City of Maple Ridge

COUNCIL MEETING AGENDA

May 28, 2019 7:00 p.m. Council Chamber

MEETING DECORUM

Council would like to remind all people present tonight that serious issues are decided at Council meetings which affect many people's lives. Therefore, we ask that you act with the appropriate decorum that a Council Meeting deserves. Commentary and conversations by the public are distracting. Should anyone disrupt the Council Meeting in any way, the meeting will be stopped and that person's behavior will be reprimanded. The meeting is live streamed and recorded by the City of Maple Ridge.

Note: This Agenda is also posted on the City's Web Site at www.mapleridge.ca

The purpose of a Council meeting is to enact powers given to Council by using bylaws or resolutions. This is the venue for debate of issues before voting on a bylaw or resolution.

| 100 | CALL TO ORDER |
|-----|---|
| 200 | AMENDMENTS TO THE AGENDA |
| 300 | APPROVAL OF THE AGENDA |
| 400 | ADOPTION OF MINUTES |
| 401 | Minutes of the Regular Council Meeting of May 14, 2019 and Special Council Meetings of May 7 and May 21, 2019 |
| 402 | Minutes to the Public Hearing of May 21, 2019 |
| 500 | PRESENTATIONS AT THE REQUEST OF COUNCIL |
| 600 | DELEGATIONS |
| 601 | Sustainabiliteens Vancouver • Lilah Williamson |

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- Fraser Health Authority Maple Ridge Community Health Profile and Healthy Community Partnership
 - Ingrid Tyler, Medical Health Officer
 - Valerie Spurrell, Executive Director, Ridge Meadows Hospital and Pitt Meadows and Maple Ridge Health Services
 - Brenna Ayliffe, Community Health Specialist

603 CUPE Local 622

Rob Letts, President

Recommendation: reconsider previous Council's decision to contract out Albion Community Centre and direct staff to include CUPE in the discussion to contract out public services in order for Council to receive all the information they require to make informed decisions.

650 QUESTIONS FROM THE PUBLIC

Note: Questions from the Public are limited to 15 minutes unless extended by a motion approved by the majority of Council. Each speaker is limited to 2 minutes at a time.

- 700 ITEMS ON CONSENT
- 701 Minutes
- 701.1 Minutes of the Development Agreements Committee Meetings of May 14, 2019
- 701.2 Minutes of Meetings of Committees and Commissions of Council
 - Advisory Design Panel April 17, 2019
- 702 Reports
- 702.1 Drinking Water Quality Report 2018

Staff report dated May 21, 2019 providing information on Drinking Water Quality Report 2018.

- 703 <u>Correspondence Nil</u>
- 704 Release of Items from Closed Council Status

From the April 23, 2019 Closed Council Meeting

04.03 Agricultural Advisory Committee Membership – 2019-2020 Term

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From the May 7, 2019 Closed Council Meeting
04.03 Social Housing Site Discussion

From the May 21, 2019 Closed Council Meeting
04.01 2020 BC Summer Games Board of Directors

800 UNFINISHED BUSINESS

900 CORRESPONDENCE

1000 BYLAWS

Note: Item 1001 is from the May 21, 2019 Public Hearing

Bylaws for Third Reading

1001 2018-301-RZ, 12294 Laity Street

Maple Ridge Zone Amending Bylaw No. 7486-2018

To rezone from RS-1 (One Family Urban Residential) to R-1 (Residential

District) to create a 2 lot subdivision.

Third reading.

1100 COMMITTEE REPORTS AND RECOMMENDATIONS

For the following items that refer to staff report earlier than this agenda date: the items were presented at a Committee of the Whole meeting typically a week prior on the date of the staff report, to provide Council with an opportunity to ask staff detailed questions. The items are now before the regular Council Meeting for debate and vote. Both meetings are open to the public. The reports are not reprinted again in hard copy, however; they can be found in the electronic agenda or in the Committee of the Whole agenda package dated accordingly.

Public Works and Development Services

1101 2018-180-RZ, 22057 and 22083 Lougheed Highway, RS-1 to RM-2

Staff report dated May 21, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7481-2018 to rezone from RS-1 (One Family Urban Residential) to RM-2 (Medium Density Apartment Residential) to allow a five storey apartment building with approximately 86 units and underground parking be given first reading and that the applicant provide further information as described on Schedules C, D and E of the Development Procedures Bylaw No. 5879-1999.

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1102 2019-081-RZ, 21358 and 21366 Dewdney Trunk Road, RS-1, RS-1b to RM-2

Staff report dated May 21, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7540-2019 to rezone from RS-1 (One Family Urban Residential) and RS-1b (One Family Urban [Medium Density] Residential) to RM-2 (Medium Density Apartment Residential) to allow future construction of a five storey, 54-unit, purpose-built rental apartment building be given first reading and that the applicant provide further information as described on Schedules C, D and E of the Development Procedures Bylaw No. 5879-1999.

1103 2019-091-RZ, 21585 River Road, RS-1 to RT-2

Staff report dated May 21, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7541-2019 to rezone from RS-1 (One Family Urban Residential) to RT-2 (Ground-Oriented Residential Infill) to permit the development of courtyard residential housing with five dwelling units, clustered around a common courtyard be given first reading and that the applicant provide further information as described on Schedules C, D and E of the Development Procedures Bylaw No. 5879-1999.

1104 2017-117-RZ, 11865, 11839, 11831 232 Street, RS-1 to RM-1

Staff report dated May 21, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7351-2017 to rezone from RS-1 (One Family Urban Residential) to RM-1 (Townhouse Residential) to permit the future construction of a 46-unit residential townhouse development be given second reading and be forwarded to Public Hearing.

Note: Item 1105 Drinking Water Quality Report 2018 has been moved to the Consent Agenda

1105 Drinking Water Quality Report 2018

Note: Item 1106 has been removed from the Agenda

1106 Post Disaster Water Supply – briefing (can be viewed at http://media.mapleridge.ca/Mediasite/Showcase - Committee of the Whole May 21, 2019)

1107 Contract Award: Hydrovac Services

Staff report dated May 21, 2019 recommending that a one (1) year agreement for Hydrovac services on an as, if and when required basis be awarded to Badger Daylighting Limited Partnership and McCrae's Environmental Services Ltd. with the option to renew.

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| ۲ ۲ | CORPORATE | SEDVICES |
|--------|-----------|-----------------|
| Э. | CURPURATE | SERVICES |

- 6. PARKS, RECREATION & CULTURE
- 1151 Award of Contract for Phase One of the Albion Community Centre

Staff report dated May 21, 2019 recommending that the Contract for Construction of Phase One of the Albion Community Centre be awarded to Double V Construction Ltd. in the amount of \$5,306,981 excluding taxes, and that a contingency of \$530,698 be authorized and that the Corporate Officer be authorized to execute the contract.

- 1200 STAFF REPORTS
- 1300 OTHER MATTERS DEEMED EXPEDIENT
- 1400 NOTICES OF MOTION AND MATTERS FOR FUTURE MEETING
- 1500 MAYOR AND COUNCILLORS' REPORTS

1600 ADJOURNMENT

QUESTIONS FROM THE PUBLIC

The purpose of the Questions from the Public session is to provide the public with an opportunity to ask questions of Council on items that are of concern to them, with the exception of Public Hearing bylaws which have not yet reached conclusion.

Council will not tolerate any derogatory remarks directed at Council or staff members.

Each person will be permitted 2 minutes to ask their question (a second opportunity is permitted if no one else is sitting in the chairs in front of the podium). Questions must be directed to the Chair of the meeting and not to individual members of Council. The total session is limited to 15 minutes.

