGE.

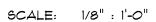


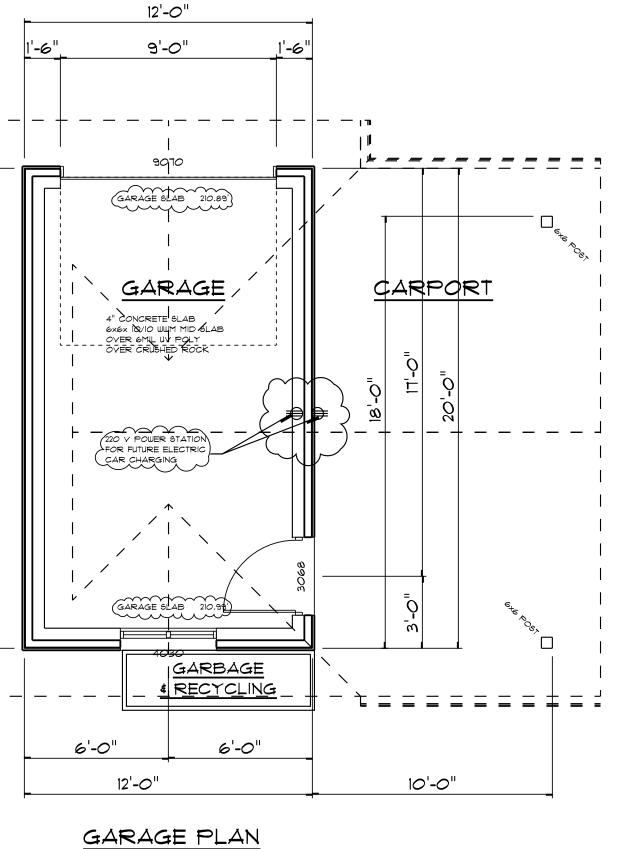


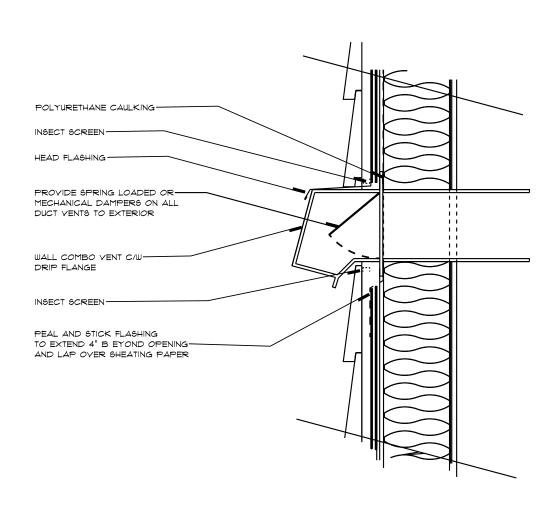
ΠÛ Ŷ <u>ш</u> A Ъ. 5'-0"







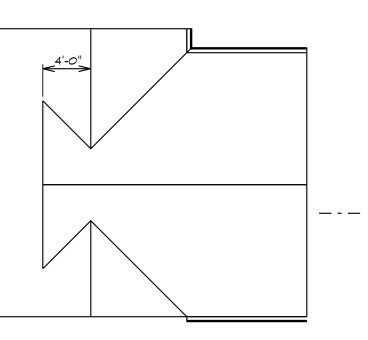




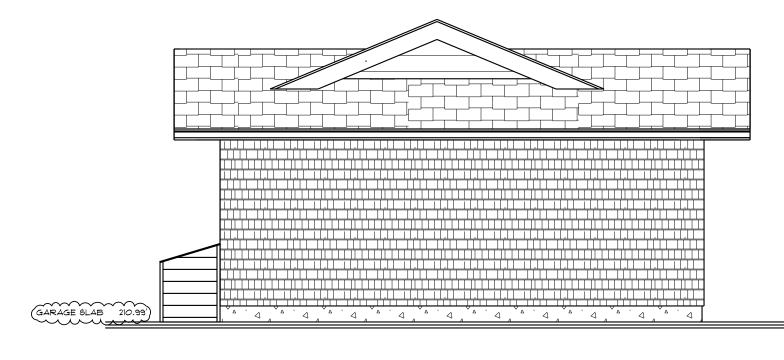


**F** 1 

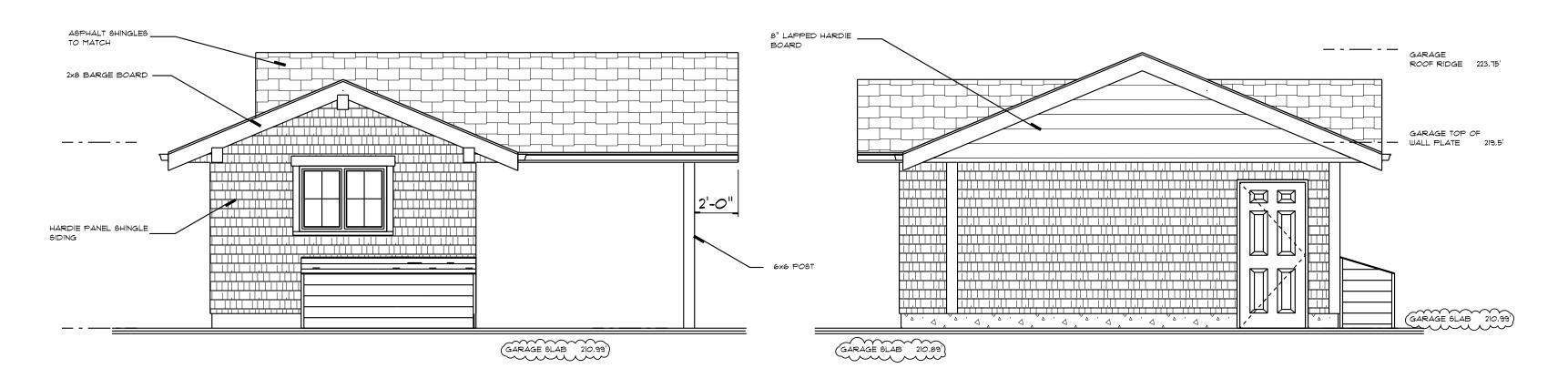
LI \_\_\_



## GARAGE ROOF PLAN SCALE: 1/8" : 1'-0"



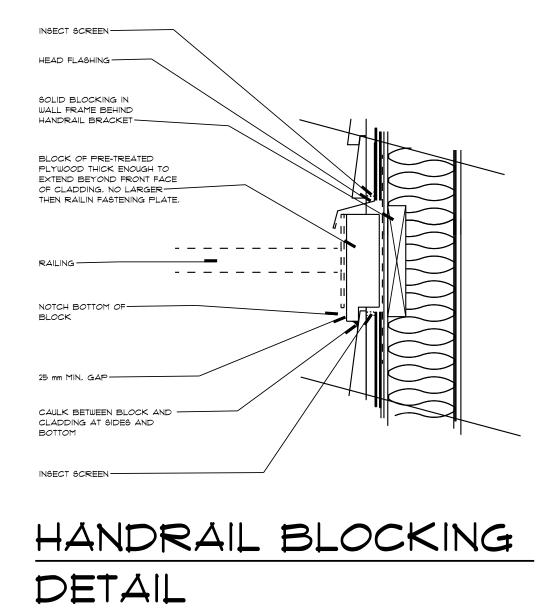
# GARAGE WEST ELEVATION

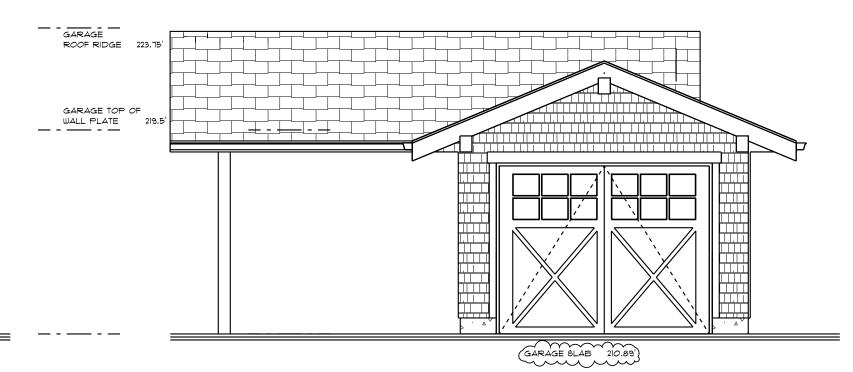


# GARAGE SOUTH ELEVATION

6x6 POST IN A PIN ANCHOR SADDLE SET IN AN 8x8 CONCRETE \_ PEDISTAL ON A 30"x30"x10" DEEP

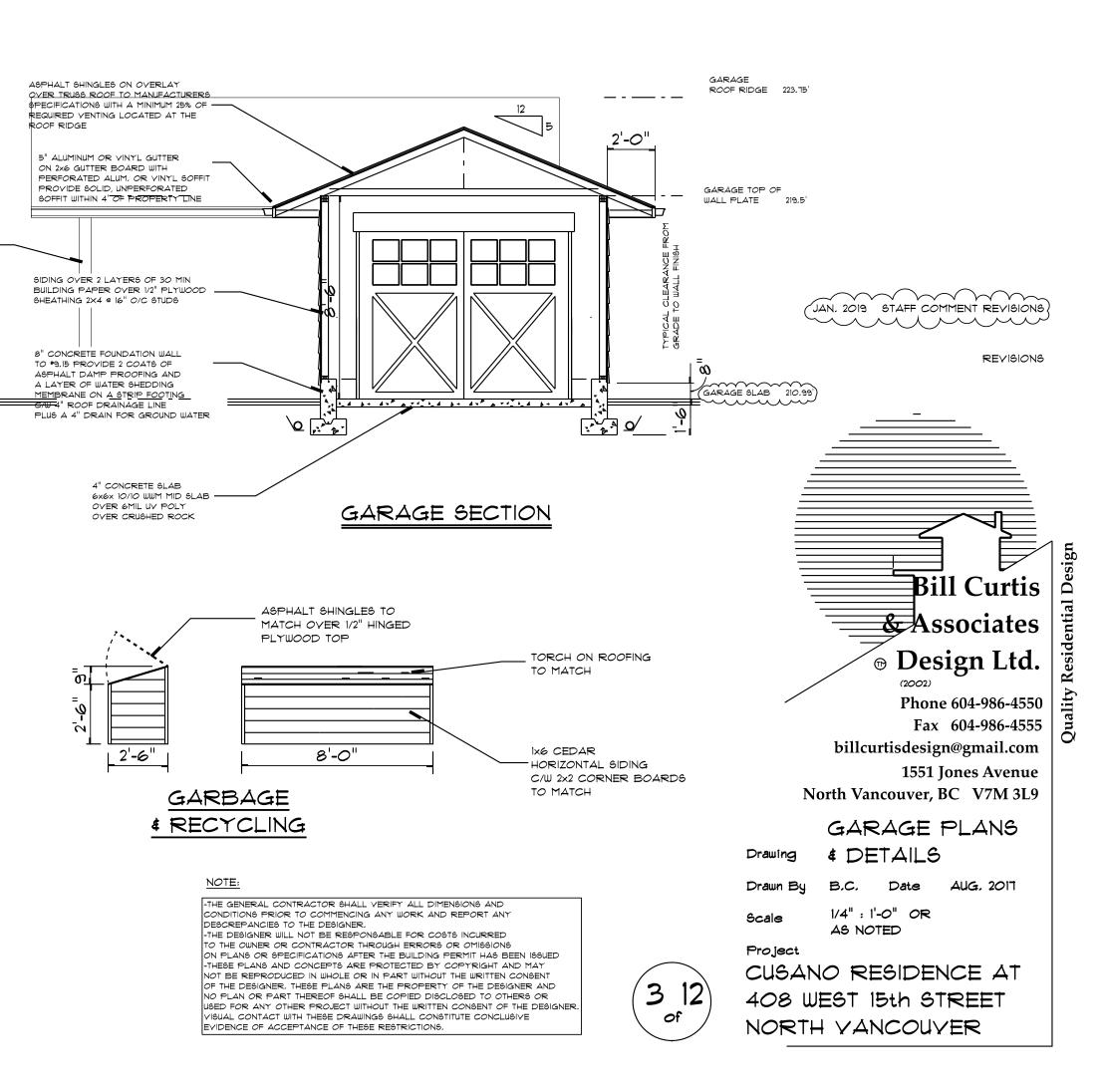
CONCRETE SPREAD FOOTING

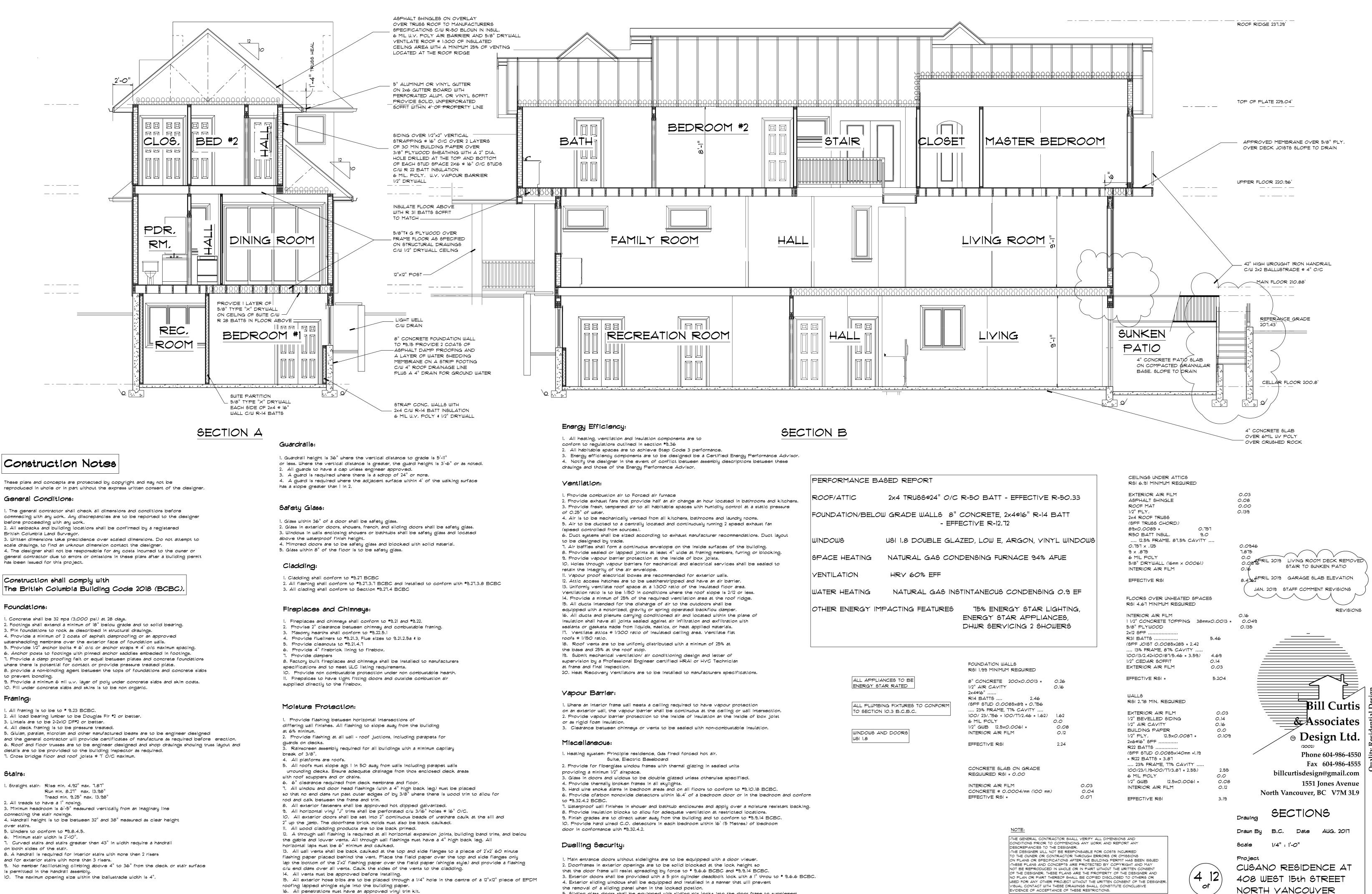




GARAGE NORTH ELEVATION

GARAGE EAST ELEVATION





# Construction Notes

These plans and concepts are protected by copyright and may not be reproduced in whole or in part without the express written consent of the designer.

### General Conditions:

1. The general contractor shall check all dimensions and conditions before commnecing with any work. Any discrepancies are to be reported to the designer before proceeding with any work.

- 2. All setbacks and building locations shall be confirmed by a registered
- British Columbia Land Surveyor. 3. Written dimensions take precidence over scaled dimensions. Do not attempt to
- scale drawings, to find an unknown dimension contact the designer. 4. The designer shall not be responsable for any costs incurred to the owner or
- has been issued for this project.

### Construction shall comply with

### Foundations:

1. Concrete shall be 32 mpa (3,000 psi) at 28 days.

- 3. Pin foundations to rock as described in structural drawings.
- 4. Provide a minimum of 2 coats of asphalt damproofing or an approved
- 6. Anchor posts to footings with pinned anchor saddles embeded in footings,
- 7. Provide a damp proofing felt or equal between plates and concrete foundations where there is potential for contact or provide pressure treated plate.
- 8. provide a non-binding agent between the tops of foundations and concrete slabs to prevent bonding.
- 10. Fill under concrete slabs and skins is to be non organic.

### Framing:

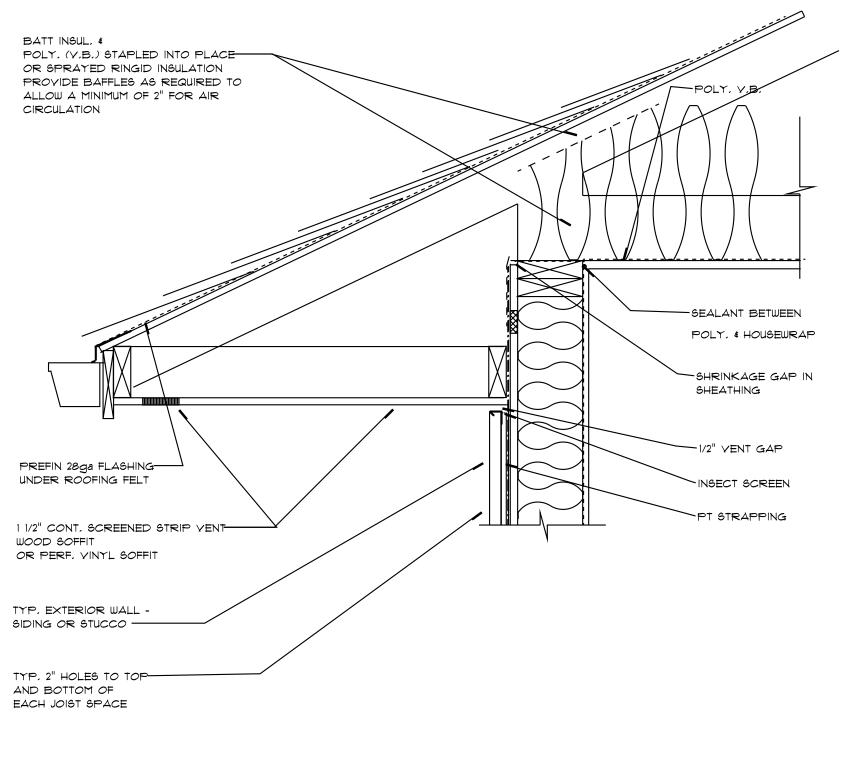
- 1. All framing is to be to # 9.23 BCBC.
- 2. All load bearing lumber to be Douglas Fir #2 or better.
- 3. Lintels are to be 2-2x10 DF#2 or better.
- and the general contractor will provide certificates of manufacture as required before erection. 6. Roof and floor trusses are to be engineer designed and shop drawings showing truss layout and details are to be provided to the building inspector as required.

### Stairs:

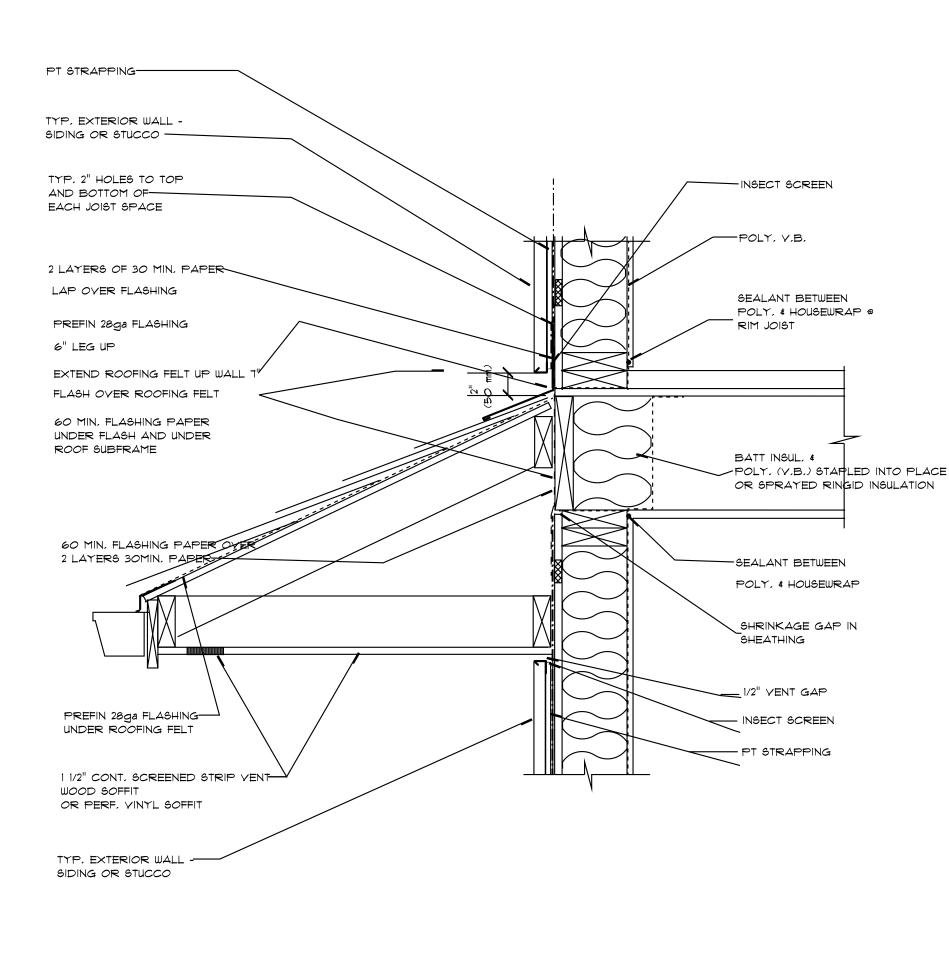
- 2. All treads to have a 1" nosing.
- connecting the stair nosings. 4. Handrail height is to be between 32" and 38" measured as clear height
- over stairs.
- 5. Winders to ocnform to #9.8.4.5.
- 6. Minimum stair width is 2'-10".
- on both sides of the stair.
- and for exterior stairs with more than 3 risers.
- 9. No member faciliotating climbing above  $4^{"}$  to 36" from the deck or stair surface
- 10. The maximum opening size within the ballustrade width is 4".

- roofing lapped shingle style into the building paper.
- 16. All penetrations must have an approved vinyl trim kit.
- 17. All exterior structural wood shall be pressure treated.

- the removal of a sliding panel when in the locked postion.
  - 5. Sliding glass doors shall be equipped with sliding pin locks into the door frame to supplement the sash lock of the door handle.

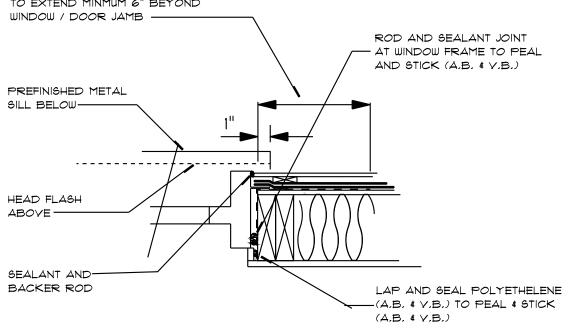


# RAINSCREEN DETAIL ROOF TO WALL INTERSECTION





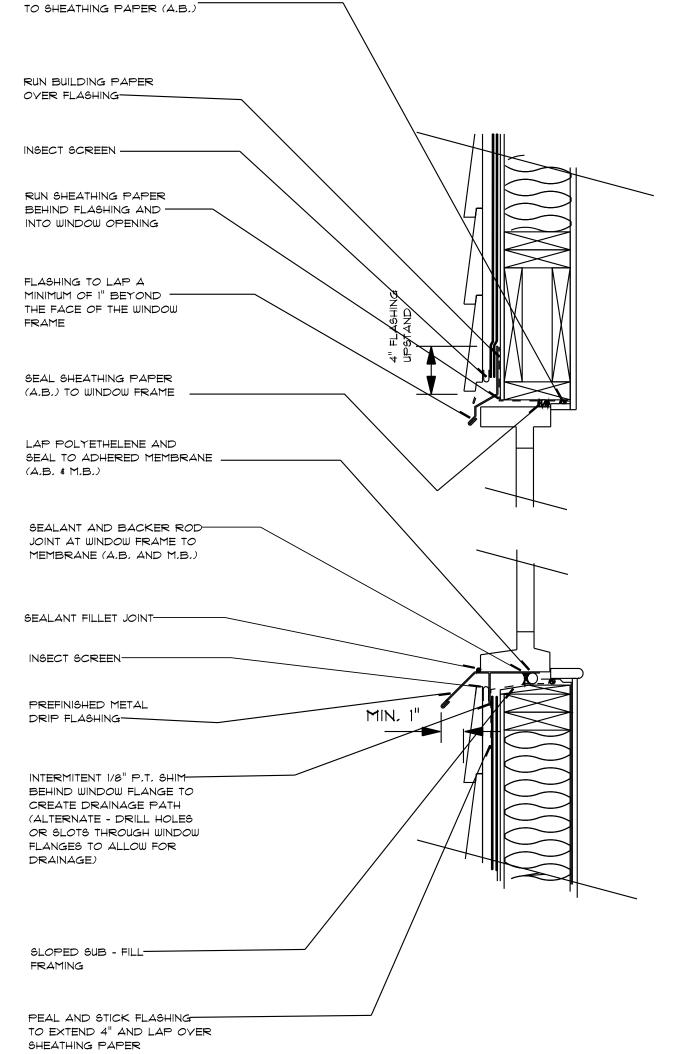
# WINDOW JAMB DETAIL



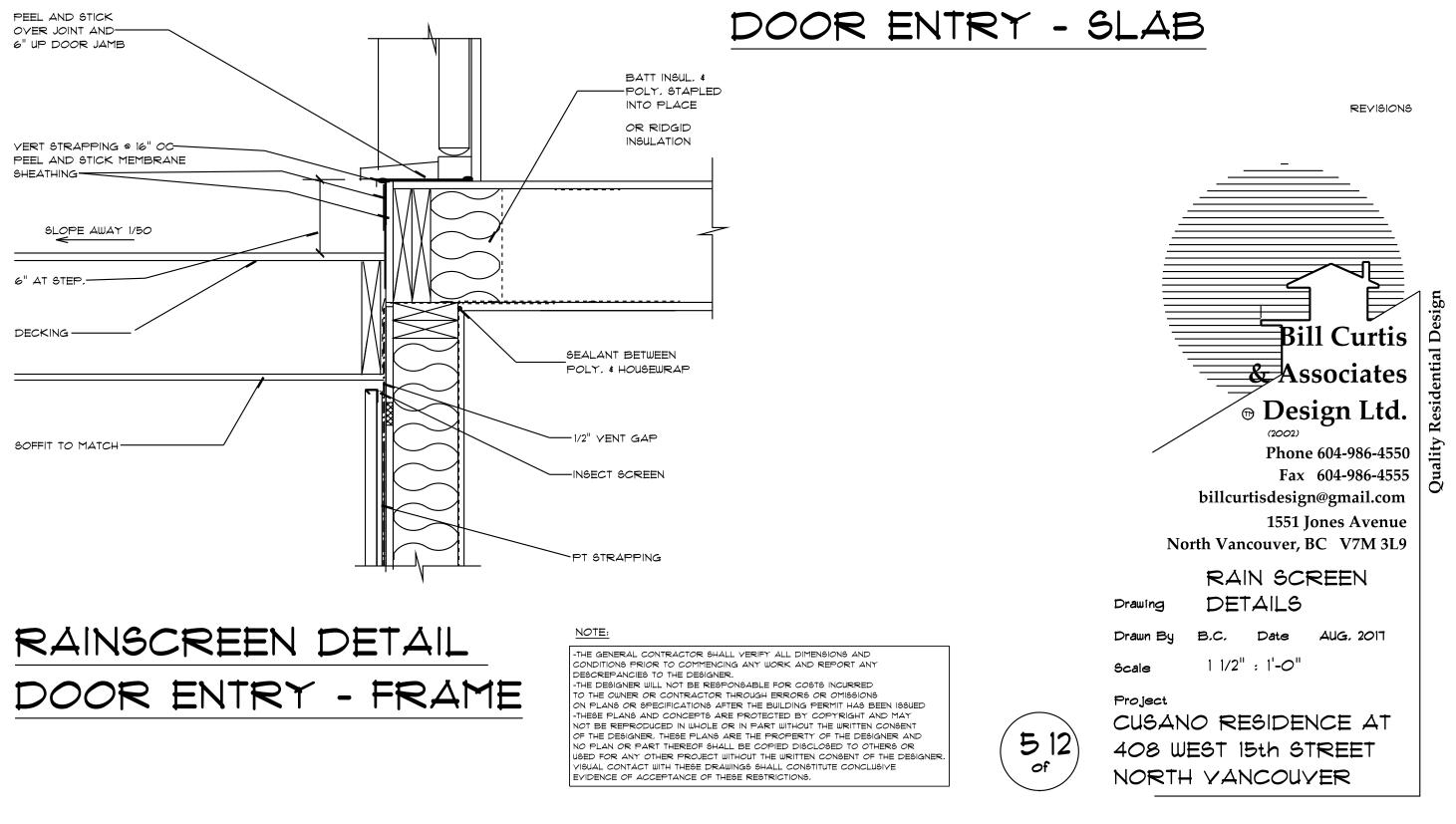
PEAL AND STICK FLASHING TO EXTEND MINMUM 6" BEYOND

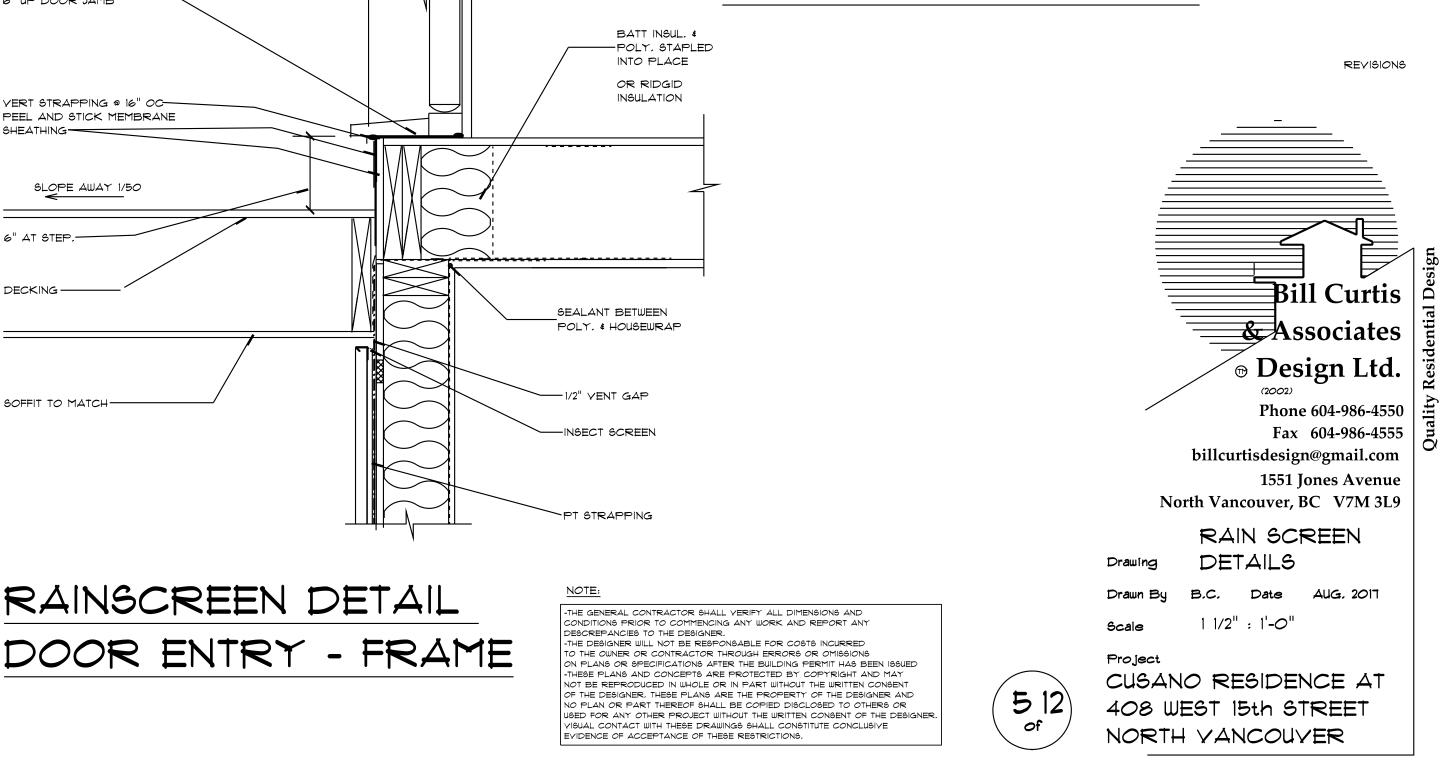
# WINDOW HEAD & SILL DETAIL

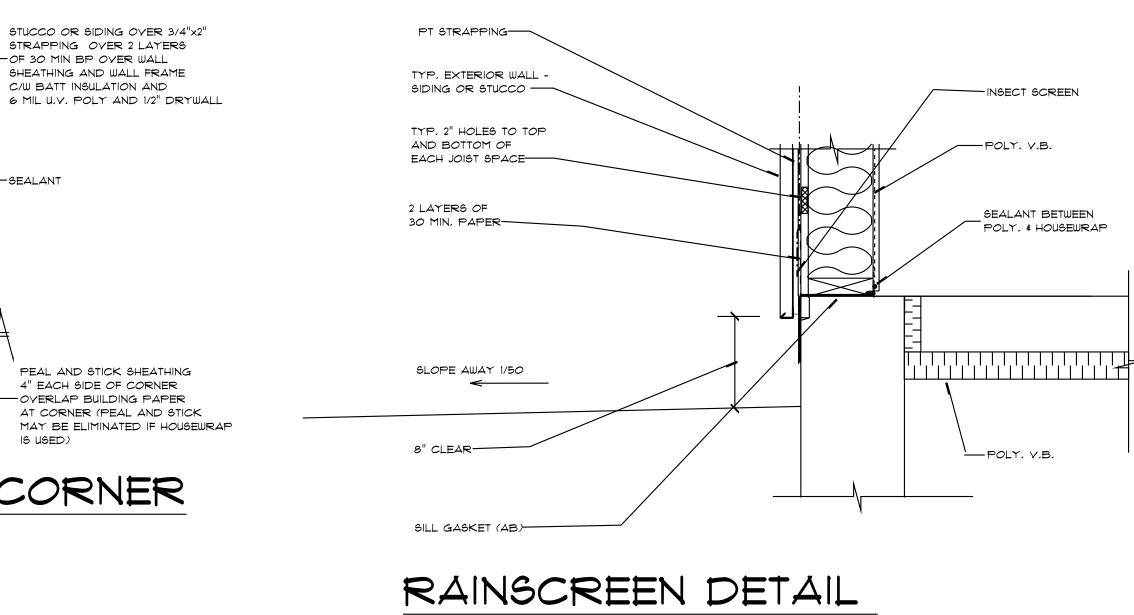
SEAL POLYETHELENE (V.B.)



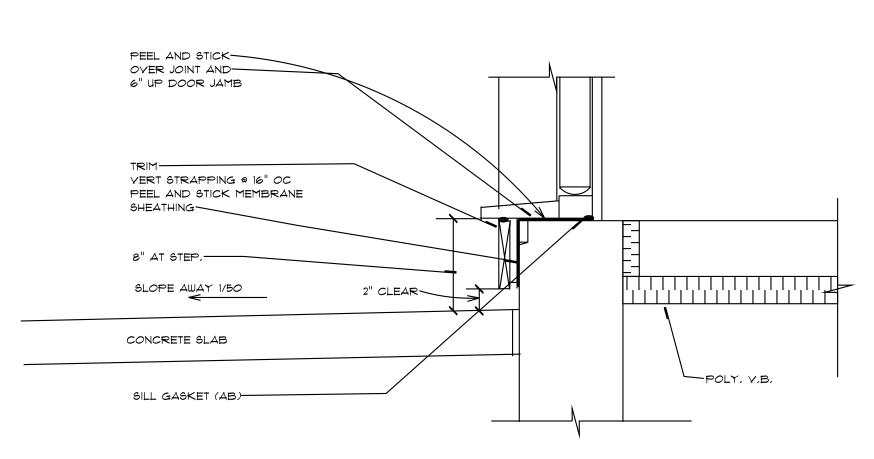
-OF 30 MIN BP OVER WALL SHEATHING AND WALL FRAME C/W BATT INSULATION AND SEALAN ヘノモノス ノモノモノモノ PEAL AND STICK SHEATHING 4" EACH SIDE OF CORNER -OVERLAP BUILDING PAPER AT CORNER (PEAL AND STICK IS USED) INTERIOR CORNER DETAIL PEAL AND STICK SHEATHING 4" EACH SIDE OF CORNER OVERLAP BUILDING PAPER AT CORNER (PEAL AND STICK MAY BE ELIMINATED IF HOUSEWRAP IS USED)  $\mathcal{A}$ EXTERIOR CORNER DETAIL



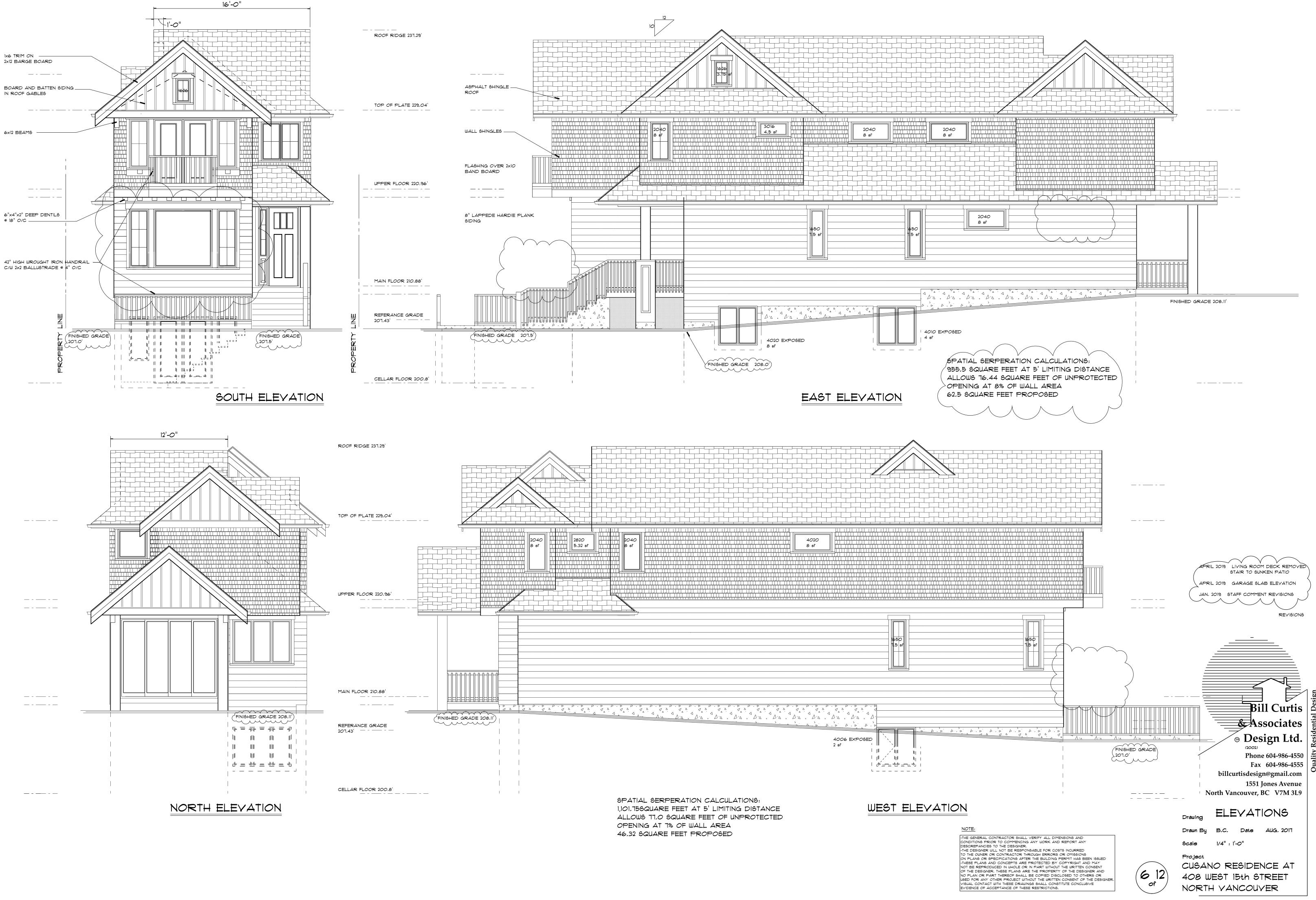




# FRAME WALL @ SLAB



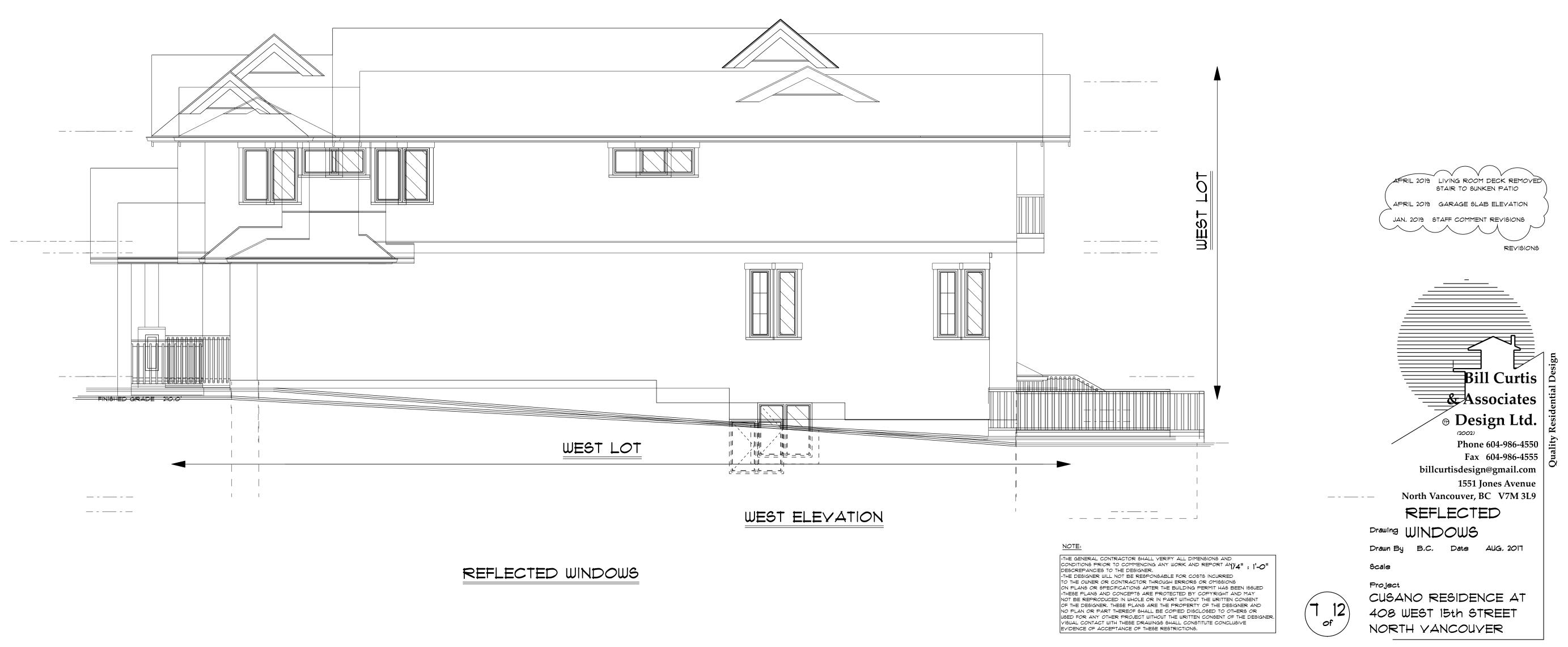
# RAINSCREEN DETAIL





- - - -

1





EAST ELEVATION

# \_ - \_\_\_ - \_\_\_ FINISHED GRADE 208.11

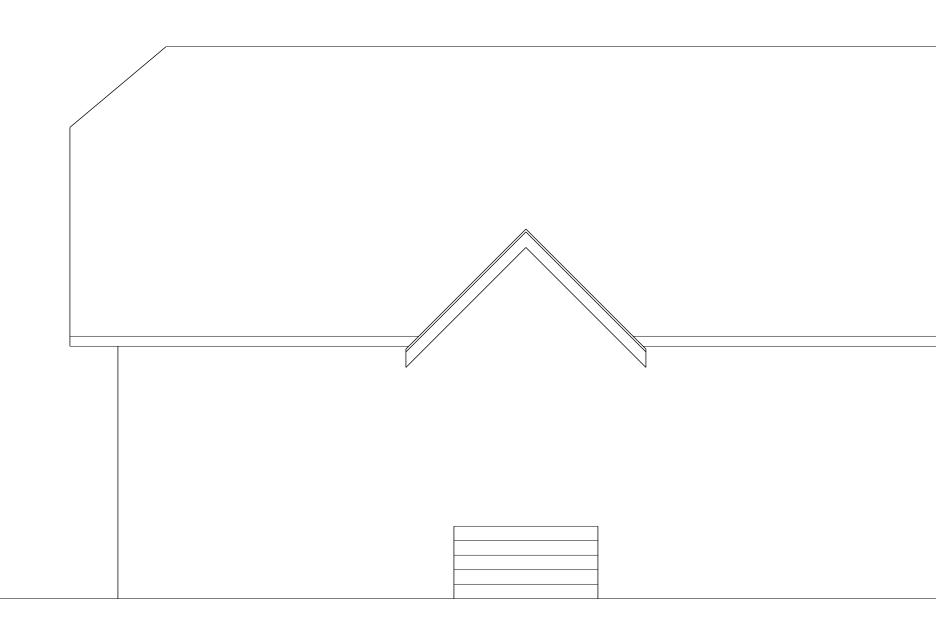
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



STREETSCAPE







# WEST 15th STREET LOOKING WEST



NORTH SIDE OF WEST 15th STREET



AREA MAP



- 410 West 15th Street



# WEST 15th STREET LOOKING EAST

REVISIONS

**Bill Curtis** & Associates 🖻 Design Ltd. Phone 604-986-4550 Fax 604-986-4555 billcurtisdesign@gmail.com 1551 Jones Avenue North Vancouver, BC V7M 3L9 CONTEXT PICTURES Drawing AUG. 2017 Date Project

NOTE:

NOTE: -THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK AND REPORT ANY DESCREPANCIES TO THE DESIGNER. -THE DESIGNER WILL NOT BE RESPONSABLE FOR COSTS INCURRED TO THE OWNER OR CONTRACTOR THROUGH ERRORS OR OMISSIONS ON PLANS OR SPECIFICATIONS AFTER THE BUILDING PERMIT HAS BEEN ISSUED -THESE PLANS AND CONCEPTS ARE PROTECTED BY COPYRIGHT AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. THESE PLANS ARE THE PROPERTY OF THE DESIGNER AND NO PLAN OR PART THEREOF SHALL BE COPIED DISCLOSED TO OTHERS OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. VISUAL CONTACT WITH THESE DRAWINGS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.