Council reserves the right to defer responding to a question in order to obtain the information required to provide a complete and accurate response.

Other opportunities are available to address Council including public hearings, delegations and community forum. The public may also make their views known to Council by writing or via email and by attending open houses, workshops and information meetings. Serving on an Advisory Committee is an excellent way to have a voice in the future of this community.

For more information on these opportunities contact:

Clerk's Department at 604-463-5221 or <u>clerks@mapleridge.ca</u>. Mayor and Council at <u>mayorandcouncil@mapleridge.ca</u>.

Checked by:

Date: May 23/19

400 Adoption and Receipt of Minutes

401 Minutes of Regular and Special Council Meetings

City of Maple Ridge

COUNCIL MEETING MINUTES

May 14, 2019

The Minutes of the City Council Meeting held on May 14, 2019 at 7:00 p.m. in the Council Chamber of the City Hall, 11995 Haney Place, Maple Ridge, British Columbia for the purpose of transacting regular City business.

PRESENT

| Elected Officials | Appointed Staff |
|------------------------|--|
| Mayor M. Morden | F. Quinn, Acting Chief Administrative Officer |
| Councillor J. Dueck | D. Boag, Acting General Manager of Parks, Recreation & Culture |
| Councillor C. Meadus | L. Benson, Director of Corporate Administration |
| Councillor G. Robson | T. Thompson, Chief Financial Officer |
| Councillor R. Svendsen | Other staff as required |
| Councillor A. Yousef | C. Carter, Director of Planning |
| | D. Pollock, Municipal Engineer |
| | C. Goddard, Manager of Development and Environmental Services |
| ABSENT | R. MacNair, Senior Advisor, Bylaw and Licensing Services |
| Councillor K. Duncan | |

Note: These Minutes are also posted on the City's Web Site at www.mapleridge.ca The meeting was live streamed and recorded by the City of Maple Ridge

| 200 | AMENDMENTS TO THE AGENDA |
|-----|--------------------------|

ADODTION OF MINITES

300 APPROVAL OF THE AGENDA

CALL TO ORDER

R/2019-272

100

100

It was moved and seconded

That the agenda of the Regular Council Meeting of May 14, 2019 be adopted as circulated.

| 400 | ADOPTION OF MINUTES |
|-----|---|
| 401 | Minutes of the Regular Council Meetings of April 9 and 23, 2019 and Special Council Meetings of April 2, 8, 16 and 23, 2019 |

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R/2019-273

It was moved and seconded

That the minutes of the Regular Council Meetings of April 9, 2019 and April 23, 2019 be adopted as circulated.

That the minutes of the Special Council Meetings of April 2, 8, 16 and 23, 2019 be adopted as circulated.

CARRIED

402 Minutes to the Public Hearing of April 16, 2019

R/2019-274

It was moved and seconded

That the minutes of the Public Hearing of April 16, 2019 be adopted as circulated.

- 500 PRESENTATIONS AT THE REQUEST OF COUNCIL
- 600 DELEGATIONS
- 601 Empower a Youth Teaching Money Matters, Community Project (For young adults Maple Ridge/Pitt Meadows)
 - Jesse Sidhu, CEO and Founder of Empower a Youth
 - Alex Wells, Creative Director, Empower a Youth
- 602 Great Canadian Gaming Corp & BC Lottery Corp
 - Chuck Keeling, Vice President, GCGC
 - Greg Walker, Director of Public Affairs, BCLC
- 650 QUESTIONS FROM THE PUBLIC NIL
- 700 ITEMS ON CONSENT
- 701 Minutes
- 701.1 Minutes of the Development Agreements Committee Meetings of April 24, 2019, May 1, 2019, May 3, 2019 and May 7, 2019
- 701.2 Minutes of Meetings of Committees and Commissions of Council
 - Advisory Design Panel March 20, 2019
 - Agricultural Advisory Committee March 28, 2019

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- Audit and Finance Committee April 16, 2019
- Economic Development Committee December 5, 2018
- Public Art Steering Committee April 11, 2019
- Social Policy Advisory Committee March 6, 2019
- 702 Reports
- 702.1 Disbursements for the month ended March 31, 2019

Staff report dated May 14, 2019 providing information on Disbursements for the month ended March 31, 2019.

702.2 2019 Council Expenses

Staff report dated May 14, 2019 providing information on 2019 Council Expenses.

R/2019-275

It was moved and seconded

That the items on the Consent Agenda be received into the record.

CARRIED

- 800 UNFINISHED BUSINESS
- 801 2018 Consolidated Financial Statements

Staff report dated April 23, 2019 recommending that the 2018 Financial Statements be accepted.

R/2019-276

It was moved and seconded

That the 2018 Financial Statements be accepted.

CARRIED

- 900 CORRESPONDENCE NIL
- 1000 BYLAWS

Bylaws for Adoption

Maple Ridge 2019-2023 Financial Plan Amending Bylaw No. 7544-2019
To amend the Maple Ridge 2019-2023 Financial Plan Bylaw No. 7452-2018
Adoption

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R/2019-277

It was moved and seconded

That Bylaw No. 7544-2019 be adopted.

Councillor Robson - OPPOSED

CARRIED

1002 Maple Ridge 2019 Property Tax Rates Bylaw No. 7545-2019

To establish property tax rates for Municipal and Regional District purposes

for the year 2019

Adoption

R/2019-278

It was moved and seconded

That Bylaw No. 7545-2019 be adopted.

CARRIED

Councillor Robson - OPPOSED

1003 Maple Ridge Sewer Rate Amending Bylaw No. 7546-2019

To amend the Maple Ridge Sewer Rate Bylaw No. 718-1964

Adoption

R/2019-279

It was moved and seconded

That Bylaw No. 7546-2019 be adopted

CARRIED

1004 Albion Dyking District Tax Rates Bylaw No. 7458-2019

To impose taxes upon lands in the Albion Dyking District

Adoption

R/2019-280

It was moved and seconded

That Bylaw No. 7458-2019 be adopted.

CARRIED

Councillor Robson - OPPOSED

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Maple Ridge Road 13 Dyking District Tax Rates Bylaw No. 7459-2019
To impose taxes upon lands in the Maple Ridge Road 13 Dyking District Adoption

R/2019-281

It was moved and seconded

That Bylaw No. 7459-2019 be adopted.

CARRIED

1100 COMMITTEE REPORTS AND RECOMMENDATIONS

1101 2018-289-RZ, 10309 and 10337 240 Street; 10350 and 10320 Slatford Place, RS-3, RS-2 to RM-1

Staff report dated May 7, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7543-2019 to rezone from RS-3 (One Family Rural Residential) and RS-2 (One Family Suburban Residential) to RM-1 (Townhouse Residential) to permit an approximately 110 townhouse development be given first reading and that Maple Ridge Zone Amending Bylaws No. 7400-2017 and 7232-2015 be repealed and that the applicant provide further information as described on Schedules A, C, D, F and G of the Development Procedures Bylaw No. 5879–1999, and a Subdivision application.