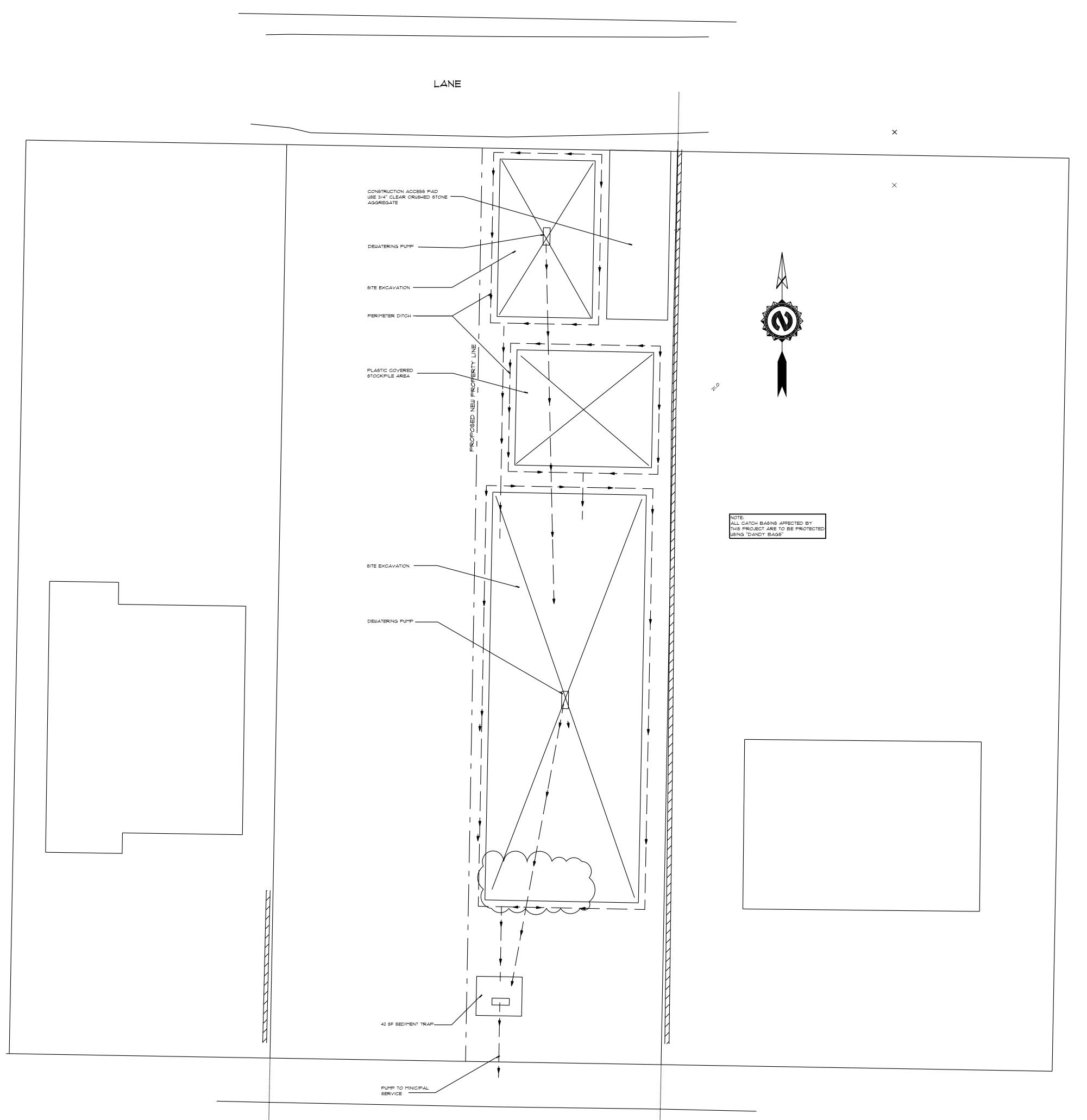
Drawn

Scale

CUSANO RESIDENCE AT 408 WEST 15th STREET NORTH VANCOUVER

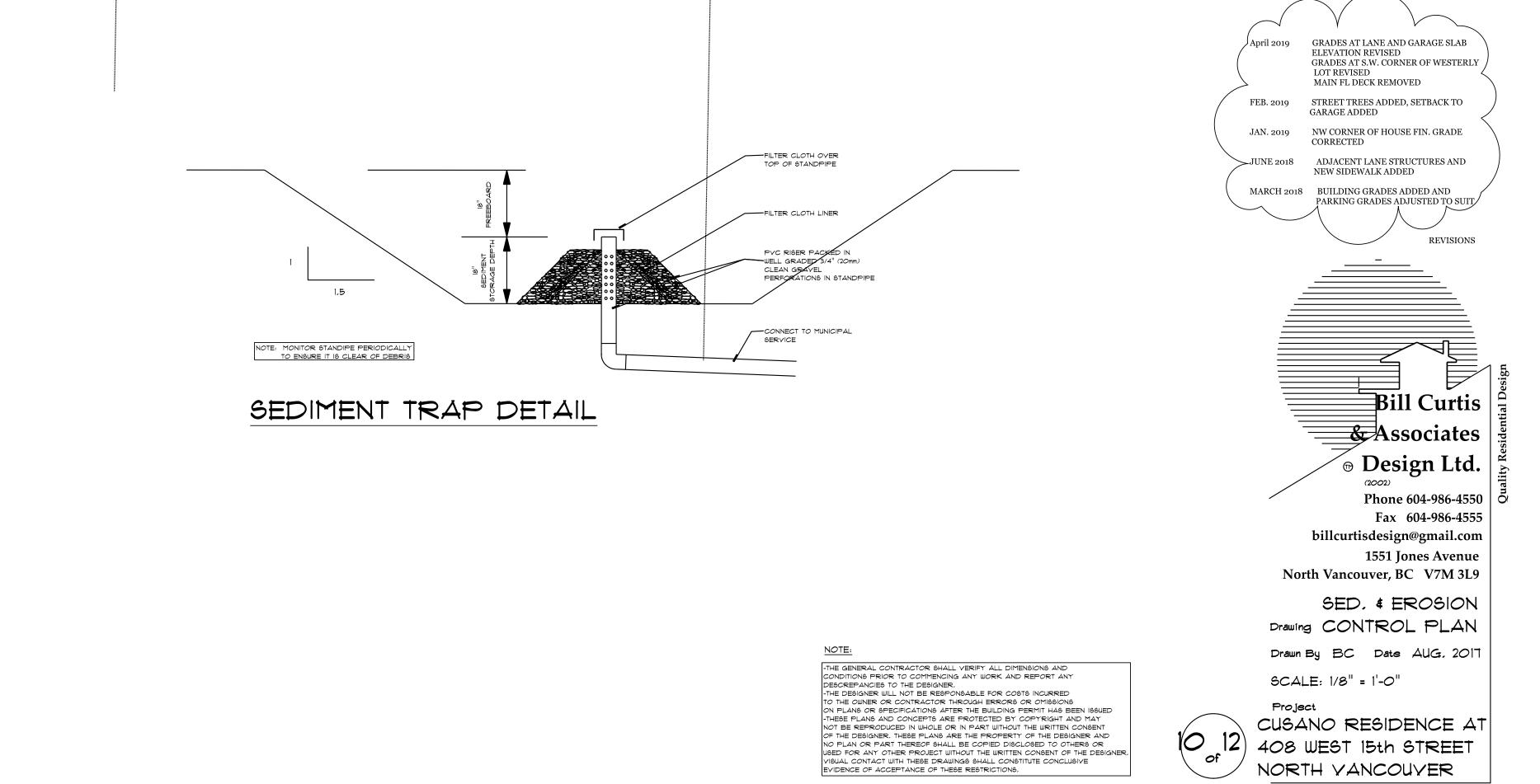
õ



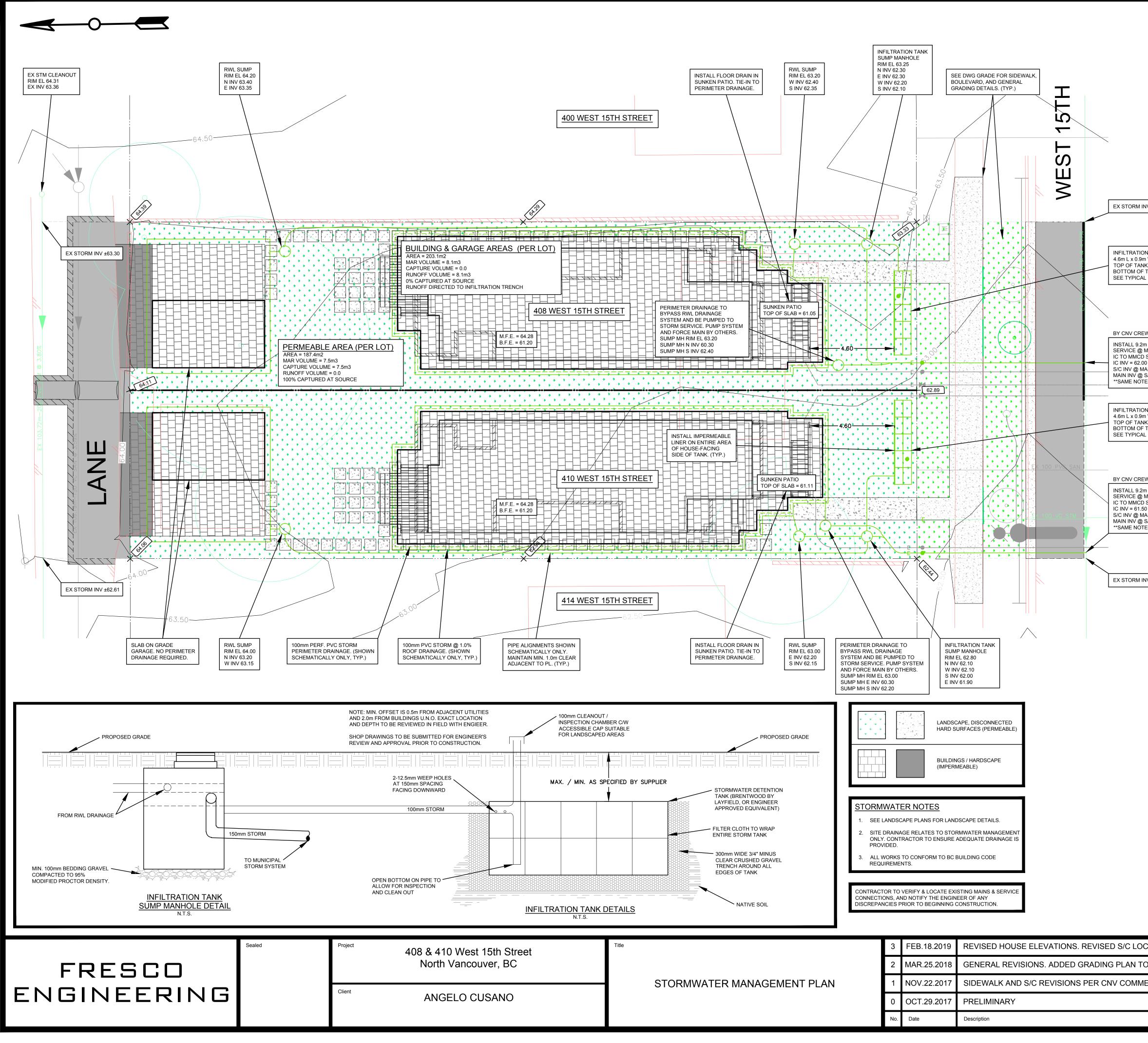


Sidewalk

 $\overline{}$ 







Total Permeable Area167.4 mNominal Infiltration Rate100 mm/hr2.8E-06 m/s0.240 m³/m²Infiltration Provided(a) 45.0 m³Infiltration Provided(a) 45.0 m³Available Runoff for Capture(b) 7.5 m³rainfall Captured7.5 m³rainfall Captured7.5 m³Building and Garage Area Rainfall CaptureBuilding and Garage Area Rainfall CaptureBuilding Surface Area154.1 m²Garage Surface Area49 m²Total Impermeable Area203.1 m²Module Dimensions (m)Length0.91 mLength0.91 mLength0.91 m2 modules*Gross Tank Volume3.8 m³Tank void space95%Net Storage Volume(c) 3.6 m²Clay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.60 m²Surface AreaSurface Area of tank Cay8.0 m²Surface Area of tank Cay0.59 mSurface Area of tank Cay0.59 m²Surface Area of tank Cay0.59 m²Surface Area of tank Cay0.59 m²Clay0.11 m³Total Rainfall Captured(e) 57.5 m³Clay0.11 m³Clay0.11 m³Clay0.11 m³Clay0.11 m³Clay0.11 m³Clay0.11 m³Clay0.11 m³Clay0.11 m³Clay<	Description         Total Catchment Area       390.5 m²       see SMP dray         Disconnected Hardscape (Courts as Permeable       26.9 m²       see SMP dray         Building Area (Inpermeable)       164.1 m²       see SMP dray         Garage Area (Inpermeable)       164.1 m²       see SMP dray         Objective: Capture the MAR Storn Event       40 mm       see SMP dray         Mar Rainfall Event       40 mm       Total Area       390.5 m²       see SMP dray         Total Area       390.5 m²       see SMP dray       see SMP dray         Building Area (Inpermeable)       156.1 m²       see SMP dray         Total Rainfall Volume to be Captured       156.1 m²       from above         Rainfall on Area       156.0 m²       from above         Disconnected Hardscape (Courts as Permeable)       160.5 m²       from above         Disconnected Hardscape (Courts as Permeable)       280.6 m²       from above         Disconnected Hardscape (Courts as Permeable)       20.0 m²/m²       from above         Total Rainfall Captured       (a)       40.0 m²       from above         Total Rainfall Captured       (b)       7.5 m³       lesser of (a) and (b)         Building and Garage Area (marget as fraget as frage		STORM EVENT	RE THE RAINFALL DURING THE 50% MA	١R
Total Catchment Area       390.5 m <sup>2</sup> //list are SMP dwg         Landscape Area (Permeable)       26.9 m <sup>2</sup> //list are SMP dwg         Building Area (Impermeable)       154.1 m <sup>2</sup> //list are SMP dwg         Garage Area (Inpermeable)       52%         Objective: Capture the MAR Storm Event       80 mm         MAR Rainfall Event       90 mm         Soft MAR Rainfall Event       90 mm         Total Percent Impermeable       26.9 m <sup>2</sup> Total Rainfall Volume to be Captured       156 m <sup>2</sup> Disconnected Hardscape (Courts as Permeable       28.9 m <sup>2</sup> Disconnected Hardscape (Courts as Permeable       28.9 m <sup>2</sup> Disconnected Hardscape (Courts as Permeable       26.4 m <sup>2</sup> //m <sup>2</sup> Montal Infitration Rate       10 mm/tr         Lendscape Area (Permeable Area       0.240 m/m <sup>2</sup> Montal Infitration Rate       10 mm/tr         Available Runoff for Capture       (b)         Nominal Infitration Rate       164.1 m <sup>2</sup> Module Dimensions (m)       Length 0.457         Length 0.514       Width 0.457 <t< th=""><th>Total Catchment Area     390.5 m<sup>3</sup>/m<sup>2</sup>     see SMP day       Landscape Area (Permeable)     169.5 m<sup>3</sup>/m<sup>2</sup>     see SMP day       Building Area (impermeable)     164.1 m<sup>3</sup>/m<sup>2</sup>     see SMP day       Garage Area (impermeable)     164.1 m<sup>3</sup>/m<sup>2</sup>     see SMP day       Sole of MR Rainfall Event     40 mm     see SMP day       Total Percent Impermeable     52%     see SMP day       Objective: Capture the MAR Roinfall Event     40 mm     see SMP day       Total Resa     390.5 m<sup>3</sup>/m<sup>3</sup>     from above       Rainfall on Area     156.8 m<sup>3</sup>     from above       Total Reside (Permeable)     160.5 m<sup>3</sup>/m<sup>3</sup>     from above       Disconnected Hardscape (Counts as Permeable)     2.86.20 m<sup>3</sup>/m<sup>3</sup>     from above       Total Remeable Area     0.240 m<sup>3/m<sup>3</sup></sup>     80.4002/day       Infitration per Area     0.240 m<sup>3/m<sup>3</sup></sup>     80.4002/day       Infitration per Area     0.240 m<sup>3/m<sup>3</sup></sup>     from above       Total Reinfall Captured     7.5 m<sup>3</sup>     rainfall on surface       Total Reinfall Captured     160.41     from above       Total Reinfall Captured     2.51 m<sup>3</sup>     from above       Infitration insidepth     0.47 m<sup>3</sup>     from above       Total Reinfall Captured     7.5 m<sup>3</sup>     from above       Building and Garage Area Rainfall Capture     160.40 m<sup>3</sup><!--</th--><th></th><th>MAR STORM EVENT :</th><th>= 80mm</th><th></th></th></t<>	Total Catchment Area     390.5 m <sup>3</sup> /m <sup>2</sup> see SMP day       Landscape Area (Permeable)     169.5 m <sup>3</sup> /m <sup>2</sup> see SMP day       Building Area (impermeable)     164.1 m <sup>3</sup> /m <sup>2</sup> see SMP day       Garage Area (impermeable)     164.1 m <sup>3</sup> /m <sup>2</sup> see SMP day       Sole of MR Rainfall Event     40 mm     see SMP day       Total Percent Impermeable     52%     see SMP day       Objective: Capture the MAR Roinfall Event     40 mm     see SMP day       Total Resa     390.5 m <sup>3</sup> /m <sup>3</sup> from above       Rainfall on Area     156.8 m <sup>3</sup> from above       Total Reside (Permeable)     160.5 m <sup>3</sup> /m <sup>3</sup> from above       Disconnected Hardscape (Counts as Permeable)     2.86.20 m <sup>3</sup> /m <sup>3</sup> from above       Total Remeable Area     0.240 m <sup>3/m<sup>3</sup></sup> 80.4002/day       Infitration per Area     0.240 m <sup>3/m<sup>3</sup></sup> 80.4002/day       Infitration per Area     0.240 m <sup>3/m<sup>3</sup></sup> from above       Total Reinfall Captured     7.5 m <sup>3</sup> rainfall on surface       Total Reinfall Captured     160.41     from above       Total Reinfall Captured     2.51 m <sup>3</sup> from above       Infitration insidepth     0.47 m <sup>3</sup> from above       Total Reinfall Captured     7.5 m <sup>3</sup> from above       Building and Garage Area Rainfall Capture     160.40 m <sup>3</sup> </th <th></th> <th>MAR STORM EVENT :</th> <th>= 80mm</th> <th></th>		MAR STORM EVENT :	= 80mm	
Landscape Area (Permeable)190.5 m²see SMP dwgDisconnected Hardscape (Counts as Permeable $25.0 m²$ see SMP dwgGarage Area (Inpermeable) $49 m²$ see SMP dwgGarage Area (Inpermeable) $49 m²$ see SMP dwgSold Percent Impermeable $523\%$ $500\%$ Objective: Capture the MAR storn Event $40 mm$ MAR Rainfall Event $300.5 m²$ from aboveRainfall on Area $15.6 m²$ Total Rainfall Volume to be Captured $15.6 m²$ Permeable Surfaces $100.5 m²$ from aboveLandscape Area (Permeable) $100.5 m²$ from aboveTotal Rainfall Colums as Permeable $100.5 m²$ from aboveTotal Rainfall Colums as Permeable $10.7 m²$ $86.400xday$ Infiltration Rate $10 mm/br$ $28.9 m²$ infiltration volumeAvailable Rundf for Capture(b) $7.5 m²$ rainfall on surfaceTotal Rainfall Captured $7.5 m²$ infiltration volumeAvailable Rundf for Capture $100 mm br$ $2 modules²$ Infiltration rak width $0.91 m$ $2 modules²$ Infiltration tark depth $4.57 m²$ from aboveInfiltration tark depth $0.51 m$ $2 modules²$ Infiltration tark depth $0.457 m$ from aboveInfiltration	Landscape Area (Permeable)       160.5 m²       see SMP dwg         Disconnected Handscape (Counts as Permeable)       49 m²       see SMP dwg         Garage Area (Impermeable)       49 m²       see SMP dwg         Total Percent Impermeable       49 m²       see SMP dwg         Soft MAR Rahafa Event       80 mm       see SMP dwg         Soft MAR Rahafa Event       80 mm       fmm above         Rainfall on Area       156 m²       fmm above         Total Rainfall Volume to be Captured       156 m²       fmm above         Landscape Area (Permeable)       160.5 m²       fmm above         Total Rainfall Volume to be Captured       157 m²       fmm above         Total Rainfall Colume to be Captured       167 m²       fmm above         Infitration per Area       0.200 m²/m²       86,4005dey         Infitration Provided       (a)       45.0 m²       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       fmm above       fmm above         Infitration Iank deph       0.457       fmm above       fmm above         Infitration Iank deph       0.457       fmm above       fmm above         Infitration Iank deph	Total Catchment Area		2 see SMP dwa	
Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Total Permeable Area       137.4 m <sup>2</sup> from above         Infiltration Rate       10 mm/hr       2.8E-06 m/s         Infiltration Provided       (a)       45.0 m <sup>3</sup> Bt 400s/day         Infiltration Provided       (a)       45.0 m <sup>3</sup> Bt 400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> resser of (e) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m <sup>2</sup> from above         Building Surface Area       194 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above       from above         Infiltration tank depth       0.91 m       2 modules*       modules*         Total Impermeable Area       3.8 m <sup>3</sup> Pertot       modules*         Tank void space       95%       Atom M       0.012 m <sup>5</sup> /m <sup>3</sup> 86.400s/day         Infiltration tank depth       0.91 m       2 modules*       100       100         Total Tank Volume       3.8 m <sup>3</sup> Pertot       100       100	Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       Landscepe Area (Permeable)       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       26.9 m²       from above         Total Permeable Area       10 mm/hr       2.85.00 m²       from above         Infiltration per Area       10 mm/hr       2.85.00 m²       86.400s/day         Infiltration per Area       10 mm/hr       2.85.00 m²       86.400s/day         Infiltration Pervided       (a)       45.0 m³       86.400s/day         Available Runoff for Capture       (b)       7.5 m³       rainfail on surface         Total Rainfail Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfail Capture       Building Surface Area       40 m²         Garage Surface Area       40 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       91 m       2 modules*         Infiltration tank depth       4.57 m       6 modules*         Infiltration tank depth       4.57 m       86.400x/day         Infiltration on tank width       0.91 m       2 modules*         Infiltration Tank Keight       6.7 m²       86.400x/day         <			2	
Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Total Permeable Area       137.4 m <sup>2</sup> from above         Infiltration Rate       10 mm/hr       2.8E-06 m/s         Infiltration Provided       (a)       45.0 m <sup>3</sup> Bt 400s/day         Infiltration Provided       (a)       45.0 m <sup>3</sup> Bt 400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> resser of (e) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m <sup>2</sup> from above         Building Surface Area       194 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above       from above         Infiltration tank depth       0.91 m       2 modules*       modules*         Total Impermeable Area       3.8 m <sup>3</sup> Pertot       modules*         Tank void space       95%       Atom M       0.012 m <sup>5</sup> /m <sup>3</sup> 86.400s/day         Infiltration tank depth       0.91 m       2 modules*       100       100         Total Tank Volume       3.8 m <sup>3</sup> Pertot       100       100	Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       Landscepe Area (Permeable)       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       26.9 m²       from above         Total Permeable Area       10 mm/hr       2.85.00 m²       from above         Infiltration per Area       10 mm/hr       2.85.00 m²       86.400s/day         Infiltration per Area       10 mm/hr       2.85.00 m²       86.400s/day         Infiltration Pervided       (a)       45.0 m³       86.400s/day         Available Runoff for Capture       (b)       7.5 m³       rainfail on surface         Total Rainfail Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfail Capture       Building Surface Area       40 m²         Garage Surface Area       40 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       91 m       2 modules*         Infiltration tank depth       4.57 m       6 modules*         Infiltration tank depth       4.57 m       86.400x/day         Infiltration on tank width       0.91 m       2 modules*         Infiltration Tank Keight       6.7 m²       86.400x/day         <	Disconnected Hardscape (Counts as Per	meabl∉ 26.9 m	<sup>2</sup> see SMP dwg	ł
Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Fermeable Surfaces       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable, 26.9 m <sup>3</sup> from above         Total Permeable Area       10 mm/hr         Sufficient Rate       10 mm/hr         2.0E-06 m/s       0.240 m <sup>3</sup> /m <sup>2</sup> Infitration Provided       (a)         4.50 m <sup>3</sup> 86.400s/day         Infitration Provided       (b)       7.5 m <sup>3</sup> Available Runoff for Capture       (b)       7.5 m <sup>3</sup> Building and Garage Area Rainfall Capture       Building Surface Area       194.1 m <sup>2</sup> Garage Surface Area       194.1 m <sup>2</sup> from above         Total Rainfall Captured       0.91 m       2 modules*         Module Dimensions (m)       Length       0.457       Infiltration tank width         Lingth 0.914       Width       0.457       From above         Tank void space       95%       Net Storage Volume       3.6 m <sup>3</sup> there tot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> there tot         Lingth torganics       0.00030 m's       2.3 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       Clay         Lingth torganics       0.0003	Total Rainfail Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       107.4 m²         Nominal Inilization Rate       10 mm/hr         2.6E-06 m/s       86.400s/day         Infiltration Provided       (a) 45.0 m³         Infiltration Provided       (a) 45.0 m³         Available Runoff for Capture       (b) 7.5 m³         Total Rainfall Captured       7.5 m³         Building and Garage Area Rainfail Capture         Building Surface Area       49 m³         Carage Surface Area       49 m³         Total Impermeable Area       203.1 m²         Module Dimensions (m)       1.67 m 5         Length       0.914         Width       0.457         Infiltration tark length       4.57 m         Gross Tank Volume       3.8 m³         Gross Tank Volume       0.80 m³         Tank void space       95%         Net Storage Volume       0.23 m³/m²         Gross Tank Volume       0.23 m³/m²         Stardsove Area       1.12 m         Depth of day floatom of sand / top of clayy       1.12 m	Building Area (Impermeable)	<b>154.1</b> m	2 see SMP dwg	
Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Disconnacted Hardscape (Counts as Permeable, 26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> Nominal Infiltration Rate       10 mm/hr         2.8E-06 m/s       0.240 m <sup>3</sup> /m <sup>2</sup> Infiltration Provided       (a)       45.0 m <sup>3</sup> Infiltration Provided       (a)       45.0 m <sup>3</sup> Available Runoff for Capture       (b)       7.5 m <sup>4</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       164.1 m <sup>2</sup> from above         Carage Surface Area       164.1 m <sup>2</sup> from above       from above         Total Rainfall Captured       0.457       from above       from above         Infiltration tank kepth       0.91 m       2 modules*       from above         Infiltration tank width       0.91 m       2 modules*       modules*         Infiltration tank wold space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Plt Test       Infiltration mot sand / top of clay)	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable 26.9 m²       from above         Total Permeable Area       107.4 m²         Nominal Infiltration Rate       10 mm/hr         2.88E-06 m/s       8.400s/day         Infiltration per Area       0.240 m²/m²         Infiltration Provided       (a) 45.0 m³         Available Runoff for Capture       (b) 7.5 m³         Total Rainfall Captured       7.5 m³         Building and Garage Area Rainfall Capture         Building Surface Area       49 m²         Total Impermeable Area       203.1 m²         Module Dimensions (m)       2 modules*         Length 0.914       Width 0.457       Depth 0.457         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.81 m       2 modules*         Infiltration tank width       0.81 m       2 modules*         Infiltration tank kength       4.57 m       5 modules*         Infiltration tank kength       4.57 m       5 modules*         Infiltration tank kength       0.51 m       2 modules*         Infiltration Tank Adepth       0.91 m       2 modules*			2 see SMP dwg	
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable)       160.5 m²       from above         Total Permeable Area       187.4 m²       from above         Infitration Rate       10 mm/hr       2.85.06 m/s       60.40 m²/m²       86.400s/day         Infitration Provided       (a)       45.0 m²       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       164.1 m²       from above         Total Rainfall Captured       0.91 m       2 modules*       from above         Total Impermeable Area       0.91 m       2 modules*         Infitration tank depth       0.91 m       2 modules*         Infitration tank width       0.91 m       2 modules*         Tank void space       95%       Net Storage Volume       (c) 3.6 m³       drain in max. 24hr         Infitration Materials       from Pit Test       Infitration per Area       0.0030 m²       86.400s/day         Cay       1.4E.07 m/s       0.012 m³/m²       86.400s/day	Total Rainfail Volume to be Captured       15.6 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable 26.9 m <sup>2</sup> from above         Total Permeable Area       10 mm/hr         2.8E-06 m/s       187.4 m <sup>2</sup> Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       0.240 m <sup>2</sup> /m <sup>2</sup> Infitration per Area       0.240 m <sup>2</sup> /m <sup>2</sup> Infitration Provided       (a) 45.0 m <sup>2</sup> Available Runoff for Capture       (b) 7.5 m <sup>3</sup> Building and Garage Area Rainfall Capturee         Building and Garage Area Rainfall Capturee         Building Surface Area       49 m <sup>2</sup> Total Impermeable Area       203.1 m <sup>2</sup> Module Dimensions (m)       101 m         Length       0.914         Width       0.457         Infitration tank depth       4.57 m         Gross Tank Volume       3.6 m <sup>2</sup> Casage Volume       (c) 3.6 m <sup>2</sup> Infitration tank depth       4.57 m         Gross Tank Volume       3.6 m <sup>2</sup> Casage Volume       (c) 3.6 m <sup>2</sup> Infitration tank depth       4.57 m         Gross Tank Volume       3.6 m <sup>2</sup>		52%		Ī
Total Rainfail Volume to be Captured       15.6 m³         Total Rainfail Volume to be Captured       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       269 m²       from above         Total Permeable Area       10 mm/hr       2.8E-06 m/s       0.400 m³/m²       86.400s/day         Infiltration Provided       (a)45.0 m³       86.400s/day       infiltration volume         Available Runoff for Capture       (b) 7.5 m³       rainfall on surface         Total Rainfall Captured	Total Rainfail Volume to be Captured       15.6 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable       26.9 m <sup>2</sup> from above         Total Permeable Area       10 mm/hr       2.86.96 m/s         Infiltration per Area       0.240 m <sup>2</sup> /m <sup>2</sup> 86.400s/day         Infiltration Provided       (a)       45.0 m <sup>3</sup> 86.400s/day         Infiltration Provided       (a)       45.0 m <sup>3</sup> 86.400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Building and Garage Area Rainfall Capture       9 m <sup>2</sup> from above         Building Surface Area       49 m <sup>2</sup> from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       4.57 m       5 modules*         Infiltration tank wdth       0.91 m       2 modules*       from bove         Infiltration tank wdth       0.91 m       2 modules*       from bove         Infiltration tank length       4.57 m       5 modules*         Infiltration tank length       4.57 m       6 modules*         Infiltration tank length       4.57 m       86.400s/day         Infiltration Tank Length		80 m	m	9
Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Disconnacted Hardscape (Counts as Permeable, 26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> Nominal Infiltration Rate       10 mm/hr         2.8E-06 m/s       0.240 m <sup>3</sup> /m <sup>2</sup> Infiltration Provided       (a)       45.0 m <sup>3</sup> Infiltration Provided       (a)       45.0 m <sup>3</sup> Available Runoff for Capture       (b)       7.5 m <sup>4</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       164.1 m <sup>2</sup> from above         Carage Surface Area       164.1 m <sup>2</sup> from above       from above         Total Rainfall Captured       0.457       from above       from above         Infiltration tank kepth       0.91 m       2 modules*       from above         Infiltration tank width       0.91 m       2 modules*       modules*         Infiltration tank wold space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Plt Test       Infiltration mot sand / top of clay)	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable 26.9 m²       from above         Total Permeable Area       107.4 m²         Nominal Infiltration Rate       10 mm/hr         2.88E-06 m/s       8.400s/day         Infiltration per Area       0.240 m²/m²         Infiltration Provided       (a) 45.0 m³         Available Runoff for Capture       (b) 7.5 m³         Total Rainfall Captured       7.5 m³         Building and Garage Area Rainfall Capture         Building Surface Area       49 m²         Total Impermeable Area       203.1 m²         Module Dimensions (m)       2 modules*         Length 0.914       Width 0.457       Depth 0.457         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.81 m       2 modules*         Infiltration tank width       0.81 m       2 modules*         Infiltration tank kength       4.57 m       5 modules*         Infiltration tank kength       4.57 m       5 modules*         Infiltration tank kength       0.51 m       2 modules*         Infiltration Tank Adepth       0.91 m       2 modules*	50% of MAR Rainfall Event	40 m	m	
Total Rainfall Volume to be Captured       15.8 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable       26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> from above         Infitration Perviced       (a)	Total Rainfall Volume to be Captured	Total Area		N MARCH AND TO MARCH 10275	
remeable Surfaces         Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Total Permeable Area       160.5 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> from above         Nominal Infitration Rate       10 mm/hr       2.8E-06 m/s       86.400s/day         Infitration per Area       (a)       45.0 m <sup>3</sup> infitration volume         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> reinfall on surface         Yotal Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         total mermeable Area       103.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.457       Depth       0.457         Infitration tank depth       0.91 m       2 modules*       Indiues*         Infitration tank depth       0.91 m       2 modules*       Indiues*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot       766.400s/day         Tank void space       95%       86.400s/day       86.400s/day         Infitration tank depth       0.91 m       2 modules*       160.1 m <sup>3</sup> Infitration tank width       0.91 m       2 modules*       160.00s/day         Infitration Tank Area       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup>	remeable Surfaces         Landscape Area (Permeable)         Disconnected Hardscape (Counts as Permeable)         7 total Permeable Area         Nominal Infiltration Rate         187.4 m <sup>2</sup> Nominal Infiltration Pervice         Available Runoff for Capture         Available Runoff for Capture         Available Runoff for Capture         Available Runoff for Capture         Building Surface Area         Garage Surface Area         49 m <sup>2</sup> Total Impermeable Area         154.1 m <sup>2</sup> Building Surface Area         49 m <sup>2</sup> Total Impermeable Area         203.1 m <sup>2</sup> Infiltration tank depth         0.91 m       2 modules <sup>2</sup> Infiltration tank length       0.91 m         4.57 m       5 modules <sup>2</sup> Gross Tank Volume       3.8 m <sup>3</sup> Clay       1.4E-07 m/s         0.012 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Depth of cay lobation of sand / top of clay)       1.12 m         Infiltration Tank Area       Infiltration per Area         Sandy with organics       0.33 m <sup>3</sup> Clay       1.4E-07 m/s         0.012 m <sup>3</sup> /m <sup>3</sup> 86.400s/day <td>Rainfall on Area</td> <td>15.6 m</td> <td>3</td> <td>ſ</td>	Rainfall on Area	15.6 m	3	ſ
Landscape Area (Permeable)160.5 m² trom above trom above form abovefrom above trom above trom aboveDisconnected Hardscape (Counts as Permeable Total Permeable Area10mm/hr 2.8E-06 m/sNominal Infiltration Rate10mm/hr 2.8E-06 m/sInfiltration per Area0.240 m²/m²86.400s/day infiltration volumeAvailable Runoff for Capture(b)7.5 m³rainfall on surfaceAvailable Runoff for Captured7.5 m³rainfall on surfaceOtal Rainfall Captured7.5 m³lesser of (a) and (b)uilding and Garage Area Rainfall CaptureBuilding Surface Area49 m² 2.03.1 m²Module Dimensions (m)Length0.457DepthLength0.914Width0.91 m 4.57 m2 modules* 1 modules*Infiltration tank depth0.91 m 4.57 m2 modules* 6 modules*Tank void space95% 95%86.400s/dayNet Storage Volume(c)3.6 m³ 4 drain in max. 24hrInfiltration tank keigh0.012 m²/m² 86.400s/dayInfiltration Tank Area0.00030 m/s 0.0030 m/s0.012 m²/m² 86.400s/dayDepth of cay (bottom of sand / top of day) Tank Height Exposur Sandy with organics 0.32 m Tank Height Exposur Sandy with organics 0.53 m³ Clay0.012 m²/m³ 1.12 m 0.60 m 1.12 m 0.61 m²Depth of cay (bottom of sand / top of day) 0.012 m²/m³1.12 m 1.60 m² 1.12 m 0.60 m²Depth of day (bottom	Landscape Area (Permeable) Disconnected Hardscape (Counts as Permeable Total Permeable Area Nominal Infitration Rate 187.4 m <sup>2</sup> Nominal Infitration Rate 10 mm/hr 2.8E-06 m/s 101 ftration Provided Available Runoff for Capture Building and Garage Area Rainfall Capture Building and Garage Area Rainfall Capture Building Surface Area Garage Surface Area 154.1 m <sup>2</sup> 100 mm Ar 160 mm <sup>2</sup> /m <sup>2</sup> 165.7 m <sup>3</sup> 160 m <sup>3</sup>	otal Rainfall Volume to be Captured	<u>15.6</u> m	3	
Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable       28.9 m <sup>2</sup> from above         Total Permeable Area       10 mm/hr       2.8.0 m <sup>3</sup> from above         Infiltration Rate       10 mm/hr       2.8.0 m <sup>3</sup> 86.400s/day         Infiltration Per Area       0.240 m <sup>3</sup> /m <sup>3</sup> 86.400s/day       infiltration volume         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured <b>7.5</b> m <sup>3</sup> rainfall on surface         Building and Garage Area Rainfall Capture       Building Surface Area       49 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>3</sup> Module Strate Area       203.1 m <sup>3</sup> Module Dimensions (m)       Ength       0.457       Emodules*         Infiltration tank depth       0.51 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Periot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration provided       3.6 m <sup>3</sup> from Above	Landscape Area (Permeable)       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       26.9 m²       from above         Total Permeable Area       0.240 m²/m²       86.400s/day         Infiltration Per Area       0.240 m²/m²       86.400s/day         Infiltration Provided       (a)       45.0 m³       infiltration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.6 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building and Garage Area       49 m²       from above         Building and Garage Area       154.1 m²       from above       from above         Total Impermeable Area       203.1 m²       loadve       modules*         Infiltration tank depth       0.91 m       2 modules*       modules*         Infiltration tank length       4.57 m       genodules*       modules*         Infiltration tank length       4.57 m       genodules*       modules*         Infiltration tank length       0.457       endules*       modules*         Infiltration tank length       0.57 m       from above       from above         Infiltration tank length       0.457       endules*       inotta	Parmaabla Surfacas			
Disconnected Hardscape (Counts as Permeable       26.9 m²       from above         Total Permeable Area       187.4 m²       from above         Nominal Infiltration Rate       10 mm/hr       2.8E-06 m/s       0.240 m³/hr³       86.400s/day         Infiltration Provided       (a)       45.0 m³       infiltration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Building and Garage Area Rainfall Capture       203.1 m²       from above       from above         Module Dimensions (m)       0.91 m       2 modules*       from above         Infiltration tank kepth       0.91 m       2 modules*       from above         Infiltration tank kepth       0.91 m       2 modules*       groutues*	Disconnected Hardscape (Counts as Permeable       26.9 m²       from above         Total Permeable Area       10 mm²hr         Nominal Infiltration Rate       10 mm²hr         2.8E-06 m/s       0.240 m²/m²         Infiltration Per Area       0.240 m²/m²         Infiltration Provided       (a)         Available Runoff for Capture       (b)         Available Runoff for Capture       (b)         Available Runoff for Capture       (b)         Building and Garage Area Rainfall Capture       164.1 m²         Building Surface Area       164.1 m²         Garage Surface Area       164.1 m²         Total Impermeable Area       203.1 m²         Module Dimensions (m)       0.457         Length       0.91 m       2 modules*         Gross Tank Volume       3.8 m²       "Per let         Tank void space       95%       86,400s/day         Net Storage Volume       (c)       3.6 m²       66,400s/day         Clay       1.4E-07 m/s       0.012 m²/m²       86,400s/day         Infitration Area       0.00030 m/s       2.63 m²       86,400s/day         Depth of day (bottom of sand / top of clay)       0.12 m²/m²       86,400s/day         Infitration Provided       3.0 m²		160 5 m	<sup>2</sup> from above	
Total Permeable Area       10,4 m         Nominal Infiltration Rate       10 mm/hr         2.8E-06 m/s         Infiltration Provided       (a)	Total Permeable Area       187.4 m <sup>2</sup> Nominal Infiltration Rate       10 mm/hr         Infiltration Provided       2.8E-06 m/s         Infiltration Provided       (a)         45.0 m <sup>3</sup> 86,400s/day         Infiltration Provided       (a)         Available Runoff for Capture       (b)         Total Rainfall Captured       7.5 m <sup>3</sup> Building and Garage Area Rainfall Capture       164.1 m <sup>3</sup> Building and Garage Area Rainfall Capture       164.1 m <sup>3</sup> Building and Garage Area Rainfall Capture       164.1 m <sup>3</sup> Building and Garage Area Rainfall Capture       164.1 m <sup>3</sup> Module Dimensions (m)       170         Length       0.457         Infiltration tank kepth       0.91 m         1071       2 modules*         Infiltration tank kepth       0.91 m         1071       2 modules*         Infiltration tank kepth       0.91 m         1071       1670 m/s         1071       170         Infiltration Materials       from Plt Test         Infiltration Materials       from Plt Test         1072       170 m/s       0.012 m <sup>3</sup> /m <sup>3</sup> 1072       170 m/s       0.012 m <sup>3</sup> /m <sup>3</sup> <t< td=""><td></td><td></td><td></td><td></td></t<>				
Nominal Infiltration Rate       10       mm/hr       2.8E-06       m/s         Infiltration per Area       0.240       m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Infiltration Provided       (a)       45.0       m <sup>3</sup> infiltration volume         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m <sup>2</sup> from above         Garage Surface Area       90.11 m       2 modules*       from above         Garage Surface Area       90.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.6 m <sup>3</sup> drain in max: 24hr         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       0.6 m <sup>3</sup> drain in max: 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.000 m/s       2.6.3 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Infiltration Tank Area       0.80 m       from Pit Test       from Pit Test         Infilt	Nominal Infitration Rate       10       mm/hr         Infitration Provided       0.240 m³/m²       86,400s/day         Infitration Provided       (a)       450 m³       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       rainfall on surface         Building and Garage Area Rainfall Capture       Building Surface Area       49 m²         Building Surface Area       49 m²       from above         Total Impermeable Area       203.1 m³       Module Dimensions (m)       2 modules*         Length       0.914       Width       0.457       1m above         Infiltration tank depth       0.91 m       2 modules*       1m above         Infiltration tank width       0.91 m       2 modules*       1m above         Tank vold space       95%       Net Storage Volume       (c)       3.6 m³       rank volds/day         Clay       1.4E-07 m/s       0.012 m²/m²       86,400s/day       86,400s/day         Clay       1.4E-07 m/s       0.012 m²/m²       86,400s/day       1m above         Depth of lop of tank       0.80 m       7m Pt Test       0.60 m       32.5 m³       1m Pt Test         Depth of top of				
Total Rainfall Captured7.5 m³lesser of (a) and (b)Building Surface Area154.1 m²from aboveGarage Surface Area154.1 m²from aboveTotal Impermeable Area203.1 m²from aboveModule Dimensions (m)	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.457       peptide         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Per lot         Tank void space       95%       sed,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       0.80 m       from Pit Test       1nfiltration per Area         Depth of log (bottom of sand / top of clay)       0.29 m       3.400s/day       11.12 m       from Pit Test         Infiltration Provided       0.32 m       1.31 m       from Pit Test       0.60 m <sup>3</sup> 1.61 m         Surface Area of tank Clay       0.59 m <sup>3</sup> Surface Area of tank Clay       0.57 m <sup>3</sup>		107.4 11		ļ
Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       194.1 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)         Net Storage Volume       0.0030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Upth of day (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of lap (bottom of sand / top of clay)       0.59 m       3.22 m         Tank Height Exposus Clay       0.59 m       Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 1.11 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.457       endules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Set,400s/day       0.12 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day       112 m       form Pit Test         Infiltration Tank Area       Depth of top of tank       0.80 m       Tank Height Exposur Sandy with organics       0.32 m       Tank	Nominal Infiltration Rate			
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       154.1 m²       from above       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Tank Area       Infiltration per Area       S6,400s/day       Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       112 m       from Pit Test         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       0.80 m       Tank Height Exposur Sandy with organics       0.32 m         Surface Area of tank Clay       0.59 m²       Surface Area of tank Clay       0.59 m²         Surface Area of tank Clay       0.91 m³       infiltration volume       Total	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       19 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       6400s/day       6400s/day       613 m <sup>3</sup> 86,400s/day       614 max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       614 max. 24hr       614 max. 24hr       614 max. 24hr       614 max. 24hr       616 max. 24hr			2 2	8
Total Rainfall Captured7.5 m²lesser of (a) and (b)Building and Garage Area Rainfall Capture Building Surface Area154.1 m²from aboveGarage Surface Area154.1 m²from aboveTotal Impermeable Area203.1 m²from aboveModule Dimensions (m)	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       1       1       2         Length       0.914       Width       0.457       1         Infiltration tank depth       0.91 m       2       modules*         Infiltration tank depth       0.91 m       2       modules*         Infiltration tank depth       0.91 m       2       modules*         Infiltration tank length       4.57 m       5       modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       0.12 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       rank Height Exposur Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Sandy with organics       53.8 m <sup>3</sup> Clay       0.11 m <sup>3</sup> Surface Area of tank Sandy with				I
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       154.1 m²       from above       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Tank Area       Infiltration per Area       S6,400s/day       Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       112 m       from Pit Test         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       0.80 m       Tank Height Exposur Sandy with organics       0.32 m         Surface Area of tank Clay       0.59 m²       Surface Area of tank Clay       0.59 m²         Surface Area of tank Clay       0.91 m³       infiltration volume       Total	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       19 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       6400s/day       6400s/day       613 m <sup>3</sup> 86,400s/day       614 max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       614 max. 24hr       614 max. 24hr       614 max. 24hr       614 max. 24hr       616 max. 24hr	Infiltration Provided	(a) <u>45.0</u> m	infiltration volume	i
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       If an above       from above         Garage Surface Area       154.1 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Imilitration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank vold space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Tank Area       Infiltration per Area       S6,400s/day       Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Lengt hof top of tank       0.80 m       Tank Height Exposur Sandy with organics       0.32 m       from Pit Test       from Pit Test         Infiltration Tank Area       Depth of top of tank       8.0 m²       86,400s/day       Clay       1.12 m       from Pit Test         Surface Area of tank Clay       0.59 m       Surface Area of tank Clay       0.59 m       Surface Area of tank Clay       0.50 m²       Surface Area of tank Clay       0.50 m²         Surface Area of tank Clay       0.50 m³       infiltration volume       Total	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>3</sup> from above         Garage Surface Area       19 m <sup>3</sup> from above       from above         Total Impermeable Area       203.1 m <sup>3</sup> from above         Module Dimensions (m)       Length       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain In max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       Glay       Glay       1.12 m       form Pit Test       86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day       Glay       Glay       Glay       Glay       Glay       1.12 m       form Pit Test       Surface Area of tank Clay       0.32 m       Tank Height Exposur Sandy with organics       0.32 m <t< td=""><td>Available Runoff for Capture</td><td>(b) 7.5 m</td><td><sup>3</sup> rainfall on surface</td><td></td></t<>	Available Runoff for Capture	(b) 7.5 m	<sup>3</sup> rainfall on surface	
Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Imilitration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Tank void space       95%       Net Storage Volume       (c) 3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       0.012 m³/m²       86,400s/day         Infiltration Tank Area       0.80 m       7       3.8 m³       Clay       0.59 m         Surface Area of tank Sandy with organics       2.05 m²       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       infiltration volume         Total (d)       53.9 m³	Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank idepth       0.91 m       2 modules*         Infiltration tank identh       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Att Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       2(a)         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       1(a)         Infiltration Tank Area       0.80 m       modules*       0.80 m       1.4E-07 m/s       0.32 m         Depth of top of tank       0.80 m       0.80 m       Tank Height Exposur Clay       0.59 m       3.2 m         Surface Area of tank Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m       3.0 m²         Surface Area of tank Clay       8.0 m²       0.1 m³       infiltration volume         Total Tank Height Exposur Clay       0.1 m³       infiltration vol	Total Rainfall Captured	<u>7.5</u> m	<sup>3</sup> lesser of (a) and (b	
Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)	Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.91 m       2 modules*         Infiltration tank idepth       0.91 m       2 modules*         Infiltration tank identh       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Att Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       Clay       Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       0.012 m³/m²       86,400s/day         Infiltration Tank Area       0.00030 m/s       2.6.3 m³/m²       86,400s/day       0.012 m³/m²       86,400s/day         Depth of top of tank       0.300 m/s       0.6.3 m³/m²       86,400s/day       0.012 m³/m²       86,400s/day         Infiltration Tank Karea       Depth of top of tank       0.30 m²       0.59 m       0.50 m       0.00 m²       0.01 m³       0.01 m³       infiltration volume				_
Garage Surface Area       49 $m^2$ from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day       Infiltration Tank Area         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       Depth of top of tank         Tank Height Exposur Clay       0.59 m       surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration	Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       smodules*         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.0030 m/s       26.3 m³1/m²       86.400s/day         Clay       1.4E-07 m/s       0.012 m³1/m²       86.400s/day         Infiltration Tank Area       0.800 m       from Pit Test       0.80 m         Depth of top of tank       0.80 m       1.12 m       from Pit Test         Depth of top of tank       0.80 m       3.20 m       3.32 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       2.05 m²         Surface Area of tank Clay       8.0 m²       1.11 m³       from pit Test         Infiltration Provided       Sandy with organics       53.8 m³       Clay		454.4	2	
Total Impermeable Area $203.1 \text{ m}^2$ Module Dimensions (m) Length0.914Width0.457Infiltration tank depth0.91 m2 modules*Infiltration tank width0.91 m2 modules*Infiltration tank length4.57 m6 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration Tank Area0.00030 m/s26.3 m³/m²Depth of clay (bottom of sand / top of clay)1.12 mInfiltration Tank Area0.80 mDepth of top of tank0.32 mTank Height Exposur Sandy with organics0.32 mTank Height Exposur Sandy with organics2.05 m²Surface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided(e)Sandy with organics53.8 m³Clay0.1 m³Total(d)Total(d)Total Tank Capture Provided(e)Sandy with organics53.8 m³Clay0.1 m³Total Rainfall Captured8.1 m³Total Rainfall Volume to be Captured15.6 m³Total Rainfall Volume to be Captured15.6 m³Form above9 from abovePermeable Area Capture7.5 m³Building and Garage Area Capture7.5 m³Total Rainfall Olume to be Captured15.6 m³Total Rainfall Volume to be Captured	Total impermeable Area       203.1 m²         Module Dimensions (m)       Length 0.914       Width 0.457       Depth 0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       S6.400s/day       Clay       Clay       1.4E-07 m/s       0.012 m³/m²       86.400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86.400s/day       0.80 m       Trank Height Exposur Sandy with organics       0.32 m       from Pit Test       0.80 m         Depth of top of tank       0.80 m       0.59 m       Surface Area of tank Calay       8.0 m²       Infiltration Provided       Sandy with organics       2.05 m²       Surface Area of tank Calay       8.0 m²       Infiltration volume         Total       (d)       53.9 m³       infiltration volume       Total       (d)       53.9 m³       infiltration volume	the subscription of the Control of t			
Module Dimensions (m)Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank length4.57 m5 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Plt TestInfiltration Materials0.00030 m/s26.3 m³/m²Sandy with organics0.00030 m/s26.3 m³/m²Sandy with organics0.00030 m/s26.3 m³/m²Depth of op of tank0.012 m³/m²Depth of op of tank0.80 mTank Height Exposur Clay1.12 mTank Height Exposur Clay0.59 mSurface Area of tank Clay8.0 m²Surface Area of tank Clay8.0 m²Infiltration ProvidedSandy with organicsSandy with organics53.8 m³Clay0.1 m³Total Tank Capture Provided(e)Surface Area of tank Clay8.1 m³Infiltration volumeTotal Tank Capture Provided(f)Available Runoff for Capture(f)Total Rainfall Captured15.6 m³Total Rainfall Volume to be Captured15.6 m³Permeable Area Capture7.5 m³Permeable Area Capture7.5 m³Infiltration advoePermeable Area Capture7.5 m³Permeable Area CaptureTotal Rainfall Olume to be CapturedTotal Rainfall Olume to be CapturedTota	Module Dimensions (m)       Length       0.914       Width       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       0.80 m         Tank Height Exposur Clay       0.32 m       Tank Height Exposur Clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       clay       infiltration volume         Total       (d)       53.9 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume         Tank Height Exposur Clay       0.0 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume		· · · · · · · · · · · · · · · · · · ·		
Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank width0.91 m2 modules*Infiltration tank length4.57 m5 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration Materialsfrom Pit TestInfiltration Tank Area0.00030 m/sDepth of clay (bottom of sand / top of clay)1.12 mDepth of top of tank0.32 mTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided53.8 m³Clay0.1 m³Total Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)8.1 m³lesser of (e) and (f)Total Rainfall Captured15.6 m³Permeable Area Capture7.5 m³Permeable Area Capture7.5 m³Building and Garage Area Capture7.5 m³Total Rainfall Volume to be Captured15.6 m³Arom abovePermeable Area Capture7.5 m³Infiltration garage Area CaptureArom aboveSurface Area CaptureTotal Rainfall Volume to be Captured15.6 m³Arom aboveSurface Area CaptureTotal Rainfall Volume to be Captured <td>Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank width0.91 m2 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³ drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration per AreaSandy with organics0.0030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayUnfiltration Tank Area0.80 mfrom Pit TestDepth of clay (bottom of sand / top of clay)1.12 mfrom Pit TestDepth of top of tank0.32 mfrom Pit TestTank Height Exposur Sandy with organics0.32 mfrom Pit TestSurface Area of tank Sandy with organics20.5 m²surface Area of tank Sandy with organicsClay0.11 m³clay0.11 m³Clay0.11 m³infiltration volumeTotal(d)53.9 m³infiltration volumeTotal Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)8.1 m³rainfall on surfaceTotal Rainfall Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved</td> <td>Total Impermeable Area</td> <td>203.1 m</td> <td></td> <td></td>	Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank width0.91 m2 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³ drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration per AreaSandy with organics0.0030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayUnfiltration Tank Area0.80 mfrom Pit TestDepth of clay (bottom of sand / top of clay)1.12 mfrom Pit TestDepth of top of tank0.32 mfrom Pit TestTank Height Exposur Sandy with organics0.32 mfrom Pit TestSurface Area of tank Sandy with organics20.5 m²surface Area of tank Sandy with organicsClay0.11 m³clay0.11 m³Clay0.11 m³infiltration volumeTotal(d)53.9 m³infiltration volumeTotal Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)8.1 m³rainfall on surfaceTotal Rainfall Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved	Total Impermeable Area	203.1 m		
Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       111       B6,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       0.80 m         Tank Height Exposur Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank       Sandy with organics       23.8 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       lesser of (e) and (f)         Total Rainfall C	Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86.400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86.400s/day       Infiltration Tank Area         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       Depth of top of tank         Tank Height Exposur Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Clay       8.0 m²       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume         Total Tank Capture Provided       (e) <u>57.5</u> m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       lesser of (e) and (f)         Total Rainfall Ca	Module Dimensions (m)			
Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86.400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86.400s/day       Infiltration Tank Area         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Surface Area of tank       0.80 m       from Pit Test         Surface Area of tank Clay       0.59 m       surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       clay	Infiltration tank length       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       *Per lot         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Depth of op of tank       0.80 m       from Pit Test       from Pit Test         Depth of op of tank       0.80 m       0.80 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Sandy with organics       2.05 m²       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       Clay       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Tank Capture Provided        8.1 m³       lesser of (e) and (f)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       15.6 m³       from above <td>Length 0.914 Width 0.45</td> <td>57 Depth 0.</td> <td>457</td> <td></td>	Length 0.914 Width 0.45	57 Depth 0.	457	
Infiltration tank length       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.80 m       from Pit Test       from Pit Test         Depth of top of tank       0.80 m       from Pit Test       Surface Area of tank Clay       0.59 m         Surface Area of tank Clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       2.05 m²       Surface Area of tank Clay       0.01 m³         Clay       0.1 m³       infiltration volume       Total       (d)       53.8 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       infiltration surface         Total Tank Capture Provided       (e) <u>57.5 m³</u> (c) + (d)         Available Runoff for Capture       (f)	Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       *Per lot         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Infiltration Tank Area       0.80 m       from Pit Test       from Pit Test         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of clay (bottom of sand / top of clay)       0.80 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank       Sandy with organics       2.05 m²       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       Clay       (a)       53.9 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume       (b) + (d)       Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)       Available Runoff for Capture       (	Infiltration tank denth	0.91 m	2 modules	*
Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       from Pit Test       0.80 m         Tank Height Exposur Sandy with organics       0.32 m       surface Area of tank Sandy with organics       0.35 m²         Surface Area of tank Sandy with organics       2.05 m²       surface Area of tank Clay       8.0 m²         Infiltration Provided	Gross Tank Volume       3.8 m³       *Per lot         Tank vold space       95%         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       0.80 m         Tank Height Exposur Sandy with organics       0.32 m         Surface Area of tank Sandy with organics       2.05 m²         Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Infiltration Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture				
Tank void space       95%         Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Depth of top of tank       0.80 m       from Pit Test       from Pit Test         Depth of top of tank       0.80 m       7mr <sup>2</sup> 86,400s/day         Tank Height Exposur Sandy with organics       0.32 m       from Pit Test         Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> infiltration volume         Total       (d)       53.8 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e) <u>57.5 m<sup>3</sup></u> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured <u>8.1 m<sup>3</sup></u> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garag	Tank void space       95%         Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day       86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       nank Height Exposur Clay       0.59 m         Surface Area of tank Sandy with organics       0.32 m       surface Area of tank Clay       8.0 m <sup>2</sup> Surface Area of tank Clay       0.59 m       surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> clay	Infiltration tank length			*
Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       0.80 m         Tank Height Exposur Sandy with organics       0.32 m       7ank Height Exposur Clay       0.59 m         Surface Area of tank Clay       8.0 m <sup>2</sup> 0.59 m         Surface Area of tank Clay       8.0 m <sup>2</sup> 0.11 m <sup>3</sup> Clay	Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of op of tank       0.80 m       7       86,400s/day         Tank Height Exposur Sandy with organics       0.32 m       7         Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay         Surface Area of tank Clay       8.0 m <sup>2</sup> 1.11 m <sup>3</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area C	Gross Tank Volume	3.8 m	*Per lot	
Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of cop of tank       0.80 m       7ank Height Exposur Clay       0.59 m         Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> clay       0.1 m <sup>3</sup> Clay       0.1 m <sup>3</sup> infiltration volume       Total       (d) 53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.32 m       Tank Height Exposur Sandy with organics       0.32 m         Surface Area of tank Clay       0.59 m       Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> clay         Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e) <u>57.5</u> m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured <u>8.1</u> m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup></sup>	Tank void space	95%		
Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       0.80 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       7ank Height Exposur Sandy with organics       0.32 m       7ank Height Exposur Sandy with organics       0.32 m         Tank Height Exposur Sandy with organics       0.59 m       Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Beuilding and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess	271		<sup>3</sup> drain in max 24br	
Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       53.8 m <sup>3</sup> Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       (f)         Total Rainfall Captured       15.6 m <sup>3</sup> Infiltration be Capture       7.5 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup>	Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved		(0) 0.0 11	MIGHT III HIMA. 2 HI	
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       (f)         Total Rainfall Captured       15.6 m³         Infiltration volume       15.6 m³         Permeable Area Capture       7.5 m³         Building and Garage Area Capture       8.1 m³         Sufface Area Capture       8.1 m³	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved	Infiltration Materials from Pit Test	171		
Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       53.8 m <sup>3</sup> Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       (f)         Total Rainfall Captured       15.6 m <sup>3</sup> Infiltration volume       15.6 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup>	Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³         Available Runoff for Capture       (f)       8.1 m³         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved	Sandy with organics 0.00030 m/s		source and s	
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m³       rainfall on surface         Total Rainfall Captured       15.6 m³         For tal Rainfall Volume to be Captured       15.6 m³         Permeable Area Capture       7.5 m³         Building and Garage Area Capture       8.1 m³	Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved		0.012 m	<sup>3</sup> /m <sup>2</sup> 86,400s/day	
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e) <u>57.5 m³</u> (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured <u>8.1 m³</u> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved		of clav) 110 m	from Dit Test	
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e) <u>57.5 m³</u> (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured <u>8.1 m³</u> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved		27		
Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       53.8 m <sup>3</sup> Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       (f)         Total Rainfall Captured       15.6 m <sup>3</sup> Infiltration be Capture       7.5 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup>	Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e) <u>57.5 m³</u> Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured <u>8.1 m³</u> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved	Tank Height Exposur Sandy with org	ganics 0.32 m		
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e) <u>57.5 m³</u> (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured <u>8.1 m³</u> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved				
Infiltration Provided Sandy with organics $53.8 \text{ m}^3$ $Clay0.1 \text{ m}^3Total0.1 \text{ m}^353.9 \text{ m}^3infiltration volumeTotal Tank Capture Provided(e) 57.5 \text{ m}^3(c) + (d)Available Runoff for Capture(f)8.1 \text{ m}^3rainfall on surfaceTotal Rainfall Captured8.1 m^3lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 \text{ m}^3from abovePermeable Area Capture7.5 \text{ m}^3from aboveBuilding and Garage Area Capture8.1 \text{ m}^3from above$	Infiltration Provided Sandy with organics 53.8 m <sup>3</sup> Clay <u>0.1</u> m <sup>3</sup> Total (d) 53.9 m <sup>3</sup> infiltration volume Total Tank Capture Provided (e) <u>57.5</u> m <sup>3</sup> (c) + (d) Available Runoff for Capture (f) 8.1 m <sup>3</sup> rainfall on surface <b>Total Rainfall Captured </b> [f] 8.1 m <sup>3</sup> lesser of (e) and (f) Total Rainfall Volume to be Captured 15.6 m <sup>3</sup> from above Permeable Area Capture 7.5 m <sup>3</sup> from above Building and Garage Area Capture 8.1 m <sup>3</sup> from above				
Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> Image: Comparison of the computed of the	Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> Image: Comparison of the computer of the	Surface Area of tank Clay	8.0 m	-	
Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> Image: Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup>	Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)       53.9 m <sup>3</sup> Image: Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved	Infiltration Provided			
Clay $0.1 \text{ m}^3$ Totalinfiltration volumeTotal Tank Capture Provided(e) $57.5 \text{ m}^3$ (c) + (d)Available Runoff for Capture(f) $8.1 \text{ m}^3$ rainfall on surfaceTotal Rainfall Captured8.1 m³lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from above	Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved		53.8 m	3	
Total(d) $53.9 \text{ m}^3$ infiltration volumeTotal Tank Capture Provided(e) $57.5 \text{ m}^3$ (c) + (d)Available Runoff for Capture(f) $8.1 \text{ m}^3$ rainfall on surfaceTotal Rainfall Captured(f) $8.1 \text{ m}^3$ lesser of (e) and (f)Total Rainfall Volume to be Captured $15.6 \text{ m}^3$ from abovePermeable Area Capture $7.5 \text{ m}^3$ from aboveBuilding and Garage Area Capture $8.1 \text{ m}^3$ from above	Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved	101 ADA			
Total Tank Capture Provided       (e) <u>57.5</u> m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f) 8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Tank Capture Provided       (e) <u>57.5</u> m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured <u>8.1</u> m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved				
Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> of mabove         Excess Runoff       0 m <sup>3</sup> Objective Achieved				
Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Rainfall Captured8.1 m³lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved				
Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved	lenningentisterenterenter ist beneftstelten freueren instander om en		3	
Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Permeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved	Total Rainfall Captured	<u>8.1</u> m	lesser of (e) and (f)	
Building and Garage Area Capture 8.1 m <sup>-</sup> from above	Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved	Total Rainfall Volume to be Captured	15.6 m	<sup>3</sup> from above	
Building and Garage Area Capture 8.1 m <sup>-</sup> from above	Excess Runoff 0 m <sup>3</sup> Objective Achieved	Permeable Area Capture			
		Building and Garage Area Capture	8.1 m	<sup>3</sup> from above	
		Excess Runoff	0 m	<sup>3</sup> Objective Achieve	
H CALE					