R/2019-282

It was moved and seconded

- That in respect of Section 475 of the Local Government Act, requirement for consultation during the development or amendment of an Official Community Plan, Council must consider whether consultation is required with specifically:
- The Board of the Regional District in which the area covered by the plan is located, in the case of a Municipal Official Community Plan;
- ii. The Board of any Regional District that is adjacent to the area covered by the plan:
- iii. The Council of any municipality that is adjacent to the area covered by the plan;
- iv. First Nations;
- v. Boards of Education, Greater Boards and Improvements District Boards; and
- vi. The Provincial and Federal Governments and their agencies.

and in that regard, it is recommended that no additional consultation be required in respect of this matter beyond the early posting of the proposed Official Community Plan amendments on the City's website, together with an invitation to the public to comment, and;

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- 2) That Zone Amending Bylaw No. 7400-2017 be repealed; and
- 3) That Zone Amending Bylaw No. 7232-2015 be repealed; and
- 4) That Zone Amending Bylaw No. 7543-2019 be given first reading; and
- 5) That the applicant provide further information as described on Schedules A, C, D, F and G of the Development Procedures Bylaw No. 5879-1999, and a Subdivision application.

CARRIED

1102 2019-064-RZ, 11045 Cameron Court, RS-2 to RS-1d

Staff report dated May 7, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7551-2019 to rezone from RS-2 (One Family Suburban Residential) to RS-1d (One Family Urban (Half Acre) Residential) to enable the subdivision of approximately 6 single family lots no less than 557m² in area be given first reading and that the applicant provide further information as described on Schedules A, B, and F of the Development Procedures Bylaw No. 5879-1999, along with the information required for an Intensive Residential Development Permit and a Subdivision application.

R/2019-283

It was moved and seconded

That Zone Amending Bylaw No. 7551-2019 be given first reading; and

That the applicant provide further information as described on Schedules A, B, and F of the Development Procedures Bylaw No. 5879-1999, along with the information required for an Intensive Residential Development Permit and a Subdivision application

CARRIED

Councillor Robson - OPPOSED

1103 2017-572-RZ, 11703 Fraser Street and 11718 224 Street, RM-1 to RM-2

Staff report dated May 7, 2019 recommending that Maple Ridge Official Community Plan Amending Bylaw No. 7550-2019 to redesignate the easterly portion of subject property (11703 Fraser Street) from Ground-Oriented Multi-Family to Low-Rise Apartment be given first and second readings and be forwarded to Public Hearing and that Maple Ridge Zone Amending Bylaw No. 7422-2018 to rezone from RM-1 (Townhouse Residential) to RM-2 (Medium Density Apartment Residential) to permit future construction of a 57 unit apartment building with underground parking be given second reading and be forwarded to Public Hearing.

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R/2019-284

It was moved and seconded

- 1) That in accordance with Section 475 of the Local Government Act, opportunity for early and on-going consultation has been provided by way of posting Official Community Plan Amending Bylaw No. 7550-2019 on the municipal website and requiring that the applicant host a Development Information Meeting (DIM), and Council considers it unnecessary to provide any further consultation opportunities, except by way of holding a Public Hearing on the bylaw;
- 2) That Official Community Plan Amending Bylaw No. 7550-2019 be considered in conjunction with the Capital Expenditure Plan and Waste Management Plan;
- That it be confirmed that Official Community Plan Amending Bylaw No. 7550-2019 is consistent with the Capital Expenditure Plan and Waste Management Plan;
- 4) That Official Community Plan Amending Bylaw No. 7550-2019 be given first and second readings and be forwarded to Public Hearing;
- 5) That Zone Amending Bylaw No. 7422-2018 be given second reading, and be forwarded to Public Hearing;
- 6) That the following terms and conditions be met prior to final reading:
 - Registration of a Rezoning Servicing Agreement as a Restrictive Covenant and receipt of the deposit of a security, as outlined in the Agreement;
 - ii. Approval from the Ministry of Transportation and Infrastructure;
 - iii. Amendment to Official Community Plan Schedule "A", Chapter 10.4
 Town Centre Area Plan, Schedule 1 Town Centre Area Land-Use Designation Map;
 - iv. Road dedication on Fraser Street as required;
 - Registration of a Restrictive Covenant for the Geotechnical Report which addresses the suitability of the subject property for the proposed development;
 - vi. Registration of a Restrictive Covenant for protecting the Visitor Parking; Tree Protection, Stormwater Management.
 - vii. In addition to the site profile, a disclosure statement must be submitted by a Professional Engineer advising whether there is any evidence of underground fuel storage tanks on the subject property. If so, a Stage 1 Site Investigation Report is required to ensure that the subject property is not a contaminated site.
 - viii. That a voluntary contribution, in the amount of \$176,700.00 (\$3,100/57) be provided in keeping with the Council Policy with regard to Community Amenity Contributions.

1104 2016-031-RZ, 13227 236 Street, RS-2 to RM-1

Staff report dated May 7, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7228-2016 to rezone from RS-2 (One Family Suburban Residential) to RM-1 (Townhouse Residential) to permit the future development of 17 townhouse units be given second reading and be forwarded to Public Hearing.

R/2019-285

It was moved and seconded

- That Zone Amending Bylaw No. 7228-2016 be given second reading, and be forwarded to Public Hearing;
- That the following terms and conditions be met prior to final reading:
 - Registration of a Rezoning Servicing Agreement as a Restrictive Covenant and receipt of the deposit of a security, as outlined in the Agreement;
 - Registration of a Restrictive Covenant for the Geotechnical Report, which addresses the suitability of the subject property for the proposed development;
 - iii. Registration of a Restrictive Covenant for the protection of the Environmentally Sensitive areas (steep slopes) on the subject property;
 - iv. Registration of a Statutory Right-of-Way plan and agreement for Storm Sewer;
 - v. Registration of a Restrictive Covenant for Stormwater Management;
 - vi. Registration of a Restrictive Covenant for protecting Visitor Parking;
 - vii. Registration of a Restrictive Covenant for Tree Protection;
 - viii. Removal of existing buildings;
 - ix. In addition to the site profile, a disclosure statement must be submitted by a Professional Engineer advising whether there is any evidence of underground fuel storage tanks on the subject property. If so, a Stage 1 Site Investigation Report is required to ensure that the subject property is not a contaminated site; and
 - x. That a voluntary contribution, in the amount of \$69,700.00 be provided in keeping with the Council Policy with regard to Community Amenity Contributions.

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1105 2018-093-RZ, 11780 Burnett Street, RS-1 to R-1

Staff report dated May 7, 2019 recommending that Maple Ridge Zone Amending Bylaw No. 7485-2018 to rezone from RS-1 (One Family Urban Residential) to R-1 (Residential District) to permit a two lot subdivision be given second reading and be forwarded to Public Hearing.

R/2019-286

It was moved and seconded

- 1) That Zone Amending Bylaw No. 7485-2018 be given second reading, and be forwarded to Public Hearing;
- 2) That the following terms and conditions be met prior to final reading:
 - Road dedication on Burnett Street as required;
 - ii. Registration of a Restrictive Covenant for Stormwater Management;
 - iii. Removal of existing buildings;
 - iv. In addition to the site profile, a disclosure statement must be submitted by a Professional Engineer advising whether there is any evidence of underground fuel storage tanks on the subject property. If so, a Stage 1 Site Investigation Report is required to ensure that the subject property is not a contaminated site.
 - v. That a voluntary contribution, in the amount of \$5,100.00 be provided in keeping with the Council Policy with regard to Community Amenity Contributions.

CARRIED

1106 New Cannabis Retail Store

Staff report dated May 7, 2019 recommending that the application for a cannabis retail store by 1151761 B.C. Ltd. at #670-22709 Lougheed Highway, Maple Ridge be supported based on the information contained in the Council report dated May 7, 2019 and that a copy of the resolution be forwarded to the Liquor and Cannabis Regulation Branch.