D S/C LOCATIONS FOR 410				ш 1:100 Д
G PLAN TO DWG SET.				ວິ ທີ່Vertical
NV COMMENTS	5	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING	File No. <b>17-01</b>
	4	FEB.20.2019	REVISED BASED ON SEPT 5, 2018 CITY LETTER	Drawing No.
	No.	Date	Description	ву МС

INFILTRATION 4.6m L x 0.9m TOP OF TANK

BOTTOM OF 1 SEE TYPICAL

BY CNV CREV INSTALL 9.2m SERVICE @ M IC TO MMCD S IC INV = 62.00

S/C INV @ MA MAIN INV @ S \*\*SAME NOTE

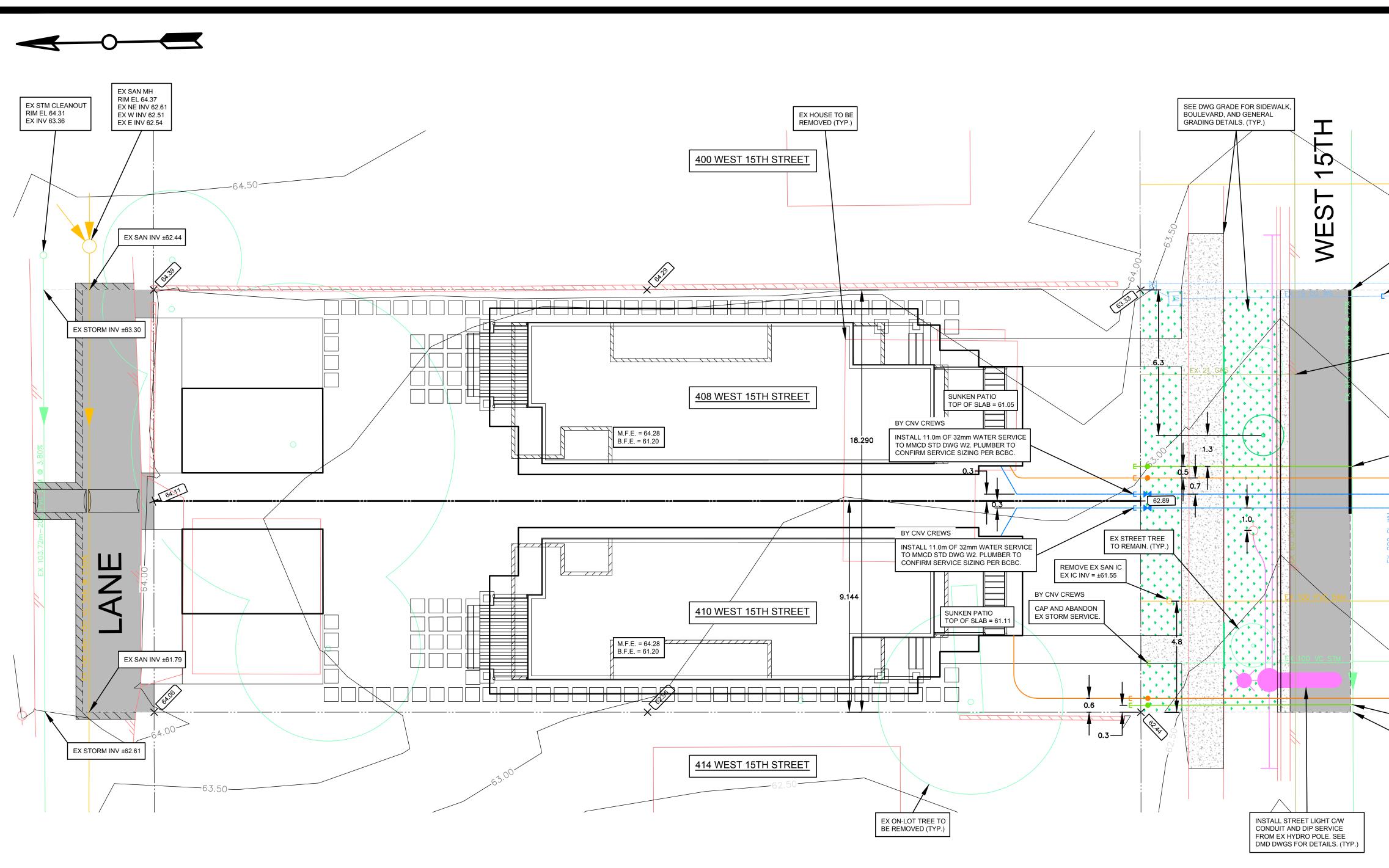
INFILTRATION 4.6m L x 0.9m TOP OF TANK BOTTOM OF 1

SEE TYPICAL BY CNV CREW

INSTALL 9.2m SERVICE @ M IC TO MMCD S IC INV = 61.50

S/C INV @ MA MAIN INV @ S \*\*SAME NOTE

EX STORM IN



### GENERAL NOTES

- 1. THE TERM "ENGINEER" REFERS TO FRESCO ENGINEERING. THEIR CONTACT, MARCO CUSANO, CAN BE REACHED AT 604.653.1683 OR MCUSANO@FRESCOENGINEERING.CA.
- ALL CONSTRUCTION IN THE CITY OF NORTH VANCOUVER RIGHT OF WAY SHALL CONFORM TO THE ALL CONSTRUCTION IN THE CITY OF NORTH VANCOUVER RIGHT OF WAT GIVE COMPLEXING THE AND ADDRESS OF THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE'S LATEST VERSION OF THE MASTER MUNICIPAL CONSTRUCTION AND INFRASTRUCTURE'S 10. TRAFFIC CONTROL TO CONFORM TO THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE'S AS SPECIFICATIONS (SCHEDULE 'C' OF BYLAW 6200) AND STANDARD DRAWINGS.
- ALL PERMITS AND APPROVALS REQUIRED FOR THE PROPOSED WORKS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO WORKS COMMENCING.
- 4. LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE BEEN BASED ON THE MUNICIPALITY'S RECORDS AND THIRD PARTY UTILITY RECORDS. THE LOCATION OF ALL EXISTING SERVICES IS TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO PERMITTING / CONSTRUCTION, AND THE CONTRACTOR IS TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS PRIOR TO CONSTRUCTION.
- ALL CUTS IN EXISTING ASPHALT SHALL BE MADE VERTICALLY WITH A SAW BLADE, 100mm DEEP, AND SHALL BE REPLACED WITH A MINIMUM OF 100mm ASPHALT, FOLLOWING SUITABLE BACKFILL AND COMPACTION. ALL PAVEMENT, DRIVEWAYS, BOULEVARDS, FENCES, ETC. TO BE RESTORED TO THE SATISFACTION AND APPROVAL OF THE MUNICIPALITY WHEN NO IMPROVEMENT IS PROPOSED UNDER THIS CONTRACT.
- THE ENGINEER 48HRS PRIOR TO ANY REQUIRED INSPECTION.
- '. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN WORKING NEAR EXISTING SERVICES. ANY DISTURBED SERVICES SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER AND THE CITY.

- 8. THE ENGINEER WILL NOTIFY THE CITY AT LEAST 24HRS IN ADVANCE OF WORK OUTSIDE THE PROPERTY BEING STARTED, RESTARTED, OR WHEN INSPECTIONS ARE REQUIRED.
- SURROUNDING ROADWAY TO BE SWEPT DAILY. EXISTING ROADWAY NOT INCLUDED IN THE PROPOSED WORKS SHALL BE KEPT CLEAN AND CLEAR FOR THE DURATION OF CONSTRUCTION AND LEFT IS THE SAME CONDITION AS PRIOR TO CONSTRUCTION.
- "TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS" OR TO THE MUNICIPAL STANDARDS, AS APPLICABLE.
- 11. ANY SIDEWALK CLOSURE IS TO BE COORDINATED WITH THE MUNICIPALITY AND NEIGHBOURING PROPERTIES AT LEAST 48HRS IN ADVANCE. PEDESTRIANS ARE TO BE PROTECTED AT ALL TIMES. TIMES. THE FINAL MARKED UP SET OF DRAWINGS IS TO BE PROVIDED TO THE ENGINEER UPON
- PROJECT COMPLETION. 13. THE ENGINEER WILL PROVIDE RECORD INFORMATION TO THE MUNICIPALITY UPON COMPLETION.
- 14. EXISTING TREES THAT ARE TO REMAIN SHALL HAVE A SOLID PROTECTIVE FENCE ERECTED OUTSIDE OF THE DRIPLINE OF THE TREE.
- 15. THE CONTRACTOR IS TO TAKE ALL NECESSARY MEASURES TO PROTECT THE NATURAL ENVIRONMENT
- 6. THE ENGINEER IS TO BE NOTIFIED BY THE CONTRACTOR 48HRS PRIOR TO STARTING OR RESTARTING 16. THE CONTRACTOR IS TO PREVENT ANY PARTICULATE MATTER FROM ENTERING THE STORM SYSTEM.
  - 17. EXISTING PARKING CONTROL SIGNAGE ARE TO BE REPLACED AS DIRECTED BY THE CITY OF NORTH VANCOUVER. POLE SLEEVES ARE AVAILABLE FOR PICKUP AT THE CITY'S OPERATIONS YARD. TO ARRANGE PICKUP OF SLEEVES, CONTACT STEVE HARBORNE AT 604.987.7155.

### LEGAL DESCRIPTION

LOT 7 BLOCK 41 DISTRICT LOT 547 GROUP 1 NWD PLAN 1061 CIVI ADDRESS 410 WEST 15TH STREET, CITY OF NORTH VANCOUVER

# **BENCHMARK CONTROL**

PID: 014-852-845

ELEVATIONS ARE GEODETIC (CVD28 GVRD)

LOT DIMENSIONS ARE DERIVED FROM POSTING PLAN EPP74850

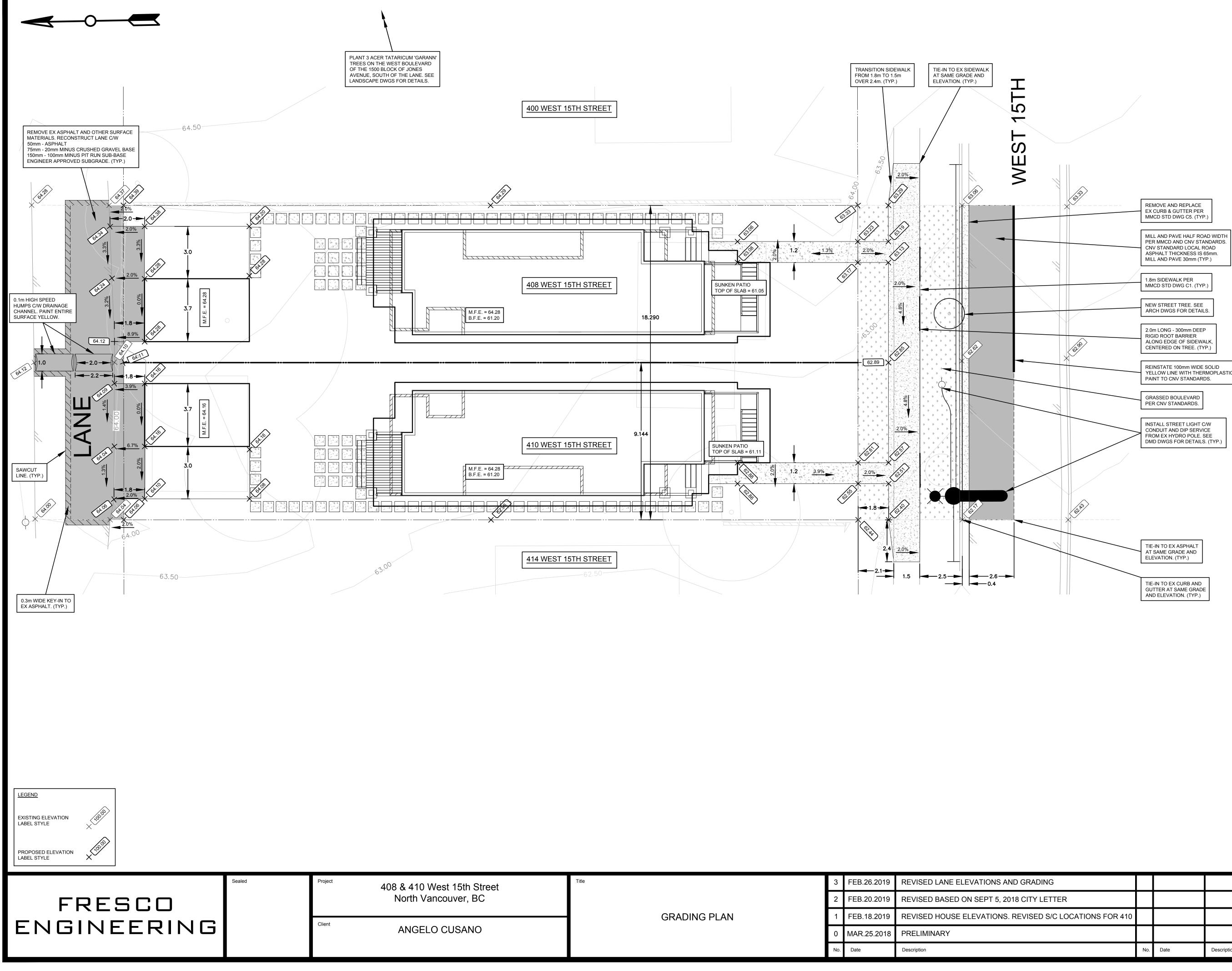
DERIVED FROM CONTROL MONUMENT 73H1019 LOCATED AT THE INTERSECTION OF 15TH STREET AND JONES AVENUE. ELEVATION = 64.163m (210.51ft)

		No.	Date	Description	No.	Date	Description	ву МС
		4	MAR.25.2018	GENERAL REVISIONS. ADDED GRADING PLAN TO DWG SET.	8	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING	Drawing No. SERV
	SERVICING PLAN	5	DEC.12.2018	WATER SERVICE SIZE REVISION AS DISCUSSED WITH CNV.				File No. 17-01
		6	FEB.18.2019	REVISED HOUSE ELEVATIONS. REVISED S/C LOCATIONS FOR 410				ວິ v Vertical -
reet	Title	7	FEB.20.2019	REVISED BASED ON SEPT 5, 2018 CITY LETTER				Horizontal 피 1:100

		/	
			EX STORM INV ±61.42
/			BY CNV CREWS CAP AND ABANDON EX WATER SERVICE.
/			EX SAN INV ±60.00
_			
			ALL UTILITY CONNECTIONS TO BE UNDERGROUND PER CNV STANDARDS. THIRD PARTY UTILITIES (FORTIS GAS, BC HYDRO, TELUS) ARE TO BE COORDINATED AND INSTALLED IN CONJUNCTION WITH THE ROADWORKS AND CNV UTILITIES INSTALLATIONS, AT THE DEVELOPER'S COST. (TYP.)
		/	BY CNV CREWS
			INSTALL 9.2m 150mm STORM SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S8 & S9. IC INV = 62.00 S/C INV @ MAIN = 61.82 MAIN INV @ S/C = 61.06 **SAME NOTE ON SMP DWG**
_	.92%		BY CNV CREWS
MM	PVC SAN @		INSTALL 15.2m 100mm SANITARY SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S7 & S9. IC INV = 60.10 S/C INV @ MAIN = 59.80 MAIN INV @ S/C = 59.60
200 DI			BY CNV CREWS
X	53.25		CAP AND ABANDON EX SAN SERVICE.
	Ä		BY CNV CREWS
		/	INSTALL 15.2m 100mm SANITARY SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S7 & S9. IC INV = ±59.70 S/C INV @ MAIN = 59.40 MAIN INV @ S/C = 59.13
		-/	
			EX SAN INV ±59.10
			BY CNV CREWS
		/	INSTALL 9.2m 150mm STORM SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S8 & S9. IC INV = 61.50 S/C INV @ MAIN = 61.32 MAIN INV @ S/C = 60.55 **SAME NOTE ON SMP DWG**

EX STORM INV ±60.53

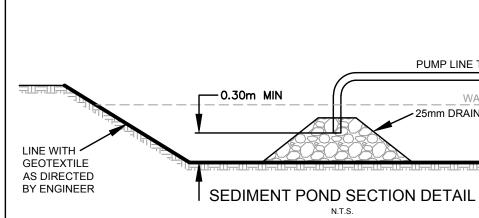
### CONTRACTOR TO VERIFY & LOCATE EXISTING MAINS & SERVICE CONNECTIONS, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.

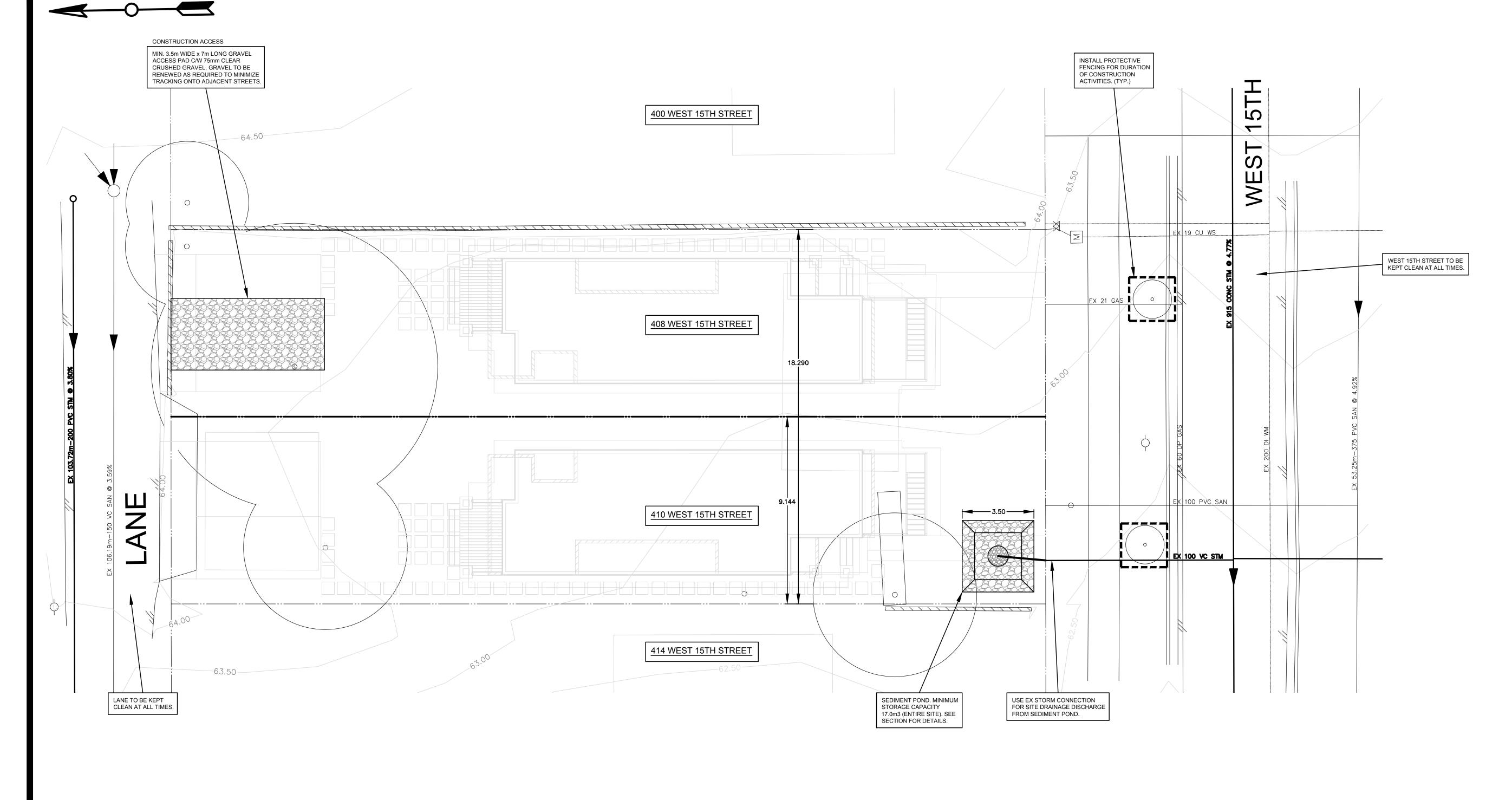


			Date	Description	No.	Date	Description	By MC
			MAR.25.2018	PRELIMINARY				Drawing No. GRADE
	GRADING PLAN	1	FEB.18.2019	REVISED HOUSE ELEVATIONS. REVISED S/C LOCATIONS FOR 410				File No. 17-01
		2	FEB.20.2019	REVISED BASED ON SEPT 5, 2018 CITY LETTER				S Vertical
eet	Title	3	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING				Horizontal 끸 1:100

	Sealed	Project	408 & 410 West 15th Street
FRESCO			North Vancouver, BC
ENGINEERING		Client	ANGELO CUSANO

OPERATION & MAI			4
ESC FEATURE		FREQUENCY	
CATCH BASIN SILT SACK	REPAIR & REPLACE DEGRADED FABRIC. REMOVE ACCUMULATED SEDIMENT & DEBRIS.	ONCE A WEEK, BEFORE & AFTER ANY SIGNIFICANT RAINFALL EVENT OR AS REQUIRED.	
ACCESS ROADS	SWEEP	DAILY OR AS REQUIRED.	
CONSTRUCTION ACCESS	REPLACE WITH CLEAN CRUSH ROCK AS REQUIRED.	AS REQUIRED.	
SEDIMENT POND REMOVED ACCUMULATED SEDIMENT		ONCE A WEEK, BEFORE & AFTER ANY SIGNIFICANT RAINFALL EVENT OR AS REQUIRED.	E





### **EROSION & SEDIMENT CONTROL NOTES**

- 1. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL EROSION & SEDIMENT CONTROL FACILITIES REQUIRED TO PREVENT SILT DISCHARGES TO THE ROADWAY, NEIGHBOURING PROPERTIES, AND THE STORM DRAINAGE SYSTEM. ADDITIONAL FACILITIES MAY BE REQUIRED TO SUPPLEMENT THE RECOMMENDATIONS PROVIDED HEREIN.
- 2. THE CONTRACTOR MUST CONSTRUCT ALL NECESSARY EROSION & SEDIMENT CONTROL WORKS PRIOR TO COMMENCING OTHER SITE WORKS.
- 3. THE CONTRACTOR MUST INSPECT THE EROSION & SEDIMENT CONTROL FACILITIES DURING RAINFALL EVENTS AND UNDERTAKE ANY REMEDIAL WORKS REQUIRED TO ENSURE THE PROPER OPERATION OF THE SYSTEM.
- 4. THE CONTRACTOR MUST CLEAN OUT THE SEDIMENT TRAP ON A REGULAR BASIS TO ENSURE THE SEDIMENT ACCUMULATION DEPTH DOES NOT EXCEED 0.3m.
- 5. THE CONTRACTOR IS TO INSTALL SILT SACS IN THE NEAREST DOWNSTREAM CATCH BASINS.
- 6. ALL ON SITE SURFACE RUN-OFF MUST BE DIRECTED TO THE WATER FILTRATION FACILITIES AND THEN 12. THE CONTRACTOR MUST ENSURE THAT THERE IS NO DISCHARGE OF ANY OF THE FOLLOWING: DISCHARGED TO THE STORM SEWER. NO SURFACE RUNOFF IS TO EXIT THE PROPERTY WITHOUT FIRST BEING ROUTED THROUGH THE WATER FILTRATION FACILITIES.
- 7. EXPOSED CUTS ARE TO BE COVERED WITH SHOTCRETE OR POLYETHYLENE LINING. ALL EXPOSED SLOPES/SOIL STOCKPILES ARE TO BE COVERED IN POLYETHYLENE SHEETING, DURING RAINFALL OR SNOW, OR IF RAIN OR SNOW IS IMMINENT (OCTOBER 1ST TO APRIL 30TH: WITHIN TWO DAYS; MAY 1ST TO SEPTEMBER 30TH: WITHIN SEVEN DAYS). SHEETING MUST BE INSPECTED ON A REGULAR BASIS. ANY SEPARATION OR TEARS ARE TO BE REPAIRED IMMEDIATELY. STORE EXCAVATED SOILS AWAY FROM STORM DRAINS OR OTHER POTENTIAL OFFSITE TRANSPORT PATHWAYS.

### 8. STREETS ARE TO BE SWEPT AT THE END OF EACH DAY, IF REQUIRED. NO FLUSHING ON ROADS IS PERMITTED. DUST CONTROL MEASURES MUST BE EMPLOYED.

PUMP LINE TO CITY

WATER LEVE

25mm DRAIN ROCK

et	Title			
	EROSION & SEDIMENT CONTROL PLAN	1	FEB.26.2019	REVISED LANE ELEVATIONS AND GRAD
		0	FEB.20.2019	PRELIMINARY
		No.	Date	Description

14. ALL CONCRETE SUPPLY TRUCKS MUST BE EQUIPPED WITH A WASH BUCKET SYSTEM FOR FLUME FLUSHING. EXCESS CONCRETE SHALL NOT BE FLUSHED ONTO ROADS OR INTO THE STORM SYSTEM.

9. THE CONTRACTOR MUST ADHERE TO CNV BYLAW #7541 FOR WATER DISCHARGE FROM PROPERTY. 10. CONSTRUCTION AND MAINTENANCE OF THE EROSION & SEDIMENT CONTROL FACILITIES SHALL BE IN 16. THE CONTRACTOR SHALL DECOMMISSION ALL EROSION & SEDIMENT CONTROL FACILITIES ONLY

OCEANS STANDARDS AND GUIDELINES, THE LATEST EDITION OF FLNRO'S STANDARDS AND GUIDELINES, THE "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT," AND SECTION 01561 OF THE MASTER MUNICIPAL SPECIFICATIONS.

THE DISCHARGE CRITERIA FROM THE WATER FILTRATION SYSTEM INCLUDES A PH OF BETWEEN 6.5-8.0, AND A TOTAL SUSPENDED SOLIDS (TSS) CONTENT OF LESS THAN OR EQUAL TO 75mg/L (OCTOBER TO APRIL) ABOVE "BACKGROUND" OR LESS THAN OR EQUAL TO 25mg/L (MAY TO SEPTEMBER) ABOVE "BACKGROUND" CONTENT. FRESCO ENGINEERING LTD. SHOULD BE RETAINED TO AND DURING OR AFTER EACH SIGNIFICANT RAINFALL EVENT.

PETROLEUM HYDROCARBONS, SOLVENTS, HEAVY METAL PARTICULATE, CEMENT, ETC. OR ANY MATERIAL THAT COULD BE DEEMED DELETERIOUS UNDER THE FISHERIES ACT, CNV SEWERAGE AND DRAINAGE UTILITY BYLAW 6746, CNV STREAM AND DRAINAGE SYSTEM PROTECTION BYLAW 7541, AND THE EROSION AND SEDIMENT CONTROL GUIDELINES.

INSPECTION AND MONITORING OF THE CONSTRUCTION WORK IS TO BE CONDUCTED BY FRESCO ENGINEERING LTD. CONTACT MARCO CUSANO (MCUSANO@FRESCOENGINEERING.CA OR 604.653.1683) TO SET UP AN INSPECTION SCHEDULE AT LEAST 48HRS IN ADVANCE.

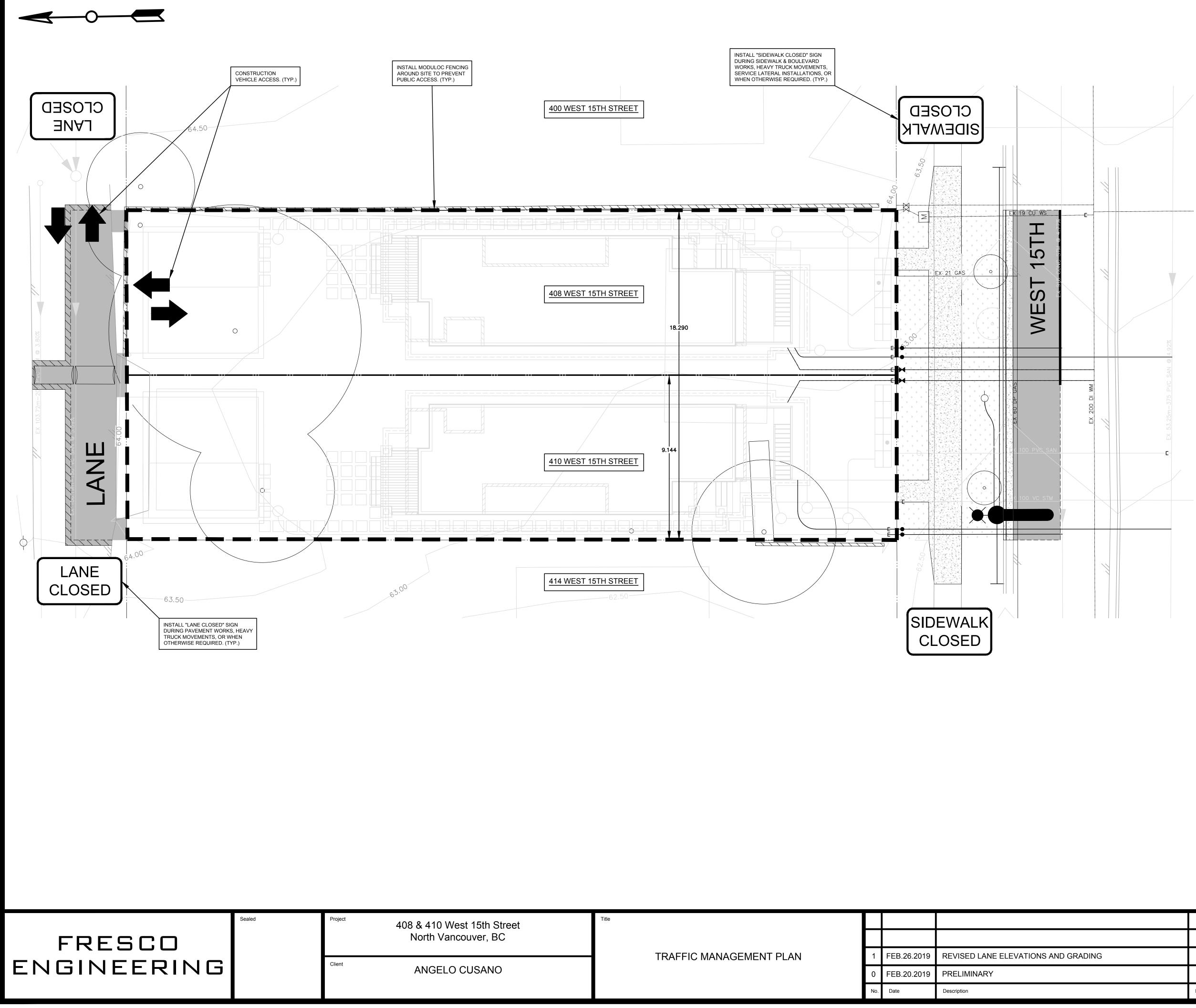
15. THE EROSION & SEDIMENT CONTROL MAY NEED TO BE ADJUSTED AS CONSTRUCTION PROGRESSES, AT THE DISCRETION OF THE ENGINEER.

- ACCORDANCE WITH THE CNV BYLAWS, THE LATEST EDITION OF THE DEPARTMENT OF FISHERIES AND AFTER HARD SURFACES ARE IN PLACE AND SURFACE WATER IS PROPERLY DIRECTED TO THE STORM SYSTEM. ALL SEDIMENT SHALL BE REMOVED OFF SITE AND DISPOSED OF BY LAND FILLING LOCALLY. 17. ALL REQUIRED CNV PERMITS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO COMMISSIONING.
  - 18. "EXCESSIVE SUSPENDED SOLIDS DISCHARGE" MEANS THE DISCHARGE OF A FLUID CONTAINING TOTAL SUSPENDED SOLIDS OF 25mg/L ABOVE BACKGROUND IN THE RECEIVING ENVIRONMENT DURING MAY - SEPTEMBER, OR 75mg/L ABOVE BACKGROUND DURING OCTOBER - APRIL.

INSPECT THE SEDIMENT CONTROLS IN PLACE AND MONITOR THE DISCHARGE ON A WEEKLY BASIS 19. "PROHIBITED SUBSTANCE" MEANS: PESTICIDES, HERBICIDES, FERTILIZERS, SOAPS, DETERGENTS, HOUSEHOLD AND COMMERCIAL GRADE CLEANING COMPOUNDS, PAINTS, SOLVERS, CHEMICALS, CHLORINATED WATER, WASTE OIL, OR ANY MATERIAL OR SUBSTANCE WHICH IS A HAZARDOUS PRODUCT, CONTAMINANT, TOXIC SUBSTANCE, DELETERIOUS SUBSTANCE, SPECIAL WASTE, DANGEROUS GOOD, OR REPORTABLE SUBSTANCE THAT IS IDENTIFIED OR DESCRIBED IN OR DEFINED BY ANY APPLICABLE STATUTE, REGULATION OR LAW, INCLUDING ANY SUBSTANCE THAT VIOLATES THE FISHERIES ACT R.S.C 1985 OR THE WASTE MANAGEMENT ACT R.S.B.C. 1996, C.482 WHICH, IF INTRODUCED TO THE DRAINAGE WORKS, WOULD FOUL IT; OR

> ANY SEDIMENT, ROCK, GRAVEL, SAND, CLAY, SILT, EARTH, CONSTRUCTION OR EXCAVATION WASTES, CEMENT, EXPOSED AGGREGATE WASH WATER, OR OTHER SUBSTANCES WHICH, WHEN INTRODUCED INTO A DRAINAGE SYSTEM, WILL AT THE POINT OF DEPOSITION, RESULT IN AN EXCESSIVE SUSPENDED SOLIDS DISCHARGE OR A PH VALUE OUTSIDE OF THE RANGE OF 6.5-8.0, OR TEMPERATURE INCREASE OF 2 DEGREES CELSIUS OR MORE.

			Horizontal 피 1:100
			ວິ ທີ່Vertical -
			File No. 17-01
			Drawing No. ESC
No.	Date	Description	ву МС



eet	Title							Horizontal 끸 1:100
								Vertical
	TRAFFIC MANAGEMENT PLAN	1	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING				File No. 17-01
		0	FEB.20.2019	PRELIMINARY				Drawing No. TMP
		No.	Date	Description	No.	Date	Description	<sup>ву</sup> МС

### TRAFFIC MANAGEMENT PLAN

- 1. PROJECT DETAILS
- a. ONSITE WORKS
- b. WEST 15TH STREET ROADWORKS AND SERVICING
- c. LANE ROADWORKS
- d. JONES AVENUE TREE INSTALLATION
- 2. DEVELOPER
- a. ANGELO CUSANO: 604-988-4882
- 3. MOBILITY IMPACT
- a. WEST 15TH STREET TO REMAIN OPEN THROUGHOUT CONSTRUCTION. TEMPORARY DISRUPTIONS ARE EXPECTED DURING SERVICING AND ROADWORKS INSTALLATIONS, AND DURING THESE TIMES ALL ROADWAY AND PEDESTRIAN TRAFFIC IS TO BE MANAGED BY TRAFFIC CONTROL PERSON(S).
- b. CONSTRUCTION VEHICLE ACCESS THROUGH LANE
- c. HEAVY VEHICLE ROUTING PER CNV TRUCK ROUTE PLAN. HEAVY VEHICLES FROM HIGHWAY 1 TO BE ROUTED SOUTHBOUND ON LONSDALE, WESTBOUND ON WEST 15TH STREET.
- d. HEAVY VEHICLE TRIPS PER DAY: UP TO 4 TRIPS/DAY DURING CONCRETE WORK
- 4. COMMUNITY IMPACT
- a. WORKER PARKING TO BE PROVIDED OFF SITE DURING WORKS. OFFSITE PARKING TO BE ARRANGED BY CONTRACTOR.
- b. WORKER VEHICLES/DAY: UP TO 4 VEHICLES/DAY
- 5. WORK ZONE TRAFFIC CONTROL DEVICES
- a. TEMPORARY SIGNAGE TO BE INSTALLED AS REQUIRED.
- b. TRAFFIC CONTROL PERSON(S) TO DIRECT ALL HEAVY VEHICLE TRAFFIC AT ENTRANCE / EXIT OF SITE.
- 6. COMMUNICATION PLAN
- a. CONTRACTOR TO NOTIFY RESIDENTS PRIOR TO COMMENCING WORKS.
- b. CONTRACTOR TO NOTIFY CNV, RCMP, AND FIRE & RESCUE ONE WEEK IN ADVANCE OF ANY TRAFFIC DISRUPTIONS AND GET APPROVAL PRIOR TO PROCEEDING.