C. Carter provided a review of Policy 6.33 Cannabis Retail Store Processing & Evaluation Criteria for the public. R. MacNair answered Council questions.

R/2019-287

It was moved and seconded

- 1) That the application for a cannabis retail store by 1151761 BC Ltd., located at #670 - 22709 Lougheed Highway, Maple Ridge be supported based on the information contained in the Council report dated May 7, 2019; and further
- 2) That a copy of the resolution be forwarded to the Liquor and Cannabis Regulation Branch in accordance with the legislative requirements.

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- 5. CORPORATE SERVICES
- 6. PARKS, RECREATION & CULTURE
- 1151 Award of Contract for Maple Ridge Secondary School Track Facility Upgrades Design Services

Staff report dated May 7, 2019 recommending that Contract RFP-PL19-31 be awarded to Simcic + Uhrich Architects in the amount of \$166,720 excluding taxes, that a contingency of \$25,000 be authorized and that the Corporate Officer be authorized to execute the contract.

R/2019-288

It was moved and seconded

That Contract RFP-PL19-31: Consulting Services for the detailed design for Maple Ridge Secondary School Track Facility Improvements be awarded to Simcic + Uhrich Architects in the amount of \$166,720 excluding taxes; and that a contingency of \$25,000 be authorized; and further,

That the Corporate Officer be authorized to execute the contract.

CARRIED

1152 Award of Contract for Hammond Community Centre Renovation Design Services

Staff report dated May 7, 2019 recommending that Contract RFP-PL19-3 be awarded to MIZA Architects Inc. in the amount of \$263,795 plus taxes, that a contingency of \$39,500 be authorized, and that the Corporate Officer be authorized to execute the contract.

R/2019-289

It was moved and seconded

Contract RFP-PL19-3: Consulting Services for the detailed design for Hammond Community Centre renovations be awarded to MIZA Architects Inc. in the amount of \$263,795 plus taxes and that a contingency of \$39,500 be authorized; and further

That the Corporate Officer be authorized to execute the contract.

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1153 Award of Contract for Firefighters Park Construction

Staff report dated May 7, 2019 recommending that Contract ITT-PL19-01 be awarded to Cedar Crest Lands (BC) Ltd. in the amount of \$526,500 excluding taxes, that a contingency of \$50,000 be authorized, that the budget be increased by \$133,330 funded from the Park Development Cost Charge fund and Capital Works Reserve, that the next Financial Plan Bylaw be amended to reflect this, and that the Corporate Officer be authorized to execute the contract.

R/2019-290

It was moved and seconded

L. Benson, Corporate Officer

That Contract ITI-PL19-01: Fire Fighters Park- Neighbourhood Park Construction be awarded to Cedar Crest Lands (BC) Ltd. in the amount of \$526,500 excluding taxes, and a contingency of \$50,000 be authorized; and,

That this project budget be increased by \$133,300 funded from the Park Development Cost Charge fund and Capital Works Reserve and that the next Financial Plan Bylaw is amended to reflect this; and further,

That the Corporate Officer be authorized to execute the contract.

| 1200 | STAFF REPORTS | |
|-----------|-------------------------------|--------------------|
| 1300 | OTHER MATTERS DEEMED EXPEDIE | NT |
| 1400 | NOTICES OF MOTION AND MATTERS | FOR FUTURE MEETING |
| 1500 | MAYOR AND COUNCILLORS' REPORT | TS . |
| 1600 | ADJOURNMENT – 8:12 p.m. | |
| Certified | Correct | M. Morden, Mayor |
| | | |

City of Maple Ridge

SPECIAL COUNCIL MEETING MINUTES

May 7, 2019

The Minutes of the City Council Meeting held on May 7, 2019 at 12:04 p.m. in the Blaney Room, 1st Floor, Maple Ridge City Hall, 11995 Haney Place, Maple Ridge, British Columbia for the purpose of transacting regular City business.

| PRESENT | Appointed Staff |
|-------------------------|---|
| Elected Officials | K. Swift, Acting Chief Administrative Officer |
| Mayor M. Morden | F. Quinn, General Manager of Public Works and Development |
| Councillor J. Dueck | Services |
| Councillor C. Meadus | D. Boag, Acting General Manager of Parks, Recreation and |
| Councillor G. Robson | Community Engagement |
| Councillor R. Svendsen* | L. Benson, Director of Corporate Administration |
| Councillor A. Yousef | D. Denton, Acting Director of Economic Development |
| | Other staff as required |
| ABSENT | J. Hyland, Officer in Charge |
| Councillor K. Duncan | Aaron Paradis - Operations Officer Ridge Meadows Det |
| | M. Jones, Senior Manager of Police Services |
| | T. Thompson, Chief Financial Officer |
| | C. Crabtree, Chief Information Officer |

Note: These Minutes are also posted on the City's Web Site at www.mapleridge.ca

1.0 CALL TO ORDER

2.0 APPROVAL OF THE AGENDA

R/2019-257

It was moved and seconded

That the agenda for the May 7, 2019 Special Council Meeting be approved as circulated.

CARRIED

3.0 NOTICE OF CLOSED COUNCIL MEETING

R/2019-258

It was moved and seconded

That the meeting following this meeting be closed to the public pursuant to Sections 90 (1) and 90 (2) of the Community Charter as the subject matter being considered relates to the following:

Section 90(1)(f)

law enforcement, if the council considers that disclosure might reasonably be expected to harm the conduct of an investigation under or enforcement of an enactment Special Council Meeting Agenda May 7, 2019 Page 2 of 2

| Section 90(1)(m) | a matter that, under another enactment, is such that the public may be excluded from the meeting | |
|--|--|--|
| Section 90(1)(i) | the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose | |
| Section 90(1)(e) | the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure might reasonably be expected to harm the interests of the municipality | |
| Section 90(2)(b) | the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial | |
| Section 90(1)(a) | personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality | |
| Any other matter may be brought before the Council that meets the requirements for a meeting closed to the public pursuant to Section 90(1) and 90(2) of the Community Charter or Freedom of Information and Protection of Privacy Act. CARRIED | | |
| 4.0 ADJOURNMENT- | 12:05 p.m. | |
| | | |
| Certified Correct | M. Morden, Mayor | |
| | | |
| L. Benson, Corporate Office | er | |

City of Maple Ridge

SPECIAL COUNCIL MEETING MINUTES

May 21, 2019

The Minutes of the City Council Meeting held on May 21, 2019 at 1:04 p.m. in the Blaney Room, 1st Floor, Maple Ridge City Hall, 11995 Haney Place, Maple Ridge, British Columbia for the purpose of transacting regular City business.

| PRESENT | Appointed Staff |
|-------------------------|---|
| Elected Officials | K. Swift, Acting Chief Administrative Officer |
| Mayor M. Morden | F. Quinn, General Manager of Public Works and Development |
| Councillor J. Dueck | Services |
| Councillor C. Meadus | D. Boag, Acting General Manager of Parks, Recreation and |
| Councillor G. Robson | Community Engagement |
| Councillor R. Svendsen* | L. Benson, Director of Corporate Administration |
| Councillor A. Yousef | Other staff as required |
| | D. Pollock, Municipal Engineer |
| ABSENT | C. Carter, Director of Planning |
| Councillor K. Duncan | - |
| | |

Note: These Minutes are also posted on the City's Web Site at www.mapleridge.ca

1.0 CALL TO ORDER

2.0 APPROVAL OF THE AGENDA

R/2019-291

It was moved and seconded

That the agenda for the May 21, 2019 Special Council Meeting be approved as circulated.