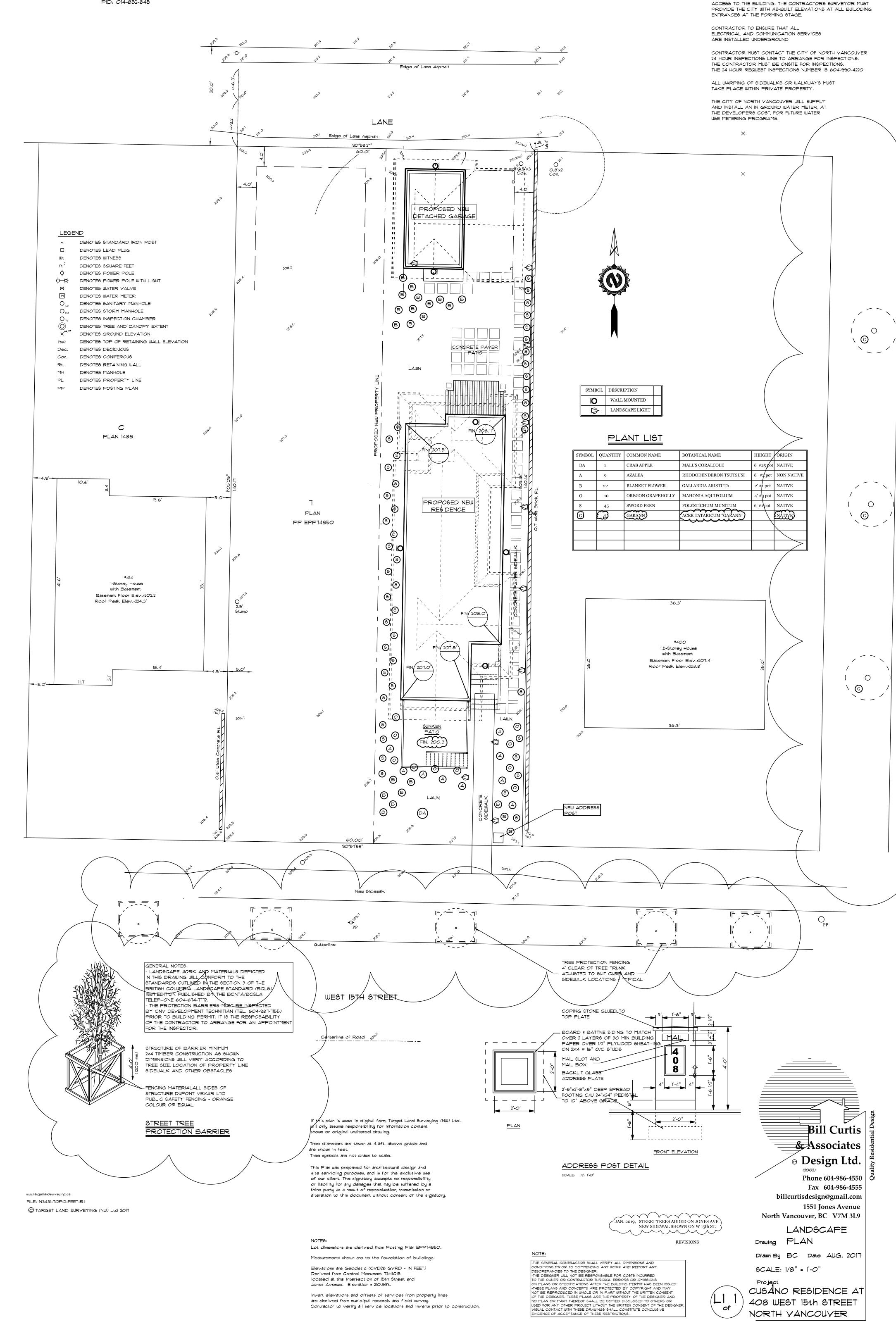
BLACKTOP TO PROPERTY LINE AT DEVELOPERS COST AND TO CITY OF NORTH VANCOUVER ENGINEERING STANDARDS

THE CONTRACTOR IS TO CONTACT ENGINEERING, PARKS AND ENVIRONMENT AT 604-983-1333 PRIOR TO POURING

ANY FLOOR SLABS ASSOCIATED WITH VEHICULAR OR PEDESTRIAN

### TOPOGRAPHIC SITE PLAN OVER LOT 7 BLOCK 41 DISTRICT LOT 547 GROUP 1 NWD PLAN 1061

CIVIC ADDRESS: 410 West 15th Avenue, City of North Vancouver PID: 014-852-845



# TOPOGRAPHIC SITE PLAN OVER LOT 7 BLOCK 41 DISTRICT LOT 547

## GROUP I NWD PLAN 1061

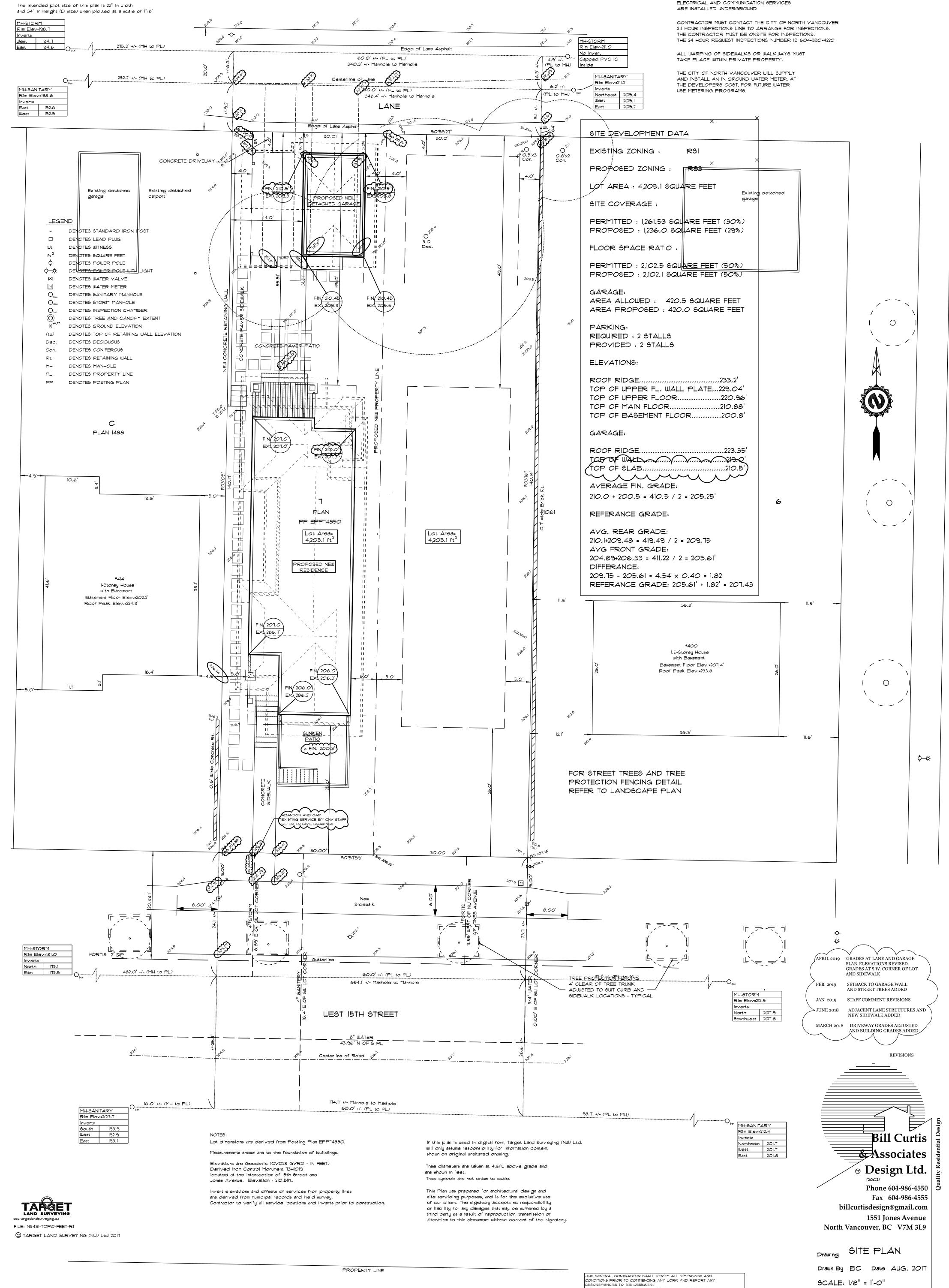
CIVIC ADDRESS:

410 West 15th Avenue, City of North Vancouver PID: 014-852-845

### SCALE 1" : 8'

5 2.5 0 5 10 15

### ALL DISTANCES ARE IN FEET



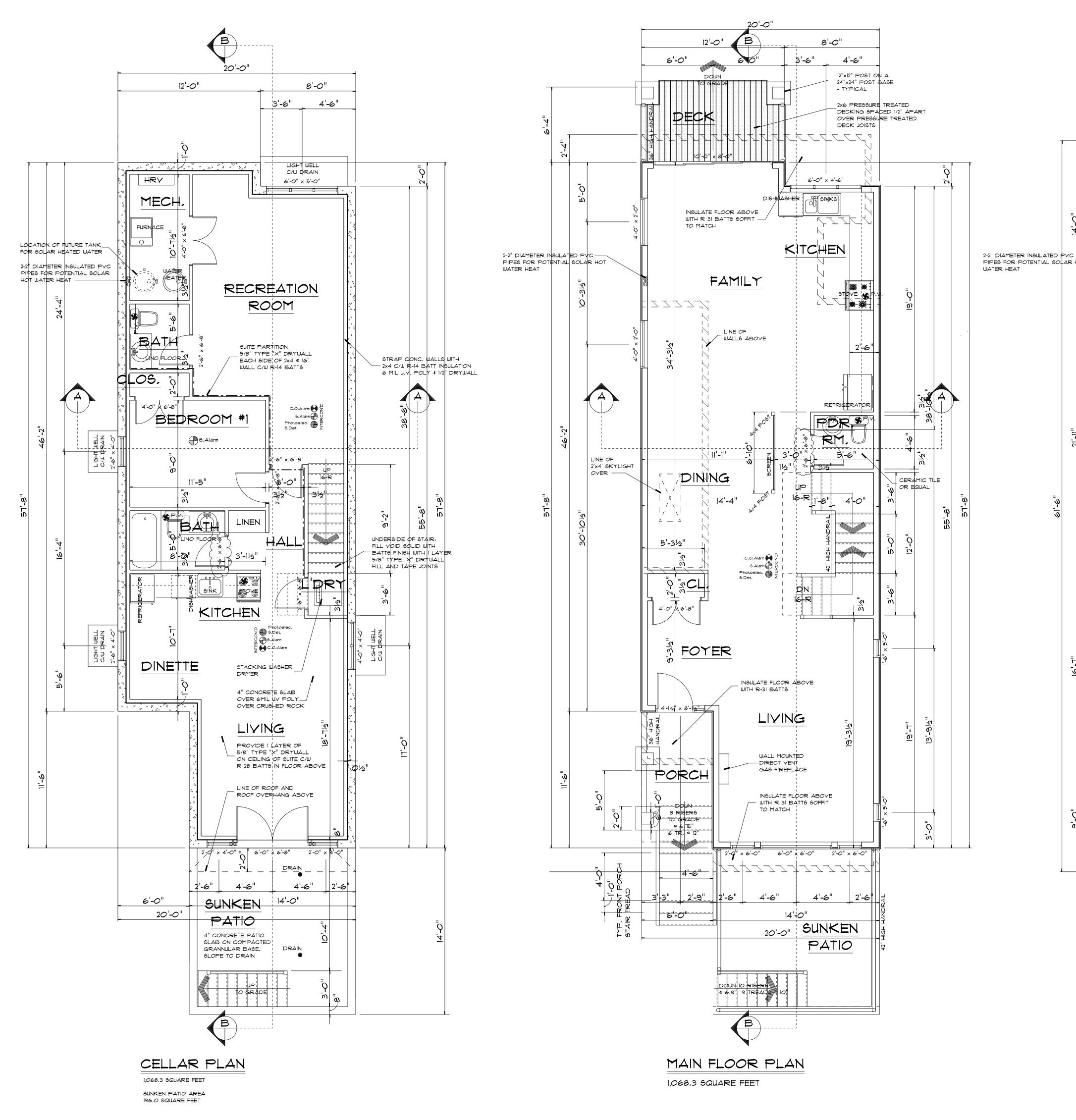
### BLACKTOP TO PROPERTY LINE AT DEVELOPERS COST AND TO CITY OF NORTH VANCOUVER ENGINEERING STANDARDS

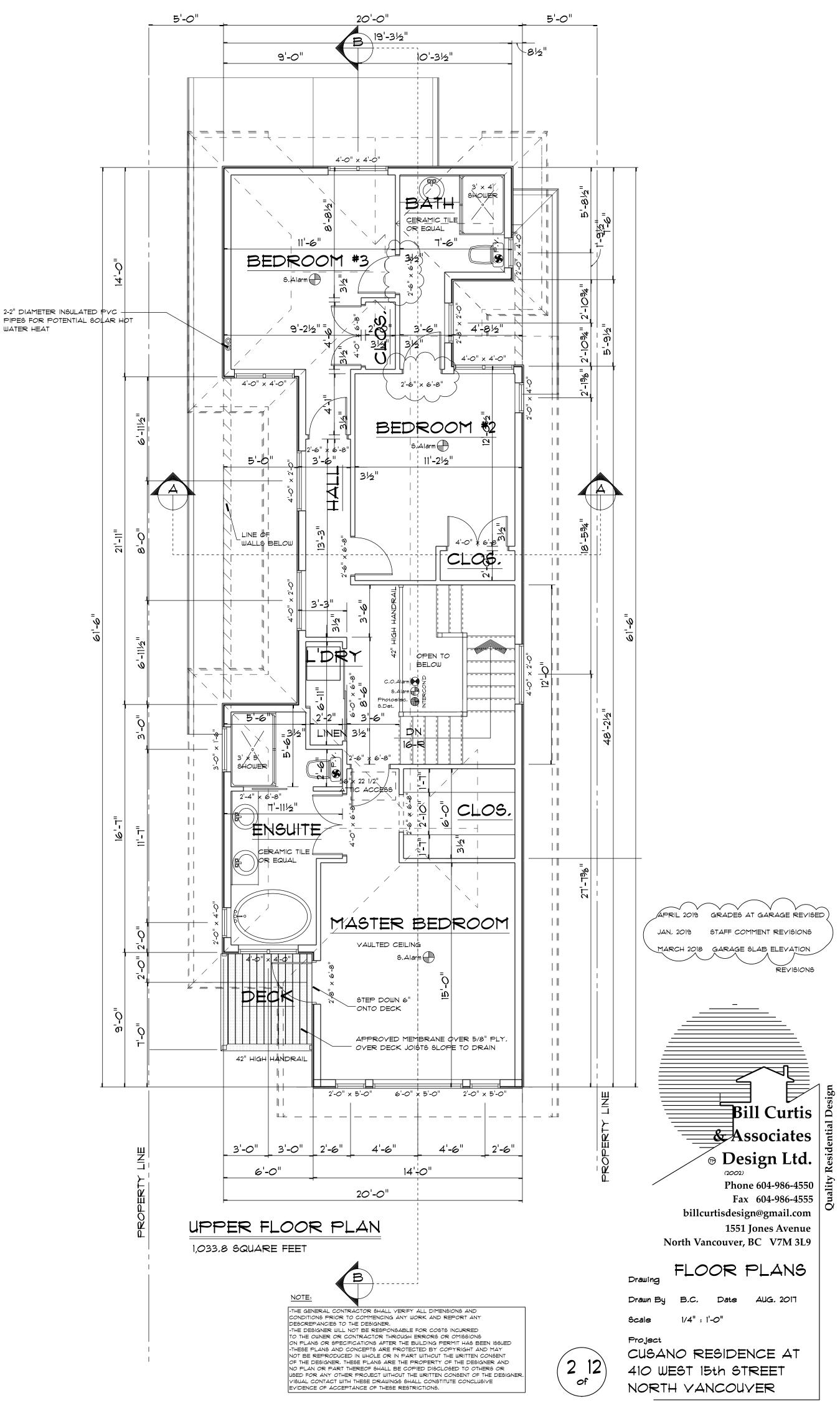
THE CONTRACTOR IS TO CONTACT ENGINEERING, PARKS AND ENVIRONMENT AT 604-983-1333 PRIOR TO POURING ANY FLOOR SLABS ASSOCIATED WITH VEHICULAR OR PEDESTRIAN ACCESS TO THE BUILDING, THE CONTRACTORS SURVEYOR MUST PROVIDE THE CITY WITH AS-BUILT ELEVATIONS AT ALL BUILODING ENTRANCES AT THE FORMING STAGE.

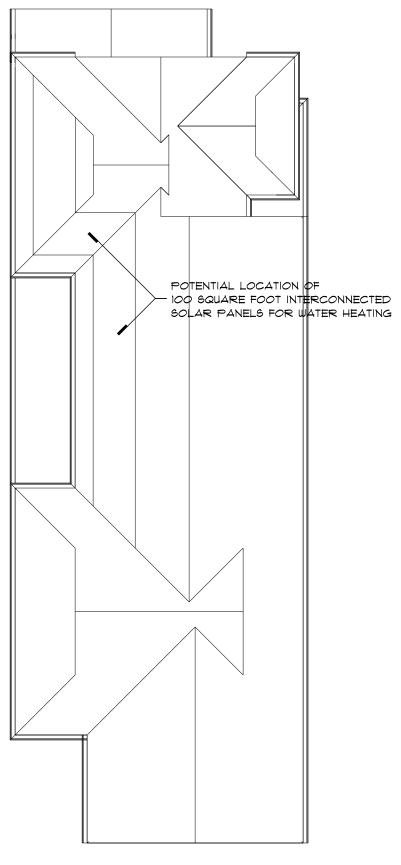
CONTRACTOR TO ENSURE THAT ALL ELECTRICAL AND COMMUNICATION SERVICES

> Project CUSANO RESIDENCE AT 12` of 410 WEST 15th STREET NORTH VANCOUVER

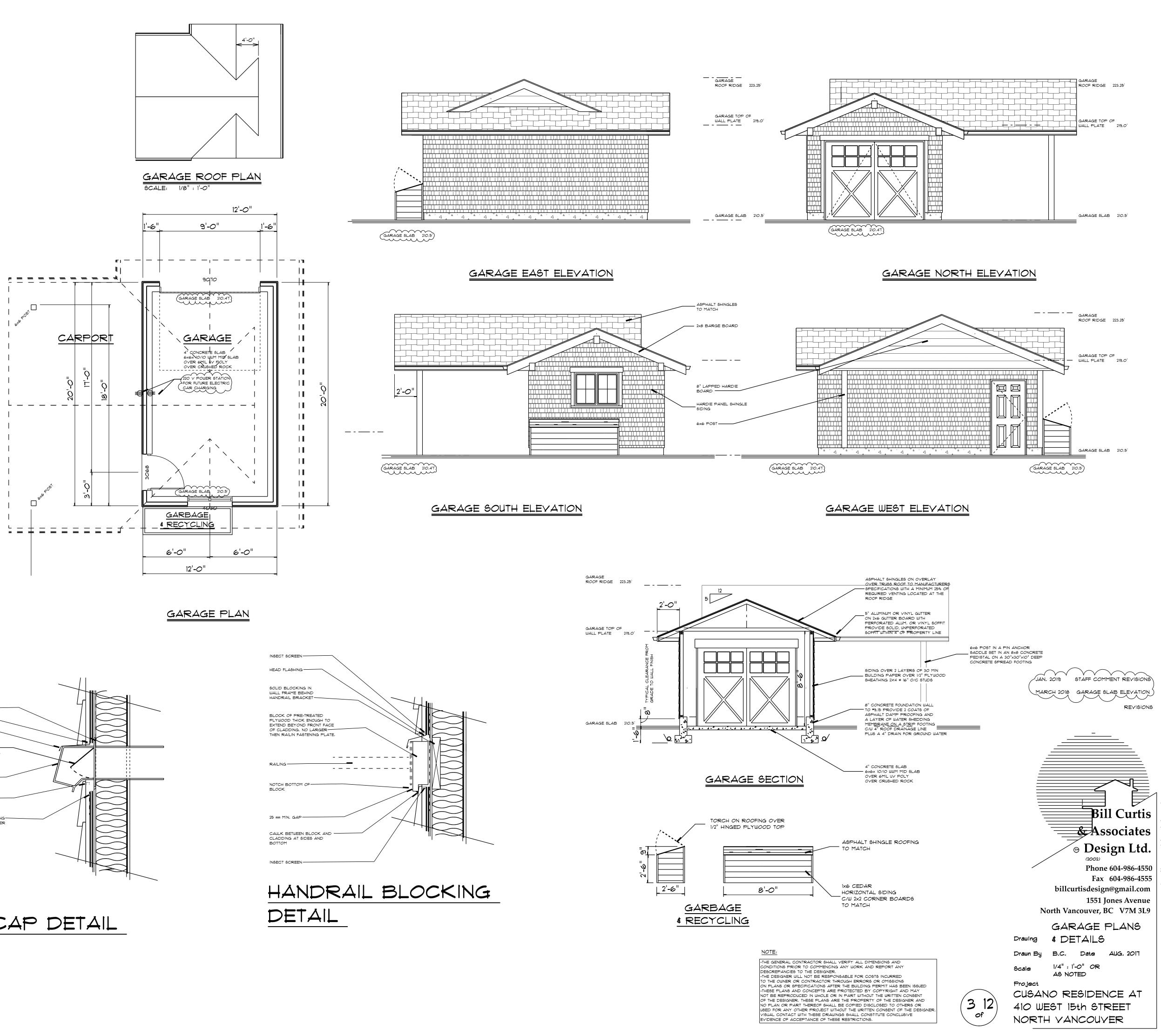
THE DEGIGNER WILL NOT BE RESPONSABLE FOR COSTS INCURRED TO THE OWNER OR CONTRACTOR THROUGH ERRORS OR OMISSIONS ON PLANS OR SPECIFICATIONS AFTER THE BUILDING PERMIT HAS BEEN ISSUED -THESE PLANS AND CONCEPTS ARE PROTECTED BY COPYRIGHT AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER, THESE PLANS ARE THE PROPERTY OF THE DESIGNER AND NO PLAN OR PART THEREOF SHALL BE COPIED DISCLOSED TO OTHERS OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE DESIGNER VISUAL CONTACT WITH THESE DRAWINGS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

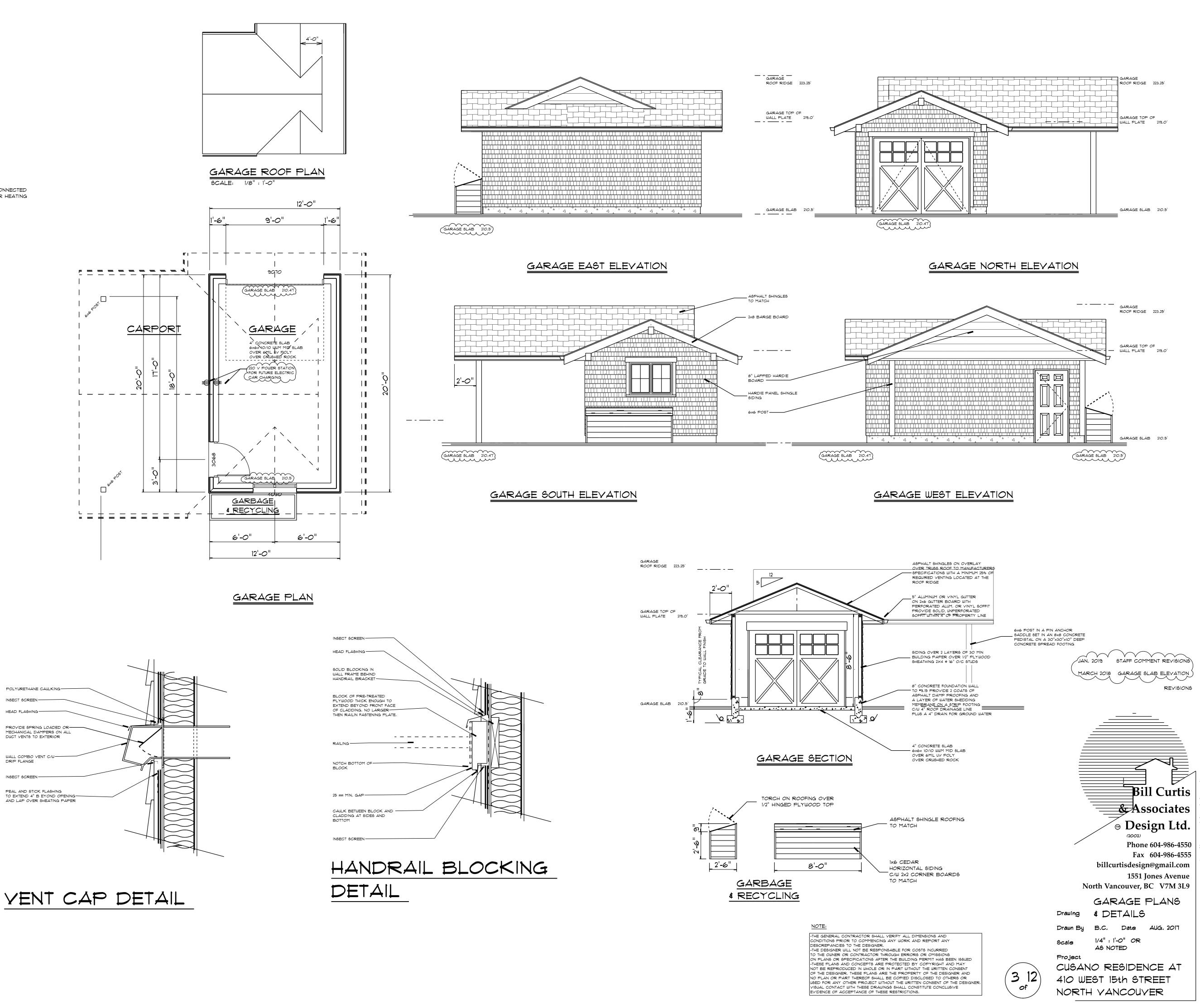


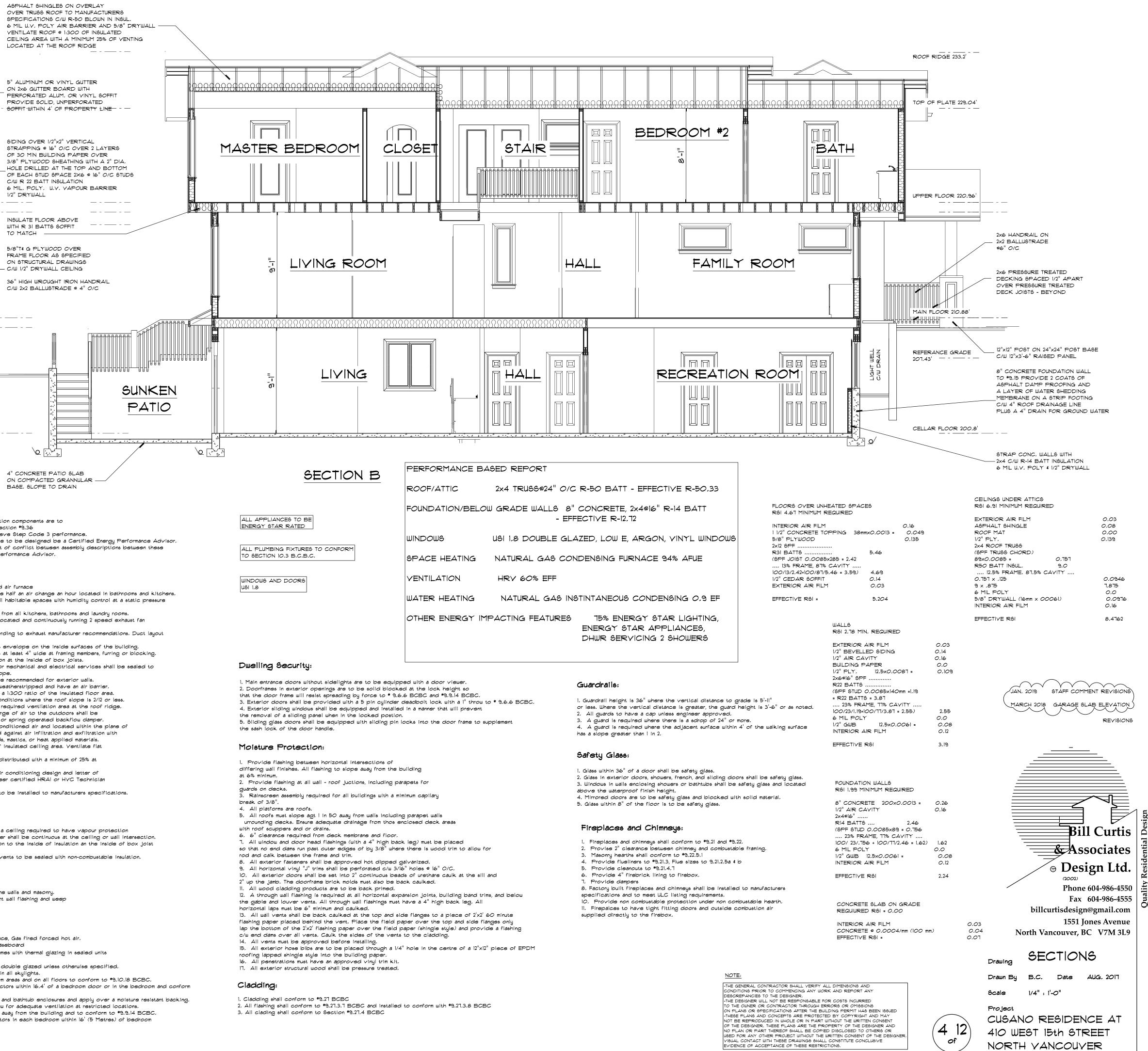


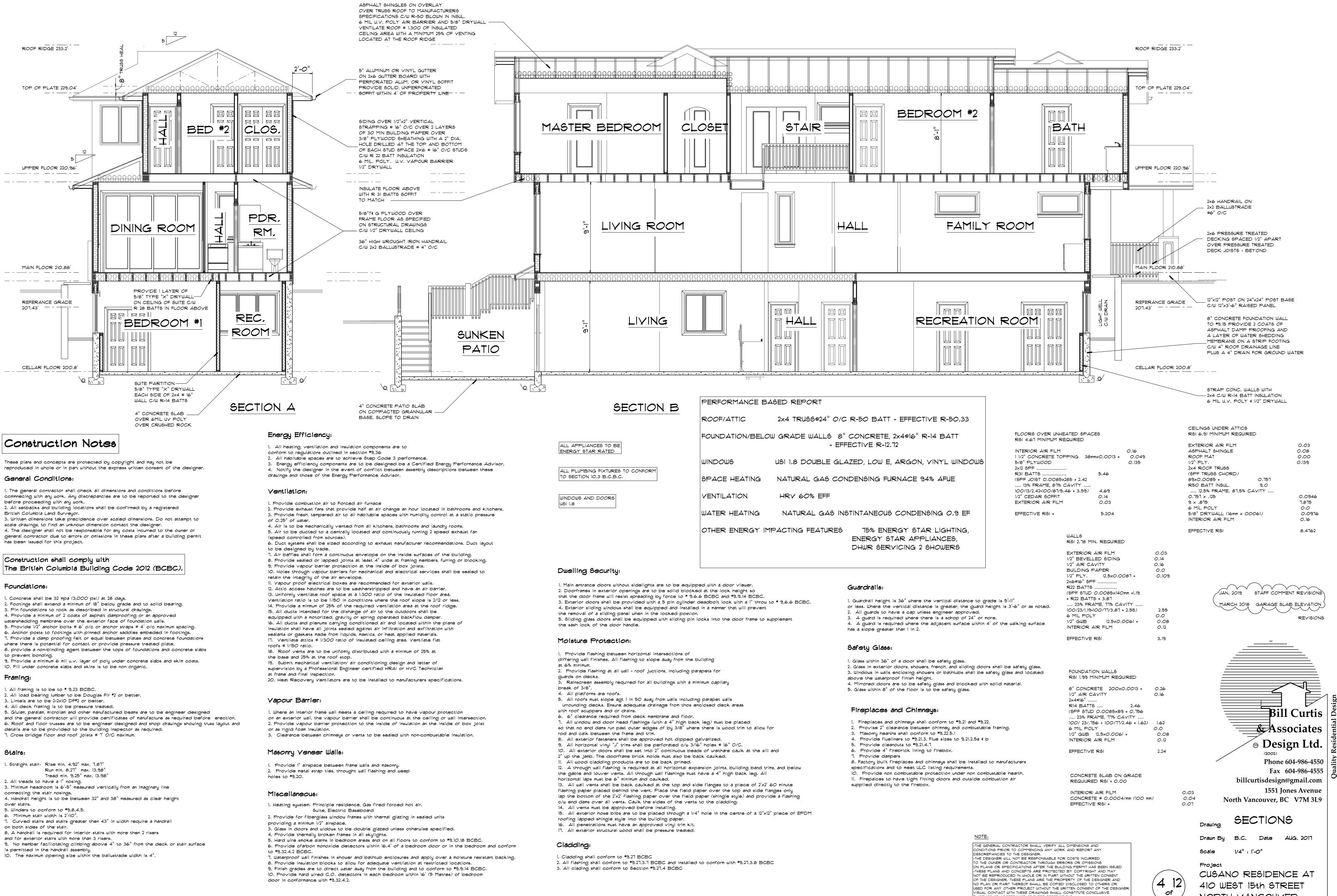


ROOF PLAN SCALE: 1/8" : 1'-0"





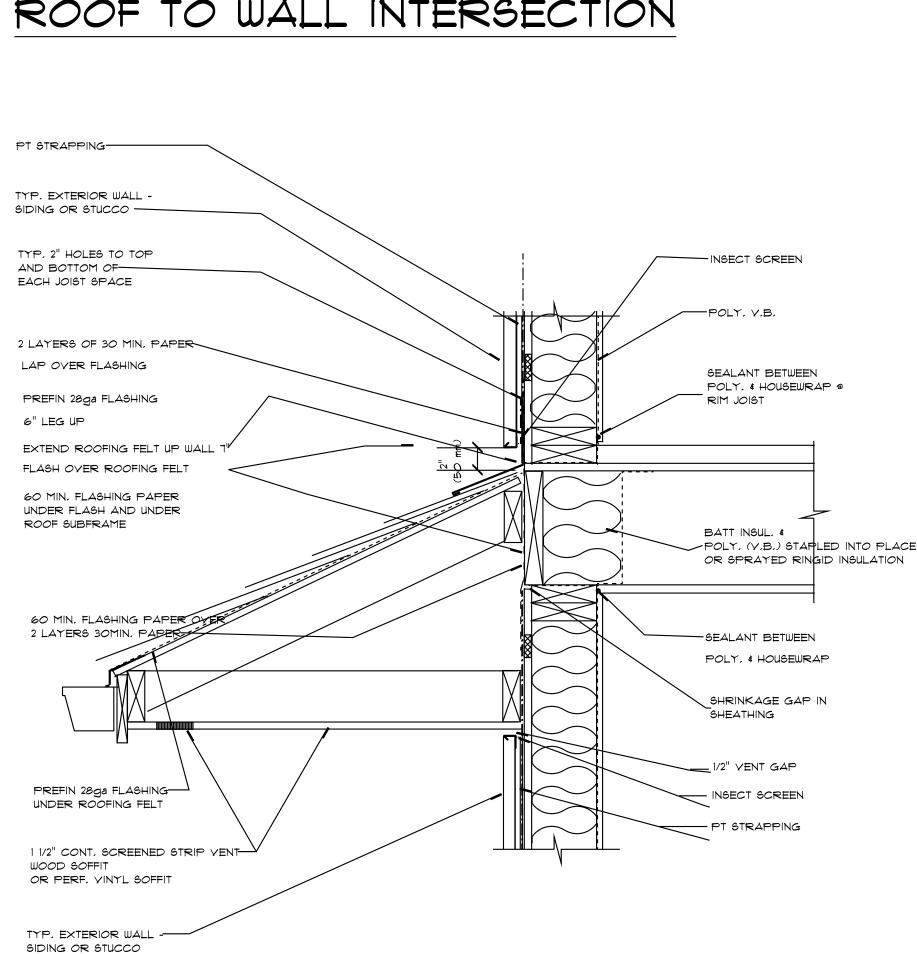




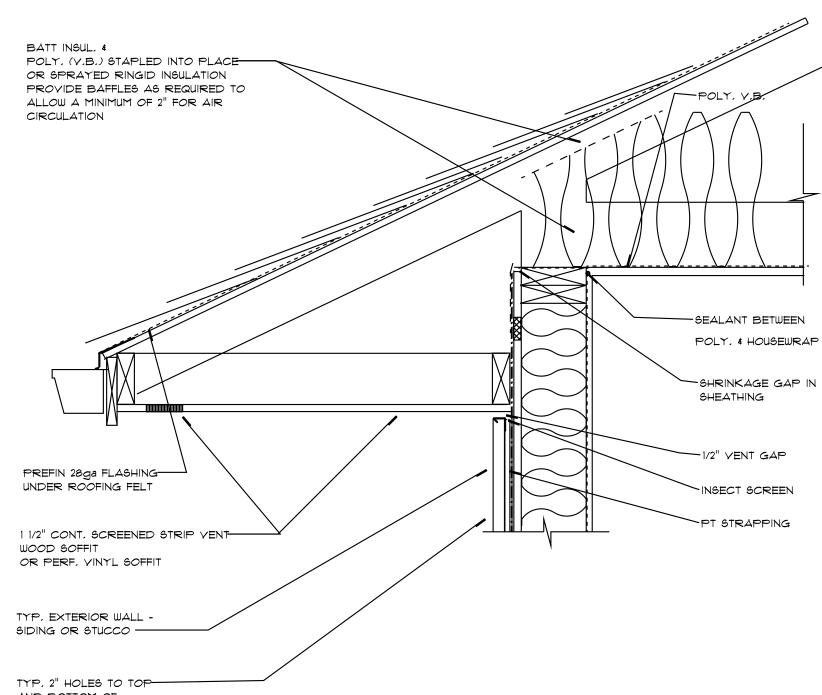
- 5. Provide  $1/2^{"}$  anchor bolts @ 6' o/c or anchor straps @ 4' o/c maximum spacing.

- 6. Minimum stair width is 2'-10".

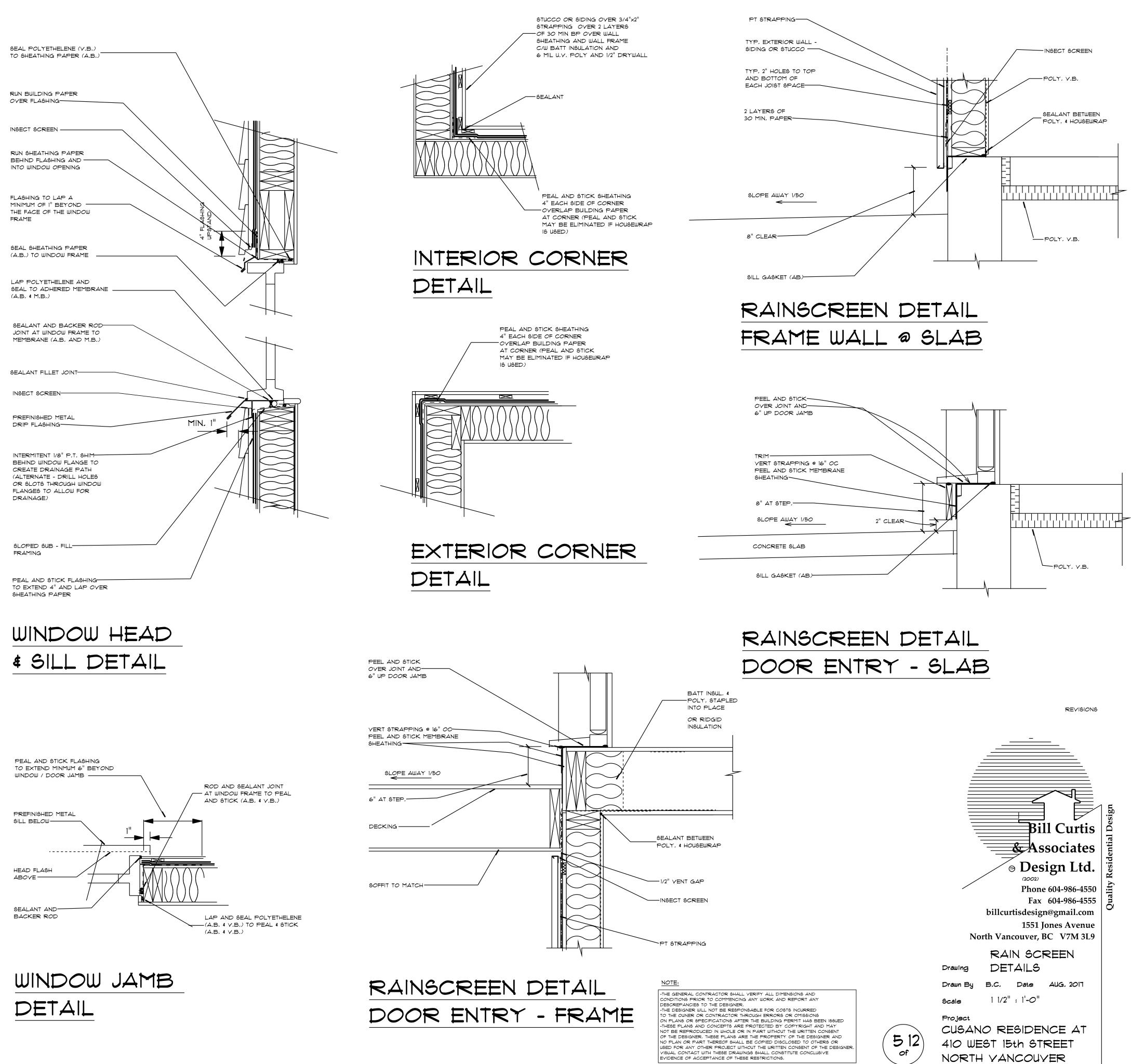
# RAINSCREEN DETAIL ROOF TO WALL INTERSECTION

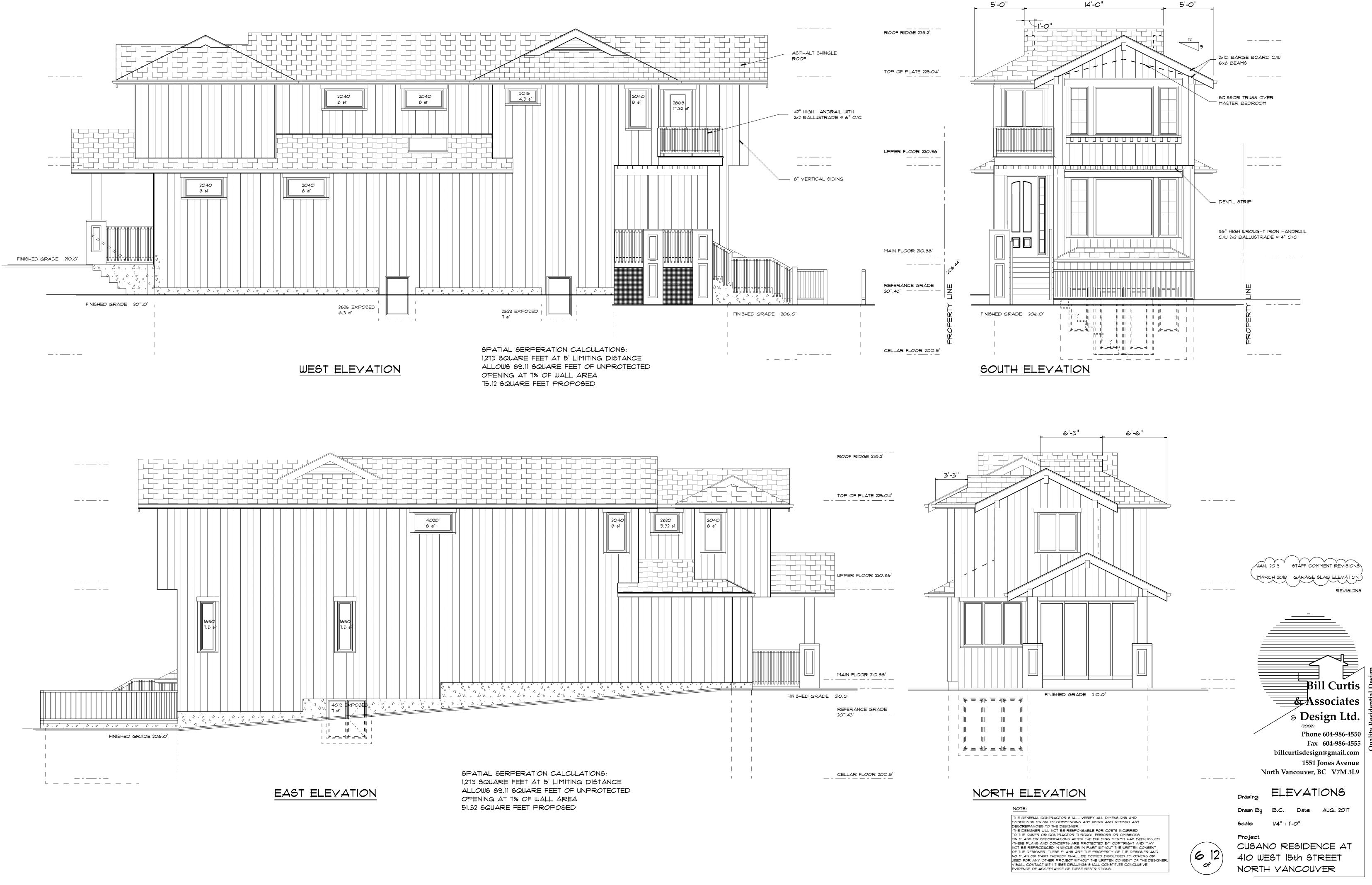


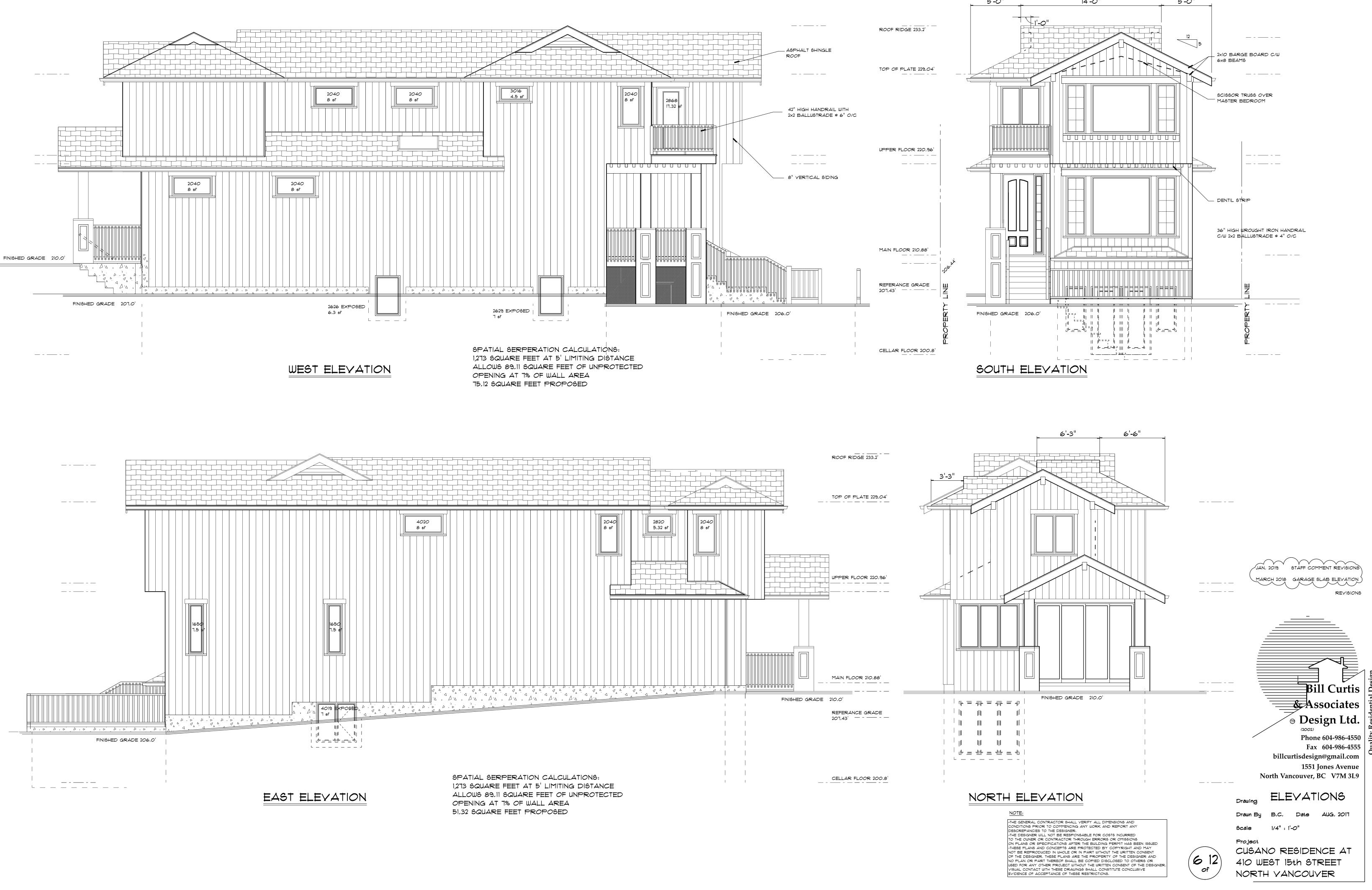
# RAINSCREEN DETAIL ROOF TO WALL INTERSECTION

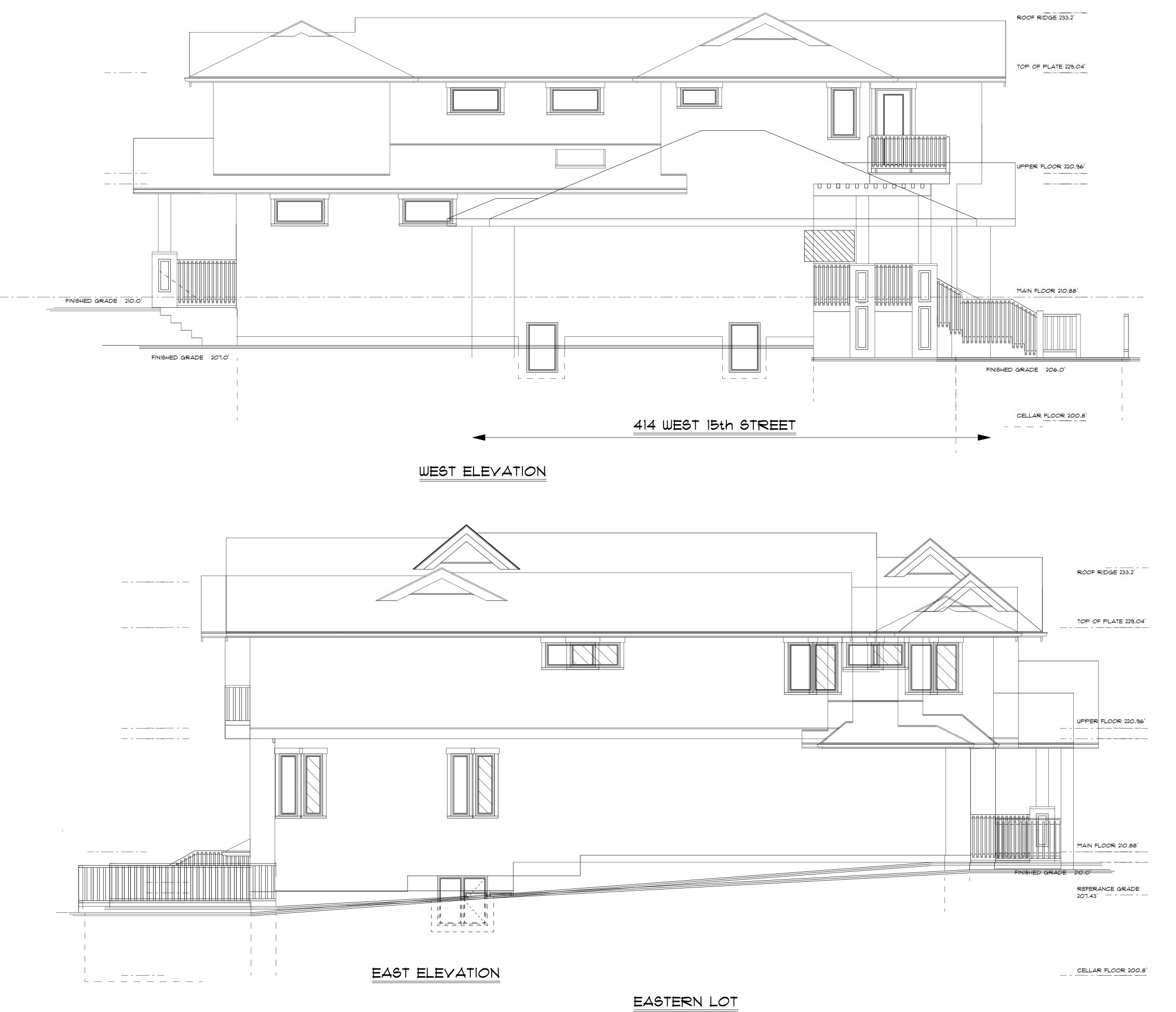


AND BOTTOM OF EACH JOIST SPACE









5TREET

WEST 15th

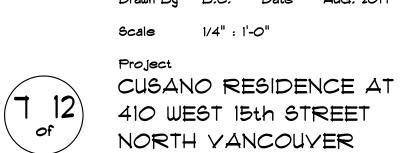
<u>4</u> 4

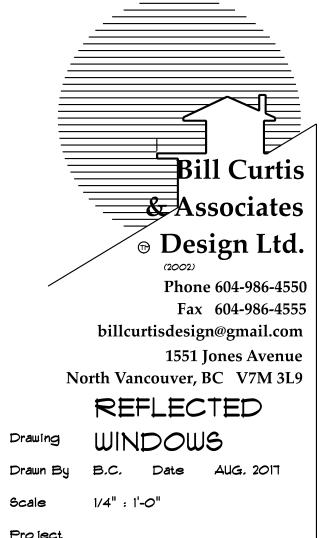
EASTERN

# REFLECTED WINDOWS

### NOTE:

THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK AND REPORT ANY DESCREPANCIES TO THE DESIGNER. -THE DESIGNER WILL NOT BE RESPONSABLE FOR COSTS INCURRED TO THE OWNER OR CONTRACTOR THROUGH ERRORS OR OMISSIONS ON PLANS OR SPECIFICATIONS AFTER THE BUILDING PERMIT HAS BEEN ISSUED -THESE PLANS AND CONCEPTS ARE PROTECTED BY COPYRIGHT AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. THESE PLANS ARE THE PROPERTY OF THE DESIGNER AND NO PLAN OR PART THEREOF SHALL BE COPIED DISCLOSED TO OTHERS OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. VISUAL CONTACT WITH THESE DRAWINGS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.