CARRIED

3.0 NOTICE OF CLOSED COUNCIL MEETING

R/2019-292

It was moved and seconded

That the meeting following this meeting be closed to the public pursuant to Sections 90(1) and 90(2) of the Community Charter as the subject matter being considered relates to the following:

Section 90(1)(a)

personal information about an identifiable individual who holds or is being considered for a position as an officer,

Special Council Meeting Agenda May 21, 2019 Page 2 of 2

employee or agent of the municipality or another position

appointed by the municipality

Section 90(1)(e)

the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure might reasonably be expected to harm the interests of the

municipality

Any other matter may be brought before the Council that meets the requirements for a meeting closed to the public pursuant to Section 90(1) and 90(2) of the Community Charter or Freedom of Information and Protection of Privacy Act.

| 4.0 | ADJOURNMENT- | 1:05 p.m. |
|-----|--------------|-----------|
|-----|--------------|-----------|

| Certified Correct | M. Morden, Mayor | |
|-------------------|------------------|--|
| Certified Correct | | |
| | | |
| | | |

402 Minutes of the Public Hearing

CITY OF MAPLE RIDGE

REPORT OF PUBLIC HEARING

May 21, 2019

The Report of the Public Hearing held in the Council Chamber of City Hall, 11995 Haney Place, Maple Ridge, British Columbia on May 21, 2019 at 7:01 p.m.

| PRESENT | Appointed Staff |
|------------------------|---|
| Elected Officials | K. Swift, Acting Chief Administrative Officer |
| Mayor M. Morden | F. Quinn, General Manager Public Works & Development |
| Councillor J. Dueck | Services |
| Councillor C. Meadus | L. Benson, Director of Corporate Administration |
| Councillor G. Robson | Other staff as required |
| Councillor R. Svendsen | C. Carter, Director of Planning |
| Councillor A. Yousef | C. Goddard, Manager of Development & Environmental Services |
| | |
| ABSENT | |
| Councillor K. Duncan | |
| | |

The Corporate Officer did not provide the procedure and rules of order of the Public Hearing after confirming there were no speakers in the audience.

The Mayor then called upon the Corporate Officer to advise of any correspondence received on the proposed bylaw. The Corporate officer advised that 31 letters were mailed out and noted that one email response was received, and that was forwarded to Council today at 12:30 p.m. The response was opposed to the application.

The agenda item was introduced on-screen.

2018-301-RZ
 12294 Laity Street
 Lot 2 District Lot 248 Group 1 New Westminster District Plan 14302

Maple Ridge Zone Amending Bylaw No. 7486-2018

• To rezone from RS-1 (One Family Urban Residential) to R-1 (Residential District). The current application is to create a 2 lot subdivision.

The Mayor called for speakers a first time.

L. Benson, Corporate Officer

The Mayor called again for second call and then for third call.

The Mayor called for third and final call for speakers.

Having given all those persons whose interests were deemed affected by the matters contained herein a chance to be heard, the Mayor adjourned the Public Hearing at 7:03 p.m.

| merenra onance to se neara, the mayor adjoan | |
|--|------------------|
| Certified Correct | M. Morden, Mayor |
| | |

701.1 Development Agreements Committee

CITY OF MAPLE RIDGE DEVELOPMENT AGREEMENTS COMMITTEE

May 14, 2019 Mayor's Office

CIRCULATED TO:

Michael Morden, Mayor Chair

Frank Quinn, Acting Chief Administrative Officer

Member

Catherine Schmidt, Recording Secretary

1. 18-120958 BG

LEGAL:

Lot 7 Section 20 Township 12 New Westminster District Plan 71854

LOCATION:

12388 Edge Street

OWNER:

Daniel Morse

REQUIRED AGREEMENTS:

Secondary Suite Covenant

THAT THE MAYOR AND CORPORATE OFFICER BE AUTHORIZED TO SIGN AND SEAL THE PRECEDING DOCUMENT AS IT RELATES TO 18-120958 BG.

CARRIED

2. 18-112594 BG

LEGAL:

Lot 26 Section 10 Township 12 New Westminster District Plan

BCP49334

LOCATION:

10408 243 Street

OWNER:

Terry and Vanessa Lim

REQUIRED AGREEMENTS:

Secondary Suite Covenant

THAT THE MAYOR AND CORPORATE OFFICER BE AUTHORIZED TO SIGN AND SEAL THE PRECEDING DOCUMENT AS IT RELATES TO 18-112594 BG.

3. 19-102921 BG

LEGAL:

Lot 90 District Lot 279 Group 1 New Westminster District Plan 114

LOCATION:

20311 Kent Street

OWNER:

Brian Beaudreault and Tara Van De Waal

REQUIRED AGREEMENTS:

Floodplain and Geotechnical Covenant

THAT THE MAYOR AND CORPORATE OFFICER BE AUTHORIZED TO SIGN AND SEAL THE PRECEDING DOCUMENT AS IT RELATES TO 19-102921 BG.

CARRIED

4. 5245-20-B482

LEGAL:

Lot 756 District Lot 278 Group 1 New Westminster District Plan 8654

LOCATION:

20591 Battle Avenue

OWNER:

Sean McQuillan

REQUIRED AGREEMENTS:

Building Development Agreement

THAT THE MAYOR AND CORPORATE OFFICER BE AUTHORIZED TO SIGN AND SEAL THE PRECEDING DOCUMENT AS IT RELATES TO 5245-20-B482.

CARRIED

5. 15-118953 BG

LEGAL:

Lot 67 Section 22 Township 12 New Westminster District Plan 43885

LOCATION:

24301 126 Avenue

OWNER:

Robert and Edward Cooper, Thi Kieu Ngan Phan

REQUIRED AGREEMENTS:

Sump Pump Covenant

THAT THE MAYOR AND CORPORATE OFFICER BE AUTHORIZED TO SIGN AND SEAL THE PRECEDING DOCUMENT AS IT RELATES TO 15-118953 BG.

6. 2017-058-SD

LEGAL:

Lot 9 Section 29 Township 12 New Westminster District Plan 9387

Except: Part Subdivided on Plan EPP66434

LOCATION:

22650 136 Avenue

OWNER:

581600 B.C. Ltd. (Anna Wong)

REQUIRED AGREEMENTS:

Statutory Right of Way (Horse Trail)

THAT THE MAYOR AND CORPORATE OFFICER BE AUTHORIZED TO SIGN AND SEAL THE PRECEDING DOCUMENT AS IT RELATES TO 2017-058-SD.