APRIL 2019 GRADES AT GARAGE REVISED

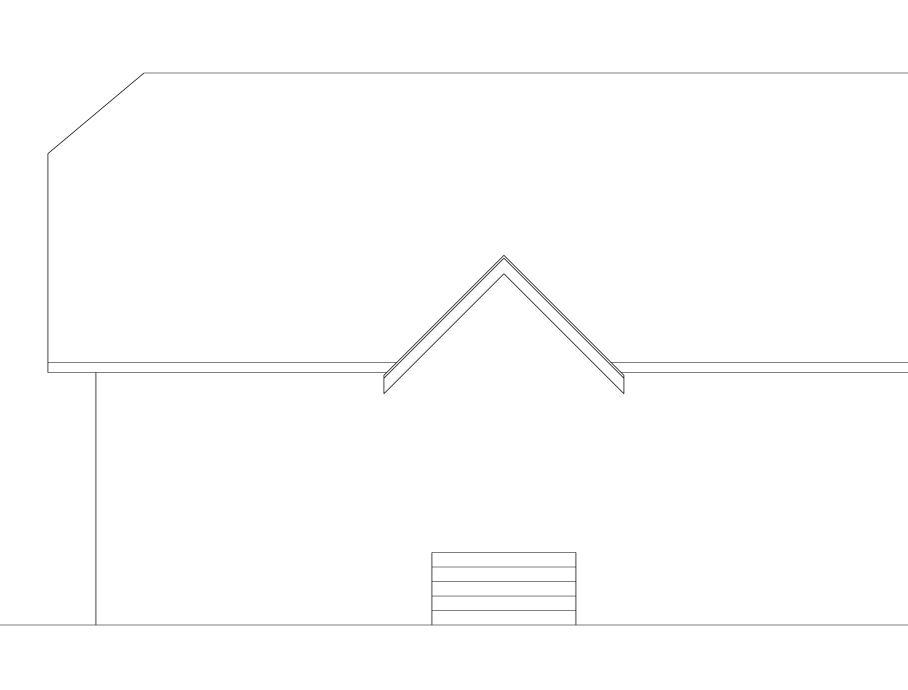
JAN, 2019 STAFF COMMENT REVISIONS

MARCH 2018 GARAGE SLAB ELEVATION

REVISIONS



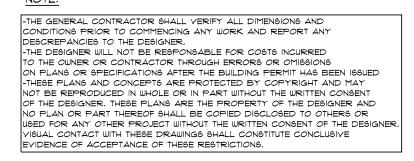
STREETSCAPE





Drawing

Drawn By B.C. Date AUG. 2017 Scale



NOTE:



Project CUSANO RESIDENCE AT 410 WEST 15th STREET NORTH VANCOUVER



# WEST 15th STREET LOOKING WEST



- 410 West 15th Street

NORTH SIDE OF WEST 15th STREET



AREA MAP





# WEST 15th STREET LOOKING EAST

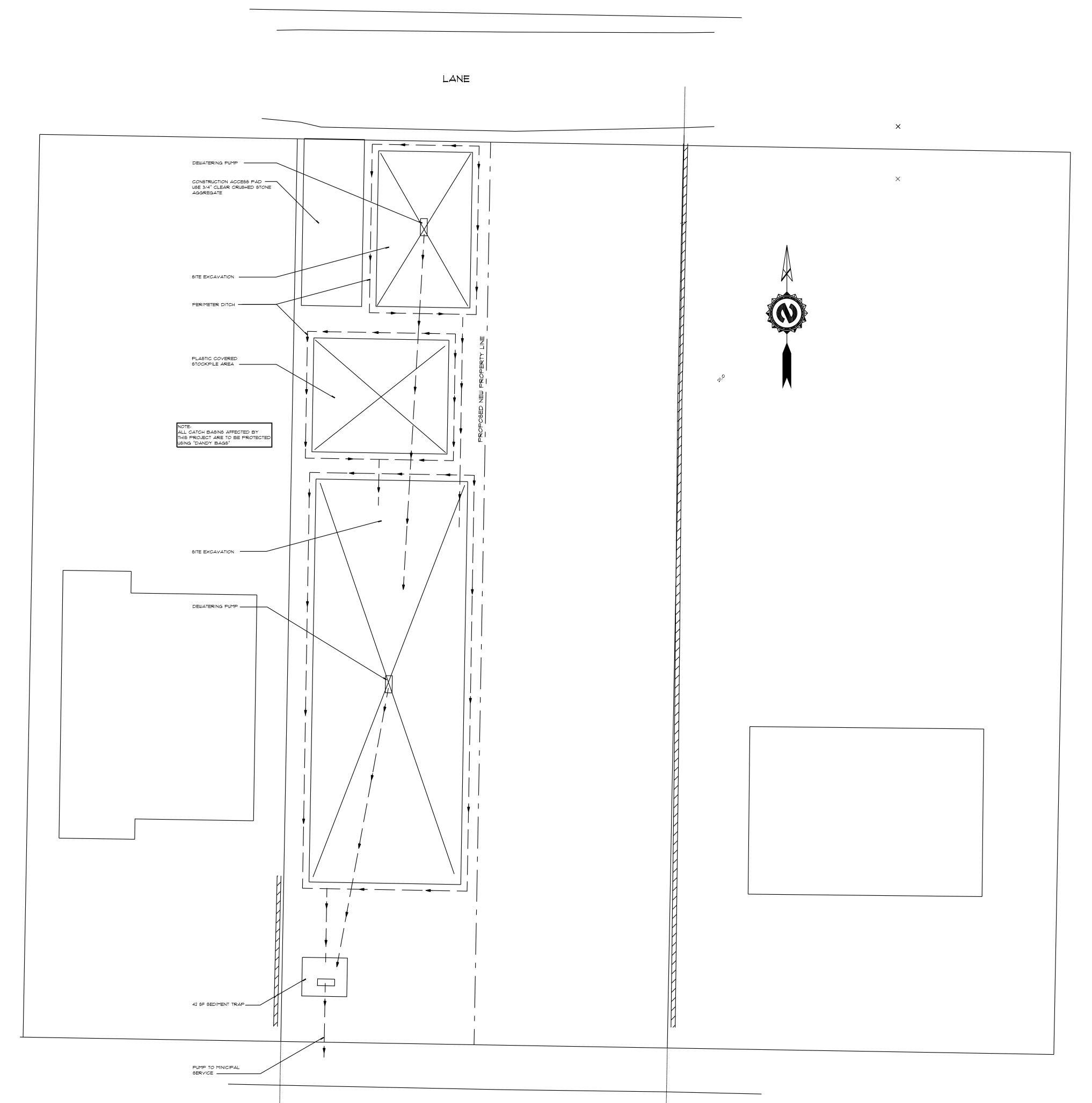
REVISIONS Bill Curtis & Associates 🖻 Design Ltd. (2002) Phone 604-986-4550 Fax 604-986-4555 billcurtisdesign@gmail.com 1551 Jones Avenue North Vancouver, BC V7M 3L9 CONTEXT Drawing PICTURES B.C. Date AUG. 2017 Drawn By Scale Project CUSANO RESIDENCE AT 410 WEST 15th STREET NORTH VANCOUVER

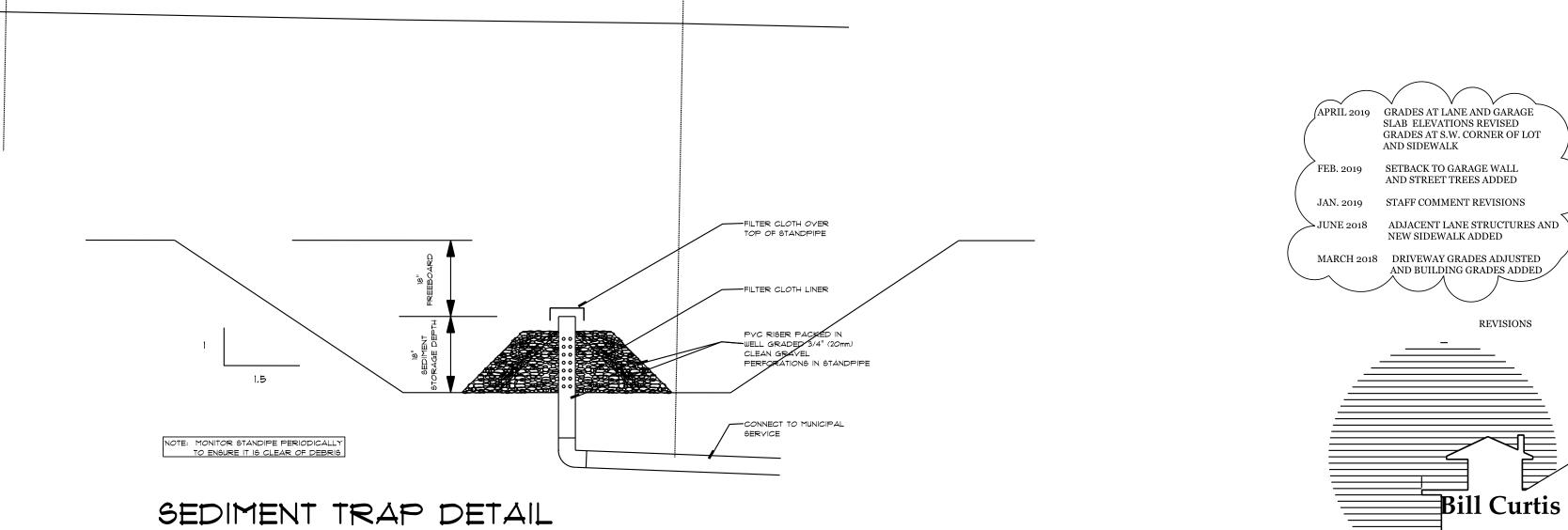
NOTE:

THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK AND REPORT ANY DESCREPANCIES TO THE DESIGNER. -THE DESIGNER WILL NOT BE RESPONSABLE FOR COSTS INCURRED TO THE OWNER OR CONTRACTOR THROUGH ERRORS OR OMISSIONS ON PLANS OR SPECIFICATIONS AFTER THE BUILDING PERMIT HAS BEEN ISSUED -THESE PLANS AND CONCEPTS ARE PROTECTED BY COPYRIGHT AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. THESE PLANS ARE THE PROPERTY OF THE DESIGNER AND NO PLAN OR PART THEREOF SHALL BE COPIED DISCLOSED TO OTHERS OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. VISUAL CONTACT WITH THESE DRAWINGS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.



# TOPOGRAPHIC SITE PLAN OVER LOT 7 BLOCK 41 DISTRICT LOT 547 GROUP I NWD PLAN 1061 PID: 014-852-845







C TARGET LAND SURVEYING (NW) Ltd 2017

-THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK AND REPORT ANY DESCREPANCIES TO THE DESIGNER. -THE DESIGNER WILL NOT BE RESPONSABLE FOR COSTS INCURRED TO THE OWNER OR CONTRACTOR THROUGH ERRORS OR OMISSIONS ON PLANS OR SPECIFICATIONS AFTER THE BUILDING PERMIT HAS BEEN ISSUED -THESE PLANS AND CONCEPTS ARE PROTECTED BY COPYRIGHT AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. THESE PLANS ARE THE PROPERTY OF THE DESIGNER AND NO PLAN OR PART THEREOF SHALL BE COPIED DISCLOSED TO OTHERS OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE DESIGNER. VISUAL CONTACT WITH THESE DRAWINGS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

SED. & EROSION Drawing CONTROL PLAN Drawn By BC Date AUG. 2017 SCALE: 1/8" = 1'-0"

ntial Des

& Associates

🕞 Design Ltd.