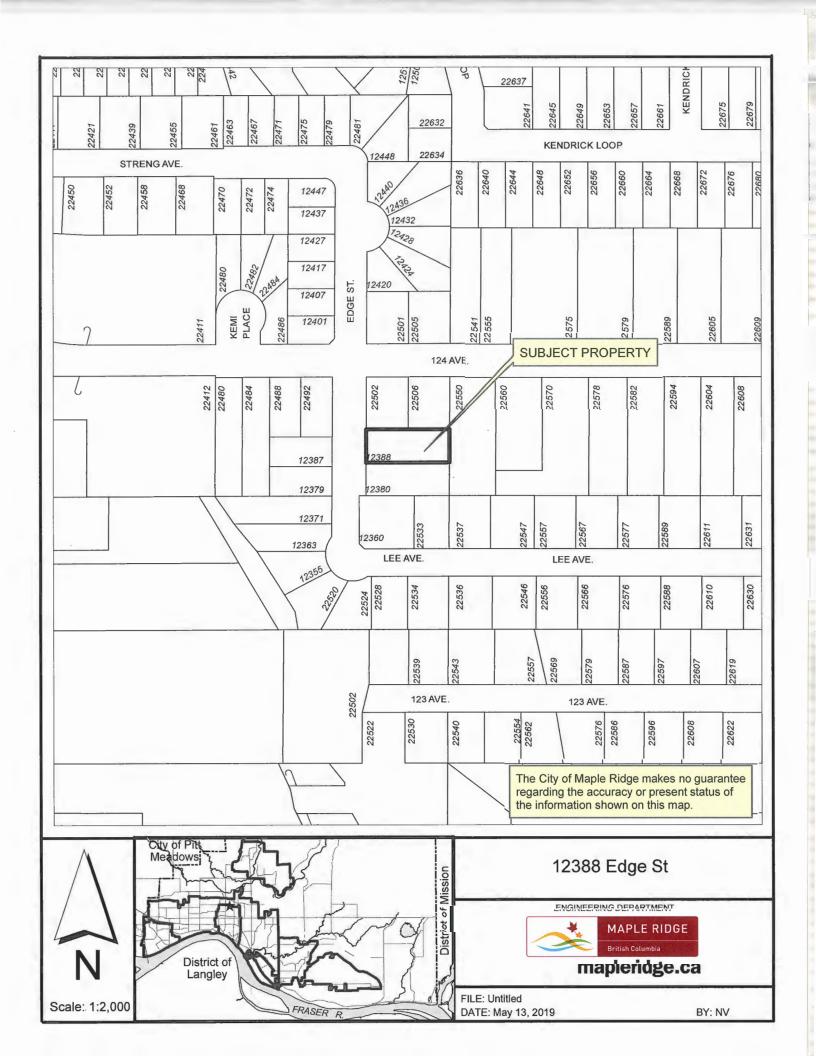
CARRIED

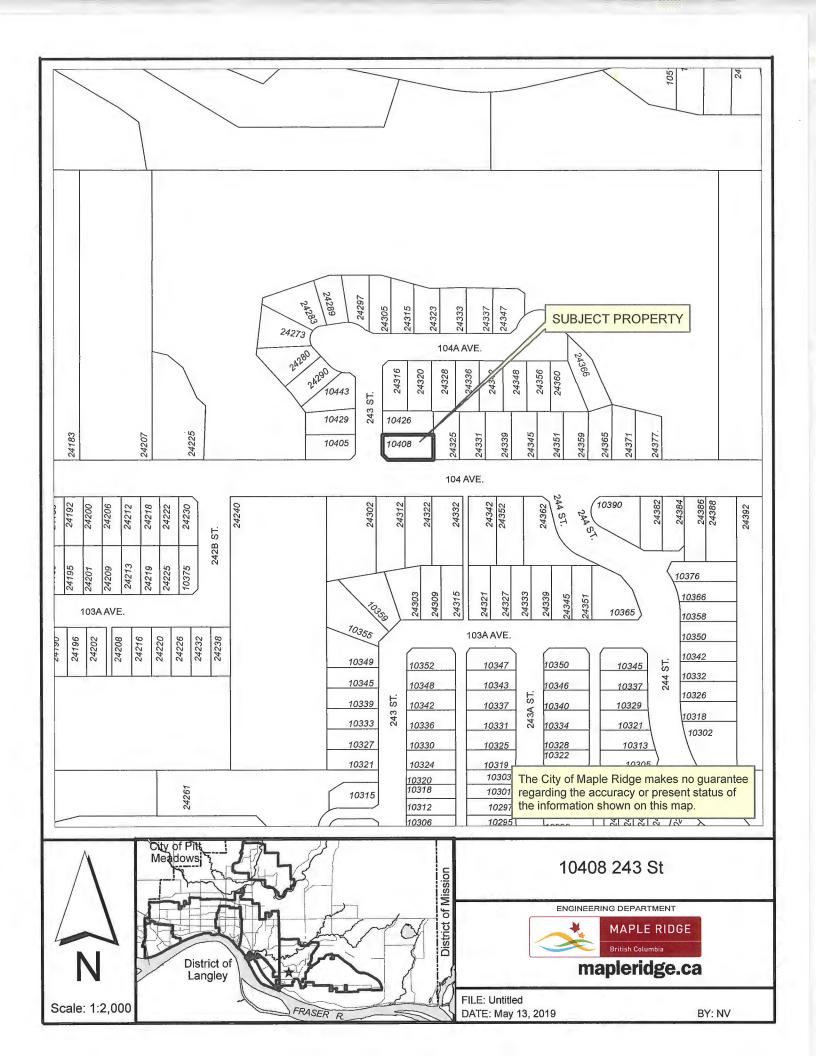
Michael Morden, Mayor

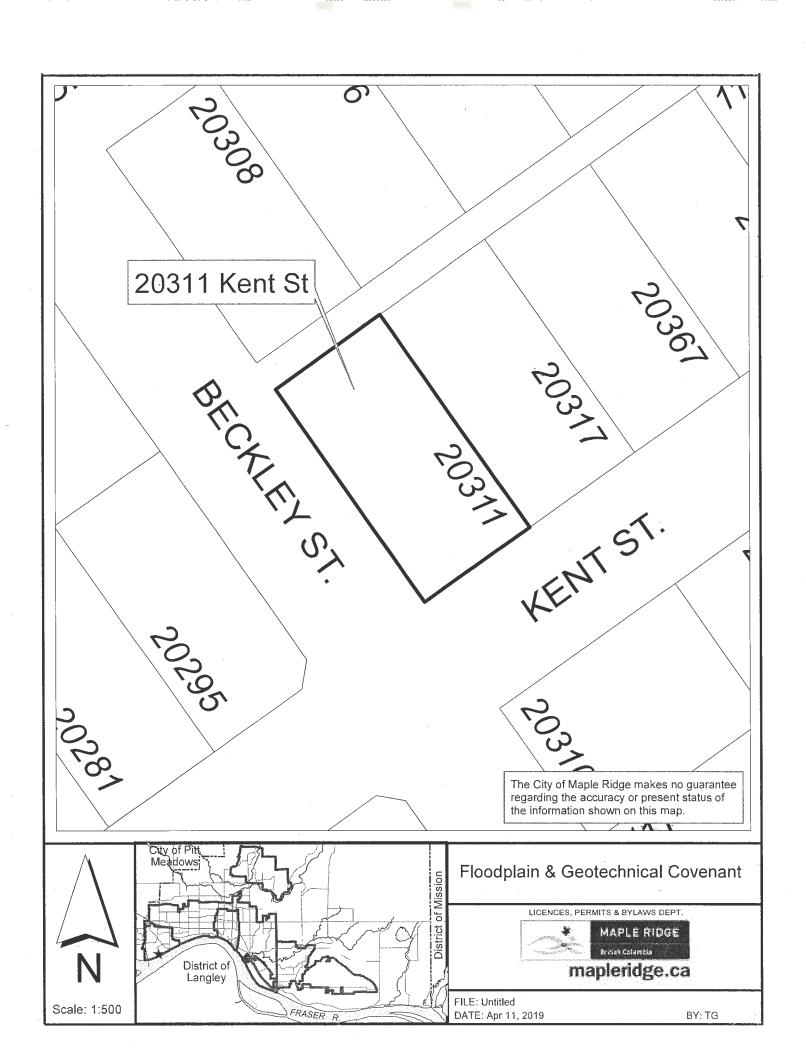
Chair

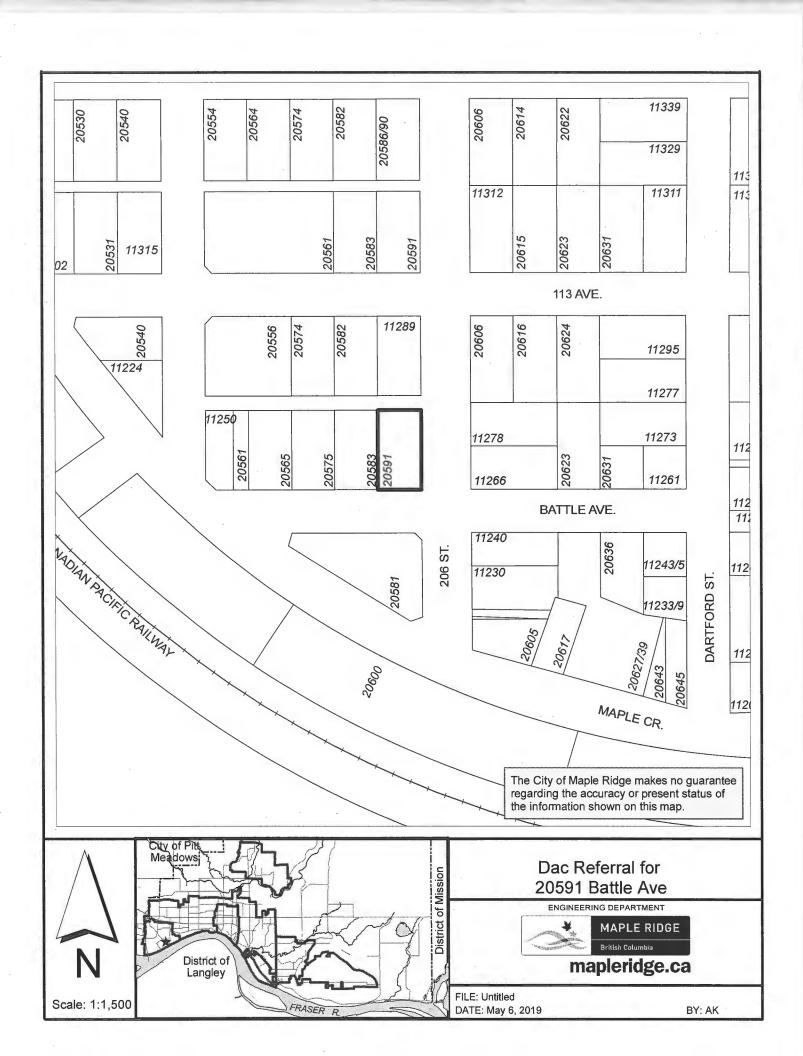
Frank Quinn, Acting Chief Administrative Officer