billcurtisdesign@gmail.com

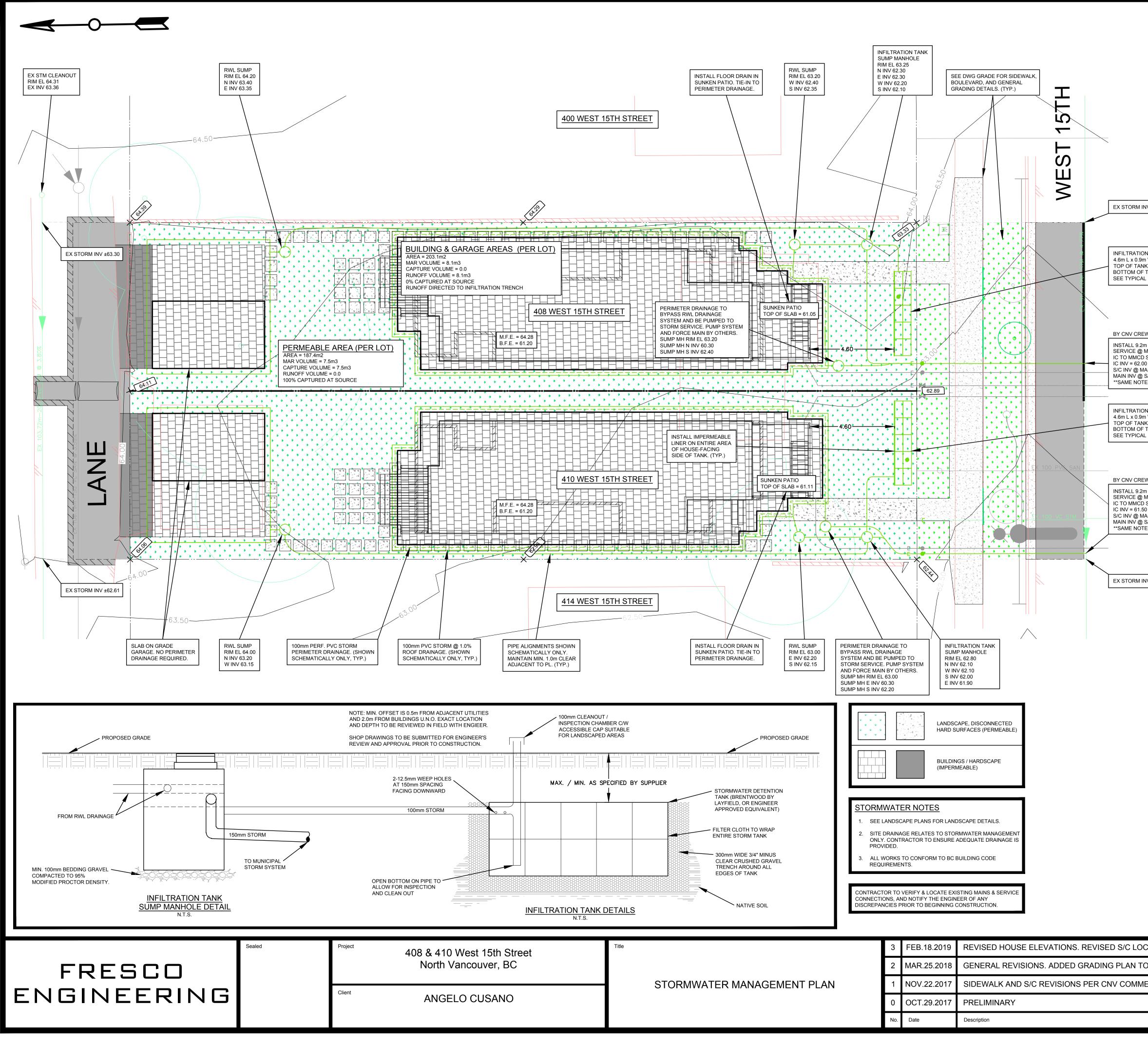
North Vancouver, BC V7M 3L9

Associates Design Ltd. <sup>(2002)</sup> Phone 604-986-4550

Fax 604-986-4555

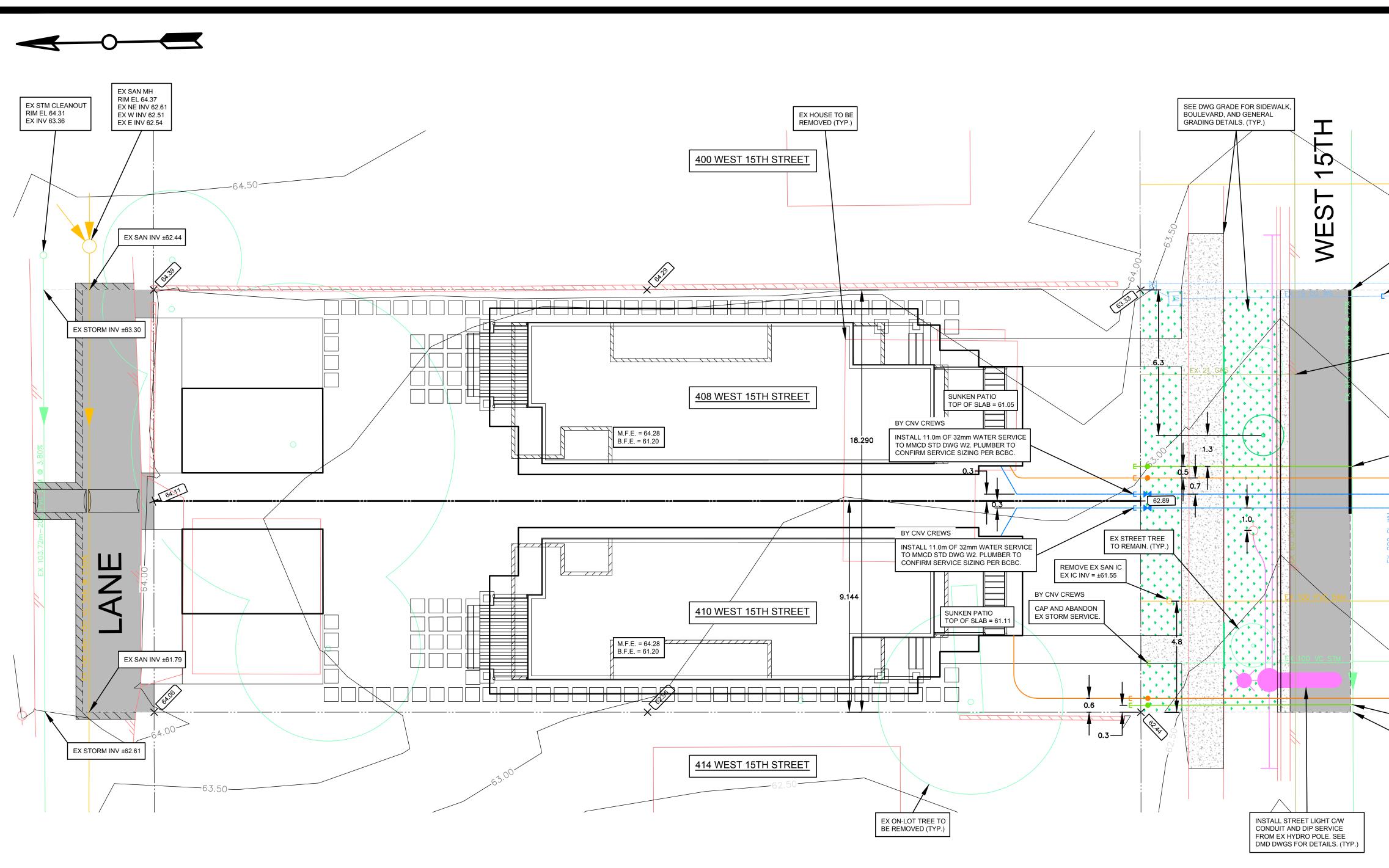
1551 Jones Avenue





Electron optimise met association and the bink weight of the construction optimised and the construled and the construction optimised and the construction	Internet per	Interest       Interest         Total Catchment Area       90.5 m²       see SMP drag         Isoda Catchment Area       90.5 m²       see SMP drag         Disconnected Hardscape (Counts as Permeable)       161.1 m²       see SMP drag         Disconnected Hardscape (Counts as Permeable)       164.1 m²       see SMP drag         Disconnected Hardscape (Counts as Permeable)       164.1 m²       see SMP drag         Disconnected Hardscape (Counts as Permeable)       165.6 m²       form above         Total Area       300.5 m²       form above         Total Rainfall Volume to be Captured       165.6 m²       form above         Disconnected Hardscape (Counts as Permeable)       28.9 m²       form above         Disconnected Hardscape (Counts as Permeable)       160.5 m²       form above         Disconnected Hardscape (Counts as Permeable)       160.5 m²       form above         Disconnected Hardscape (Counts as Permeable)       160.5 m²       form above         Disconnected Hardscape (Counts as Permeable)       160.5 m²       form above         Disconnected Hardscape (Counts as Permeable)       160.5 m²       form above         Disconnected Hardscape (Counts as Permeable)       160.400.400       form above         Disconnected Hardscape (Counts as Permeable)       160.400       form above		STORMWATER MANAGEMENT	
Period       See SMP drag         Total Catchment Area       S90.0 m²       see SMP drag         Landscape Area (Permeable)       180.5 m²       see SMP drag         Disconnected Hardscape (Courts as Permeable       25.0 m²       see SMP drag         Garage Area (Impermeable)       44 m²       see SMP drag         Objective: Capture the MAR Storn Event       80 mm       see SMP drag         MAR Rainfail Event       80 mm       see SMP drag         Total Permeable       15.0 m²       see SMP drag         Total Rainfail Event       80 mm       m²         Total Rainfail Event       80 mm       mabove         Rainfail on Area       15.0 m²       from above         Rainfail on Area       160.5 m²       from above         Total Rainfail Event       0.0 mm       mabove         Total Rainfail Captured       10.0 mm²       from above         Instruction Permeable       100.5 m²       from above         Total Rainfail Captured       0.240 m²/m²       66.4006/day         Infiltration Perviced       10.9 Ts²       infiltration volume         Available Runoff for Capture       (a)       7.5 m³       leaser of (a) and (b)         Building adurace Area       154.1 m²       from above	Disconsected Hardscape (Courts as Permeable Building and Area (Permeable) Cost of the Area (Permeable	Total Catchment Area       390.5 m²       see SMP dwg         Disconnected Hardscape (Courts as Permeable)       160.5 m²       see SMP dwg         Disdrave (inpermeable)       164.1 m²       see SMP dwg         Objective: capture the MR Storm Event       80 mm       see SMP dwg         MAR Rainfall Event       80 mm       see SMP dwg         Objective: capture the MR Storm Event       80 mm       see SMP dwg         MAR Rainfall Event       90 mm       toor above         Rainfall on Area       158.8 m²       from above         Total Rainfall Event       90 mm       toor above         Disconnected Hardscape (Courts as Permeable)       100.5 m²       from above         Disconnected Hardscape (Courts as Permeable)       100.5 m²       from above         Disconnected Hardscape (Courts as Permeable)       285.06 m%       infiltration volume         Disconnected Hardscape (Courts as Permeable)       100.5 m²       from above         Total Rainfall Captured       7.5 m²       rainfall on sufface         Nominal Infiltration per Area       104.0 m²       infiltration volume         Available Runoff for Capture       (b) 7.5 m²       rainfall on volume         Module Dimemsions (m)       Imma bove       Total Rainfall Capture       109.1 m²       modules²			AINFALL DURING THE 50% MAR
Star GRAUE PROVE Provided           Total Catchment Area Landscape Area (Permeable)         390,5 m <sup>2</sup> see SMP dwg           Disconnected Hardscape (Counts as Permeable Building Area (Impermeable)         48 m <sup>2</sup> see SMP dwg           Gange Area (Impermeable)         48 m <sup>2</sup> see SMP dwg           Gange Area (Impermeable)         48 m <sup>2</sup> see SMP dwg           Objective: Capture the MAR Storm Event MAR Rainfall Event         80 mm 50% of MAR Rainfall Event         90 mm 50% of MAR Rainfall Event         90 mm 50% of MAR Rainfall Event           Total Area         390,6 m <sup>2</sup> from above         from above           Rainfall Order Area (Remeable)         166.5 m <sup>2</sup> from above           Total Area         390,6 m <sup>2</sup> from above           Total Area         190 mm 50% of MAR Rainfall Event         90 mm 50% of MAR Rainfall Capture           Disconnected Hardscape (Counts as Permeable 2.86.60 m/s         from above           Inflitzation Parkea         197 mm <sup>2</sup> 86.400s/day           Inflitzation Parkea         197 mm <sup>2</sup> 86.400s/day           Inflitzation Parkea         194 m <sup>2</sup> from above           Total Permeable Area         42 m <sup>2</sup> from above           Total Permeable Area         194 m <sup>2</sup> from above           Total P	Description         Period 390,5 m²         see SMP day 50,5 m²           Landscape Area (Permeable)         190,5 m²         see SMP day 50,5 m²           Diading Area (Impermeable)         49 m²         see SMP day 50 mm           Garage Area (Impermeable)         49 m²         see SMP day 50 mm           Garage Area (Impermeable)         49 m²         see SMP day 50 mm           Total Percent Impermeable         50 mm         see SMP day 50 mm           Total Area         156 m²         from above           Total Rainfall Event         90 mm         Total Rainfall Event         100 mm           Total Rainfall Volume to be Captured         156 m²         from above           Total Rainfall Volume to be Captured         100,5 m²         from above           Total Rainfall Volume to be Capture         100,7 m²         from above           Total Rainfall Captured         154,1 m²         from above           Total Rainfall Captured         154,1 m²         from above           Infiltration Provided         (a) <u>45,0 m²</u> from above           Total Rainfall Captured         154,1 m²         from above           Total Rainfall Captured         154,1 m²         from above           Total Rainfall Captured         0,240 m²/m²         from above	Per tods       See SMP day         Indicatory Area       100.5 m²       see SMP day         Disconnected Hardcape (Counts as Permeable)       49 m²       see SMP day         Garage Area (Impermeable)       49 m²       see SMP day         Garage Area (Impermeable)       49 m²       see SMP day         Garage Area (Impermeable)       49 m²       see SMP day         Objective: Capture the MAR Storm Event       80 mm       see SMP day         MAR Rainfall Event       90 mm       55%       form above         Rainfall on Area       156 m³       form above       form above         Total Rainfall Volume to be Captured       165.8 m³       form above       form above         Total Rainfall Volume to be Captured       0.5 m²       form above       form above         Total Rainfall Volume to be Capture       (b) 7.5 m³       rainflut on surface         Disconnected Hardscape (Counts as Permeable)       0.240 m²/m²       86,400aday         Infitration per Area       0.31 m²       from above         Total Rainfall Captured       7.5 m³<			PAL HALL
Total Catchment Area       390.5 m <sup>2</sup> see SMP drag         Landscape Area (Permeable)       016.0 m <sup>2</sup> see SMP drag         Building Area (Impermeable)       26.8 m <sup>2</sup> see SMP drag         Garage Area (Impermeable)       48 m <sup>2</sup> see SMP drag         Garage Area (Impermeable)       52%       See SMP drag         Objective: Capture the MAR Storm Event       80 mm       SOM of MAR Rainfall Event       80 mm         MAR Rainfall Event       300.5 m <sup>2</sup> from above       from above         Rainfall on Area       15.5 m <sup>3</sup> from above       from above         Rainfall on Area       16.5 m <sup>3</sup> from above       from above         Total Permeable Surfaces       100.5 m <sup>3</sup> from above       from above         Landscape Area (Permeable)       100.5 m <sup>3</sup> from above       from above         Total Permeable Surfaces       10       from above       from above         Total Permeable Surfaces       10       from above       from above         Total Rainfall Copture       (b)       7.5 m <sup>3</sup> rainfall on aurface         Disconnected Hardscape (Counts as Permeable, 286.06 mis       infitration volume       from above         Total Rainfall Captured       7.5 m <sup>3</sup> rainfall on aurface <th>Total Catchment Area       390.5 m<sup>3</sup>//lise SMP dwg         Landscape Area (Permeable)       26.9 m<sup>3</sup>/lise SMP dwg         Discontected Hardscape (Courts as Permeable       365.4 m<sup>3</sup>/lise SMP dwg         Carage Area (Inpermeable)       52.6 m<sup>3</sup>/lise SMP dwg         Carage Area (Inpermeable)       52.6 m<sup>3</sup>/lise SMP dwg         Discontected Hardscape (Courts as Permeable       50.0 mm         S05 of MAR Rainfall Event       80.0 mm         S05 of MAR Rainfall Event       90.5 m<sup>3</sup>/lise Control         Total Rainfall Volume to be Captured       15.6 m<sup>3</sup>         Total Rainfall Volume to be Captured       160.5 m<sup>3</sup>/lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m<sup>3</sup>/lise Control         Total Rainfall Volume to be Capture       160.5 m<sup>3</sup>/lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m<sup>3</sup>/lise Control         Total Rainfall Capture       160.5 m<sup>3</sup>/lise Control         Nominal infiltration Raie       100 mm/m         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       reactal control         Available Runoff for Capture       164.1 m<sup>4</sup>/lise Control       20.0 m<sup>3/lise Control       20.0 m<sup>3/lise Control         Building and Garage Area Rainfall Capture       20.3 m<sup>3/lise Control       20.0 m<sup>3/lise Control       20.0 m<sup>3/lise Control        </sup></sup></sup></sup></sup></th> <th>Total Catchment Area     390.5 m³     see SMP day       Landscape Area (Permeable)     160.5 m²     see SMP day       Building Area (Impermeable)     154.1 m²     see SMP day       Garage Area (Impermeable)     49 m²     see SMP day       Garage Area (Impermeable)     52%     see SMP day       Objective: Capture the MAR Storn Event     80 m²     fmm above       MAR Rainfall Event     40 m²     fmm above       Total Area     390.5 m²     fmm above       Total Area     390.5 m²     fmm above       Total Renable)     49 m²     fmm above       Total Renable     160.5 m²     fmm above       Total Renable     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     2.86.00 m²     infiltration rolume       Disconnected Hardscape (Counts as Permeable)     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Available Runoff for Capture     (b) 7.5 m²     raintation surface       Building and Garage Area Rainfall Capture     fmm above     fmm above       Total Rainfall Captured     0.51 m²     fmm above       In</th> <th></th> <th></th> <th>0mm</th>	Total Catchment Area       390.5 m <sup>3</sup> //lise SMP dwg         Landscape Area (Permeable)       26.9 m <sup>3</sup> /lise SMP dwg         Discontected Hardscape (Courts as Permeable       365.4 m <sup>3</sup> /lise SMP dwg         Carage Area (Inpermeable)       52.6 m <sup>3</sup> /lise SMP dwg         Carage Area (Inpermeable)       52.6 m <sup>3</sup> /lise SMP dwg         Discontected Hardscape (Courts as Permeable       50.0 mm         S05 of MAR Rainfall Event       80.0 mm         S05 of MAR Rainfall Event       90.5 m <sup>3</sup> /lise Control         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Total Rainfall Volume to be Captured       160.5 m <sup>3</sup> /lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m <sup>3</sup> /lise Control         Total Rainfall Volume to be Capture       160.5 m <sup>3</sup> /lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m <sup>3</sup> /lise Control         Total Rainfall Capture       160.5 m <sup>3</sup> /lise Control         Nominal infiltration Raie       100 mm/m         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> reactal control         Available Runoff for Capture       164.1 m <sup>4</sup> /lise Control       20.0 m <sup>3/lise Control       20.0 m<sup>3/lise Control         Building and Garage Area Rainfall Capture       20.3 m<sup>3/lise Control       20.0 m<sup>3/lise Control       20.0 m<sup>3/lise Control        </sup></sup></sup></sup></sup>	Total Catchment Area     390.5 m³     see SMP day       Landscape Area (Permeable)     160.5 m²     see SMP day       Building Area (Impermeable)     154.1 m²     see SMP day       Garage Area (Impermeable)     49 m²     see SMP day       Garage Area (Impermeable)     52%     see SMP day       Objective: Capture the MAR Storn Event     80 m²     fmm above       MAR Rainfall Event     40 m²     fmm above       Total Area     390.5 m²     fmm above       Total Area     390.5 m²     fmm above       Total Renable)     49 m²     fmm above       Total Renable     160.5 m²     fmm above       Total Renable     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     2.86.00 m²     infiltration rolume       Disconnected Hardscape (Counts as Permeable)     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Available Runoff for Capture     (b) 7.5 m²     raintation surface       Building and Garage Area Rainfall Capture     fmm above     fmm above       Total Rainfall Captured     0.51 m²     fmm above       In			0mm
Total Catchment Area       390.5 m <sup>2</sup> see SMP drag         Landscape Area (Permeable)       016.0 m <sup>2</sup> see SMP drag         Building Area (Impermeable)       26.8 m <sup>2</sup> see SMP drag         Garage Area (Impermeable)       48 m <sup>2</sup> see SMP drag         Garage Area (Impermeable)       52%       See SMP drag         Objective: Capture the MAR Storm Event       80 mm       SOM of MAR Rainfall Event       80 mm         MAR Rainfall Event       300.5 m <sup>2</sup> from above       from above         Rainfall on Area       15.5 m <sup>3</sup> from above       from above         Rainfall on Area       16.5 m <sup>3</sup> from above       from above         Total Permeable Surfaces       100.5 m <sup>3</sup> from above       from above         Landscape Area (Permeable)       100.5 m <sup>3</sup> from above       from above         Total Permeable Surfaces       10       from above       from above         Total Permeable Surfaces       10       from above       from above         Total Rainfall Copture       (b)       7.5 m <sup>3</sup> rainfall on aurface         Disconnected Hardscape (Counts as Permeable, 286.06 mis       infitration volume       from above         Total Rainfall Captured       7.5 m <sup>3</sup> rainfall on aurface <th>Total Catchment Area       390.5 m<sup>3</sup>//lise SMP dwg         Landscape Area (Permeable)       26.9 m<sup>3</sup>/lise SMP dwg         Discontected Hardscape (Courts as Permeable       365.4 m<sup>3</sup>/lise SMP dwg         Carage Area (Inpermeable)       52.6 m<sup>3</sup>/lise SMP dwg         Carage Area (Inpermeable)       52.6 m<sup>3</sup>/lise SMP dwg         Discontected Hardscape (Courts as Permeable       50.0 mm         S05 of MAR Rainfall Event       80.0 mm         S05 of MAR Rainfall Event       90.5 m<sup>3</sup>/lise Control         Total Rainfall Volume to be Captured       15.6 m<sup>3</sup>         Total Rainfall Volume to be Captured       160.5 m<sup>3</sup>/lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m<sup>3</sup>/lise Control         Total Rainfall Volume to be Capture       160.5 m<sup>3</sup>/lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m<sup>3</sup>/lise Control         Total Rainfall Capture       160.5 m<sup>3</sup>/lise Control         Nominal infiltration Raie       100 mm/m         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       reactal control         Available Runoff for Capture       164.1 m<sup>4</sup>/lise Control       20.0 m<sup>3/lise Control       20.0 m<sup>3/lise Control         Building and Garage Area Rainfall Capture       20.3 m<sup>3/lise Control       20.0 m<sup>3/lise Control       20.0 m<sup>3/lise Control        </sup></sup></sup></sup></sup></th> <th>Total Catchment Area     390.5 m³     see SMP day       Landscape Area (Permeable)     160.5 m²     see SMP day       Building Area (Impermeable)     154.1 m²     see SMP day       Garage Area (Impermeable)     49 m²     see SMP day       Garage Area (Impermeable)     52%     see SMP day       Objective: Capture the MAR Storn Event     80 m²     fmm above       MAR Rainfall Event     40 m²     fmm above       Total Area     390.5 m²     fmm above       Total Area     390.5 m²     fmm above       Total Renable)     49 m²     fmm above       Total Renable     160.5 m²     fmm above       Total Renable     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     2.86.00 m²     infiltration rolume       Disconnected Hardscape (Counts as Permeable)     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Available Runoff for Capture     (b) 7.5 m²     raintation surface       Building and Garage Area Rainfall Capture     fmm above     fmm above       Total Rainfall Captured     0.51 m²     fmm above       In</th> <th><b></b></th> <th>Deviat</th> <th></th>	Total Catchment Area       390.5 m <sup>3</sup> //lise SMP dwg         Landscape Area (Permeable)       26.9 m <sup>3</sup> /lise SMP dwg         Discontected Hardscape (Courts as Permeable       365.4 m <sup>3</sup> /lise SMP dwg         Carage Area (Inpermeable)       52.6 m <sup>3</sup> /lise SMP dwg         Carage Area (Inpermeable)       52.6 m <sup>3</sup> /lise SMP dwg         Discontected Hardscape (Courts as Permeable       50.0 mm         S05 of MAR Rainfall Event       80.0 mm         S05 of MAR Rainfall Event       90.5 m <sup>3</sup> /lise Control         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Total Rainfall Volume to be Captured       160.5 m <sup>3</sup> /lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m <sup>3</sup> /lise Control         Total Rainfall Volume to be Capture       160.5 m <sup>3</sup> /lise Control         Disconnected Hardscape (Courts as Permeable)       160.5 m <sup>3</sup> /lise Control         Total Rainfall Capture       160.5 m <sup>3</sup> /lise Control         Nominal infiltration Raie       100 mm/m         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> reactal control         Available Runoff for Capture       164.1 m <sup>4</sup> /lise Control       20.0 m <sup>3/lise Control       20.0 m<sup>3/lise Control         Building and Garage Area Rainfall Capture       20.3 m<sup>3/lise Control       20.0 m<sup>3/lise Control       20.0 m<sup>3/lise Control        </sup></sup></sup></sup></sup>	Total Catchment Area     390.5 m³     see SMP day       Landscape Area (Permeable)     160.5 m²     see SMP day       Building Area (Impermeable)     154.1 m²     see SMP day       Garage Area (Impermeable)     49 m²     see SMP day       Garage Area (Impermeable)     52%     see SMP day       Objective: Capture the MAR Storn Event     80 m²     fmm above       MAR Rainfall Event     40 m²     fmm above       Total Area     390.5 m²     fmm above       Total Area     390.5 m²     fmm above       Total Renable)     49 m²     fmm above       Total Renable     160.5 m²     fmm above       Total Renable     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     160.5 m²     fmm above       Disconnected Hardscape (Counts as Permeable)     2.86.00 m²     infiltration rolume       Disconnected Hardscape (Counts as Permeable)     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Initiation Per Area     0.240 m²     infiltration colume       Available Runoff for Capture     (b) 7.5 m²     raintation surface       Building and Garage Area Rainfall Capture     fmm above     fmm above       Total Rainfall Captured     0.51 m²     fmm above       In	<b></b>	Deviat	
Landscape Area (Permeable) Disconnected Hardscape (Counts as Permeable Building Area (Impermeable) Garage Area (Impermeable) Garage Area (Impermeable) Garage Area (Impermeable) Af 9 m <sup>2</sup> see SMP dwg Soft dwg	Landscape Area (Permeable) Disconnected Handscape (Counts as Permeable) Garage Area (Impermeable) Garage Area (Impermeable) Garage Area (Impermeable) Garage Area (Impermeable) Total Percent Impermeable) 52% Objective: Capture the MAR Storm Event MAR Rainfall Event 30% of MAR Rainfall Cepture Disconnected Hardscape (Counts as Permeable) 10% of MAR Rainfall Capture Building Surface Area 30% of MAR Rainfall Capture Building Surface Area 30% of MAR Rainfall Capture Building Surface Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream above 7 total Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup>3</sup> ream Area 30% of MAR Rainfall Capture 10% of Sam <sup></sup>	Landscape Area (Permeable)       160.5 m²       see SMP dwg         Disconnected Hardscape (Counts as Permeable)       49 m²       see SMP dwg         Garage Area (Inpermeable)       49 m²       see SMP dwg         Total Percent Impermeable       52%       see SMP dwg         Solgective: Capture the MAR Storn Event       80 mm       see SMP dwg         MAR Rainfall Event       80 mm       see SMP dwg         Solgective: Capture the MAR Storn Event       40 mm         Total Area       390.5 m²       from above         Rainfall Count to be Captured       15.6 m³         Total Rainfall Volume to be Captured       16.4 m²         Landscape Area (Permeable)       160.5 m²       from above         Total Rainfall Nolume to be Captured       15.6 m³       from above         Landscape Area (Landscape Counts as Permeable)       100.5 m²       from above         Total Rainfall Captured       (a)       45.0 m²       from above         Total Rainfall Captured       (b)       7.5 m³       institution outure         Available Runoff for Capture       (b)       7.5 m³       from above         Total Rainfall Captured       7.5 m³       from above       from above         Total Rainfall Captured       0.457       from above <td< th=""><th>Total Catchment Area</th><th></th><th>see SMP dwa</th></td<>	Total Catchment Area		see SMP dwa
Disconnected Hardscape (Counts as Permeable Building Area (Impermeable) Garage Area (Impermeable) Total Percent Impermeable       15.4 m² see SMP dwg         Objective: Capture the MAR Storm Event MAR Rainfall Event S0% of MAR Rainfall Event Area       80 mm s0% of MAR Rainfall Event 40 mm Total Area       80 mm s0% of MAR Rainfall Event 40 mm         Total Rainfall Volume to be Captured       15.6 m²       from above         Total Rainfall Control       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable Disconnected Hardscape (Counts as Permeable 2.8.6 m²       from above         Total Rainfall Coptured       10 mmhr 2.8.6 m²       from above         Infiltration per Area       0.240 m²/m²       88.400 kday Infiltration Provided         Available Runoff for Capture       (b)       7.5 m²       rainfall on surface         Total Rainfall Captured       7.5 m²       rainfall on surface       from above         Total Rainfall Captured       0.31 m²       from above       from above         Total Rainfall Captured       0.430 m²/m²       88.400 kday       ind (b)         Building and Garage Area Rainfall Capture       154.1 m²       from above       from above         Total Rainfall Captured       0.430 m²       from above       from above         Garage Surface Area       0.31 m²       2.modulas²         Hiltration ta	Disconnected Hardscape (Counts as Permeable) Garage Area (mpermeable) Total Percent Impermeable) 52% Objective: Capture the MAR Storn Event MAR Rainfall Event 50% of NAR Rainfall Capture 50% of Nar Bare 50% of Nar Bare	Disconnected Hardscape (Counts as Permeable Building Area (Impermeable) Total Percent Impermeable       28.9 m <sup>3</sup> see SMP drag see SMP drag see SMP drag see SMP drag see SMP drag see SMP drag         Objective: Capture the MAR Storm Event MAR Rainfail Event 40 nm       80 nm 40 nm         Total Percent Impermeable       305 m <sup>2</sup> from above         Total Percent Impermeable       16.5 m <sup>2</sup> from above         Total Ravea       100.5 m <sup>2</sup> from above         Rainfail on Area       16.0 fm <sup>2</sup> from above         Dispective: Capture the MAR Storm Event State Permeable Area       160.5 m <sup>2</sup> from above         Dispective: Capture Area       100.5 m <sup>2</sup> from above         Dispective: Capture Area       100.5 m <sup>2</sup> from above         Dispective: Capture Area       100.5 m <sup>2</sup> from above         Dispective: Capture Area       24.0 m <sup>2</sup> /m <sup>2</sup> Infiltration Parkea       0.240 m <sup>2</sup> /m <sup>2</sup> Infiltration Parkea       0.240 m <sup>2</sup> /m <sup>2</sup> Infiltration Rate       10         Dialiding and Garage Area Rainfail Capture       154.1 m <sup>2</sup> from above         Building Surface Area       154.1 m <sup>2</sup> from above         Total Rainfail Captured       0.91 m         Dispective Area       90 m <sup>2</sup> from above         Total Rainfail Captured       0.457         Deptit O 10 Optit       0.457 m         Dispective Area <td></td> <td></td> <td></td>			
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²         Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       infitration per Area         Infitration Provided       (a)       45.0 m³         Infitration Provided       (a)       45.0 m³         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m²       from above         Garage Surface Area       194 m²       from above       from above         Garage Surface Area       194 m²       from above       from above         Gross Tank Volume       0.457       Depth       0.457         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pil Test       Infiltration provided       86.400s/day         Lingth torganics       0.00030 ms       2.3 m²/m²       86.400s/day </td <td>Total Rainfall Volume to be Captured       15.8 m<sup>3</sup>         Permeable Surfaces       160.5 m<sup>3</sup>       from above         Landscape Area (Permeable)       160.5 m<sup>3</sup>       from above         Total Permeable Area       187.4 m<sup>3</sup>       from above         Infitration per Area       10 mm/hr       2.86-90 m<sup>3</sup>       from above         Infitration Provided       (a)       45.0 m<sup>3</sup>/m<sup>3</sup>       86.400s/day         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       rainfall on surface         Total Rainfall Captured       7.5 m<sup>3</sup>       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m<sup>2</sup>       from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m<sup>3</sup>/m<sup>2</sup>       86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m</td> <td>Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       &lt;</td> <td></td> <td>3</td> <td></td>	Total Rainfall Volume to be Captured       15.8 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>3</sup> from above         Landscape Area (Permeable)       160.5 m <sup>3</sup> from above         Total Permeable Area       187.4 m <sup>3</sup> from above         Infitration per Area       10 mm/hr       2.86-90 m <sup>3</sup> from above         Infitration Provided       (a)       45.0 m <sup>3</sup> /m <sup>3</sup> 86.400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m <sup>2</sup> from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       <		3	
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²         Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       infitration per Area         Infitration Provided       (a)       45.0 m³         Infitration Provided       (a)       45.0 m³         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m²       from above         Garage Surface Area       194 m²       from above       from above         Garage Surface Area       194 m²       from above       from above         Gross Tank Volume       0.457       Depth       0.457         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pil Test       Infiltration provided       86.400s/day         Lingth torganics       0.00030 ms       2.3 m²/m²       86.400s/day </td <td>Total Rainfall Volume to be Captured       15.8 m<sup>3</sup>         Permeable Surfaces       160.5 m<sup>3</sup>       from above         Landscape Area (Permeable)       160.5 m<sup>3</sup>       from above         Total Permeable Area       187.4 m<sup>3</sup>       from above         Infitration per Area       10 mm/hr       2.86-90 m<sup>3</sup>       from above         Infitration Provided       (a)       45.0 m<sup>3</sup>/m<sup>3</sup>       86.400s/day         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       rainfall on surface         Total Rainfall Captured       7.5 m<sup>3</sup>       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m<sup>2</sup>       from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m<sup>3</sup>/m<sup>2</sup>       86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m</td> <td>Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       &lt;</td> <td>(iii) State strategy dependences representations, in: Nonline, Monthly, (Monthly, Monthly, Televis, Control and State representation).</td> <td></td> <td>see SMP dwg</td>	Total Rainfall Volume to be Captured       15.8 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>3</sup> from above         Landscape Area (Permeable)       160.5 m <sup>3</sup> from above         Total Permeable Area       187.4 m <sup>3</sup> from above         Infitration per Area       10 mm/hr       2.86-90 m <sup>3</sup> from above         Infitration Provided       (a)       45.0 m <sup>3</sup> /m <sup>3</sup> 86.400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m <sup>2</sup> from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       <	(iii) State strategy dependences representations, in: Nonline, Monthly, (Monthly, Monthly, Televis, Control and State representation).		see SMP dwg
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²         Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       infitration per Area         Infitration Provided       (a)       45.0 m³         Infitration Provided       (a)       45.0 m³         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m²       from above         Garage Surface Area       194 m²       from above       from above         Garage Surface Area       194 m²       from above       from above         Gross Tank Volume       0.457       Depth       0.457         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pil Test       Infiltration provided       86.400s/day         Lingth torganics       0.00030 ms       2.3 m²/m²       86.400s/day </td <td>Total Rainfall Volume to be Captured       15.8 m<sup>3</sup>         Permeable Surfaces       160.5 m<sup>3</sup>       from above         Landscape Area (Permeable)       160.5 m<sup>3</sup>       from above         Total Permeable Area       187.4 m<sup>3</sup>       from above         Infitration per Area       10 mm/hr       2.86-90 m<sup>3</sup>       from above         Infitration Provided       (a)       45.0 m<sup>3</sup>/m<sup>3</sup>       86.400s/day         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       rainfall on surface         Total Rainfall Captured       7.5 m<sup>3</sup>       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m<sup>2</sup>       from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m<sup>3</sup>/m<sup>2</sup>       86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m</td> <td>Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       &lt;</td> <td></td> <td></td> <td>see SMP dwg</td>	Total Rainfall Volume to be Captured       15.8 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>3</sup> from above         Landscape Area (Permeable)       160.5 m <sup>3</sup> from above         Total Permeable Area       187.4 m <sup>3</sup> from above         Infitration per Area       10 mm/hr       2.86-90 m <sup>3</sup> from above         Infitration Provided       (a)       45.0 m <sup>3</sup> /m <sup>3</sup> 86.400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m <sup>2</sup> from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       <			see SMP dwg
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²         Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       infitration per Area         Infitration Provided       (a)       45.0 m³         Infitration Provided       (a)       45.0 m³         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m²       from above         Garage Surface Area       194 m²       from above       from above         Garage Surface Area       194 m²       from above       from above         Gross Tank Volume       0.457       Depth       0.457         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pil Test       Infiltration provided       86.400s/day         Lingth torganics       0.00030 ms       2.3 m²/m²       86.400s/day </td <td>Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²       from above         Infitration per Area       0.240 m³/m²       fiformation         Infitration Provided       (a)       45.0 m³       fiformation volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       194.1 m²       from above         Building and Garage Area Rainfall Capture       Building Surface Area       194.1 m²       from above         Building Surface Area       194.1 m²       from above       from above         Infitration tank width       0.91 m       2 modulos*         Total Impermeable Area       203.1 m²       from above         Infitration tank width       0.91 m       2 modulos*         Tork void space       95%       from obove         Tank void space       95%       from Pit Tast       Infitration per Area         Sandy with organics       0.0030 m/s       26.3 m²/m²       66.400s/day         Infitration Provided       0.80 m²       from Pit Tast       Infitration volume         <t< td=""><td>Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       &lt;</td><td></td><td></td><td>see SimP dwg</td></t<></td>	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²       from above         Infitration per Area       0.240 m³/m²       fiformation         Infitration Provided       (a)       45.0 m³       fiformation volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       194.1 m²       from above         Building and Garage Area Rainfall Capture       Building Surface Area       194.1 m²       from above         Building Surface Area       194.1 m²       from above       from above         Infitration tank width       0.91 m       2 modulos*         Total Impermeable Area       203.1 m²       from above         Infitration tank width       0.91 m       2 modulos*         Tork void space       95%       from obove         Tank void space       95%       from Pit Tast       Infitration per Area         Sandy with organics       0.0030 m/s       26.3 m²/m²       66.400s/day         Infitration Provided       0.80 m²       from Pit Tast       Infitration volume <t< td=""><td>Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       &lt;</td><td></td><td></td><td>see SimP dwg</td></t<>	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       <			see SimP dwg
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²         Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       infitration per Area         Infitration Provided       (a)       45.0 m³         Infitration Provided       (a)       45.0 m³         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m²       from above         Garage Surface Area       194 m²       from above       from above         Garage Surface Area       194 m²       from above       from above         Gross Tank Volume       0.457       Depth       0.457         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pil Test       Infiltration provided       86.400s/day         Lingth torganics       0.00030 ms       2.3 m²/m²       86.400s/day </td <td>Total Rainfall Volume to be Captured       15.8 m<sup>3</sup>         Permeable Surfaces       160.5 m<sup>3</sup>       from above         Landscape Area (Permeable)       160.5 m<sup>3</sup>       from above         Total Permeable Area       187.4 m<sup>3</sup>       from above         Infitration per Area       10 mm/hr       2.86-90 m<sup>3</sup>       from above         Infitration Provided       (a)       45.0 m<sup>3</sup>/m<sup>3</sup>       86.400s/day         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       rainfall on surface         Total Rainfall Captured       7.5 m<sup>3</sup>       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m<sup>2</sup>       from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m<sup>3</sup>/m<sup>2</sup>       86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m</td> <td>Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       &lt;</td> <td></td> <td>80 mm</td> <td>Honora and Anna and A</td>	Total Rainfall Volume to be Captured       15.8 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>3</sup> from above         Landscape Area (Permeable)       160.5 m <sup>3</sup> from above         Total Permeable Area       187.4 m <sup>3</sup> from above         Infitration per Area       10 mm/hr       2.86-90 m <sup>3</sup> from above         Infitration Provided       (a)       45.0 m <sup>3</sup> /m <sup>3</sup> 86.400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m <sup>2</sup> from above         Total Rainfall Captured       0.91 m       2 modules*       modules*         Infittration tank depth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Infittration tank keth       0.91 m       2 modules*         Tank void space       95%       form Plt Test       Infittration per Area         Sandy with organics       0.002 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       form Plt Test         Infittration tank keth       0.91 m       2 modules*       form plt Test         Infittration tank keth       0.91 m	Total Rainfall Volume to be Captured       15.8 m³         Permeable Surfaces       Landscape Area (Permeable)       160.5 m²       from above         Total Permeable Area       16 mm/hr       Ifom above         Nominal Infitration Rate       10 mm/hr       2.885.06 m/s       0.240 m²/m²       86.400s/day         Infitration per Area       0.240 m²/m²       86.400s/day       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Building and Carage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       modules*         Module Dimension (m)       Length       0.457       pepth       odds7         Infitration tank kepth       0.81 m       2 modules*       modules*         Infitration tank kepth       0.81 m       2 modules*       modules*         Tank voldspace       95%       smodules*       modules*         Sandy with organics       0.00030 m/s       2.63 m²       86.400s/day         Infitration Tank Kep       1.46.07 m/s       0.61 m²       modules*         Infitration Tank Kep       0.0030 m/s       2.63 m²       86.400s/day         Infitration Nateriak       <		80 mm	Honora and Anna and A
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²         Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       infitration per Area         Infitration Provided       (a)       45.0 m³         Infitration Provided       (a)       45.0 m³         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m²       from above         Garage Surface Area       194 m²       from above       from above         Garage Surface Area       194 m²       from above       from above         Gross Tank Volume       0.457       Depth       0.457         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pil Test       Infiltration provided       86.400s/day         Lingth torganics       0.00030 ms       2.3 m²/m²       86.400s/day </td <td>Total Rainfall Volume to be Captured       15.6 m<sup>3</sup>         Permeable Surfaces       160.5 m<sup>2</sup>       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m<sup>2</sup>       from above         Total Permeable Area       187.4 m<sup>2</sup>         Nominal Infittration Rate       10 mm/hr         2.8E-06 m/s       9         Infittration Provided       (a) <u>450 m<sup>3</sup></u>         Infittration Provided       (a) <u>7.5 m<sup>3</sup></u>         Available Runoff for Capture       (b) 7.5 m<sup>3</sup>         Building and Garage Area Rainfall Capture       Building Surface Area         Building Surface Area       194 m<sup>3</sup>         Grass Varlace Area       194 m<sup>3</sup>         Module Dimensions (m)       Length 0.914 Width 0.457 Depth 0.457         Infittration tank width       0.91 m         Infittration tank width       0.91 m         Tank void space       95%         Net Storage Volume       (c) 3.6 m<sup>3</sup>         Tank void space       95%         Net Storage Volume       0.26 m<sup>3</sup>         Depth of clay (bottom of sand / top of clay)       1.12 m/m<sup>2</sup>         Infiltration Materials       from Pil Test         Infiltration Provided       0.28 m<sup>3</sup>         Cay       1.4E-07 m/s       0.012 m<sup>5</sup>/m<sup>2</sup>         Dept</td> <td>Total Rainfail Volume to be Captured       15.8 m<sup>3</sup>         Permeable Surfaces       180.5 m<sup>2</sup>       from above         Disconcel Hardscape (Counts as Permeable 26.9 m<sup>2</sup>       from above         Total Permeable Area       187.4 m<sup>2</sup>         Nominal Infiltration Rate       10 mm/br         2.8E-06 m/s       infiltration per Area         Infiltration Provided       (a) 45.0 m<sup>3</sup>         Available Runoff for Capture       (b) 7.5 m<sup>3</sup>         Total Rainfall Captured       7.5 m<sup>3</sup>         Building and Garage Area Rainfall Capture         Building and Garage Area Rainfall Capture         Building and Garage Area Rainfall Capture         Building Surface Area       49 m<sup>2</sup>         Infiltration tark depth       0.457         Infiltration tark depth       4.57 m         Garage Surface Area       9 m<sup>2</sup>         Infiltration tark depth       4.57 m         Gross Tank Volume       3.8 m<sup>2</sup>         Infiltration tark depth       4.57 m         Gross Tank Volume       0.81 m<sup>3</sup>         Cay       1.4E of max)         Infiltration Materials       from PIT Test         Infiltration Tark height Exposus Carly with organics       0.38 m<sup>3</sup>         Gross Tank Volume       5.3.8 m<sup>3</sup></td> <td></td> <td></td> <td></td>	Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> Permeable Surfaces       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable, 26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> Nominal Infittration Rate       10 mm/hr         2.8E-06 m/s       9         Infittration Provided       (a) <u>450 m<sup>3</sup></u> Infittration Provided       (a) <u>7.5 m<sup>3</sup></u> Available Runoff for Capture       (b) 7.5 m <sup>3</sup> Building and Garage Area Rainfall Capture       Building Surface Area         Building Surface Area       194 m <sup>3</sup> Grass Varlace Area       194 m <sup>3</sup> Module Dimensions (m)       Length 0.914 Width 0.457 Depth 0.457         Infittration tank width       0.91 m         Infittration tank width       0.91 m         Tank void space       95%         Net Storage Volume       (c) 3.6 m <sup>3</sup> Tank void space       95%         Net Storage Volume       0.26 m <sup>3</sup> Depth of clay (bottom of sand / top of clay)       1.12 m/m <sup>2</sup> Infiltration Materials       from Pil Test         Infiltration Provided       0.28 m <sup>3</sup> Cay       1.4E-07 m/s       0.012 m <sup>5</sup> /m <sup>2</sup> Dept	Total Rainfail Volume to be Captured       15.8 m <sup>3</sup> Permeable Surfaces       180.5 m <sup>2</sup> from above         Disconcel Hardscape (Counts as Permeable 26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> Nominal Infiltration Rate       10 mm/br         2.8E-06 m/s       infiltration per Area         Infiltration Provided       (a) 45.0 m <sup>3</sup> Available Runoff for Capture       (b) 7.5 m <sup>3</sup> Total Rainfall Captured       7.5 m <sup>3</sup> Building and Garage Area Rainfall Capture         Building and Garage Area Rainfall Capture         Building and Garage Area Rainfall Capture         Building Surface Area       49 m <sup>2</sup> Infiltration tark depth       0.457         Infiltration tark depth       4.57 m         Garage Surface Area       9 m <sup>2</sup> Infiltration tark depth       4.57 m         Gross Tank Volume       3.8 m <sup>2</sup> Infiltration tark depth       4.57 m         Gross Tank Volume       0.81 m <sup>3</sup> Cay       1.4E of max)         Infiltration Materials       from PIT Test         Infiltration Tark height Exposus Carly with organics       0.38 m <sup>3</sup> Gross Tank Volume       5.3.8 m <sup>3</sup>			
Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable Area       187.4 m²         Nominal Infitration Rate       10 mm/hr         2.8E-06 m/s       infitration per Area         Infitration Provided       (a)       45.0 m³         Infitration Provided       (a)       45.0 m³         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       194 m²       from above         Garage Surface Area       194 m²       from above       from above         Garage Surface Area       194 m²       from above       from above         Gross Tank Volume       0.457       Depth       0.457         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pil Test       Infiltration provided       86.400s/day         Lingth torganics       0.00030 ms       2.3 m²/m²       86.400s/day </td <td>Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable/Area       187.4 m²       from above         Infitration per Area       0 mm/br       2.85.00 m/s         Infitration per Area       0.240 m²/m²       86.400s/day         Infitration Provided       (a)       4.50 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       154.1 m²       from above       from above         Total Rainfall Captured       0.91 m       2 modules*         Module Dimensions (m)       10.91 m       2 modules*         Length       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infitration tank width       0.91 m       2 modules*         Clay       1.4E-07 m/s       0.012 m³/m²       86.400s/day         Infitration tank width       0.91 m       2.2 modules*</td> <td>Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable 26.9 m²       from above         Total Permeable Area       167.4 m²       from above         Infitration per Area       167.4 m²       66.400s/day         Infitration Provided       (a)</td> <td>Total Area</td> <td>390.5 m<sup>2</sup></td> <td>from above</td>	Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m²       from above         Total Permeable/Area       187.4 m²       from above         Infitration per Area       0 mm/br       2.85.00 m/s         Infitration per Area       0.240 m²/m²       86.400s/day         Infitration Provided       (a)       4.50 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       154.1 m²       from above       from above         Total Rainfall Captured       0.91 m       2 modules*         Module Dimensions (m)       10.91 m       2 modules*         Length       0.91 m       2 modules*         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infitration tank width       0.91 m       2 modules*         Clay       1.4E-07 m/s       0.012 m³/m²       86.400s/day         Infitration tank width       0.91 m       2.2 modules*	Total Rainfall Volume to be Captured       15.6 m³         Permeable Surfaces       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable 26.9 m²       from above         Total Permeable Area       167.4 m²       from above         Infitration per Area       167.4 m²       66.400s/day         Infitration Provided       (a)	Total Area	390.5 m <sup>2</sup>	from above
Permeable Surfaces       Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Disconceled Hardscape (Counts as Permeable)       26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> from above         Infitration per Area       187.4 m <sup>2</sup> 86.400s/day         Infitration Provided       (a)       450 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       164.1 m <sup>2</sup> from above       Total lampermeable Area       203.1 m <sup>2</sup> Module Dimensions (m)       Length       0.457       Infiltration tank idepth       0.457         Infiltration tank idepth       0.91 m       2 modules*       redules*         Gross Tank Volume       3.8 m <sup>4</sup> "Periot         Tank vold space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Ark iength       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       Garain in max. 24hr         Infiltration Park Keg       0.38 m <sup>4</sup> infiltrat	Permeable Surfaces       Iandscape Area (Permeable)       160.5 m <sup>2</sup> from above         Disconceled Hardscape (Counts as Permeable)       26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> from above         Infitration per Area       187.4 m <sup>2</sup> 86.400s/day         Infitration Provided       (a)       450 m <sup>3</sup> rainfall on surface         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       164.1 m <sup>2</sup> from above       from above         Garage Surface Area       164.1 m <sup>2</sup> from above       from above         Garage Surface Area       164.1 m <sup>2</sup> from above       from above         Garage Surface Area       164.1 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above       from above         Garage Surface Area       164.1 m <sup>2</sup> from above       from above         Garage Surface Area       0.457       Depth       deft       from above         Infiltration tank Width	Permeable Surfaces       Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable       26.9 m <sup>2</sup> from above         Total Permeable Area       10 mm/hr       2.8E 06 m/s         Infitration per Area       0.240 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Infitration per Area       0.240 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Infitration Per Area       0.240 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> rainfall on surface         Building and Garage Area Rainfall Capture       Building Surface Area       164.1 m <sup>2</sup> from above         Garage Surface Area       164.1 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       0.91 m       2 modules*         Infiltration tank deph       0.457       per lot         Tank void space       95%       Arain in max. 24hr         Infiltration Tank Area       10000 m/s       2.8 modules*         Infiltration Materials       from PIT Test       Infiltration per Area         Strike Area at Area       0.012 m <sup>3</sup> /m <sup>3</sup> 86.400s/day </td <td>Rainfall on Area</td> <td></td> <td></td>	Rainfall on Area		
Permeable Surfaces       Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable, 26.9 m <sup>2</sup> from above       from above         Total Permeable Area       187.4 m <sup>2</sup> from above         Infitration per Area       10 mm/hr       2.8E-06 m/s       0         Infitration Provided       (a)       450 m <sup>2</sup> infitration volume         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       164.1 m <sup>3</sup> from above         Garage Surface Area       164.1 m <sup>3</sup> from above       from above         Total Reinfall Captured       0.457       Infitration tank depth       0.91 m       2 modules*         Infitration tank depth       0.91 m       2 modules*       1modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot       Tank void space       95%         Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infitration Tank Area       Sandy with organics       0.32 m       86,400s/day         Cay       1.4 E-07 m/s       0.012 m <sup>2</sup> /m <sup>2</sup> 86,400s/day <td>Permeable Surfaces       Landscape Area (Permeable)       160.5 m<sup>2</sup>       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m<sup>2</sup>       from above       from above         Total Permeable Area       187.4 m<sup>2</sup>       from above         Infitration per Area       10 mm/hr       2.8E-06 m/s       0         Infitration Provided       (a)       450 m<sup>2</sup>       infitration volume         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       rainfall on surface         Total Rainfall Captured       7.5 m<sup>3</sup>       rainfall on surface         Building and Garage Area Rainfall Capture       Building Surface Area       164.1 m<sup>2</sup>       from above         Building and Garage Area Rainfall Capture       Building 0.914       Width       0.457       Infitration tank depth         Infitration tank depth       0.91 m       2 modules*       modules*         Garage Surface Area       95%       rom above       modules*         Infitration tank length       0.91 m       2 modules*         Infitration tank kepth       0.91 m       2 modules*     <td>Permeable Surfaces         Landscape Area (Permeable)       160.5 m<sup>2</sup>       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m<sup>2</sup>       from above         Total Permeable Area       187.4 m<sup>2</sup>         Nominal Infiltration Rate       10       mm/hr         2.86-06 m/s       0.240 m<sup>2</sup>/m<sup>2</sup>       86,400s/day         Infiltration per Area       0.240 m<sup>2</sup>/m<sup>2</sup>       86,400s/day         Infiltration Provided       (a)       45.0 m<sup>2</sup>       infiltration volume         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       rainfall on surface         Total Rainfall Captured       7.5 m<sup>3</sup>       lesser of (a) and (b)         Building Surface Area       49 m<sup>2</sup>       from above         Garage Surface Area       49 m<sup>2</sup>       from above         Total Impermeable Area       203.1 m<sup>2</sup>       from above         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m<sup>3</sup>       "Per lot         Tank vold space       95%       Net Storage Volume       (c)       3.6 m<sup>3</sup>       modules*         Clay       1.4E-07 m/s       0.012 m<sup>3</sup>/m<sup>2</sup>       86,400s/day       infiltration Tank Area       <td< td=""><td>Total Rainfall Volume to be Captured</td><td>15.6 m<sup>3</sup></td><td></td></td<></td></td>	Permeable Surfaces       Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable, 26.9 m <sup>2</sup> from above       from above         Total Permeable Area       187.4 m <sup>2</sup> from above         Infitration per Area       10 mm/hr       2.8E-06 m/s       0         Infitration Provided       (a)       450 m <sup>2</sup> infitration volume         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> rainfall on surface         Building and Garage Area Rainfall Capture       Building Surface Area       164.1 m <sup>2</sup> from above         Building and Garage Area Rainfall Capture       Building 0.914       Width       0.457       Infitration tank depth         Infitration tank depth       0.91 m       2 modules*       modules*         Garage Surface Area       95%       rom above       modules*         Infitration tank length       0.91 m       2 modules*         Infitration tank kepth       0.91 m       2 modules* <td>Permeable Surfaces         Landscape Area (Permeable)       160.5 m<sup>2</sup>       from above         Disconnected Hardscape (Counts as Permeable, 26.9 m<sup>2</sup>       from above         Total Permeable Area       187.4 m<sup>2</sup>         Nominal Infiltration Rate       10       mm/hr         2.86-06 m/s       0.240 m<sup>2</sup>/m<sup>2</sup>       86,400s/day         Infiltration per Area       0.240 m<sup>2</sup>/m<sup>2</sup>       86,400s/day         Infiltration Provided       (a)       45.0 m<sup>2</sup>       infiltration volume         Available Runoff for Capture       (b)       7.5 m<sup>3</sup>       rainfall on surface         Total Rainfall Captured       7.5 m<sup>3</sup>       lesser of (a) and (b)         Building Surface Area       49 m<sup>2</sup>       from above         Garage Surface Area       49 m<sup>2</sup>       from above         Total Impermeable Area       203.1 m<sup>2</sup>       from above         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m<sup>3</sup>       "Per lot         Tank vold space       95%       Net Storage Volume       (c)       3.6 m<sup>3</sup>       modules*         Clay       1.4E-07 m/s       0.012 m<sup>3</sup>/m<sup>2</sup>       86,400s/day       infiltration Tank Area       <td< td=""><td>Total Rainfall Volume to be Captured</td><td>15.6 m<sup>3</sup></td><td></td></td<></td>	Permeable Surfaces         Landscape Area (Permeable)       160.5 m <sup>2</sup> from above         Disconnected Hardscape (Counts as Permeable, 26.9 m <sup>2</sup> from above         Total Permeable Area       187.4 m <sup>2</sup> Nominal Infiltration Rate       10       mm/hr         2.86-06 m/s       0.240 m <sup>2</sup> /m <sup>2</sup> 86,400s/day         Infiltration per Area       0.240 m <sup>2</sup> /m <sup>2</sup> 86,400s/day         Infiltration Provided       (a)       45.0 m <sup>2</sup> infiltration volume         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building Surface Area       49 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank vold space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> modules*         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day       infiltration Tank Area <td< td=""><td>Total Rainfall Volume to be Captured</td><td>15.6 m<sup>3</sup></td><td></td></td<>	Total Rainfall Volume to be Captured	15.6 m <sup>3</sup>	
Landscape Area (Permeable)       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       26.9 m²       from above         Total Permeable Area       10 mm/hr       2.8E-06 m/s         Infiltration Rate       10 mm/hr       2.8E-06 m/s         Infiltration Provided       (a)       450 m³         Infiltration Provided       (b)       7.5 m³       86.400s/day         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lessor of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Modules*       modules*         Infiltration tank depth       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*       Gross Tank Volume       3.6 m²         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pli Test       Infiltration provided       86.400s/day         Sandy with organics       0.020 m²       0.012	Landscape Area (Permeable) Disconnected Hardscape (Counts as Permeable Total Permeable Area160.5 m² rom above from above from above from aboveTotal Permeable Area187.4 m²from above from aboveNominal Infiltration Rate0 2.8E.06 m/s66.400s/day infiltration volumeInfiltration Provided(a) 45.0 m²66.400s/day infiltration volumeAvailable Runoff for Capture(b)7.5 m²rainfail on surfaceTotal Rainfail Captured <b>7.5</b> m³lesser of (a) and (b)Building and Garage Area Rainfail CaptureBuilding Surface Area Carage Surface Area194.1 m² trom above for aboveTotal Rainfail Captured <b>7.5</b> m³lesser of (a) and (b)Building Surface Area Garage Surface Area194.1 m² trom aboveTotal Impermeable Area203.1 m²Module Dimensions (m) Length0.91 m 4.57 mCross Tank Volume3.8 m³Tank void space Surface Area of tank Width0.91 m 0.91 m 4.57 m²Tank void space Depth of day (bottom of sand / top of day) Length organics0.012 m³/m² 86.400s/dayInfiltration Provided Sandy with organics0.32 m² 0.59 m Surface Area of tank ClaySurface Area of tank Clay Clay0.1 m³ (c) + (d)Total Tank Capture Provided Sandy with organics53.8 m³ (c) + (d)Clay Clay0.1 m³ (c) + (d)And Height Exposur Clay Surface Area of tank Clay53.9 m³ (c) + (d)Available Runoff for Capture Clay(f)Anti-Reint Exposur Clay Surface Area of tan	Landscape Area (Permeable)       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       26.5 m²       from above         Total Permeable Area       10 mm/hr         Nominal Infitration Rate       10 mm/hr         Left Control       0.240 m³/m²       86,400s/day         Infitration Provided       (a)       45.0 m³       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured			
Landscape Area (Permeable)       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       26.9 m²       from above         Total Permeable Area       10 mm/hr       2.8E-06 m/s         Infiltration Rate       10 mm/hr       2.8E-06 m/s         Infiltration Provided       (a)       450 m³         Infiltration Provided       (b)       7.5 m³       86.400s/day         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lessor of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Modules*       modules*         Infiltration tank depth       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*       Gross Tank Volume       3.6 m²         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pli Test       Infiltration provided       86.400s/day         Sandy with organics       0.020 m²       0.012	Landscape Area (Permeable) Disconnected Hardscape (Counts as Permeable Total Permeable Area180.5 m² 187.4 m²from above from above from aboveTotal Permeable Area197.4 m²from aboveNominal Inflitration Rate00.240 m²/m²86.400s/day inflitration volumeAvailable Runoff for Capture(b)7.5 m³rainfall on surfaceAvailable Runoff for Capture(b)7.5 m³rainfall on surfaceTotal Rainfall Captured $\overline{7.5}$ m³lesser of (a) and (b)Building and Garage Area Rainfall CaptureBuilding Surface Area194.1 m² from aboveGarage Surface Area $49$ m³from aboveTotal Rainfall Captured0.91 m2 modules* form aboveInfiltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m2 modules* form aboveGross Tank Volume3.8 m³"Per lotTank void space95% Net Storage Volume0.012 m²/m²Gross Tank Volume3.8 m³"Per lotTank void space95% 8.400s/day1.12 m 0.012 m²/m²Depth of day (bottom of sand / top of elay) Depth of day (bottom of sand / top of elay) Eard (d) 653.9 m³infiltration reactionInfiltration Provided53.8 m³infiltration volumeSandy with organics0.32 m 0.32 m Tank Height Exposur Clay0.50 m³ 0.32 m 0.53 m³Infiltration Provided63.9 m³ 0.53.9 m³infiltration volumeSandy with organics53.8 m³ 0.32 m 1 mithreator volumeTotal Tank Capture Provided<	Landscape Area (Permeable)       160.5 m²       from above         Disconnected Hardscape (Counts as Permeable       26.5 m²       from above         Total Permeable Area       10 mm/tr         Nominal Infitration Rate       10 mm/tr         1/1000 Area       0.240 m³/m²       86.400s/day         Infitration Provided       (a)       45.0 m³       infitration volume         Available Runoff for Capture       (b)       7.5 m³       rainfall on surface         Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       154.1 m²       from above       from above         Total Impermeable Area       203.1 m²       genodules*         Infitration tank depth       0.91 m       2 modules*         Infitration tank depth       0.91 m       2 modules*         Gross Tank Volume       3.8 m²       Grass Tank Volume       3.8 m²         Carge Volume       (c)       3.6 m²       drain in max: 24hr         Infitration Tank Area       0.0030 m/s       2.6.3 m³/m²       86.400s/day         Infitration Tank Area       0.0030 m/s       2.6.3 m³/m²       86.400s/day <t< td=""><td></td><td></td><td></td></t<>			
Disconnected Hardscape (Counts as Permeable $\frac{26.9}{187.4}$ m <sup>2</sup> from above         Total Permeable Area       10 mm/hr       2.8E-06 m/s         Infitration per Area       0.240 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Infitration Pervided       (a)       45.0 m <sup>3</sup> 86.400s/day         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Available Runoff for Capture       (b)       7.5 m <sup>3</sup> rainfall on surface         Building and Garage Area Rainfall Capture       Iffer and the permeable Area       203.1 m <sup>2</sup> from above         Garage Surface Area       154.1 m <sup>2</sup> from above       from above       from above         Garage Surface Area       194.1       0.457       pepth       0.467         Infiltration tank with       0.91 m       2 modules*       from above         Gross Tank Volume       (c)       3.6 m <sup>3</sup> Pet lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> from Pit Test         Infitration Tank Area       112 m       from Pit Test       form Pit Test       form Pit Test         Infitration Tank Area       129 m       0.59 m       surface Area of tank       Sad with organics       0.32 m	Disconnected Hardscape (Counts as Permeable Total Permeable Area $\frac{26.9}{187.4}$ m <sup>2</sup> from above 187.4Nominal Infiltration Rate10mm/hr 2.86-06 m/sInfiltration Provided(a) $\frac{45.0}{45.0}$ m <sup>3</sup> Available Runoff for Capture(b)7.5 m <sup>3</sup> Available Runoff for Capture(b)7.5 m <sup>3</sup> Infiltration Surface Area194.1 m <sup>2</sup> rom aboveBuilding and Garage Area Rainfall Capture194.1 m <sup>2</sup> rom aboveBuilding Surface Area194.1 m <sup>2</sup> rom aboveGarage Surface Area49 m <sup>3</sup> 203.1 m <sup>2</sup> Module Dimensions (m)0.91 m 2 modules*Length0.91 4 Vidth0.457Infiltration tank depth Infiltration tank depth Infiltration tank kength0.91 m 4.57 m 5 modules*Gross Tank Volume3.8 m <sup>4</sup> (Per lotTank vold space Depth of old of tank Depth of log of tank Clay Clay Depth of log of tank Surface Area 1 tank Clay Depth of log of tank Surface Area 1 tank Clay Depth of log of tank Surface Area 1 tank Clay Depth of log of tank Surface Area 1 tank Clay Surface Area 1 tank Clay63.8 m <sup>3</sup> clay (0) + (d)Infiltration Provided Sandy with organices Clay Clay53.8 m <sup>3</sup> clay (0) + (d)1.12 m <sup>3</sup> rainfall on surfaceTotal Rainfall Volume to be Captured Building and Garage Area Capture <td>Disconnected Hardscape (Counts as Permeable  Total Permeable Area<math>26.0 \text{ m}^2</math> <math>187.4 \text{ m}^2</math>from above <math>187.4 \text{ m}^2</math>Nominal Infiltration Rate<math>10 \text{ mm/hrr}</math> <math>2.8E-06 \text{ m/s}</math><math>86.400 \text{s/day}</math> infiltration volumeInfiltration Pervided<math>(a) = 45.0 \text{ m}^2</math> <math>45.0 \text{ m}^2</math><math>86.400 \text{s/day}</math> infiltration volumeAvailable Runoff for Capture(b)<math>7.5 \text{ m}^3</math>reinfall on surfaceTotal Rainfall Captured<math>7.5 \text{ m}^3</math>lesser of (a) and (b)Building and Garage Area Rainfall CaptureBuilding Surface Area<math>49 \text{ m}^2</math> <math>203.1 \text{ m}^2</math>Module Dimensions (m)<math>\boxed{\text{Length}}</math><math>0.91 \text{ m}</math> <math>2 \text{ modules}^2</math>Infiltration tank depth<math>0.91 \text{ m}</math> <math>2 \text{ modules}^2</math>Infiltration tank depth<math>0.91 \text{ m}</math> <math>2 \text{ modules}^2</math>Tank void space<math>95\%</math> Net Storage Volume<math>0.030 \text{ m}^3</math> <math>2.63 \text{ m}^3/\text{ m}^2</math>Beh of day (bottom of sand / top of day)<math>1.2 \text{ m}</math> <math>1.02 \text{ m}^3</math>from Pit Test <math>0.32 \text{ m}^3</math>Infiltration Tank Kerea<math>0.34 \text{ m}^3/\text{ m}^3</math> <math>0.0030 \text{ m}^3</math><math>0.23 \text{ m}^3/\text{ m}^3</math> <math>86.400 \text{s/day}</math>Clay<math>1.42 \text{ m}^3/\text{ m}^3</math><math>86.400 \text{s/day}</math> <math>0.32 \text{ m}^3/\text{ m}^3</math>Infiltration Tank Kerea<math>0.0030 \text{ m}^3</math> <math>0.002 \text{ m}^3/\text{ m}^3</math><math>86.400 \text{ s/day}</math>Infiltration Tank Kerea<math>1.2 \text{ m}^3/\text{ m}^3</math> <math>0.00030 \text{ m}^3</math><math>0.60 \text{ m}^3/\text{ m}^3</math>Clay<math>1.2 \text{ m}^3/\text{ m}^3</math><math>1.64 \text{ m}^3/\text{ m}^3</math>Infiltration Provided<math>0.38 \text{ m}^3</math><math>0.32 \text{ m}^3/\text{ m}^3</math>Sandy with organics<math>53.8 </math></td> <td></td> <td>100 5 2</td> <td></td>	Disconnected Hardscape (Counts as Permeable Total Permeable Area $26.0 \text{ m}^2$ $187.4 \text{ m}^2$ from above $187.4 \text{ m}^2$ Nominal Infiltration Rate $10 \text{ mm/hrr}$ $2.8E-06 \text{ m/s}$ $86.400 \text{s/day}$ infiltration volumeInfiltration Pervided $(a) = 45.0 \text{ m}^2$ $45.0 \text{ m}^2$ $86.400 \text{s/day}$ infiltration volumeAvailable Runoff for Capture(b) $7.5 \text{ m}^3$ reinfall on surfaceTotal Rainfall Captured $7.5 \text{ m}^3$ lesser of (a) and (b)Building and Garage Area Rainfall CaptureBuilding Surface Area $49 \text{ m}^2$ $203.1 \text{ m}^2$ Module Dimensions (m) $\boxed{\text{Length}}$ $0.91 \text{ m}$ $2 \text{ modules}^2$ Infiltration tank depth $0.91 \text{ m}$ $2 \text{ modules}^2$ Infiltration tank depth $0.91 \text{ m}$ $2 \text{ modules}^2$ Tank void space $95\%$ Net Storage Volume $0.030 \text{ m}^3$ $2.63 \text{ m}^3/\text{ m}^2$ Beh of day (bottom of sand / top of day) $1.2 \text{ m}$ $1.02 \text{ m}^3$ from Pit Test $0.32 \text{ m}^3$ Infiltration Tank Kerea $0.34 \text{ m}^3/\text{ m}^3$ $0.0030 \text{ m}^3$ $0.23 \text{ m}^3/\text{ m}^3$ $86.400 \text{s/day}$ Clay $1.42 \text{ m}^3/\text{ m}^3$ $86.400 \text{s/day}$ $0.32 \text{ m}^3/\text{ m}^3$ Infiltration Tank Kerea $0.0030 \text{ m}^3$ $0.002 \text{ m}^3/\text{ m}^3$ $86.400 \text{ s/day}$ Infiltration Tank Kerea $1.2 \text{ m}^3/\text{ m}^3$ $0.00030 \text{ m}^3$ $0.60 \text{ m}^3/\text{ m}^3$ Clay $1.2 \text{ m}^3/\text{ m}^3$ $1.64 \text{ m}^3/\text{ m}^3$ Infiltration Provided $0.38 \text{ m}^3$ $0.32 \text{ m}^3/\text{ m}^3$ Sandy with organics $53.8 $		100 5 2	
Initial Permeable Area187.4 mNominal Infiltration Rate10 mm/hr 2.6E-06 m/sInfiltration Pervided(a)Available Runoff for Capture(b)7.5 m³rainfall convolumeAvailable Runoff for Capture(b)7.5 m³rainfall on surfaceTotal Rainfall Captured7.5 m³Building and Garage Area Rainfall CaptureBuilding Surface Area164.1 m²Garage Surface Area164.1 m²Carage Surface Area164.1 m²Infiltration tank depth0.91 mLength0.91 m2 modules*Infiltration tank depth0.91 m1 miltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m1 miltration tank depth0.91 m2 modules*Infiltration tank length4.57 m1 miltration tank depth0.91 m2 modules*Gross Tank Volume3.8 m³Tank void space95%Net Storage Volume(c)3.6 4.00s/dayInfiltration Materialsfrom Pit TestInfiltration Tank AreaDepth of day (both of sand / top of day)Depth of day (both of sand / top of day)Depth of day (both of sand / top of day)Clay0.12 m³1 main Height Exposur Clay0.32 m1 main Height Exposur Clay0.35 m²1 main Height Exposur Clay0.35 m²1 cotal Rainfall Captured(e) <t< td=""><td>InterpretationIs / 4 mNominal Infiltration Rate10 mm/hr 2.6E-06 m/sInfiltration Pervided(a) 45.0 m3Infiltration Provided(a) 45.0 m3Available Runoff for Capture(b) 7.5 m3rainfall Captured7.5 m3Infiltration VolumeAvailable Runoff for Capture(b) 7.5 m3Infiltration VolumeAvailable Runoff for CaptureBuilding and Garage Area Rainfall CaptureBuilding Surface Area154.1 m2Garage Surface Area49 m2Total Impermeable Area203.1 m2Module Dimensions (m)Length0.91 mLength0.91 m2 modules*Infiltration tank depth0.91 m1 miltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m1 miltration tank depth0.91 m2 modules*Gross Tank Volume3.8 m3Tank vold space95%Net Storage Volume(c) 3.6 m3day with organics0.0030 m/s2 Clay1.12 mDepth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Clay0.12 m3Tank Height Exposur Clay0.32 mTank Height Exposur Clay0.35 m3<t< td=""><td>I total Permeable Area187.4 mNominal Infiltration Rate10 mm/hrr 2.8E-66 m/sInfiltration per Area<math>0.240 \text{ m}^3/\text{m}^3</math>B6,400s/dayinfiltration volumeAvailable Runoff for Capture(b)Available Runoff for Capture(b)Total Rainfall Captured7.6 m³Infiltration and Garage Area Rainfall CaptureBuilding and Garage Area Rainfall CaptureBuilding Surface Area194.1 m²Garage Surface Area194 m³Carage Surface Area9 m²Total Impermeable Area203.1 m²Module Dimensions (m)10.914Length0.914Unifiltration tank width0.91 mCorse Tank Volume3.6 m³Grose Tank Volume3.6 m³Tank vold space95%Net Storage Volume(c)Sandy with organics0.00030 msClay1.4E-07 m/sDepth of clay (bottom of sand / top of clay)1.12 mDepth of clay (bottom of sand / top of clay)0.80 m²Linditration Provided5.3 m³Surface Area of tank Sandy with organics0.32 mTank Height Exposur Clay0.59 m³Surface Area of tank Clay0.30 m²Linditration Provided(e)Sandy with organics5.38 m³Clay0.01 m³Total Tank Capture Provided(e)Surface Area of tank Clay0.30 m²Linditration Provided8.1 m³Surface Area of tank Clay0.6 m³Linditration Provided8.1 m³&lt;</td><td></td><td>2</td><td>from above</td></t<></td></t<>	InterpretationIs / 4 mNominal Infiltration Rate10 mm/hr 2.6E-06 m/sInfiltration Pervided(a) 45.0 m3Infiltration Provided(a) 45.0 m3Available Runoff for Capture(b) 7.5 m3rainfall Captured7.5 m3Infiltration VolumeAvailable Runoff for Capture(b) 7.5 m3Infiltration VolumeAvailable Runoff for CaptureBuilding and Garage Area Rainfall CaptureBuilding Surface Area154.1 m2Garage Surface Area49 m2Total Impermeable Area203.1 m2Module Dimensions (m)Length0.91 mLength0.91 m2 modules*Infiltration tank depth0.91 m1 miltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m1 miltration tank depth0.91 m2 modules*Gross Tank Volume3.8 m3Tank vold space95%Net Storage Volume(c) 3.6 m3day with organics0.0030 m/s2 Clay1.12 mDepth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Depth of day (bottom of sand / top of day)Clay0.12 m3Tank Height Exposur Clay0.32 mTank Height Exposur Clay0.35 m3 <t< td=""><td>I total Permeable Area187.4 mNominal Infiltration Rate10 mm/hrr 2.8E-66 m/sInfiltration per Area<math>0.240 \text{ m}^3/\text{m}^3</math>B6,400s/dayinfiltration volumeAvailable Runoff for Capture(b)Available Runoff for Capture(b)Total Rainfall Captured7.6 m³Infiltration and Garage Area Rainfall CaptureBuilding and Garage Area Rainfall CaptureBuilding Surface Area194.1 m²Garage Surface Area194 m³Carage Surface Area9 m²Total Impermeable Area203.1 m²Module Dimensions (m)10.914Length0.914Unifiltration tank width0.91 mCorse Tank Volume3.6 m³Grose Tank Volume3.6 m³Tank vold space95%Net Storage Volume(c)Sandy with organics0.00030 msClay1.4E-07 m/sDepth of clay (bottom of sand / top of clay)1.12 mDepth of clay (bottom of sand / top of clay)0.80 m²Linditration Provided5.3 m³Surface Area of tank Sandy with organics0.32 mTank Height Exposur Clay0.59 m³Surface Area of tank Clay0.30 m²Linditration Provided(e)Sandy with organics5.38 m³Clay0.01 m³Total Tank Capture Provided(e)Surface Area of tank Clay0.30 m²Linditration Provided8.1 m³Surface Area of tank Clay0.6 m³Linditration Provided8.1 m³&lt;</td><td></td><td>2</td><td>from above</td></t<>	I total Permeable Area187.4 mNominal Infiltration Rate10 mm/hrr 2.8E-66 m/sInfiltration per Area $0.240 \text{ m}^3/\text{m}^3$ B6,400s/dayinfiltration volumeAvailable Runoff for Capture(b)Available Runoff for Capture(b)Total Rainfall Captured7.6 m³Infiltration and Garage Area Rainfall CaptureBuilding and Garage Area Rainfall CaptureBuilding Surface Area194.1 m²Garage Surface Area194 m³Carage Surface Area9 m²Total Impermeable Area203.1 m²Module Dimensions (m)10.914Length0.914Unifiltration tank width0.91 mCorse Tank Volume3.6 m³Grose Tank Volume3.6 m³Tank vold space95%Net Storage Volume(c)Sandy with organics0.00030 msClay1.4E-07 m/sDepth of clay (bottom of sand / top of clay)1.12 mDepth of clay (bottom of sand / top of clay)0.80 m²Linditration Provided5.3 m³Surface Area of tank Sandy with organics0.32 mTank Height Exposur Clay0.59 m³Surface Area of tank Clay0.30 m²Linditration Provided(e)Sandy with organics5.38 m³Clay0.01 m³Total Tank Capture Provided(e)Surface Area of tank Clay0.30 m²Linditration Provided8.1 m³Surface Area of tank Clay0.6 m³Linditration Provided8.1 m³<		2	from above
Lotal Permeable Area       187.4 m²         Nominal Infiltration Rate       10 mm/hr         2.8E-06 m/s       0.240 m³/m²         Infiltration per Area       0.240 m³/m²         Available Runoff for Capture       (b)       7.5 m³         Available Runoff for Capture       (b)       7.5 m³         Total Rainfall Captured       7.5 m³       rainfall on surface         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²         Building and Garage Area Rainfall Capture       from above       from above         Garage Surface Area       19 m²       from above         Total Impermeable Area       203.1 m²       from above         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Infiltration tank length       4.57 m       5 modules*         Infiltration Mark length       0.91 m       2 modules*         Infiltration Mark length       0.91 m       2 modules*         Infiltration Mareinals       from Pit T	Lotal Permeable Area       187.4 m²         Nominal Infiltration Rate       10 mm/hr         2.8E-06 m/s         Infiltration Provided       (a)	Iotal Permeable Area187.4 mNominal Infitration Rate10 mm/hr2.8E-06 m/s $0.240 \text{ m}^3/\text{m}^2$ Infitration Provided $(a) (a) (a (5.0 \text{ m}^3))$ Available Runoff for Capture(b)7.5 m <sup>3</sup> rainfall on surfaceTotal Rainfall Captured7.5 m <sup>3</sup> Building and Garage Area Rainfall Capture(b)Building Surface Area49 m <sup>2</sup> Carage Surface Area49 m <sup>2</sup> Total Impermeable Area203.1 m <sup>2</sup> Module Dimensions (m)(b) 457Length 0.914Width 0.457Depth 0.457Infitration tank depthInfitration tank kepth0.91 m2 modules*Gross Tank Volume3.8 m <sup>4</sup> Tank void space95%Net Storage Volume(c)Cay1.4E-07 m/s0.012 m <sup>5</sup> /m <sup>2</sup> 86,400s/dayClay1.4E-07 m/s0.012 m <sup>5</sup> /m <sup>2</sup> Builtration ProvidedSandy with organics0.28.3 m <sup>3</sup> /m <sup>2</sup> Bothow Kasey with organics0.38 m <sup>3</sup> Clay1.12 mTotal A Kasey with organics0.32 mTank Height Exposur Clay1.12 mDepth of clay (bottom of sand / top of clay)1.12 mDepth of top of tank0.32 mTank Height Exposur Clay0.59 mSurface Area of tank Clay8.0 m <sup>2</sup> Infittration Provided53.8 m <sup>3</sup> Clay0.1 m <sup>3</sup> Total Tank Capture Provided(e) 57.5 m <sup>3</sup> Clay0.1 m <sup>3</sup> Total Rainfall Captured8.1 m <sup>3</sup> <td>Disconnected Hardscape (Counts as Perme</td> <td></td> <td>from above</td>	Disconnected Hardscape (Counts as Perme		from above
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       Import 1000 (Mither Comparison Comp	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       Implification tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*       Implified       Implified         Infiltration tank width       0.91 m       2 modules*       Implified         Gross Tank Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86.400s/day         Sandy with organics       0.0030 m/s       26.3 m³/m²       86.400s/day         Infiltration Tank Area       0.90 m²       1.12 m       from Pit Test         Depth of lop of tank       0.30 m²       0.30 m²       1.2 m         Tank Height Exposur Sandy with organics       2.38	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*       Indicates*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain In max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00230 m/s <sup>2</sup> 26.3 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       11.12 m       from Pit Test         Infiltration Materials       from Pit Test       Infiltration Tank Area       0.80 m       Tank Height Exposur Sandy with organics       0.32 m         Depth of top of tank       0.80 m       Surface Area of tank Clay       0.59 m       Surface Area of tank Clay       0.59 m         Surface Area of tank Clay       0.59 m       Surface Area of tank Clay	Total Permeable Area	187.4 m <sup>2</sup>	
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Unfiltration Tank Area       Depth of ot po f tank       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.302 m       1.12 m       from Pit Test       Depth of top of tank       0.30 m²         Surface Area of tank Sandy with organics       0.38 m³       clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       40 m <sup>2</sup> from above       Total Impermeable Area       203.1 m <sup>2</sup> Module Dimensions (m)       Length       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.32 m       86,400s/day         Depth of tay (bottom of sand / top of day)       1.12 m       from Pit Test       64,00s/day         Infiltration Tox Area       0.80 m       7 m       86,400s/day         Depth of tay (bottom of sand / top of day)       1.12 m       from Pit Test         Depth of tay (	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Tank keight       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Glay         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Glay         Depth of log Viotiom of sand / top of clay)       1.12 m       Module modules       Surface Area of tank Sandy with organics       0.32 m         Surface Area of tank Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m³       Surface Area of tank Sandy with organics       0.32 m²         Infiltration Provided       Sandy with organics       53.8 m³       clay       0.1 m³       inf			
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Unfiltration Tank Area       Depth of ot po f tank       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.302 m       1.12 m       from Pit Test       Depth of top of tank       0.30 m²         Surface Area of tank Sandy with organics       0.38 m³       clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       1         Length       0.914       Width       0.457       1         Infiltration tank depth       0.91 m       2 modules*       1         Infiltration tank width       0.91 m       2 modules*       1         Gross Tank Volume       3.8 m³       *Per lot       1         Tank void space       95%       1       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 ms       26.3 m³/m²       86,400s/day         Depth of oby (bottom of sand / top of clay)       1.12 m       from Pit Test       Depth of abx       0.80 m         Tank Height Exposur Sandy with organics       0.32 m       nm       Tank Height Exposur Sandy with organics       0.59 m         Surface Area of tank Sandy with organics       0.38 m³       infiltration volume       1         Total       (d)	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length 0.914       Width 0.457       Depth 0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 ms       26.3 m²/m²       86.400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86.400s/day       110 m²       100 m² <td>Nominal Infiltration Rate</td> <td></td> <td>Ē</td>	Nominal Infiltration Rate		Ē
Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above         Total Impermeable Area       203.1 m <sup>2</sup> Module Dimensions (m)       Length 0.914       Width 0.457       Depth 0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank verth       4.57 m       5 modules*         Infiltration tank length       4.57 m       6.400s/day         Tank void space       95%       95%         Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       S6.400s/day         Sandy with organics       0.0030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Infiltration Tank Area       0.90 m       Surface Area of tank       0.80 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Clay       8.0 m <sup>2</sup>	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       149 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*       164.003/day       174.004         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration parkers       0.60 m       767.004/day         Infiltration Tank Area       0.0030 m/s       26.3 m³/m²       86,400s/day       117 m<	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       0.91 m       2 modules*         Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00230 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       11.12 m       from Pit Test         Infiltration Tank Area       Depth of top of tank       0.80 m       Tank Height Exposur Sandy with organics       0.32 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Clay       0.59 m       Surface Area of tank Clay         Surface Area of tank Clay       0.1 m <sup>3</sup> infiltration volume       Total<			
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Unfiltration Tank Area       Depth of ot po f tank       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.302 m       1.12 m       from Pit Test       Depth of top of tank       0.30 m²         Surface Area of tank Sandy with organics       0.38 m³       clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       Total Impermeable Area       203.1 m²         Module Dimensions (m)       Length       0.914       With       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*       Impermeable Area       2003.1 m²         Gross Tank Volume       0.91 m       2 modules*       Impermeable Area       2004.1 m²         Gross Tank Volume       0.91 m       2 modules*       Impermeable Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Infiltration Tank Area       Infiltration per Area       Sandy with organics       0.32 m         Length of top of tank       0.80 m       Tank Height Exposur Sandy with organics       0.32 m         Surface Area of tank Sandy with organics       0.32 m       Tank Height Exposur Sandy with organics       0.32 m         Surface Area of tank Cay       8.0 m²       Sandy	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       49 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       from above         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       net storage Volume       (c)         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Tank void space       95%       Net Storage Volume       0.012 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       112 m         Depth of log Volumo of sand / top of clay)       1.12 m       0.80 m       Tank Height Exposus Clay       0.32 m         Tank Height Exposur Clay       0.32 m       form Pit Test       0.60 m²       161 m²         Surface Area of tank Caly       0.40 m       0.80 m       7       161 m²         Surface Area of tank Caly       0.59 m³       surface Area of tank Clay       0.60 m²       161 m²	Infiltration per Area		86,400s/day
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Unfiltration Tank Area       Depth of ot po f tank       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.302 m       1.12 m       from Pit Test       Depth of top of tank       0.30 m²         Surface Area of tank Sandy with organics       0.38 m³       clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*       Infiltration tank length       4.57 m         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.32 m       drain in max. 24hr         Infiltration Area       Depth of algo (bottom of sand / top of clay)       1.12 m       from Pit Test       Depth of algo (bottom of sand / top of clay)       1.12 m       Sandy with organics       0.32 m       Tank Height Exposur Sandy with organics       2.35 m²       Surface Area of tank Sandy with organics       2.38 m³       infiltration no	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length 0.914       Width 0.457       Depth 0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sady with organics       0.00030 m's       26.3 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86.400s/day       1112 m       from Pit Test         Infiltration Tank Area       0.80 m       Tank Height Exposur Sandy with organics       0.32 m       Tank Height Exposur Clay       0.99 m         Surface Area of tank Clay       0.59 m <sup>3</sup> Surface Area of tank Clay       0.1 m <sup>3</sup> infiltration volume         Total       Galy       0.1	Infiltration Provided	(a) 45.0 m <sup>3</sup>	infiltration volume
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Unfiltration Tank Area       Depth of ot po f tank       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.302 m       1.12 m       from Pit Test       Depth of top of tank       0.30 m²         Surface Area of tank Sandy with organics       0.38 m³       clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*       Infiltration tank width       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*       Infiltration tank length       4.67 m         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.32 m         Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day       Bill main in max. 24hr         Infiltration Tank Area       Depth of olg Voltom of sand / top of clay)       1.12 m       from Pit Test       Depth of olg Voltom of sand / up of clay)       0.59 m         Surface Area of tank Sandy with organics       0.38 m³	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length 0.914       Width 0.457       Depth 0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sa.400s/day       11.2 m       from Pit Test         Infiltration Tank Area       Depth of loay (bottom of sand / top of clay)       0.12 m <sup>3</sup> /m <sup>2</sup> 86.400s/day         Infiltration Provided       Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Clay       0.10 m <sup>3</sup> infiltration volume       10.4 m <sup>3</sup> infiltration volume         Tark Height Exposur Clay       0.59 m <sup>3</sup> infiltration volume       10.4 m <sup>3</sup> infiltra		· · · <u> </u>	ž
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Unfiltration Tank Area       Depth of ot po f tank       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.302 m       1.12 m       from Pit Test       Depth of top of tank       0.30 m²         Surface Area of tank Sandy with organics       0.38 m³       clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)       1         Length       0.914       Width       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*       1       modules*         Infiltration tank width       0.91 m       2 modules*       1       modules*         Infiltration tank width       0.91 m       2 modules*       1       1         Gross Tank Volume       3.8 m³       *Per lot       1       Tank void space       95%         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr       Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day       111 m       111 m       max. 24hr         Infiltration Tank Area       Depth of tap of tank       0.40 m²       86,400s/day       111 m       111	Total Rainfall Captured       7.5 m <sup>3</sup> lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*       Indilutation tank module       1 modules*         Infiltration tank depth       0.91 m       2 modules*       Indilutation tank module       1 modules*         Infiltration tank depth       0.91 m       2 modules*       Indilutation tank module       1 modules*         Infiltration tank depth       0.91 m       2 modules*       Indilutation tank length       1 modules*         Infiltration tank kength       0.91 m       2 modules*       Indilutation tank and       Indilutation tank and         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain In max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.32 m       Tank Height Exposur Sandy with organics       0.32 m         Tank Height Exposur Clay       0.59 m	Available Runoff for Capture	(b) $7.5 \text{ m}^3$	rainfall on surface
Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       If 4.1 m²       from above         Garage Surface Area       154.1 m²       from above         Total Impermeable Area       203.1 m²       module Dimensions (m)         Length       0.914       Width       0.457         Infitration tank depth       0.91 m       2 modules*         Infitration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       second at the storage Volume       (c)         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infitration Materials       from Pit Test       Infitration per Area         Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Infitration Tank Area       0.612 m³/m²       86,400s/day       Infitration Tank Area         Depth of top of tank       0.80 m       7mm Pit Test       0.11 m³         Tank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       2.05 m³         Surface Area of tank Clay       8.0 m²       111       111       111         Depth of clay (bottom of sand / top of clay)	Total Rainfall Captured       7.5 m³       lesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)         Length       0.914       Width       0.457       Depth       0.457         Infitration tank depth       0.91 m       2 modules*       Imodules*       Imodules*         Infitration tank width       0.91 m       2 modules*       Imodules*         Infitration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infitration Materials       from Pit Test       Infitration per Area       Sady with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Infitration Tank Area       Infitration per Area       Sady with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Sandy with organics       0.38 m³       clay       0.59 m       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics<	Total Rainfall Captured       7.5 m <sup>3</sup> Jesser of (a) and (b)         Building and Garage Area Rainfall Capture       Building Surface Area       154.1 m <sup>2</sup> from above         Garage Surface Area       49 m <sup>2</sup> from above       from above         Garage Surface Area       49 m <sup>2</sup> from above         Total Impermeable Area       203.1 m <sup>2</sup> modules*         Module Dimensions (m)			l
Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)         Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kength       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       S6,400s/day       Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Depth of top of tank       0.80 m       7ank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Clay       8.0 m²       Som and       Infiltration volume         Total       (d)       53.8 m³       Infiltration volume         Tank Height Exposur Clay       0.59 m       Surface Area of tank Clay       8.0 m²         Surface Area of tank Clay       8.0 m²       <	Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)         Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sady with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of top of tank       0.80 m       Tank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       0.22 m         Tank Height Exposur Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Clay       8.0 m²       Sady m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume<	Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day         Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.30 m       0.32 m       from Pit Test         Infiltration Tank Area       0.80 m       0.32 m       from Pit Test         Depth of top of tank       0.30 m³       infiltration volume       0.32 m         Tank Height Exposur Clay       0.59	Total Rainfall Captured	<u>7.5</u> m <sup>3</sup>	
Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)         Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Infiltration Tank Area       Depth of ot po f tank       0.80 m         Depth of ot op of tank       0.80 m       Tank Height Exposur Sandy with organics       0.32 m       Tank Height Exposur Sandy with organics       2.05 m²         Surface Area of tank Sandy with organics       53.8 m³       clay       0.11 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume       10tal       (d)       53.9 m³       infiltration volume         Total Tank Capture	Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)         Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       S6,400s/day       Clay       Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Depth of tap (bottom of sand / top of clay)       0.12 m³/m²       86,400s/day       0.012 m³/m²       86,400s/day         Infiltration Tank Area       Depth of of ot (bottom of sand / top of clay)       0.12 m³/m²       86,400s/day         Depth of top of tank       Sandy with organics       0.32 m       Tank Height Exposur Clay       0.59 m         Surface Area of tank Sandy with organics       2.05 m²       Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       Infiltration volume <t< td=""><td>Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       S6.400s/day       203.1 m²         Sandy with organics       0.0030 m/s       26.3 m³/m²       86.400s/day       1111111100000000000000000000000000000</td><td></td><td></td><td></td></t<>	Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       S6.400s/day       203.1 m²         Sandy with organics       0.0030 m/s       26.3 m³/m²       86.400s/day       1111111100000000000000000000000000000			
Building Surface Area154.1 m²from above from aboveGarage Surface Area49 m²from aboveTotal Impermeable Area203.1 m²Module Dimensions (m)0.914Width0.457Length0.914Width0.457Infiltration tank depth0.91 m2 modules*Infiltration tank width0.91 m2 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³Clay1.4E-07 m/s0.012 m³/m²Beht of ot op of tank0.80 mTank Height Exposur Clay0.59 mSurface Area of tank Clay0.30 m²Building Provided53.8 m³Clay0.11 m³Infiltration Provided53.8 m³Surface Area of tank Clay8.0 m²Infiltration Provided6.9 57.5 m³Surface Area of tank Clay8.1 m³Total Tank Capture Provided(e)Sandy with organics53.8 m³Clay0.1 m³Total Tank Capture Provided(f)Available Runoff for Capture(f)Total Rainfall Optime15.6 m³Form abovePermeable Area CapturePermeable Area Capture7.5 m³Building and Garage Area Capture7.5 m³Arom above	Building Surface Area154.1 m²from aboveGarage Surface Area49 m²from aboveTotal Impermeable Area203.1 m²Module Dimensions (m)1Length0.914Width0.457Infiltration tank depth0.91 m0.91 m2 modules*Infiltration tank width0.91 m0.91 m2 modules*Infiltration tank kength4.57 m6 gross Tank Volume3.8 m³Tank void space95%Net Storage Volume(c)Clay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.91 m7 m Pit TestInfiltration Tank Area0.90 mDepth of top of tank0.32 mTank Height Exposur Clay0.59 mSurface Area of tank Clay8.0 m²Surface Area of tank Clay8.0 m²Infiltration Provided53.8 m³Clay0.1 m³Infiltration Provided(e)Sandy with organics53.8 m³Clay0.1 m³Infiltration Provided8.1 m³Sandy with organics53.8 m³Clay0.1 m³Infiltration Provided(e)Sandy with organics53.8 m³Clay0.1 m³Infiltration Provided(e)Sandy with organics53.8 m³Clay0.1 m³Infiltration Provided(e)Sandy with organics53.8 m³Clay0.1 m³Infiltration Provided(e)<	Building Surface Area       154.1 m²       from above         Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       Module Dimensions (m)         Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kength       4.57 m       5 modules*         Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       86,400s/day       0.012 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       0.80 m       0.80 m         Tank Height Exposur Gay       0.60 m       0.80 m       0.80 m       0.80 m       0.80 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Clay       0.59 m       0.02 m³       infiltration volume         Total       (d)       53.8 m³       c) m³       infiltration volume         Tank Height Exposur Clay       0.59 m       0.0 m³       infiltration volume	Building and Garage Area Painfall Capture		
Garage Surface Area       49 $m^2$ from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank length       4.57 m       5 modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day       1.12 m       from Pit Test         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       0.60 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 1.12 m       from Pit Test         Infiltration Provided       Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay         Surface Area of tank Clay       8.0 m <sup>2</sup> infiltration volume         Tota	Garage Surface Area       49 $m^2$ from above         Total Impermeable Area       203.1 m <sup>2</sup> from above         Module Dimensions (m)       Length       0.914       Width       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m <sup>3</sup> *Per lot         Tank void space       95%       Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day       1.12 m       from Pit Test         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test       0.80 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       <	Garage Surface Area       49 m²       from above         Total Impermeable Area       203.1 m²       from above         Module Dimensions (m)       1       1       1         Length       0.914       Width       0.457       0.457         Infiltration tank depth       0.91 m       2 modules*       1         Infiltration tank width       0.91 m       2 modules*       1         Infiltration tank width       0.91 m       2 modules*       1         Infiltration tank width       0.91 m       2 modules*       1         Infiltration tank keepth       6.57 m       5 modules*       1         Gross Tank Volume       3.8 m³       4 Per lot       1       1         Tank void space       95%       Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       112 m       from Pit Test         Depth of op ot ank       0.80 m       1.12 m       from Pit Test       0.80 m       115 m       115 m       115 m       115 m       115 m       115 m<		454.4 m <sup>2</sup>	former all sources
Total Impermeable Area203.1 m²Module Dimensions (m)Length 0.914 Width 0.457 Depth 0.457Infiltration tank depth0.91 mInfiltration tank width0.91 m2 modules*Infiltration tank length4.57 mGross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration Tank Area0.00030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.80 m7ank Height Exposur Sandy with organics0.32 m1.72 mTank Height Exposur Sandy with organics0.32 mTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided53.8 m³Clay0.1 m³Total(d)53.9 m³infiltration volumeTotal Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)8.1 m³lesser of (e) and (f)Total Rainfall Captured15.6 m³Total Rainfall Volume to be Captured15.6 m³Form above8.1 m³Building and Garage Area Capture7.5 m³Robustore7.5 m³Building and Garage Area Capture7.5 m³Total8.1 m³	Total Impermeable Area203.1 m²Module Dimensions (m)Length 0.914 Width 0.457 Depth 0.457Infiltration tank depth0.91 mInfiltration tank width0.91 mQ modules*Infiltration tank length4.57 mGross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)Sandy with organics0.00030 m/s26.3 m³/m²86.400s/dayClay1.4E-07 m/sOutles*0.60 mTank read0.60 mDepth of clay (bottom of sand / top of clay)1.12 mInfiltration Tank Height Exposur Sandy with organics0.32 mTank Height Exposur Sandy with organics0.32 mTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided(e)Sandy with organics53.8 m³Clay0.1 m³Total(d)Total(d)Total8.1 m³Infiltration volumeTotal Tank Capture Provided(e)Strate Area of tank ClayRotal Bainfall Captured8.1 m³Total Rainfall Volume to be Captured15.6 m³Total Rainfall Volume to be Captured15.6 m³Total Rainfall Capture7.5 m³Permeable Area Capture7.5 m³Permeable Area Capture7.5 m³Building and Garage Area Capture7.5 m³Total Rainfall Capture8.1 m³ <td>Total Impermeable Area       203.1 m²         Module Dimensions (m)       Length 0.914       Width 0.457       Depth 0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Infiltration For Max       Rea       Depth of top of tank       0.80 m         Tank Height Exposur Clay       0.112 m       from Pit Test       0.99 m       Surface Area of tank Sandy with organics       0.59 m         Surface Area of tank Clay       8.0 m²       Sandy with organics       53.8 m³       Clay       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       infiltration volume         Total Tank Capture</td> <td></td> <td></td> <td></td>	Total Impermeable Area       203.1 m²         Module Dimensions (m)       Length 0.914       Width 0.457       Depth 0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Infiltration tank kepth       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%       Net Storage Volume       (c)         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Infiltration For Max       Rea       Depth of top of tank       0.80 m         Tank Height Exposur Clay       0.112 m       from Pit Test       0.99 m       Surface Area of tank Sandy with organics       0.59 m         Surface Area of tank Clay       8.0 m²       Sandy with organics       53.8 m³       Clay       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       infiltration volume         Total Tank Capture			
Module Dimensions (m)Length0.914Width0.457Infiltration tank depth0.91 m2 modules*Infiltration tank depth0.91 m2 modules*Infiltration tank length4.57 m5 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration Tank Area0.012 m³/m²Depth of clay (bottom of sand / top of clay)1.12 mDepth of clay (bottom of sand / top of clay)1.12 mTank Height Exposur Sandy with organics0.32 m²Surface Area of tank0.80 mTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Total Tank Capture Provided(e)Sandy with organics53.8 m³Clay0.1 m³Total Tank Capture Provided(e)Available Runoff for Capture(f)Total Rainfall Captured15.6 m³Foral Rainfall Captured15.6 m³Foral Rainfall Volume to be Captured15.6 m³Form abovePermeable Area CaptureBuilding and Garage Area Capture7.5 m³Infiltration aboveInfiltration and Capture15.6 m³Infiltration aboveInfiltration and CaptureInfiltration aboveInfiltration and CaptureInfiltration aboveInfiltration and Capture <t< td=""><td>Module Dimensions (m)Length0.914Width0.457Infiltration tank depth0.91 mInfiltration tank depth0.91 mInfiltration tank length4.57 mGross Tank Volume3.8 m³Tank void space95%Net Storage Volume(c)1Sandy with organics0.0030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay0.59 mSurface Area0.50 mSurface Area53.8 m³Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided53.9 m³Sandy with organics53.8 m³Clay0.1 m³Total (d)53.9 m³Infiltration volumeTotal Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)Total Rainfall Captured15.6 m³From aboveBuilding and Garage Area Capture7.5 m³From aboveBuilding and Garage Area Capture7.5 m³from above</td><td>Module Dimensions (m)Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank length4.57 m5 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration per AreaSandy with organics0.00030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayDepth of clay (bottom of sand / top of clay)1.12 mfrom Pit TestDepth of top of tank0.80 m786,400s/dayTank Height Exposur Clay0.59 m5.05 m³Surface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration ProvidedSandy with organics2.05 m²Surface Area of tank Clay8.0 m²Total Tank Capture Provided(e)<math>57.5</math> m³(c) + (d)Available Runoff for Capture(f)8.1 m³rainfall on surfaceTotal Rainfall Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³Objective Achieved</td><td>Garage Surface Area</td><td></td><td>from above</td></t<>	Module Dimensions (m)Length0.914Width0.457Infiltration tank depth0.91 mInfiltration tank depth0.91 mInfiltration tank length4.57 mGross Tank Volume3.8 m³Tank void space95%Net Storage Volume(c)1Sandy with organics0.0030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayClay0.59 mSurface Area0.50 mSurface Area53.8 m³Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided53.9 m³Sandy with organics53.8 m³Clay0.1 m³Total (d)53.9 m³Infiltration volumeTotal Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)Total Rainfall Captured15.6 m³From aboveBuilding and Garage Area Capture7.5 m³From aboveBuilding and Garage Area Capture7.5 m³from above	Module Dimensions (m)Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank length4.57 m5 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration per AreaSandy with organics0.00030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayDepth of clay (bottom of sand / top of clay)1.12 mfrom Pit TestDepth of top of tank0.80 m786,400s/dayTank Height Exposur Clay0.59 m5.05 m³Surface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration ProvidedSandy with organics2.05 m²Surface Area of tank Clay8.0 m²Total Tank Capture Provided(e) $57.5$ m³(c) + (d)Available Runoff for Capture(f)8.1 m³rainfall on surfaceTotal Rainfall Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³Objective Achieved	Garage Surface Area		from above
Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank width0.91 m2 modules*Infiltration tank length4.57 m5 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration Tank Area0.00030 m/sDepth of clay (bottom of sand / top of clay)1.12 mDepth of top of tank0.32 mTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided53.8 m³Surface Area of tank Clay8.0 m²Total Tank Capture Provided(e) $57.5$ m³(c) + (d)Available Runoff for Capture(f)8.1 m³lesser of (e) and (f)Total Rainfall Captured15.6 m³Permeable Area Capture7.5 m³Building and Garage Area Capture7.5 m³Rotage Area Capture7.5 m³Rotage Area Capture7.5 m³Total Rainfall Volume to be Captured15.6 m³Hour Area15.6 m³	Length0.914Width0.457Depth0.457Infiltration tank depth0.91 m2 modules*Infiltration tank width0.91 m2 modules*Infiltration tank length4.57 m5 modules*Gross Tank Volume3.8 m³*Per lotTank void space95%Net Storage Volume(c)3.6 m³drain in max. 24hrInfiltration Materialsfrom Pit TestInfiltration Tank Area0.00030 m/sDepth of clay (bottom of sand / top of clay)1.12 mDepth of top of tank0.80 mTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration Provided53.8 m³Surface Area of tank Clay8.0 m²Total Tank Capture Provided(e) $57.5$ m³(c) + (d)Available Runoff for Capture(f)8.1 m³lesser of (e) and (f)Total Rainfall Captured15.6 m³Permeable Area Capture7.5 m³Building and Garage Area Capture7.5 m³Form aboveBuilding and Garage Area Capture7.5 m³Total Rainfall Volume to be Captured15.6 m³House Capture15.6 m³House Capture<	Length       0.914       Width       0.457       Depth       0.457         Infiltration tank depth       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Infiltration tank width       0.91 m       2 modules*         Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.0030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Infiltration Tank Area       0.90 m       from Pit Test       from Pit Test         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.32 m       Tank Height Exposur Clay       0.53 m         Surface Area of tank Clay       8.0 m²       Surface Area of tank Clay       8.0 m²         Sandy with organics       53.8 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)	Total Impermeable Area	203.1 m <sup>2</sup>	
Gross Tank Volume       3.8 m³       "Per lot         Tank void space       95%         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       from Pit Test       mom Pit Test         Tank Height Exposur Sandy with organics       0.32 m       from Pit Test         Surface Area of tank Clay       0.59 m       surface Area of tank Clay       8.0 m²         Surface Area of tank Clay       8.0 m²       lnfiltration row       strate Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics       53.8 m³       clay       0.1 m³       infiltration volume         Total       (d)       53.9 m³       infiltration volume       infiltration volume         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       lesser of (e) and (f)	Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       from Pit Test       mom Pit Test         Tank Height Exposur Sandy with organics       0.32 m       surface Area of tank Sandy with organics       2.05 m²         Surface Area of tank Clay       8.0 m²       linfiltration Provided       Sandy with organics       53.8 m³         Clay	Gross Tank Volume       3.8 m³       *Per lot         Tank void space       95%         Net Storage Volume       (c)       3.6 m³       drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area       Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day       Infiltration Tank Area         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of of of tank       0.80 m       0.59 m         Tank Height Exposur Clay       0.59 m         Surface Area of tank Sandy with organics       2.05 m²         Surface Area of tank Clay       8.0 m²         Infiltration Provided       Sandy with organics         Sandy with organics       53.8 m³         Clay	Infiltration tank width	0.91 m	2 modules*
Tank void space       95%         Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max.24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of op of tank       0.80 m       from Pit Test         Depth of top of tank       0.80 m       from Pit Test         Surface Area of tank Kandy with organics       0.32 m       from Pit Test         Surface Area of tank Clay       8.0 m <sup>2</sup> surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> clay	Tank void space       95%         Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max.24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       0.80 m       from Pit Test       from Pit Test         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       n       7ank Height Exposur Sandy with organics       0.32 m         Surface Area of tank       Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> clay	Tank void space       95%         Net Storage Volume       (c)       3.6 m <sup>3</sup> drain in max. 24hr         Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       Tank Height Exposur Sandy with organics       0.32 m       atrian at the standy with organics       0.32 m         Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> clay			
Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.32 m       from Pit Test       86,400s/day         Tank Height Exposur Sandy with organics       0.32 m       surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 8.0 m <sup>2</sup> Infiltration Provided         Sandy with organics       53.8 m <sup>3</sup> clay       0.1 m <sup>3</sup> Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Permeable Area Capture       8.1 m <sup>3</sup> may	Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.32 m       from Pit Test       86,400s/day         Tank Height Exposur Sandy with organics       0.32 m       surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 1       1       m <sup>3</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 1       1         Infiltration Provided       sandy with organics       53.8 m <sup>3</sup> 1         Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup>	Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m³/m²       86,400s/day         Clay       1.4E-07 m/s       0.012 m³/m²       86,400s/day         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       7m²       86,400s/day         Tank Height Exposur Sandy with organics       0.32 m       7m²       86,400s/day         Surface Area of tank       0.80 m       7m²       86,400s/day         Surface Area of tank K Sandy with organics       0.32 m²       80 m²         Surface Area of tank Clay       8.0 m²       80 m²         Infiltration Provided       Sandy with organics       53.8 m³         Clay       0.11 m³       1filtration volume         Total       (d)       53.9 m³       infiltration volume         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       reinfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from		0.0 11	
Infiltration Materialsfrom Pit TestInfiltration per AreaSandy with organics0.00030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayInfiltration Tank AreaDepth of clay (bottom of sand / top of clay)1.12 mfrom Pit TestDepth of top of tank0.80 mTank Height Exposur Clay0.32 mfrom Pit TestTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²surface Area of tank Clay8.0 m²Infiltration ProvidedSandy with organics53.8 m³clay0.11 m³infiltration volumeTotal(d)53.9 m³infiltration volumeTotal Tank Capture Provided(e) <u>57.5</u> m³(c) + (d)Available Runoff for Capture(f)8.1 m³rainfall on surfaceTotal Rainfall Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from above	Infiltration Materialsfrom Pit TestInfiltration per AreaSandy with organics0.00030 m/s26.3 m³/m²86,400s/dayClay1.4E-07 m/s0.012 m³/m²86,400s/dayInfiltration Tank AreaDepth of clay (bottom of sand / top of clay)1.12 mfrom Pit TestDepth of top of tank0.80 mTank Height Exposur Clay0.59 mTank Height Exposur Clay0.59 mSurface Area of tank Sandy with organics2.05 m²Surface Area of tank Clay8.0 m²Infiltration ProvidedSandy with organics53.8 m³Clay0.1 m³Clay0.1 m³infiltration volumeTotalTotal(d)53.9 m³Clay0.1 m³infiltration volumeTotal Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)8.1 m³rainfall on surfaceTotal Rainfall Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from above	Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       0.040 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       1.80 m         Tank Height Exposur Clay       0.59 m       0.59 m         Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics         Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)       53.9 m <sup>3</sup> Infiltration Provided       (e) <u>57.5 m<sup>3</sup></u> Sandy with organics       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> Tom above         Exc	Tank void space	95%	
Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.32 m       from Pit Test       86,400s/day         Tank Height Exposur Sandy with organics       0.32 m       surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 8.0 m <sup>2</sup> Infiltration Provided         Sandy with organics       53.8 m <sup>3</sup> clay       0.1 m <sup>3</sup> Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Permeable Area Capture       8.1 m <sup>3</sup> from above	Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.32 m       from Pit Test       86,400s/day         Tank Height Exposur Sandy with organics       0.32 m       surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> 8.0 m <sup>2</sup> Infiltration Provided         Sandy with organics       53.8 m <sup>3</sup> clay       0.1 m <sup>3</sup> Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Permeable Area Capture       8.1 m <sup>3</sup> from above	Infiltration Materials       from Pit Test       Infiltration per Area         Sandy with organics       0.00030 m/s       26.3 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Clay       1.4E-07 m/s       0.012 m <sup>3</sup> /m <sup>2</sup> 86,400s/day         Infiltration Tank Area       Depth of clay (bottom of sand / top of clay)       1.12 m       from Pit Test         Depth of top of tank       0.80 m       Tank Height Exposur Clay       0.32 m         Tank Height Exposur Clay       0.59 m       Surface Area of tank Sandy with organics       2.05 m <sup>2</sup> Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> Clay       0.11 m <sup>3</sup> Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e) <u>57.5</u> m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured <u>8.1 m<sup>3</sup></u> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved	Net Storage Volume	(c) $3.6 \text{ m}^3$	drain in max. 24hr
Surface Area of tank Clay       8.0 m <sup>2</sup> Infiltration Provided       53.8 m <sup>3</sup> Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       (f)         Total Rainfall Captured       15.6 m <sup>3</sup> Infiltration volume       15.6 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup>	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved			
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       15.6 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       15.6 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Infiltration volume       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved	Infiltration Materials from Pit Test	Infiltration per Area	
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       15.6 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       15.6 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Available Runoff for Capture       (f)         Total Rainfall Captured       8.1 m³         rainfall Captured       15.6 m³         Infiltration above       Permeable Area Capture         Building and Garage Area Capture       8.1 m³         Excess Runoff       0 m³	Sandy with organics 0.00030 m/s	26.3 m <sup>3</sup> /m <sup>2</sup>	86,400s/day
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Infiltration volume       (d)       53.9 m³         Total       (d)       55.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved	Clay 1.4E-07 m/s	$0.012 \text{ m}^3/\text{m}^2$	86,400s/day
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       8.1 m³         Infiltration surface         Total Rainfall Volume to be Captured       15.6 m³         Permeable Area Capture       7.5 m³         Building and Garage Area Capture       8.1 m³	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Infiltration volume       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved			
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured        8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Infiltration volume       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved		37	from Pit Test
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured        8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved			
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       8.1 m³         Infiltration surface         Total Rainfall Volume to be Captured       15.6 m³         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Infiltration volume       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved			
Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         Rainfall Captured       8.1 m³         Infiltration surface         Total Rainfall Volume to be Captured       15.6 m³         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above	Surface Area of tank Clay       8.0 m²         Infiltration Provided       53.8 m³         Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)       53.9 m³         Infiltration volume       (d)       53.9 m³         Total       (d)       53.9 m³         Total Tank Capture Provided       (e)       57.5 m³       (c) + (d)         Available Runoff for Capture       (f)       8.1 m³       rainfall on surface         Total Rainfall Captured       8.1 m³       lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m³       from above         Permeable Area Capture       7.5 m³       from above         Building and Garage Area Capture       8.1 m³       from above         Excess Runoff       0 m³       Objective Achieved		2	
Infiltration Provided Sandy with organics $53.8 \text{ m}^3$ $Clay0.1 \text{ m}^31 \text{ otal}Total(d)53.9 \text{ m}^3infiltration volumeTotal Tank Capture Provided(e)57.5 \text{ m}^3(c) + (d)Available Runoff for Capture(f)8.1 \text{ m}^3rainfall on surfaceTotal Rainfall Captured8.1 \text{ m}^3lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 \text{ m}^3from abovePermeable Area Capture7.5 \text{ m}^3from aboveBuilding and Garage Area Capture8.1 \text{ m}^3from above$	Infiltration Provided Sandy with organics $53.8 \text{ m}^3$ $Clay0.1 \text{ m}^31 \text{ otal}Total(d)53.9 \text{ m}^3infiltration volumeTotal Tank Capture Provided(e)57.5 \text{ m}^3(c) + (d)Available Runoff for Capture(f)8.1 \text{ m}^3rainfall on surfaceTotal Rainfall Captured8.1 \text{ m}^3lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 \text{ m}^3from abovePermeable Area Capture7.5 \text{ m}^3from aboveBuilding and Garage Area Capture8.1 \text{ m}^3from above$	Infiltration Provided       Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)       53.9 m <sup>3</sup> Infiltration volume       6         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved			
Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> Item Total Rainfall Captured       15.6 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup>	Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> Item Total Rainfall Captured       15.6 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup>	Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> Image: Total Rainfall Captured       15.6 m <sup>3</sup> Formeable Area Capture       7.5 m <sup>3</sup> Building and Garage Area Capture       8.1 m <sup>3</sup> First Rainfall Captured       0 m <sup>3</sup>	Surface Area of tank Clay	8.0 m <sup>2</sup>	
Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> Image: Comparison of the computer of the	Sandy with organics       53.8 m³         Clay       0.1 m³         Total       (d)         Total       (d)         Total Tank Capture Provided       (e)         Available Runoff for Capture       (f)         8.1 m³       rainfall on surface         Total Rainfall Captured       15.6 m³         Instant Capture       7.5 m³         Formeable Area Capture       7.5 m³         Building and Garage Area Capture       8.1 m³	Sandy with organics       53.8 m <sup>3</sup> Clay       0.1 m <sup>3</sup> Total       (d)       53.9 m <sup>3</sup> Image: Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Image: Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Image: Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> O m <sup>3</sup> O m <sup>3</sup> Objective Achieved			
Clay $0.1 \text{ m}^3$ Totalinfiltration volumeTotal Tank Capture Provided(e) $57.5 \text{ m}^3$ (c) + (d)Available Runoff for Capture(f) $8.1 \text{ m}^3$ rainfall on surfaceTotal Rainfall Captured $8.1 \text{ m}^3$ lesser of (e) and (f)Total Rainfall Volume to be Captured $15.6 \text{ m}^3$ from abovePermeable Area Capture $7.5 \text{ m}^3$ from aboveBuilding and Garage Area Capture $8.1 \text{ m}^3$ from above	Clay $0.1 \text{ m}^3$ Totalinfiltration volumeTotal Tank Capture Provided(e) $57.5 \text{ m}^3$ (c) + (d)Available Runoff for Capture(f) $8.1 \text{ m}^3$ rainfall on surfaceTotal Rainfall Captured8.1 m³lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from above	Clay       0.1 m <sup>3</sup> infiltration volume         Total       (d)       53.9 m <sup>3</sup> infiltration volume         Total Tank Capture Provided       (e)       57.5 m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved		3	
Total(d) $53.9 \text{ m}^3$ infiltration volumeTotal Tank Capture Provided(e) $57.5 \text{ m}^3$ (c) + (d)Available Runoff for Capture(f) $8.1 \text{ m}^3$ rainfall on surfaceTotal Rainfall Captured8.1 m <sup>3</sup> lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 m <sup>3</sup> from abovePermeable Area Capture7.5 m <sup>3</sup> from aboveBuilding and Garage Area Capture8.1 m <sup>3</sup> from above	Total(d) $53.9 \text{ m}^3$ infiltration volumeTotal Tank Capture Provided(e) $57.5 \text{ m}^3$ (c) + (d)Available Runoff for Capture(f) $8.1 \text{ m}^3$ rainfall on surfaceTotal Rainfall Captured8.1 m <sup>3</sup> lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 m <sup>3</sup> from abovePermeable Area Capture7.5 m <sup>3</sup> from aboveBuilding and Garage Area Capture8.1 m <sup>3</sup> from above	Total(d)53.9 m³infiltration volumeTotal Tank Capture Provided(e)57.5 m³(c) + (d)Available Runoff for Capture(f)8.1 m³rainfall on surfaceTotal Rainfall Captured(f)8.1 m³lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved	Sandy with organics		
Total Tank Capture Provided       (e) <u>57.5</u> m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f) 8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Tank Capture Provided       (e) <u>57.5</u> m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f) 8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Tank Capture Provided       (e) <u>57.5</u> m <sup>3</sup> (c) + (d)         Available Runoff for Capture       (f) 8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved	Clay	<u> </u>	
Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved	Total	(d) 53.9 m <sup>3</sup>	infiltration volume
Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Available Runoff for Capture       (f)       8.1 m <sup>3</sup> rainfall on surface         Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above         Excess Runoff       0 m <sup>3</sup> Objective Achieved		(-)3	(m) - 7-15
Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Rainfall Captured       8.1 m <sup>3</sup> lesser of (e) and (f)         Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Rainfall Captured8.1 m³lesser of (e) and (f)Total Rainfall Volume to be Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved	Total Tank Capture Provided	(e) <u>57.5</u> m <sup>-</sup>	(C) + (Q)
Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Rainfall Volume to be Captured       15.6 m <sup>3</sup> from above         Permeable Area Capture       7.5 m <sup>3</sup> from above         Building and Garage Area Capture       8.1 m <sup>3</sup> from above	Total Rainfall Volume to be Captured15.6 m³from abovePermeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved	Available Runoff for Capture	(f) 8.1 m <sup>3</sup>	rainfall on surface
Permeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from above	Permeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from above	Permeable Area Capture7.5 m³from aboveBuilding and Garage Area Capture8.1 m³from aboveExcess Runoff0 m³Objective Achieved	Total Rainfall Captured	<b>8.1</b> m <sup>3</sup>	lesser of (e) and (f)
Building and Garage Area Capture 8.1 m <sup>2</sup> from above	Building and Garage Area Capture 8.1 m <sup>2</sup> from above	Building and Garage Area Capture     8.1 m <sup>3</sup> from above       Excess Runoff     0 m <sup>3</sup> Objective Achieved	Total Rainfall Volume to be Captured	15.6 m <sup>3</sup>	from above
Building and Garage Area Capture 8.1 m <sup>2</sup> from above	Building and Garage Area Capture 8.1 m <sup>2</sup> from above	Building and Garage Area Capture     8.1 m <sup>3</sup> from above       Excess Runoff     0 m <sup>3</sup> Objective Achieved			
		Excess Runoff 0 m <sup>3</sup> Objective Achieved			from above
			1070 Martin Carlos and		ō
Hor Hor YO			Excess Runoff	0 m <sup>3</sup>	Hor