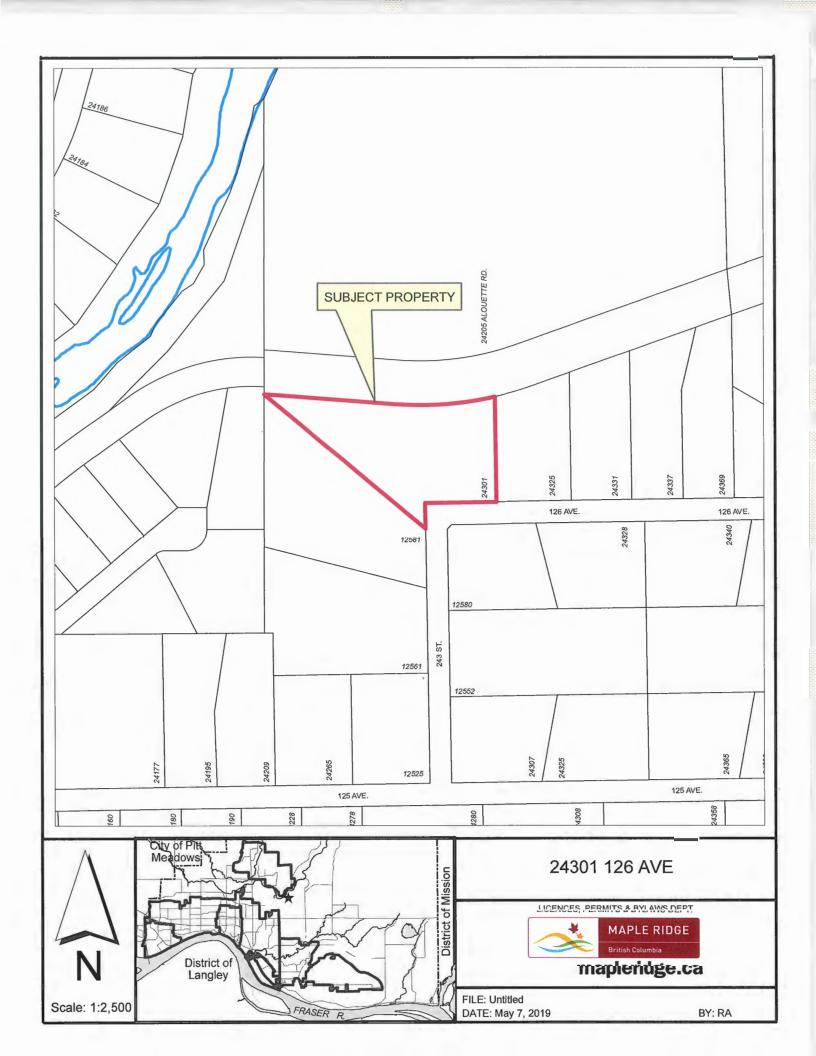
Member

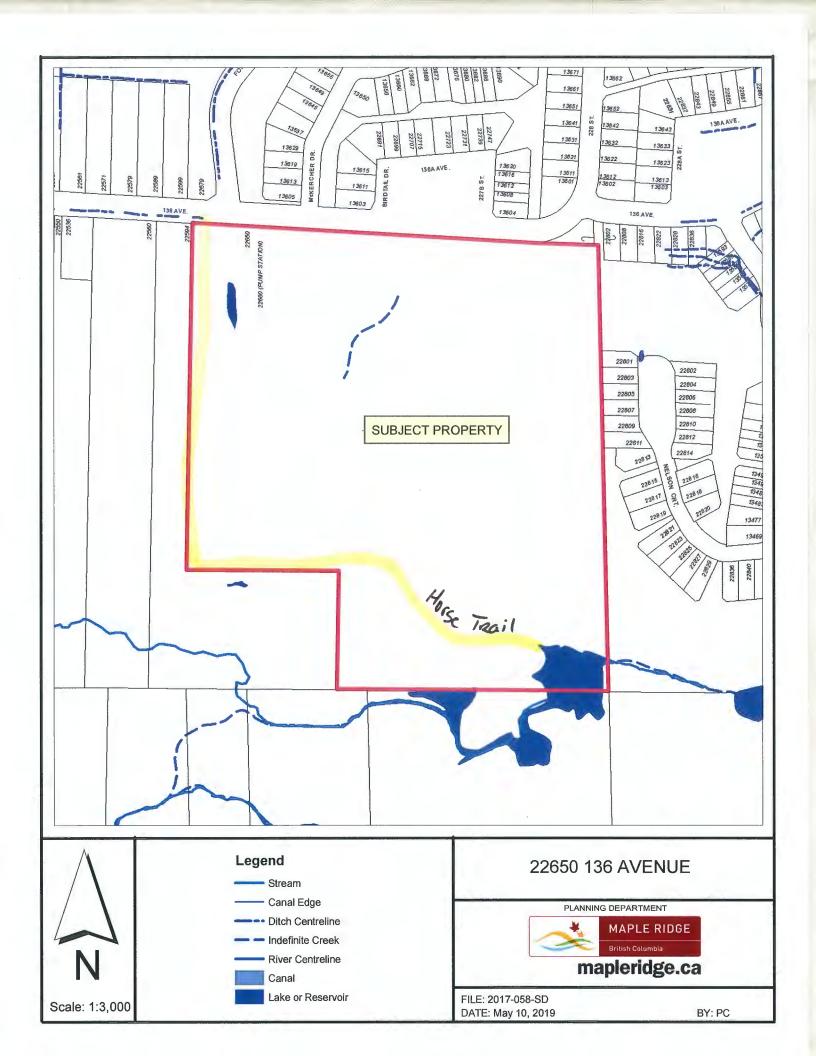












701.2 Minutes of Meetings of Committees and Commissions of Council



City of Maple Ridge ADVISORY DESIGN PANEL

The Minutes of the Regular Meeting of the Maple Ridge Advisory Design Panel held in the Blaney Room at Maple Ridge Municipal Hall, 11995 Haney Place, Maple Ridge, British Columbia, on Wednesday, April 17, 2019 at 4:01 pm.

PANEL MEMBERS PRESENT

Steven Bartok, Chair

Meredith Mitchell Narjes Miri

Shida Neshat-Behzadi

Stephen Heller, Vice Chair

Architect AIBC

Architect AIBC

Architect AIBC

Landscape Architect

Landscape Architect

STAFF MEMBERS PRESENT

Wendy Cooper Amanda Allen Staff Liaison, Planner Committee Clerk

1. CALL TO ORDER

2. APPROVAL OF THE AGENDA

R/2019-011

It was moved and seconded

That the agenda for the April 17, 2019 Advisory Design Panel meeting be approved as circulated.

CARRIED

3. ADOPTION OF MINUTES

R/2019-012

It was moved and seconded

That the minutes of the Maple Ridge Advisory Design Panel meeting dated March 20, 2019 be adopted.

CARRIED

Advisory Design Panel Agenda April 17, 2019 Page 2 of 4

4. NEW AND UNFINISHED BUSINESS

Note: Item 4.1 was dealt with after Item 5.2

4.1. Landscape Buffers / Designations for Greenbelts - Discussion

There was discussion on the policies and guidelines of other municipalities, specifically the Township of Langley, City of Surrey and Vancouver. The information discussed will be shared with staff in the Community Planning section.

PROJECTS

5.1. Development Permit No: 2016-246-DP

Applicant: M. Cheng

Project Architect: Matthew Cheng Architect Inc.
Project Landscape Architect: PMG Landscape Architects
Proposal: 10 unit townhouse development
Location: 12111 and 12119 203 Street

File Manager: Michelle Baski

The staff liaison provided an overview of the 10 unit townhouse development. The project team gave a presentation of the project plans. There was discussion on the interpretation of the Key Guideline Concepts, particularly with respect to encouraging creativity of design while still respecting the general character of the area.

Note: Meredith Mitchell joined the meeting at 4:13 pm

R/2019-013

It was moved and seconded

That File No. 2016-246-DP be supported and the following concerns be addressed as the design develops and submitted to Planning staff for follow-up:

Landscape Comments:

- 1. Consider replacing community garden boxes with additional seating;
- 2. Consider incorporating a unit paver detail to the North side concrete walkway for consistency along the path:
- Consider detailing landscape perimeter fencing to relate to architectural detailing and character;
- 4. Consider detailing the removable bollards at the 203 Street driveway to be high visibility but still aesthetically pleasing;
- 5. Consider alternative materials such as grass rings or grass paving material to make emergency service vehicle entry off 203 Street more pedestrian oriented.

Architectural Comments:

- Consider reviewing the architectural detailing for style;
- 2. Provide additional details to support architectural character;
- 3. Consider adding variation to dormer roof lines;
- 4. Provide accent colours and/or materiality at a human scale;
- 5. Emphasize the 203 Street façade through materials, articulation, etc.

Advisory Design Panel Agenda April 17, 2019 Page 3 of 4

5.2. Development Permit No:

2019-033-DP

Applicant:

Corey Adams, Spire Development