D S/C LOCATIONS FOR 410				ш 1:100 Д
G PLAN TO DWG SET.				ວິ ທີ່Vertical -
IV COMMENTS	5	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING	File No. <b>17-01</b>
	4	FEB.20.2019	REVISED BASED ON SEPT 5, 2018 CITY LETTER	Drawing No. SMP
	No.	Date	Description	<sup>Ву</sup> МС



### GENERAL NOTES

- 1. THE TERM "ENGINEER" REFERS TO FRESCO ENGINEERING. THEIR CONTACT, MARCO CUSANO, CAN BE REACHED AT 604.653.1683 OR MCUSANO@FRESCOENGINEERING.CA.
- ALL CONSTRUCTION IN THE CITY OF NORTH VANCOUVER RIGHT OF WAY SHALL CONFORM TO THE ALL CONSTRUCTION IN THE CITY OF NORTH VANCOUVER RIGHT OF WAT GIVE COMPLEXING THE AND ADDRESS OF THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE'S LATEST VERSION OF THE MASTER MUNICIPAL CONSTRUCTION AND INFRASTRUCTURE'S 10. TRAFFIC CONTROL TO CONFORM TO THE MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE'S AS SPECIFICATIONS (SCHEDULE 'C' OF BYLAW 6200) AND STANDARD DRAWINGS.
- ALL PERMITS AND APPROVALS REQUIRED FOR THE PROPOSED WORKS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO WORKS COMMENCING.
- 4. LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE BEEN BASED ON THE MUNICIPALITY'S RECORDS AND THIRD PARTY UTILITY RECORDS. THE LOCATION OF ALL EXISTING SERVICES IS TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO PERMITTING / CONSTRUCTION, AND THE CONTRACTOR IS TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES, CONFLICTS, OR OMISSIONS PRIOR TO CONSTRUCTION.
- ALL CUTS IN EXISTING ASPHALT SHALL BE MADE VERTICALLY WITH A SAW BLADE, 100mm DEEP, AND SHALL BE REPLACED WITH A MINIMUM OF 100mm ASPHALT, FOLLOWING SUITABLE BACKFILL AND COMPACTION. ALL PAVEMENT, DRIVEWAYS, BOULEVARDS, FENCES, ETC. TO BE RESTORED TO THE SATISFACTION AND APPROVAL OF THE MUNICIPALITY WHEN NO IMPROVEMENT IS PROPOSED UNDER THIS CONTRACT.
- THE ENGINEER 48HRS PRIOR TO ANY REQUIRED INSPECTION.
- '. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN WORKING NEAR EXISTING SERVICES. ANY DISTURBED SERVICES SHALL BE REPLACED TO THE SATISFACTION OF THE ENGINEER AND THE CITY.

- 8. THE ENGINEER WILL NOTIFY THE CITY AT LEAST 24HRS IN ADVANCE OF WORK OUTSIDE THE PROPERTY BEING STARTED, RESTARTED, OR WHEN INSPECTIONS ARE REQUIRED.
- SURROUNDING ROADWAY TO BE SWEPT DAILY. EXISTING ROADWAY NOT INCLUDED IN THE PROPOSED WORKS SHALL BE KEPT CLEAN AND CLEAR FOR THE DURATION OF CONSTRUCTION AND LEFT IS THE SAME CONDITION AS PRIOR TO CONSTRUCTION.
- "TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS" OR TO THE MUNICIPAL STANDARDS, AS APPLICABLE.
- 11. ANY SIDEWALK CLOSURE IS TO BE COORDINATED WITH THE MUNICIPALITY AND NEIGHBOURING PROPERTIES AT LEAST 48HRS IN ADVANCE. PEDESTRIANS ARE TO BE PROTECTED AT ALL TIMES. TIMES. THE FINAL MARKED UP SET OF DRAWINGS IS TO BE PROVIDED TO THE ENGINEER UPON
- PROJECT COMPLETION. 13. THE ENGINEER WILL PROVIDE RECORD INFORMATION TO THE MUNICIPALITY UPON COMPLETION.
- 14. EXISTING TREES THAT ARE TO REMAIN SHALL HAVE A SOLID PROTECTIVE FENCE ERECTED OUTSIDE OF THE DRIPLINE OF THE TREE.
- 15. THE CONTRACTOR IS TO TAKE ALL NECESSARY MEASURES TO PROTECT THE NATURAL ENVIRONMENT
- 6. THE ENGINEER IS TO BE NOTIFIED BY THE CONTRACTOR 48HRS PRIOR TO STARTING OR RESTARTING 16. THE CONTRACTOR IS TO PREVENT ANY PARTICULATE MATTER FROM ENTERING THE STORM SYSTEM.
  - 17. EXISTING PARKING CONTROL SIGNAGE ARE TO BE REPLACED AS DIRECTED BY THE CITY OF NORTH VANCOUVER. POLE SLEEVES ARE AVAILABLE FOR PICKUP AT THE CITY'S OPERATIONS YARD. TO ARRANGE PICKUP OF SLEEVES, CONTACT STEVE HARBORNE AT 604.987.7155.

### LEGAL DESCRIPTION

LOT 7 BLOCK 41 DISTRICT LOT 547 GROUP 1 NWD PLAN 1061 CIVI ADDRESS 410 WEST 15TH STREET, CITY OF NORTH VANCOUVER

# **BENCHMARK CONTROL**

PID: 014-852-845

ELEVATIONS ARE GEODETIC (CVD28 GVRD)

LOT DIMENSIONS ARE DERIVED FROM POSTING PLAN EPP74850

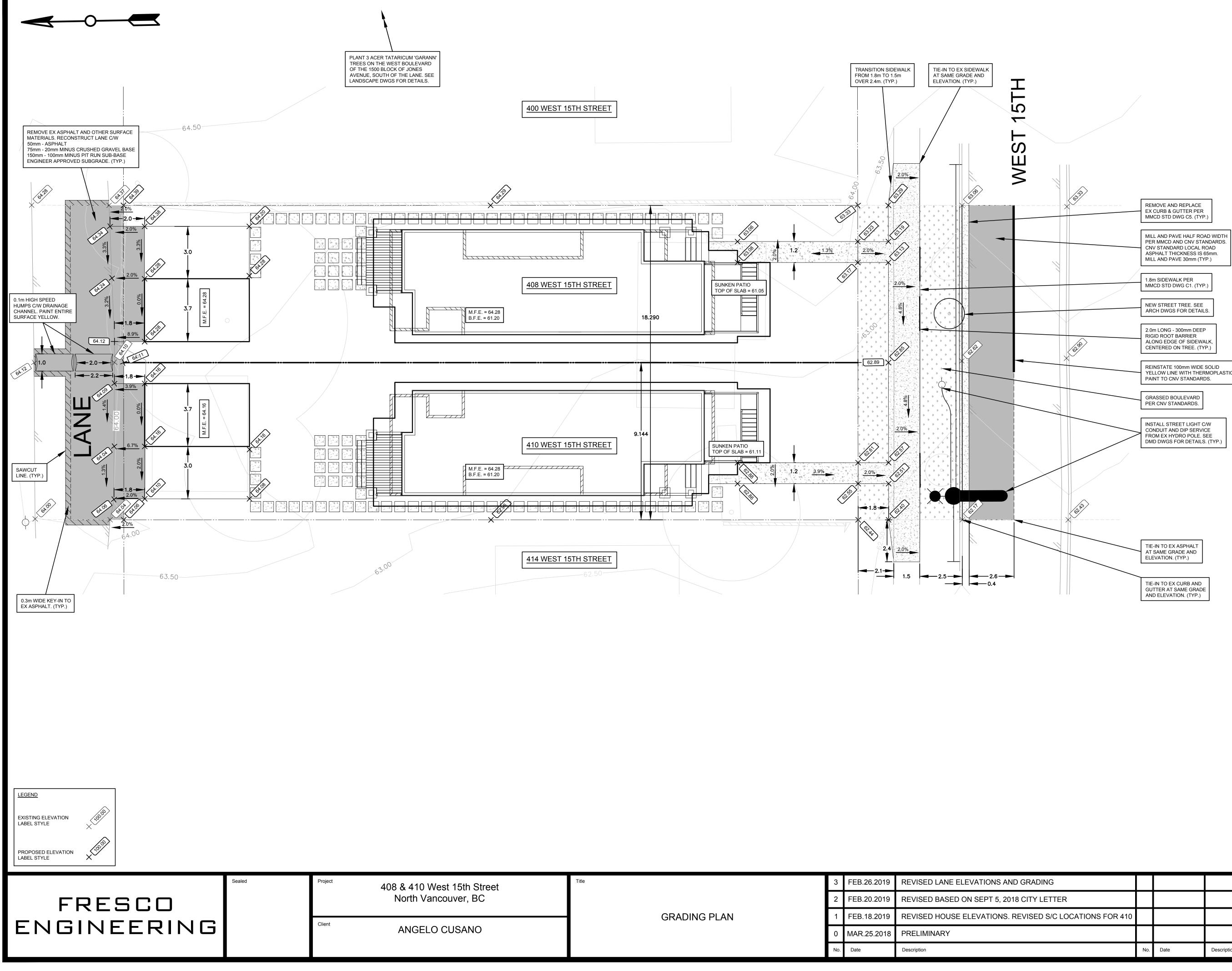
DERIVED FROM CONTROL MONUMENT 73H1019 LOCATED AT THE INTERSECTION OF 15TH STREET AND JONES AVENUE. ELEVATION = 64.163m (210.51ft)

		No.	Date	Description	No.	Date	Description	ву МС
		4	MAR.25.2018	GENERAL REVISIONS. ADDED GRADING PLAN TO DWG SET.	8	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING	Drawing No. SERV
	SERVICING PLAN	5	DEC.12.2018	WATER SERVICE SIZE REVISION AS DISCUSSED WITH CNV.				File No. 17-01
		6	FEB.18.2019	REVISED HOUSE ELEVATIONS. REVISED S/C LOCATIONS FOR 410				ວິ v Vertical -
reet	Title	7	FEB.20.2019	REVISED BASED ON SEPT 5, 2018 CITY LETTER				Horizontal 피 1:100

			EX STORM INV ±61.42
/			BY CNV CREWS CAP AND ABANDON EX WATER SERVICE.
/			EX SAN INV ±60.00
_			
			ALL UTILITY CONNECTIONS TO BE UNDERGROUND PER CNV STANDARDS. THIRD PARTY UTILITIES (FORTIS GAS, BC HYDRO, TELUS) ARE TO BE COORDINATED AND INSTALLED IN CONJUNCTION WITH THE ROADWORKS AND CNV UTILITIES INSTALLATIONS, AT THE DEVELOPER'S COST. (TYP.)
		/	BY CNV CREWS
			INSTALL 9.2m 150mm STORM SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S8 & S9. IC INV = 62.00 S/C INV @ MAIN = 61.82 MAIN INV @ S/C = 61.06 **SAME NOTE ON SMP DWG**
_	.92%		BY CNV CREWS
MM	PVC SAN @		INSTALL 15.2m 100mm SANITARY SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S7 & S9. IC INV = 60.10 S/C INV @ MAIN = 59.80 MAIN INV @ S/C = 59.60
200 DI			BY CNV CREWS
X	53.25		CAP AND ABANDON EX SAN SERVICE.
	Ä		BY CNV CREWS
		/	INSTALL 15.2m 100mm SANITARY SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S7 & S9. IC INV = ±59.70 S/C INV @ MAIN = 59.40 MAIN INV @ S/C = 59.13
		-/	
			EX SAN INV ±59.10
			BY CNV CREWS
		/	INSTALL 9.2m 150mm STORM SERVICE @ MIN 2.0% GRADE C/W IC TO MMCD STD DWG S8 & S9. IC INV = 61.50 S/C INV @ MAIN = 61.32 MAIN INV @ S/C = 60.55 **SAME NOTE ON SMP DWG**

EX STORM INV ±60.53

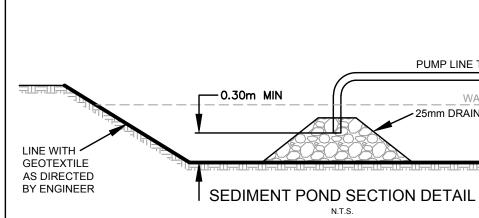
### CONTRACTOR TO VERIFY & LOCATE EXISTING MAINS & SERVICE CONNECTIONS, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.

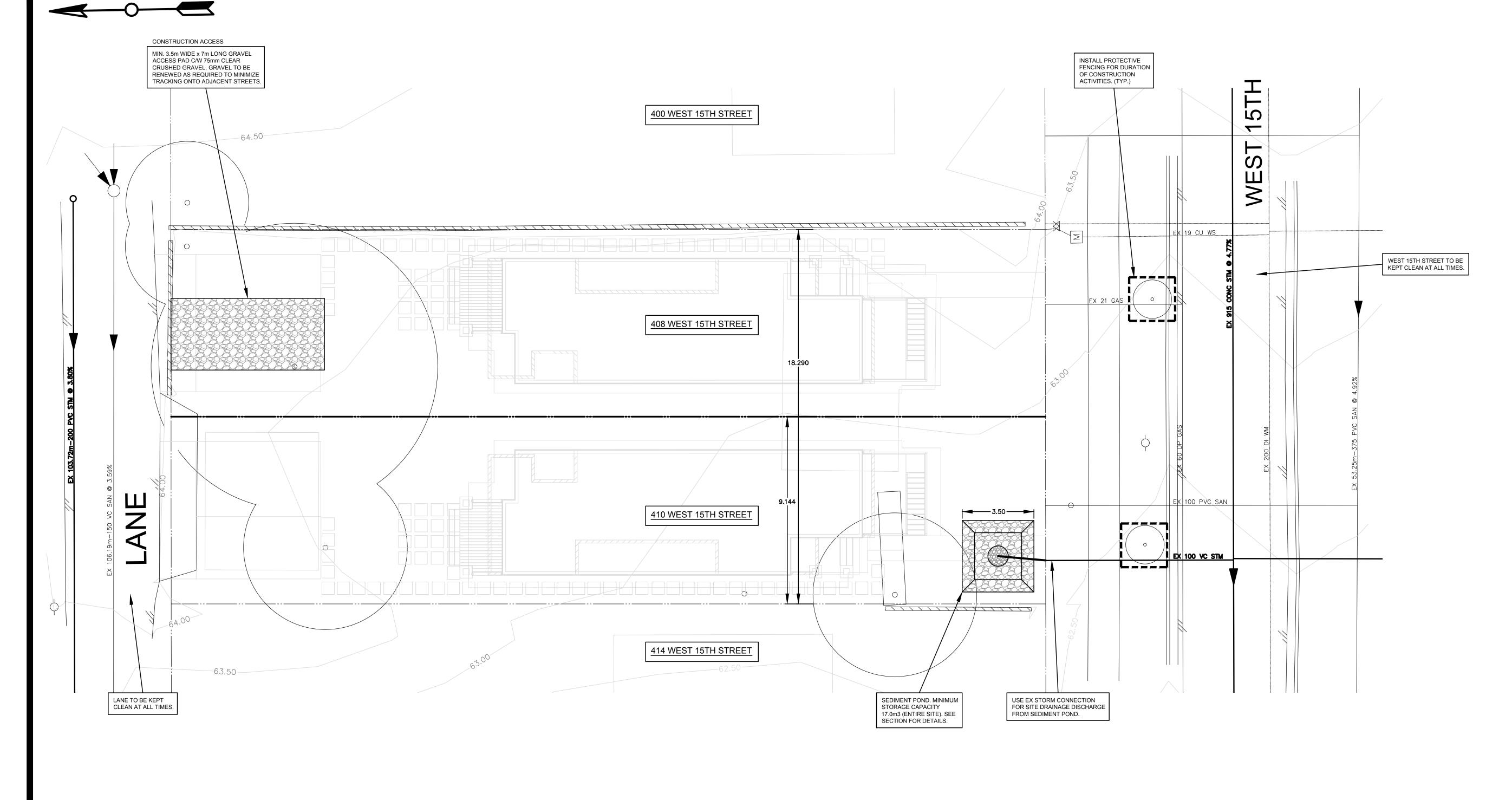


			Date	Description	No.	Date	Description	By MC
		0	MAR.25.2018	PRELIMINARY				Drawing No. GRADE
	GRADING PLAN		FEB.18.2019	REVISED HOUSE ELEVATIONS. REVISED S/C LOCATIONS FOR 410				File No. 17-01
		2	FEB.20.2019	REVISED BASED ON SEPT 5, 2018 CITY LETTER				S Vertical
eet	Title	3	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING				Horizontal 끸 1:100

	Sealed	Project	408 & 410 West 15th Street
FRESCO			North Vancouver, BC
ENGINEERING		Client	ANGELO CUSANO

	TENANCE SCHEDULE				
ESC FEATURE		FREQUENCY			
CATCH BASIN SILT SACK	REPAIR & REPLACE DEGRADED FABRIC. REMOVE ACCUMULATED SEDIMENT & DEBRIS.	ONCE A WEEK, BEFORE & AFTER ANY SIGNIFICANT RAINFALL EVENT OR AS REQUIRED.			
ACCESS ROADS	SWEEP	DAILY OR AS REQUIRED.			
CONSTRUCTION ACCESS	REPLACE WITH CLEAN CRUSH ROCK AS REQUIRED.	AS REQUIRED.			
SEDIMENT POND	REMOVED ACCUMULATED SEDIMENT	ONCE A WEEK, BEFORE & AFTER ANY SIGNIFICANT RAINFALL EVENT OR AS REQUIRED.	E		





### **EROSION & SEDIMENT CONTROL NOTES**

- 1. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL EROSION & SEDIMENT CONTROL FACILITIES REQUIRED TO PREVENT SILT DISCHARGES TO THE ROADWAY, NEIGHBOURING PROPERTIES, AND THE STORM DRAINAGE SYSTEM. ADDITIONAL FACILITIES MAY BE REQUIRED TO SUPPLEMENT THE RECOMMENDATIONS PROVIDED HEREIN.
- 2. THE CONTRACTOR MUST CONSTRUCT ALL NECESSARY EROSION & SEDIMENT CONTROL WORKS PRIOR TO COMMENCING OTHER SITE WORKS.
- 3. THE CONTRACTOR MUST INSPECT THE EROSION & SEDIMENT CONTROL FACILITIES DURING RAINFALL EVENTS AND UNDERTAKE ANY REMEDIAL WORKS REQUIRED TO ENSURE THE PROPER OPERATION OF THE SYSTEM.
- 4. THE CONTRACTOR MUST CLEAN OUT THE SEDIMENT TRAP ON A REGULAR BASIS TO ENSURE THE SEDIMENT ACCUMULATION DEPTH DOES NOT EXCEED 0.3m.
- 5. THE CONTRACTOR IS TO INSTALL SILT SACS IN THE NEAREST DOWNSTREAM CATCH BASINS.
- 6. ALL ON SITE SURFACE RUN-OFF MUST BE DIRECTED TO THE WATER FILTRATION FACILITIES AND THEN 12. THE CONTRACTOR MUST ENSURE THAT THERE IS NO DISCHARGE OF ANY OF THE FOLLOWING: DISCHARGED TO THE STORM SEWER. NO SURFACE RUNOFF IS TO EXIT THE PROPERTY WITHOUT FIRST BEING ROUTED THROUGH THE WATER FILTRATION FACILITIES.
- 7. EXPOSED CUTS ARE TO BE COVERED WITH SHOTCRETE OR POLYETHYLENE LINING. ALL EXPOSED SLOPES/SOIL STOCKPILES ARE TO BE COVERED IN POLYETHYLENE SHEETING, DURING RAINFALL OR SNOW, OR IF RAIN OR SNOW IS IMMINENT (OCTOBER 1ST TO APRIL 30TH: WITHIN TWO DAYS; MAY 1ST TO SEPTEMBER 30TH: WITHIN SEVEN DAYS). SHEETING MUST BE INSPECTED ON A REGULAR BASIS. ANY SEPARATION OR TEARS ARE TO BE REPAIRED IMMEDIATELY. STORE EXCAVATED SOILS AWAY FROM STORM DRAINS OR OTHER POTENTIAL OFFSITE TRANSPORT PATHWAYS.

#### 8. STREETS ARE TO BE SWEPT AT THE END OF EACH DAY, IF REQUIRED. NO FLUSHING ON ROADS IS PERMITTED. DUST CONTROL MEASURES MUST BE EMPLOYED.

PUMP LINE TO CITY

WATER LEVE

25mm DRAIN ROCK

et	Title			
	EROSION & SEDIMENT CONTROL PLAN	1	FEB.26.2019	REVISED LANE ELEVATIONS AND GRAD
		0	FEB.20.2019	PRELIMINARY
		No.	Date	Description

14. ALL CONCRETE SUPPLY TRUCKS MUST BE EQUIPPED WITH A WASH BUCKET SYSTEM FOR FLUME FLUSHING. EXCESS CONCRETE SHALL NOT BE FLUSHED ONTO ROADS OR INTO THE STORM SYSTEM.

9. THE CONTRACTOR MUST ADHERE TO CNV BYLAW #7541 FOR WATER DISCHARGE FROM PROPERTY. 10. CONSTRUCTION AND MAINTENANCE OF THE EROSION & SEDIMENT CONTROL FACILITIES SHALL BE IN 16. THE CONTRACTOR SHALL DECOMMISSION ALL EROSION & SEDIMENT CONTROL FACILITIES ONLY

OCEANS STANDARDS AND GUIDELINES, THE LATEST EDITION OF FLNRO'S STANDARDS AND GUIDELINES, THE "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT," AND SECTION 01561 OF THE MASTER MUNICIPAL SPECIFICATIONS.

THE DISCHARGE CRITERIA FROM THE WATER FILTRATION SYSTEM INCLUDES A PH OF BETWEEN 6.5-8.0, AND A TOTAL SUSPENDED SOLIDS (TSS) CONTENT OF LESS THAN OR EQUAL TO 75mg/L (OCTOBER TO APRIL) ABOVE "BACKGROUND" OR LESS THAN OR EQUAL TO 25mg/L (MAY TO SEPTEMBER) ABOVE "BACKGROUND" CONTENT. FRESCO ENGINEERING LTD. SHOULD BE RETAINED TO AND DURING OR AFTER EACH SIGNIFICANT RAINFALL EVENT.

PETROLEUM HYDROCARBONS, SOLVENTS, HEAVY METAL PARTICULATE, CEMENT, ETC. OR ANY MATERIAL THAT COULD BE DEEMED DELETERIOUS UNDER THE FISHERIES ACT, CNV SEWERAGE AND DRAINAGE UTILITY BYLAW 6746, CNV STREAM AND DRAINAGE SYSTEM PROTECTION BYLAW 7541, AND THE EROSION AND SEDIMENT CONTROL GUIDELINES.

INSPECTION AND MONITORING OF THE CONSTRUCTION WORK IS TO BE CONDUCTED BY FRESCO ENGINEERING LTD. CONTACT MARCO CUSANO (MCUSANO@FRESCOENGINEERING.CA OR 604.653.1683) TO SET UP AN INSPECTION SCHEDULE AT LEAST 48HRS IN ADVANCE.

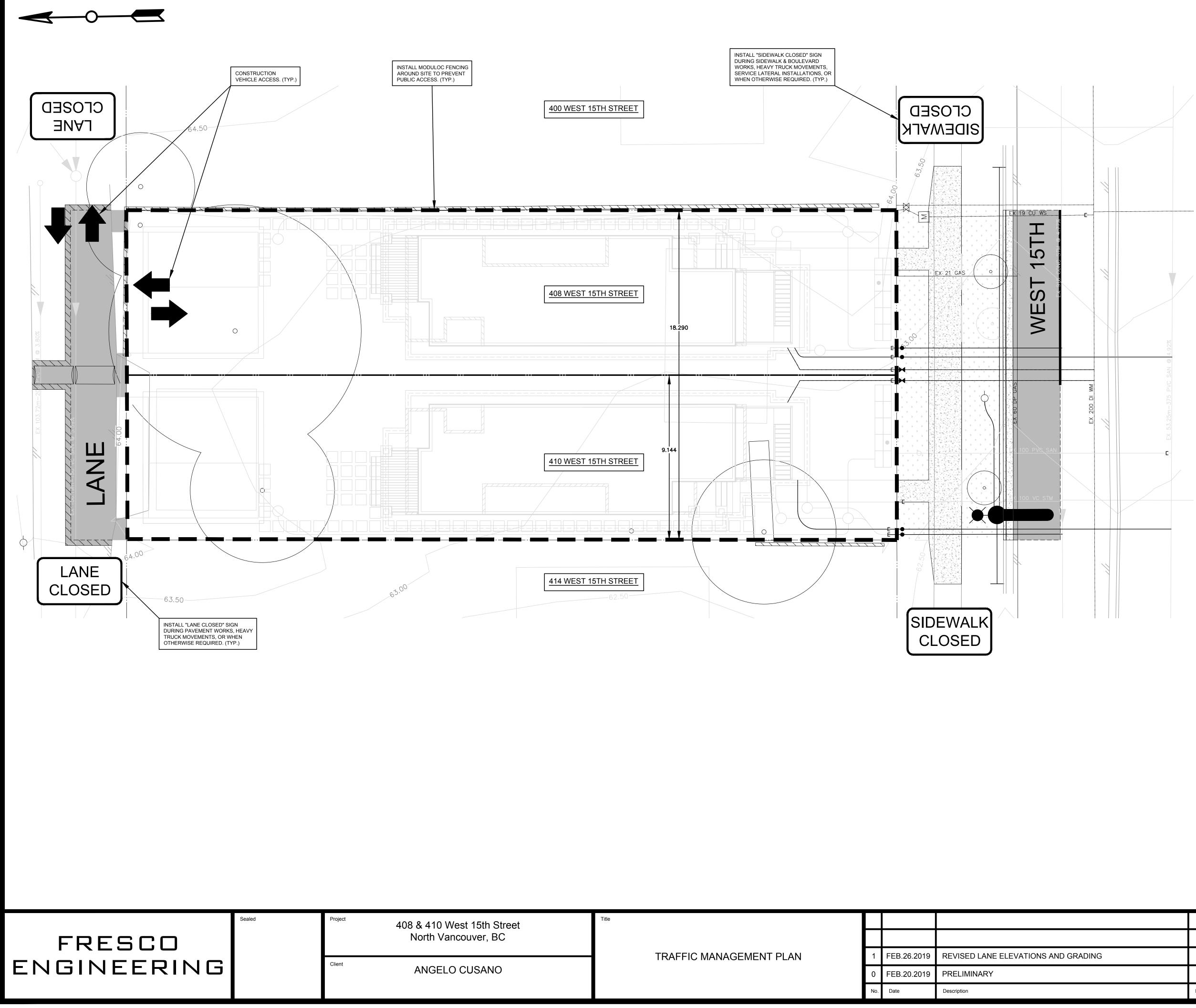
15. THE EROSION & SEDIMENT CONTROL MAY NEED TO BE ADJUSTED AS CONSTRUCTION PROGRESSES, AT THE DISCRETION OF THE ENGINEER.

- ACCORDANCE WITH THE CNV BYLAWS, THE LATEST EDITION OF THE DEPARTMENT OF FISHERIES AND AFTER HARD SURFACES ARE IN PLACE AND SURFACE WATER IS PROPERLY DIRECTED TO THE STORM SYSTEM. ALL SEDIMENT SHALL BE REMOVED OFF SITE AND DISPOSED OF BY LAND FILLING LOCALLY. 17. ALL REQUIRED CNV PERMITS ARE TO BE OBTAINED BY THE CONTRACTOR PRIOR TO COMMISSIONING.
  - 18. "EXCESSIVE SUSPENDED SOLIDS DISCHARGE" MEANS THE DISCHARGE OF A FLUID CONTAINING TOTAL SUSPENDED SOLIDS OF 25mg/L ABOVE BACKGROUND IN THE RECEIVING ENVIRONMENT DURING MAY - SEPTEMBER, OR 75mg/L ABOVE BACKGROUND DURING OCTOBER - APRIL.

INSPECT THE SEDIMENT CONTROLS IN PLACE AND MONITOR THE DISCHARGE ON A WEEKLY BASIS 19. "PROHIBITED SUBSTANCE" MEANS: PESTICIDES, HERBICIDES, FERTILIZERS, SOAPS, DETERGENTS, HOUSEHOLD AND COMMERCIAL GRADE CLEANING COMPOUNDS, PAINTS, SOLVERS, CHEMICALS, CHLORINATED WATER, WASTE OIL, OR ANY MATERIAL OR SUBSTANCE WHICH IS A HAZARDOUS PRODUCT, CONTAMINANT, TOXIC SUBSTANCE, DELETERIOUS SUBSTANCE, SPECIAL WASTE, DANGEROUS GOOD, OR REPORTABLE SUBSTANCE THAT IS IDENTIFIED OR DESCRIBED IN OR DEFINED BY ANY APPLICABLE STATUTE, REGULATION OR LAW, INCLUDING ANY SUBSTANCE THAT VIOLATES THE FISHERIES ACT R.S.C 1985 OR THE WASTE MANAGEMENT ACT R.S.B.C. 1996, C.482 WHICH, IF INTRODUCED TO THE DRAINAGE WORKS, WOULD FOUL IT; OR

> ANY SEDIMENT, ROCK, GRAVEL, SAND, CLAY, SILT, EARTH, CONSTRUCTION OR EXCAVATION WASTES, CEMENT, EXPOSED AGGREGATE WASH WATER, OR OTHER SUBSTANCES WHICH, WHEN INTRODUCED INTO A DRAINAGE SYSTEM, WILL AT THE POINT OF DEPOSITION, RESULT IN AN EXCESSIVE SUSPENDED SOLIDS DISCHARGE OR A PH VALUE OUTSIDE OF THE RANGE OF 6.5-8.0, OR TEMPERATURE INCREASE OF 2 DEGREES CELSIUS OR MORE.

			Horizontal 믜 1:100
			ວິ ທີ່Vertical -
			File No. 17-01
			Drawing No. ESC
No.	Date	Description	ву МС



eet	Title							Horizontal 끸 1:100
								Vertical
	TRAFFIC MANAGEMENT PLAN	1	FEB.26.2019	REVISED LANE ELEVATIONS AND GRADING				File No. 17-01
		0	FEB.20.2019	PRELIMINARY				Drawing No. TMP
		No.	Date	Description	No.	Date	Description	<sup>ву</sup> МС

### TRAFFIC MANAGEMENT PLAN

- 1. PROJECT DETAILS
- a. ONSITE WORKS
- b. WEST 15TH STREET ROADWORKS AND SERVICING
- c. LANE ROADWORKS
- d. JONES AVENUE TREE INSTALLATION
- 2. DEVELOPER
- a. ANGELO CUSANO: 604-988-4882
- 3. MOBILITY IMPACT
- a. WEST 15TH STREET TO REMAIN OPEN THROUGHOUT CONSTRUCTION. TEMPORARY DISRUPTIONS ARE EXPECTED DURING SERVICING AND ROADWORKS INSTALLATIONS, AND DURING THESE TIMES ALL ROADWAY AND PEDESTRIAN TRAFFIC IS TO BE MANAGED BY TRAFFIC CONTROL PERSON(S).
- b. CONSTRUCTION VEHICLE ACCESS THROUGH LANE
- c. HEAVY VEHICLE ROUTING PER CNV TRUCK ROUTE PLAN. HEAVY VEHICLES FROM HIGHWAY 1 TO BE ROUTED SOUTHBOUND ON LONSDALE, WESTBOUND ON WEST 15TH STREET.
- d. HEAVY VEHICLE TRIPS PER DAY: UP TO 4 TRIPS/DAY DURING CONCRETE WORK
- 4. COMMUNITY IMPACT
- a. WORKER PARKING TO BE PROVIDED OFF SITE DURING WORKS. OFFSITE PARKING TO BE ARRANGED BY CONTRACTOR.
- b. WORKER VEHICLES/DAY: UP TO 4 VEHICLES/DAY
- 5. WORK ZONE TRAFFIC CONTROL DEVICES
- a. TEMPORARY SIGNAGE TO BE INSTALLED AS REQUIRED.
- b. TRAFFIC CONTROL PERSON(S) TO DIRECT ALL HEAVY VEHICLE TRAFFIC AT ENTRANCE / EXIT OF SITE.
- 6. COMMUNICATION PLAN
- a. CONTRACTOR TO NOTIFY RESIDENTS PRIOR TO COMMENCING WORKS.
- b. CONTRACTOR TO NOTIFY CNV, RCMP, AND FIRE & RESCUE ONE WEEK IN ADVANCE OF ANY TRAFFIC DISRUPTIONS AND GET APPROVAL PRIOR TO PROCEEDING.

### TOPOGRAPHIC SITE PLAN OVER LOT 7 BLOCK 41 DISTRICT LOT 547

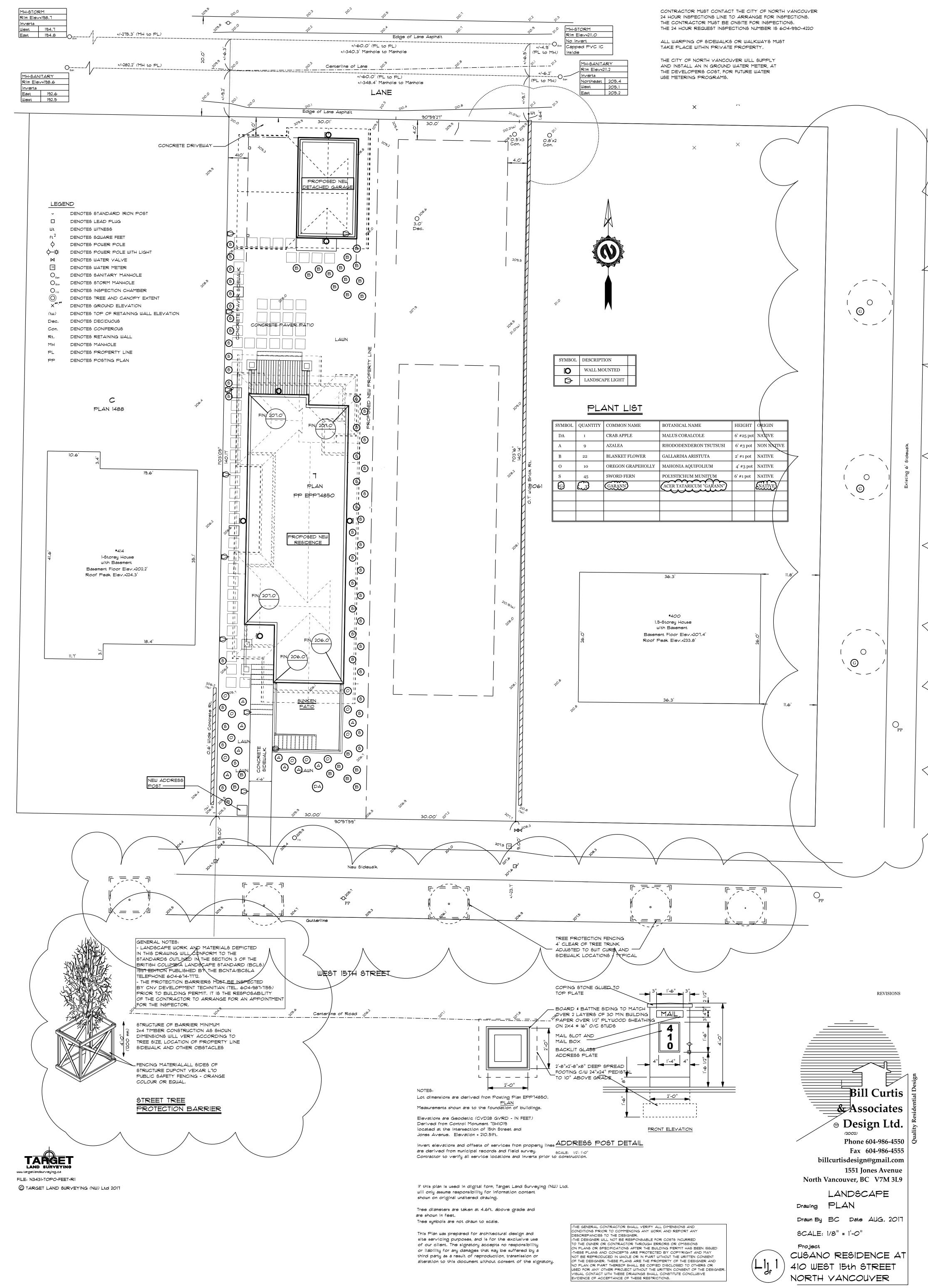
## GROUP I NWD PLAN 1061

CIVIC ADDRESS: 410 West 15th Avenue, City of North Vancouver PID: 014-852-845

#### BLACKTOP TO PROPERTY LINE AT DEVELOPERS COST AND TO CITY OF NORTH VANCOUVER ENGINEERING STANDARDS

THE CONTRACTOR 16 TO CONTACT ENGINEERING, PARKS AND ENVIRONMENT AT 604-983-7333 PRIOR TO POURING ANY FLOOR SLABS ASSOCIATED WITH VEHICULAR OR PEDESTRIAN ACCESS TO THE BUILDING. THE CONTRACTORS SURVEYOR MUST PROVIDE THE CITY WITH AS-BUILT ELEVATIONS AT ALL BUILODING ENTRANCES AT THE FORMING STAGE.

CONTRACTOR TO ENGURE THAT ALL ELECTRICAL AND COMMUNICATION SERVICES ARE INSTALLED UNDERGROUND



# Bill Curtis & Associates Design Ltd.

Harbourfront Business Centre 5<sup>th</sup> Floor, 224 West Esplanade North Vancouver, B.C. V7M 3M6 Tel. (604) 986-4550 Fax. (604) 986-4555 www,billcurtishomedesign.com e-mail <u>billcurtisdesign@gmail.com</u>

City of North Vancouver 141 West 14<sup>th</sup> Street North Vanhcouver V7M 1H9 Planning Department Attn. Ms. Emily MacDonald

Regarding 140 West 15<sup>th</sup> Street, North Vancouver 4/0 November 2, 2018

A Development Information Session was held at the John Braithwaite Community Center, Meeting Room #2 on Thursday, November 1<sup>st</sup> from 7:00 to 9:00 PM. The event had been advertised in the North Shore News October 24<sup>th</sup> and 26<sup>th</sup>, was notified to neighbors within the area required by the City with a dropped off flyer and the event was advertised with a sign to City Standards posted on the lot Monday October 29<sup>th</sup>. Letter size signs were posted on the front door of the Braithwaite Center and through out the building leading to Meeting Room #2.

Attending the meeting was Ms. Emily MacDonald representing the City of North Vancouver, Mr. Angelo Cusano, the owner and myself and there was only one interested member of the public who attended. Mr. Christian Cianfrone was pleased to see the project move ahead and left a completed questionnaire defining his support.

Thank you for your consideration,

**Bill** Curtis

## RECEIVED NOV - 5 2018 CITY OF NORTH VANCOUVER COMMUNITY SERVICES DEPARTMENT

Development Information Session									
SIGN IN SHEET									
ide DE	entified, please do not include your name         EVELOPMENT:       410 West 15th Street         S LOCATION:       Meeting Room #2, Brain								
No.	Name	Address Time	E S						
1	Christian Ciantrone	424 15th St. W. North Vancouver, BC VTM ISC 7:10p	m.						
2									
3									
5									
6									
7									
8									
9									
10									
11			-						
12									
13									
14 15									
15									
17									
18									
19									
20									
21									
22									
23									
24									
25									

#### Regarding 410 West 15th Street Street

### **Development Information Session**

Please Note: Should you provide your name and address, this form will become part of the staff report to City Council on this development proposal and will be publically available. If you do not wish to be identified, please do not include your name on the form, only your address. Your comments will be taken into consideration by City staff in its review of the application; however it will not be viewed by City Council or the public.

#### November 1, 2018 7:00 – 9:00 PM

Name:	
Address:	
1. Do you support the proposed project?	Yes
2. What do you like most about the proposed project?	New, energy efficient homes componed to older, dilapidated duelling
3. Do you have any concerns about the proposed project?	
4. What would you suggest to improve or enhance the proposed project?	Consider Step 4 or 5 for some planning / by-law relaxations on set-back/FSF & stow leadership
5. Please provide any additional comments.	

Comments will be delivered to the City of North Vancouver for consideration. Alternatively, you may mail or email your comments to either the City of North Vancouver or to the developer. All comments will be forwarded to the City.

#### CONTACTS:

Applicant:Bill Curtis & Associates Design Ltd.City of North Vancouver:Emily Macdonald

Telephone:604 986 4550Telephone:604 982 3904

E-Mail: billcurtisdesign@gmail.com E-Mail: emacdonald@cnv.org 2018

NOV

nsnews.com north shore news FRIDAY, OCTOBER 26, 2018

# NDAR

Concert: A performance of works by Schubert and Strauss Friday, Oct. 26, 8-9:30 p.m. Complimentary beverages and treats before the concert at 7:30 p.m. Admission by donation. Info: amblesideorchestra.ca. KAY MEEK CENTRE 1700 Mathers Ave, West Vancouver. 604-981-6335 kaymeekcentre.com Amplify Series: Ruthie Foster performs country blues, sweet gospel and laid back soul Friday,

# ograding tion in Murdo Frazer Park

y to 12,000 homes and businesses, we're upgrading ated on Woods Drive at Pemberton Avenue.

is how we're keeping the park and golf course tion.

nunity Recreation Centre, Fir Room M17. Road

ər, B.C. e in William Griffin Park)

ovember 7, 2018

se contact us at projects@bchydro.com

n/capsub

BC Hydro Power smart

Oct. 26, 7:30-9:30 p.m. Tickets: \$48/\$45/\$19.

Fall for Love: Multi-cultural performances including folk and modern dance, Chinese and foreign songs, musical performances, poetry and drama as well as a fashion show Saturday, Oct. 27, 7-9 p.m. All proceeds will be donated to the Lions Gate Hospital Foundation to build the new medical and surgical centre. Tickets: \$20-\$40. **Resonate Series:** Pianist Ian Parker performs Sunday, Oct. 28 at 3 p.m. Tickets: \$48/\$46/\$19. The Howl 18 – A Musical Masquerade: Norman Foote and a large local youth costumed choir provide music and laughter in the spirit of Halloween Tuesday, Oct. 30, 7-8 p.m. There will also be guest singers from Irwin Park Elementary School. Tickets: \$25/\$20/\$15.

Cabaret Series - An Ode to Toots & Stevie: Keith Bennett and Miles Black pay homage to the music of Toots Thielemans and Stevie Wonder Nov. 15 and 16 at 7:30 p.m. Joel Fountain on drums and André Lachance on bass join them. Tickets: \$38/\$36/\$25. 3201 Mountain Hwy, North Vancouver.

Friday Night Live: A storytelling and musical experience for all ages Fridays at 8 p.m. Schedule: Oct. 26, Illiteratty (folk music with a twist); Nov. 2, Sweet Scarlet (a cappella); Nov. 9, Sammy Chien; Nov. 16, The Authentics (classic rock, \$25); and Nov. 23, Devon Hanley (singer/ songwriter). Tickets: \$15/\$12. Info: fnihorthvan.com. PARKGATE COMMUNITY CENTRE

3625 Banff Court, North

See more page 39

### **Developer Information Session**

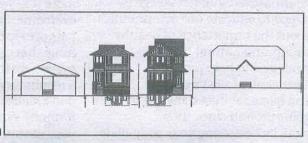
Bill Curtis & Associates Design Ltd. has applied to subdivide the lot at 410 west 15<sup>th</sup> street to enable a new home with a suite and a detached garage to be built on each lot.

Interested members at the public are invited to this Development information session to better understand the proposal and have quotations answered. Dill Curtis & Associates - Design Md.

Meeting Information Location: Meeting Room 2, John Braithwaite Rec Centre 145 West 1st Street, NV Date: November 1, 2018 Time: 7:00 to 9:00 P.M.

Developer Contact Bill Curtis

604.986.4550 • 604.616.3561 billcurtisdesign@gmail.com



City of North Vancouver Contact: Ms. Emily MacDonald, emacdonald@cnv.org, 604.982.3904 This meeting is required by the City of North Vancouver as a part of the rezoning process.

**IE TO CHANGE YOUR TIRE** 

OUR LARGE ASSORTMENT OF TOP TIRES FROM TOMASTER, CONTINENTAL & MICHELIN



#### LMP Publication Limited

Partnership- A Div. of Glacier Media 3355 Grandview Hwy Vanc, BC V5M 1Z5 PH: 604 630-3540 EM: LMPAR@VAN.NET

# INVOICE

Invoice No. :	NSND00098789
Date :	10/30/2018
Page :	2

Billed to :

BILL CURTIS DESIGN 1551 JONES AVENUE NORTH VANCOUVER, BC V7M 3L9 Advertiser : 637602 BILL CURTIS DESIGN

Client No. 637602	Tearsheets	Salesrep Hollee Brown	1 THE R. P. LEWIS CO., 1997	ns of Payment PAYMENT ONLY	
	Description		Rate Gross	Discount	Net
		5a.		SUB TOTAL :	832.50
				H.S.T./G.S.T. :	41.62
		abarrad at a rate of 20%		P.S.T. :	0.00
	t 30 days. Interest may be per annum) on overdue ad			INVOICE TOTAL :	874.12
	per annung en everade a	soounts.		PAYMENT : ADJUSTMENT :	0.00
				ADJUSTMENT:	0.00
H.S.T./G.S.T. Reg	istration No. : 84515 310	5 RT0001		AMOUNT DUE :	874.12
		5 RT0001		 	874.12
Client Id. :	637602	5 RT0001		NSND00098789	874.12
Client Id. :		5 RT0001	Invoice No. : Date :	 	874.12
Client Id. :	637602	5 RT0001		NSND00098789	874.12
Client Id. : Telephone :	637602 (604) 986-4550	5 RT0001		NSND00098789 10/30/2018	
Client Id. : Telephone : BILL CUR	637602 (604) 986-4550 TIS DESIGN	5 RT0001		NSND00098789 10/30/2018 SUB TOTAL :	832.50
Client Id. : Telephone : BILL CUR 1551 JON	637602 (604) 986-4550 TIS DESIGN ES AVENUE			NSND00098789 10/30/2018 SUB TOTAL : H.S.T./G.S.T. :	832.50 41.62
Client Id. : Felephone : BILL CUR 1551 JON	637602 (604) 986-4550 TIS DESIGN			NSND00098789 10/30/2018 SUB TOTAL : H.S.T./G.S.T. : P.S.T. : INVOICE TOTAL : PAYMENT :	832.50 41.62 0.00 874.12
Client Id. : Telephone : BILL CUR 1551 JON	637602 (604) 986-4550 TIS DESIGN ES AVENUE			NSND00098789 10/30/2018 SUB TOTAL : H.S.T./G.S.T. : P.S.T. : INVOICE TOTAL :	832.50 41.62 0.00

- PLEASE DETACH AND RETURN THIS PORTION WITH YOUR PAYMENT -

# Development Information Session

Bill Curtis & Associates Design Ltd. has applied to subdivide the lot at 410 West 15th Street to enable a new home with a suite and a detached garage to be built on each lot. Interested members of the public are invited to this Development Information Session to better understand the proposal and have questions answered.



This is a procedure required by the City of North Vancouver













From: Sent: To: Cc: Subject: Mike Berris <> June-29-19 3:01 PM Submissions Emily Macdonald; 'ANNE CRITCHLEY BERRIS' Zoning Bylaw No. 8725

My name is Mike Berris and we own the unit at 415 – 16<sup>th</sup> Street, North Vancouver.

### We are in support of the proposed development at 410 W 15<sup>th</sup> Street.

Thank you and warm regards Mike Berris and Anne Critchley-Berris 415 West 16<sup>th</sup> Street North Vancouver

$c_{1}$	ΝΟΤΙCΙ	E OF PUBLIC HEARING (WAIVED)
of north	WHO:	Bill Curtis & Associates Design Ltd.
vancouver	WHAT:	Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725
	WHERE:	410 West 15 <sup>th</sup> Street
	WHEN:	Monday, July 8, 2019 at 6:30 pm Council Chamber, City Hall 141 West 14 <sup>th</sup> Street, North Vancouver

Notice is hereby given that Council will consider:

### Zoning Amendment Bylaw, 2019, No. 8725

to rezone the subject property from a One Unit Residential 1 (RS-1) Zone to a One Unit Residential 2 (RS-2) Zone to permit 2 lots with a single family dwelling, with suite, on each lot.

If you believe you may be affected by the above proposal, please forward written or email submissions, including your name and address, to the City Clerk, at **input@cnv.org**, or by mail or delivered to City Hall. Submissions must be received no later than 4:00 pm, Monday, July 8, 2019, to ensure their availability to Council. No further information or submissions can be



considered by Council after third reading of the bylaw.

The proposed Zoning Amendment Bylaw and background material will be available for viewing at City Hall between 8:30 am and 5:00 pm, Monday to Friday, except Statutory Holidays, from June 28, 2019, and online at **cnv.org/PublicHearings.** 

Please direct any inquiries to **Emily Macdonald**, Planner 1, at **emacdonald@cnv.org** or **604-982-3904.** 

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

# THIS PAGE INTENTIONALLY LEFT BLANK

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

#### **BYLAW NO. 8725**

#### A Bylaw to amend "Zoning Bylaw, 1995, No. 6700"

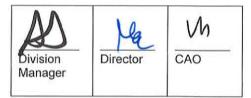
The Council of The Corporation of the City of North Vancouver, in open meeting assembled, enacts as follows:

- 1. This Bylaw shall be known and cited for all purposes as "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8725" (Angelo Cusano / Bill Curtis & Associates Design Ltd., 410 West 15<sup>th</sup> Street).
- 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	
7	41	547	1061	from RS-1 Zone
		READ a fi	rst time on the	e 24 <sup>th</sup> day of June, 2019.
		READ a s 2019.	econd time or	n the 24 <sup>th</sup> day of June,
		READ a th	nird time on th	ne <> day of <>, 2019.
		ADOPTEI	D on the <> da	ay of <>, 2019.
		MAYOR		

CITY CLERK

# THIS PAGE INTENTIONALLY LEFT BLANK





#### 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: 132 WEST ESPLANADE (132 ESPLANADE HOLDINGS LTD., CD-179 TEXT AMENDMENT)

Date: June 12, 2019

File No: 08-3360-20-0499/1

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

#### **RECOMMENDATION:**

PURSUANT to the report of the Planner 1, dated June 12, 2019, entitled "Rezoning Application: 132 West Esplanade (132 Esplanade Holdings Ltd., CD-179 Text Amendment)":

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment) 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# 1791285)
- 2. Applicant's Letter (Doc# 1778771)
- 3. Birdseye View of Rogers Plaza (Doc# 1791346)
- 4. Notification Signage (Doc# 1791477)
- 5. "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (Doc# 1791291)

#### PROJECT DESCRIPTION

The rezoning would allow for a broader range of businesses to occupy the commercial unit, approximately 740 square metres (8000 square feet), located at the plaza level of 132 West Esplanade, adjacent to Rogers Plaza. The unit has been vacant since October 2017. The applicant is requesting that permitted uses at the plaza level are expanded to include uses that are typically permitted in most commercial Zones under the definition of "Retail Service Group 1 Use". The Retail-Service Group 1 Use, defined below, includes all of the currently permitted uses and would result in some additional uses being permitted, such as business offices, gyms/fitness studios, banks and child care.

	Current Designation/Regulation	Proposed Designation/Regulation
Zone	CD-179	CD-179 (amended)
Permitted Uses (plaza level) (	<ul> <li>(i) retail stores including: bakery shops, meat and fish markets, delicatessens, clothing and shoe stores, personal furnishing shops, book shops, camera shops, stationery stores, art galleries and other similar establishments;</li> <li>(ii) restaurants and cafes provided that the principal use of such restaurants and cafes is the preparation, sale and consumption of food on the premises;</li> <li>(iii) personal service establishments, including: barber shops, beauty parlours, dry cleaners, florists, launderettes, optical or watch repair shops, tailoring and dressmaking establishments, shoe repair shops, printers, and other similar establishments;</li> <li>(iv) accessory outdoor dining use, in those areas indicated on Schedule 33, Page 3;</li> </ul>	"Retail-Service Group 1 Use" means a Use providing for the sale at retail or repair of household or personal goods or things, or for extending services to persons; includes Child Care Use, grocery stores, bakery shops, meat and fish markets, supermarkets, delicatessens, drug stores, clothing stores, personal furnishings shops, hardwares, variety stores, department stores, book shops, toy stores, home furnishing and appliance stores, camera shops, stationery stores, professional and semiprofessional offices, banks, business offices, finance offices, barbers, hairdressers, tailors, shoemakers, launderettes, dry cleaners, printers, trade and business schools, appliance repairs, restaurants and cafes, coffee houses, dance and music studios, art galleries, social clubs, health clubs, billiard halls, fraternal lodges, bowling alleys, theatres, veterinary clinics and internet cafes [Bylaw7537, November 24, 2003]; but excludes an Accessory Drive-Through Use, Bingo or Casino Gaming, an Escort Service Use and all licensed Premises except Food Primary License [Bylaw 7508, June 23, 2003], unless expressly provided for in this Bylaw, as defined under the regulations pursuant to the Liquor Control and Licensing Act, and any single retail use occupying an area larger than 3,710 square metres (40,000 square feet) established in the City after March 15, 2000; [Bylaw 7223, June 26, 2000]

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

REPORT: Rezoning Application: 132 West Esplanade (132 Esplanade Holdings Ltd., CD-179 Text Amendment) Date: June 12, 2019

#### POLICY FRAMEWORK

The subject property is designated Mixed Use Level 4A in the Official Community Plan.

Official Community Plan				
Policy 1.1.3 Balance the number of jobs to number of residents employed in the labour force in the City, reducing the need for longer commute distances for City residents;	The text amendment will help to support the occupancy of the currently-vacant space, providing an increase in jobs available in the area.			
Policy 1.1.5 Provide space for commercial uses in mixed-use developments to support employment and economic development;	The building itself is not mixed-use but is directly next to several residential towers and mixed-use developments.			
Policy 2.4.9 (Area Specific Policies for Lower Lonsdale) high-density mixed-use development supporting a variety of commercial uses and active public spaces, including significant waterfront lands, continues to be supported. As new development occurs in the Lower Lonsdale area, the presence of small-scale commercial spaces and established light- industrial/mixed employment uses are expected to be maintained.	Allowing for relaxation of restrictions on commercial uses within the Lower Lonsdale area helps to support economic activity, encouraging job production and provision of services to residents and visitors.			
Policy 7.2.2 Increase the concentration of jobs in the Lonsdale Regional City Centre and Frequent Transit Development Areas, supporting the area as the North Shore's business and service core;	The location of the commercial space is an ideal location for employment-generating uses (offices, banks, etc.) that are not currently permitted in the CD-179 Zone. Access from nearby residential buildings and by transit would allow for short and convenient commutes by walking or by transit.			
Policy 7.2.4 Review City regulations related to business and development to identify ways to make them more business-friendly;	Expanding permitted uses will allow for more opportunities for potential tenants to occupy the vacant unit.			

#### PLANNING ANALYSIS

#### Site Context and Surrounding Use

The commercial space is located at the plaza level and is adjacent to Rogers Plaza (see Attachment #3). Other uses adjacent to the Plaza include a restaurant (Tao Organics), John Braithwaite Community Centre, the CNV community wood shop and a fitness studio (Ride Cycle). The Plaza has been the site of a public space activation project since summer of 2017.

A pedestrian walkway over Esplanade provides a direct route from the commercial space to the waterfront and Seabus and bus connections.

#### Use

The proposed text amendment would expand the permitted uses in the CD-179 Zone, thereby supporting the occupancy of a currently vacant commercial unit. The amendment would permit several additional uses including child care, health clubs and offices. Given the location of the unit, with high-quality pedestrian connections to the Seabus and bus routes, the commercial space would be an ideal location for employment-generating commercial uses currently prohibited by the CD-179 Zone.

The intent of the initial limitations on use, which were designed to ensure that businesses would contribute to a vibrant public space, are no longer essential to the space as newer developments adjacent to the public space are now supporting activity and foot traffic in Rogers Plaza. While the space could still be considered underutilized, the addition of more people to the space, whether employees or customers of a future tenant, would provide an increase in activity in the public space.

The application was reviewed by CNV staff who have worked on the activation of Rogers Plaza. Primary concerns were regarding the vacant unit presenting an uninviting appearance. Staff expressed general support for occupancy of the space and increased foot traffic that would result from future businesses.

Intensity

No change.

Form

No change.

#### COMMUNITY CONSULTATION

Signage was posted on the property for a two-week period (see Attachment #4). No correspondence was submitted to the applicant or to the staff regarding the proposed text amendment. No emails or phone calls were received.

Because of the absence of public concern, staff is recommending that the Public Hearing be waived. Should Council wish to refer the application to a Public Hearing, the first active clause in the resolution should be amended to read:

THAT "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment) be considered and referred to a Public Hearing;.

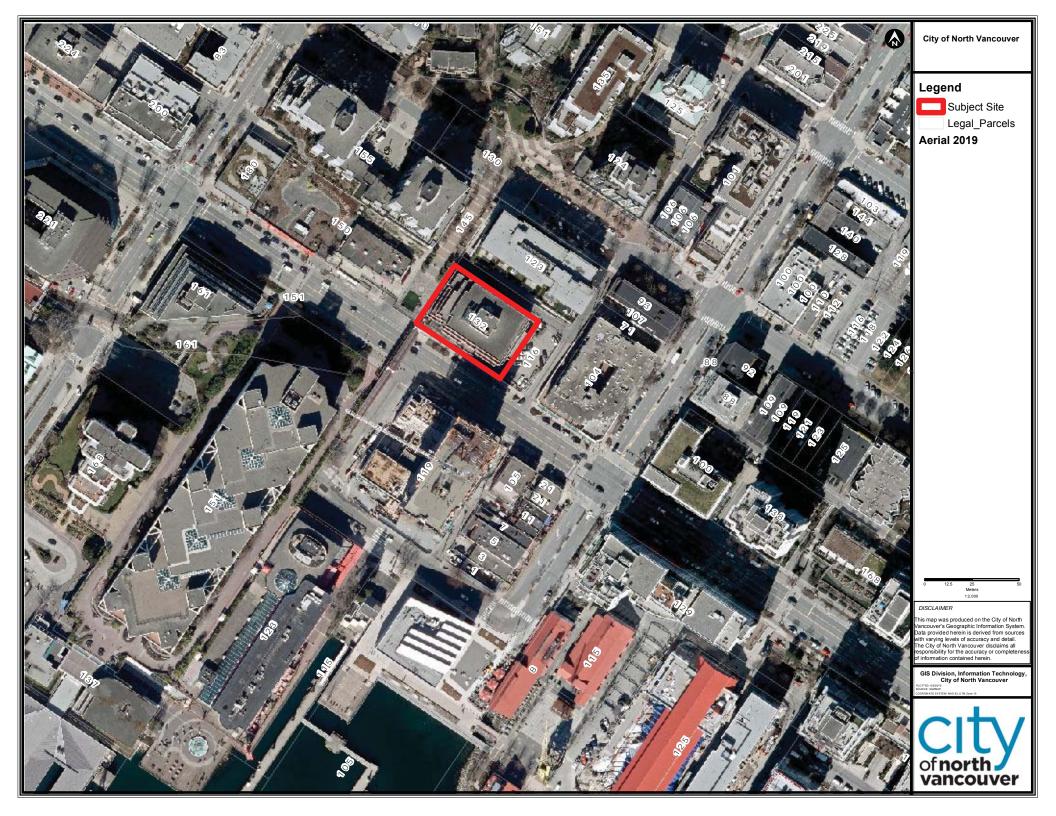
REPORT: Rezoning Application: 132 West Esplanade (132 Esplanade Holdings Ltd., CD-179 Text Amendment) Date: June 12, 2019

#### CONCLUSION

The proposed text amendment will allow for a broader range of businesses to operate in the plaza level commercial space. Expanding the permitted uses will help to support the tenancy of the space which will contribute to the vibrancy of Rogers Plaza. The location of the site near a key transit hub and at the heart of Lower Lonsdale makes it an excellent location for commercial activity and would be particularly ideal for an employment-generating use. Policy and planning analysis supports the proposed text amendment.

**RESPECTFULLY SUBMITTED:** 

Emily Macdonald Planner 1



# WESGROUP

March 4th, 2019

Michael Epp Director, Planning City of North Vancouver 141 West 14<sup>th</sup> Street, North Vancouver BC V7M 1H9

By Email: mepp@cnv.org

Dear Mr. Epp,

#### RE: 132 WEST ESPLANADE – COMPREHENSIVE DEVELOPMENT 179 ZONE – TEXT AMENDMENT

We submit this letter as a request to undertake a text amendment to Comprehensive Development 179 Zone of The Corporation of the City of North Vancouver Zoning Bylaw, 1995, No. 6700 related to the mixed-use commercial building located at 132 West Esplanade.

The property is conveniently located in Lower Lonsdale District, with direct access from the Lonsdale Quay via pedestrian overpass. The building currently comprises of ground floor retail, fronting West Esplanade, with tenants such as Freshslice, Tim Horton's, and BC Liquor Store. Floors 3-4 are occupied by ICBC, and floors 5-6 are with Vancouver Coastal Health Authority. The 2<sup>nd</sup> level (plaza level) has been vacant since October 2017 and was previously tenanted by ICBC. The proposed text amendment application will directly impact this 2<sup>nd</sup> floor plaza level.

#### Zoning

The plaza level permitted uses differ from the remaining building under CD-179. It is limited to retail stores, restaurants and cafes, various personal service establishments and accessory outdoor dining uses. Comparing this to the remaining building, it excludes uses that fall under Retail Service Group 1, such as child cares, professional and semiprofessional offices, banks, business offices, finance offices, health clubs, and a variety of other retail and service uses.

As stated above, the plaza level has been vacant since October 2017. We have had difficulties securing a tenant under the current use and believe the plaza level will be leased if it could access the uses that fall under Retail Service's Group 1.

We believe that a business operating out of the 2<sup>nd</sup> floor aligns with the City's objectives identified in the Economic Development Strategy (EDS), stating that Lower Lonsdale has the opportunity for a mix of small businesses that will collective contribute to a more vibrant Lonsdale Quay. If approved, our search for a viable tenant will broaden and could potentially attract more employers to the area, playing a role in the economic development of North Vancouver in a location with exceptional access to public transportation.

# WESGROUP

#### Signage

We believe that there is an opportunity to include business and directional signage incorporated strategically to invite more pedestrian traffic through the outdoor and indoor areas of the plaza. We would like to work with the City to review potential locations, including signage on the pedestrian overpass, business signage facing south, or the street level stairs on West Esplanade that direct pedestrians up to the plaza.

#### Parking

Under Zoning Bylaw CD-179 (8) – the building is required to provide 170 parking stalls, including 3 handicapped stalls. The building is currently providing 202 stalls, with a breakdown of allocated stalls below:

Parking Level	Total
ICBC	70
VCH	58
Tim Hortons	4
Fresh Slice	3
BC Liquor	8
Public Parking Stalls	33
City of North Vancouver	26
Total	202

The 33 public parking stalls are not tied to any lease and could be allocated to the plaza level. Given that the area of the plaza level is ~8,000 sf, a conversion to Retail Service Group 1 would require the need for only 16 stalls.

Thank you for your consideration of the proposed application. Please address any questions to myself, Ryan Sekhon <u>rsekhon@wesgoup.ca</u> and Brad Jones <u>bjones@wesgroup.ca</u>.

Sincerely,

WESGROUP PROPERTIES LTD.

Ryan Sekhon, Development Coordinator

1

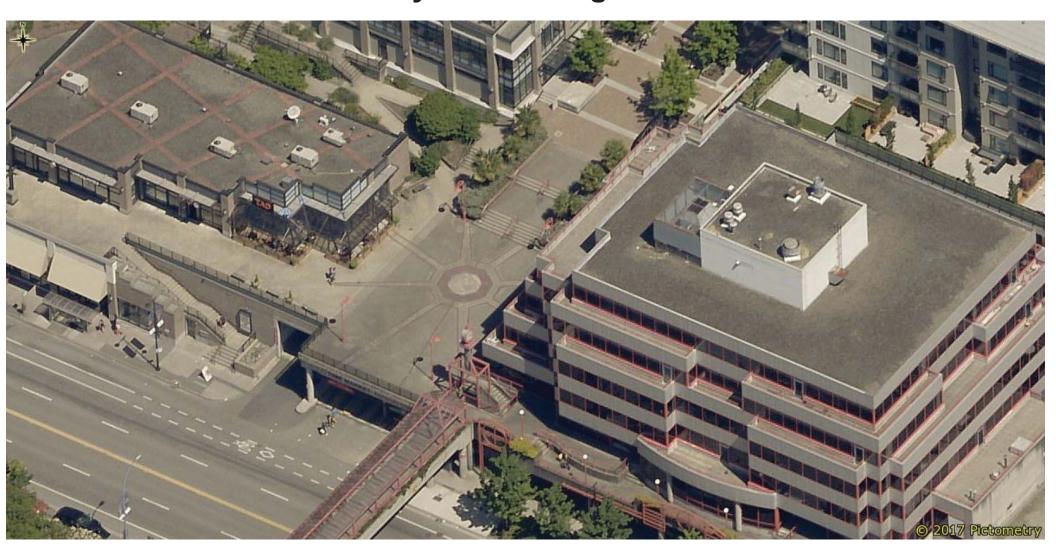
Brad Jones, Vice President Development

 Suite 910, Four Bentall Centre
 T
 604 648 1800

 1055 Dunsmuir Street, PO Box 49287
 F
 604 632 1737

 Vancouver, BC V7X 1L3
 E
 wesgroup.ca

**Birdseye View - Rogers Plaza** 



05/27/2017

From:	Ryan Sekhon
То:	Emily Macdonald
Cc:	Brad Jones
Subject:	RE: 132 W Esplanade - REZ2019-00007
Date:	May-24-19 11:18:34 AM
Attachments:	image004.png
	image007.png

Hi Emily,

The boards were installed on May 22<sup>nd</sup>. Images below of the posted signs. I understand these are to remain posted for two weeks, which would be June 5<sup>th</sup>.







WESGROUP Ryan Sekhon Development Coordinator

D 604 648 1867 C 604 217 5211

# **EARLY PUBLIC INPUT OPPORTUNITY** Zoning Amendment Application – 132 West Esplanade



The City of North Vancouver has received a Development Application to amend the Zoning Bylaw 6700, CD-179 (Comprehensive Development 179) Zone by adding Retail Service Group 1 Uses as a permitted Principal Use at the plaza level (shown right, in yellow).

Retail Service Group 1 Uses include restaurants and cafes, offices, retail stores, gyms, salons, galleries and studios, and similar uses. For the full definition, see the Zoning Bylaw No. 6700, available at www.cnv.org/zoning.

Interested members of the public may contact the applicant or Planner to learn about and comment on the proposal.

#### Applicant

Ryan Sekhon Wesgroup Properties 910-1055 Dunsmuir St. Vancouver, BC V7X 1L3 604.648.1867 rsekhon@wesgroup.ca

#### **City of North Vancouver**

Emily Macdonald, Planner 1 Planning & Development 141 West 14<sup>th</sup> Street North Vancouver, BC V7M 1H9 604.982.3904 emacdonald@cnv.org

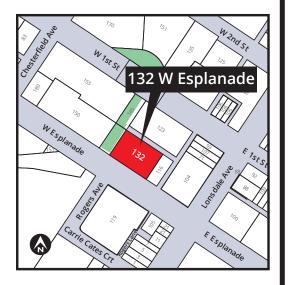
	NOTIC	E OF PUBLIC HEARING (WAIVED)	
of north vancouver	WHO:	Wesgroup Properties	
	WHAT:	Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726 (CD-179 Text Amendment)	
	WHERE:	132 West Esplanade	
	WHEN:	Monday, July 8, 2019 at 6:30 pm Council Chamber, City Hall 141 West 14 <sup>th</sup> Street, North Vancouver	

Notice is hereby given that Council will consider:

### Zoning Amendment Bylaw, 2019, No. 8726

to amend the existing CD-179 Zone to permit Retail Service Group 1 Uses on the Plaza Level. Retail Service Group 1 Uses include restaurants and cafes, child care, offices, retail stores, gyms, salons, galleries, studios and similar uses.

If you believe you may be affected by the above proposal, please forward written or email submissions, including your name and address, to the City Clerk, at **input@cnv.org**, or by mail or delivered to City Hall. Submissions must be received no later than 4:00 pm, Monday, July 8, 2019, to ensure their availability to Council. No further



information or submissions can be considered by Council after third reading of the bylaw.

The proposed Zoning Amendment Bylaw and background material will be available for viewing at City Hall between 8:30 am and 5:00 pm, Monday to Friday, except Statutory Holidays, from June 28, 2019, and online at **cnv.org/PublicHearings.** 

Please direct any inquiries to **Emily Macdonald**, Planner 1, at **emacdonald@cnv.org** or **604-982-3904.** 

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

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

#### **BYLAW NO. 8726**

#### A Bylaw to amend "Zoning Bylaw, 1995, No. 6700"

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

- 1. This Bylaw shall be known and cited for all purposes as "Zoning Bylaw, 1995, No. 6700, Amendment Bylaw, 2019, No. 8726" (132 Esplanade Holdings Ltd., 132 West Esplanade, CD-179 Text Amendment).
- 2. Part 11 of Division V: Comprehensive Development Regulations of Document "A" of "Zoning Bylaw, 1995, No. 6700" is hereby amended by:
  - A. In Section 1100, within the designation "CD-179 Comprehensive Development 179 Zone", removing the following:
    - (a) on the plaza level, approximate elevation 14.7 metres geodetic, the permitted principal uses shall be limited to:
      - retail stores including: bakery shops, meat and fish markets, delicatessens, clothing and shoe stores, personal furnishing shops, book shops, camera shops, stationery stores, art galleries and other similar establishments;
      - (ii) restaurants and cafes provided that the principal use of such restaurants and cafes is the preparation, sale and consumption of food on the premises;
      - (iii) personal service establishments, including: barber shops, beauty parlours, dry cleaners, florists, launderettes, optical or watch repair shops, tailoring and dressmaking establishments, shoe repair shops, printers, and other similar establishments;
      - (iv) accessory outdoor dining use, in those areas indicated on Schedule 33, Page 3;

and replacing it with the following:

- (a) on the plaza level, approximate elevation 14.7 metres geodetic, the permitted principal uses shall be limited to:
  - (i) Retail Service Group 1 Use;
  - (ii) accessory outdoor dining use, in those areas indicated on Schedule 33, Page 3;

READ a first time on the 24<sup>th</sup> day of June, 2019.

READ a second time on the 24<sup>th</sup> day of June, 2019.

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

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

MAYOR

CITY CLERK