Project Architect:

Chip Barrett Project Landscape Architect: Al Tanser

Proposal:

Self storage industrial building

Location:

20288 113B Avenue

File Manager:

Diana Hall

The staff liaison provided an overview of the self storage building in a phased development. The project team gave a presentation of the project plans. There was discussion about street lighting along 113B Avenue.

R/2019-014

It was moved and seconded

That File No. 2019-033-DP be supported and the following concerns be addressed as the design develops and submitted to Planning staff for follow-up:

Landscape Comments:

- 1. If allowed, consider installing perimeter fencing at property line at the outside edge of the Statutory Right of Way;
- 2. Recommend a maintenance program for landscape within the Statutory Right of Way if located outside of perimeter fence; consider how the Statutory Right of Way will be accessed to maintain the proposed planting in Statutory Right of Way;
- 3. Provide all planting along the Statutory Right of Way at Phase 3 construction;
- 4. Ensure all lighting facing residential is dark skies compliant;
- 5. As the Tier A Stormwater management was not incorporated as part of the landscaping submission, staff are encouraged to review the conceptual Stormwater management plan for compliance:
- 6. Consider providing bike racks;
- 7. Consider adding marked pedestrian connection from sidewalk to office in Building 4.

Architectural Comments:

- 1. Consider sustainable components to the project to reduce heat island effects such as reflective roof materials and permeable paving materials;
- 2. Consider providing additional reveals and/or colour bands to reduce the scale of the building facing the residential neighbours.

CARRIED

Advisory Design Panel Agenda April 17, 2019 Page 4 of 4

6. CORRESPONDENCE

Lougheed Transit Corridor Study survey <u>lougheedstudy.mapleridge.ca</u>.

Lougheed Transit Corridor Study Sneak Peek: Co-Design Results, May 11, 2019 at Glenwood Elementary School from 3:30 – 5:00 pm.

- 7. **QUESTION PERIOD** Nil
- 8. **ADJOURNMENT** 6:58 pm.

"Original signed by Steven Bartok"

S. Bartok, Chair

/aa



City of Maple Ridge

TO:

His Worship Mayor Michael Morden

MEETING DATE:

May 21, 2019

and Members of Council

FILE NO:

11-5600-05

FROM:

Chief Administrative Officer

MEETING:

COW

SUBJECT:

Drinking Water Quality Report 2018

EXECUTIVE SUMMARY:

The City of Maple Ridge (City) operates a Municipal Water Utility under permit by the Fraser Health Authority (FHA) that requires an annual report be prepared and submitted to the FHA, and be available to the public.

The attached "Drinking Water Quality Report 2018" includes an outline of the regulatory framework, water quality monitoring data for 2018, and explanatory comments on the data. A copy of the report will be placed in the public library and on the corporate website.

In 2018, water quality within the City's municipal water distribution system met the standards detailed in the *BC Drinking Water Protection Regulation* as well as Health Canada's recommendations for drinking water quality, with the exception of temperature.

RECOMMENDATION:

This report is submitted for information.

DISCUSSION:

a) Background Context:

The City operates a Municipal Water Utility under the provisions of the provincial Local Government Act, and under permit by the Provincial Ministry of Health Services - Fraser Health Authority (FHA). Water quality requirements are stipulated by the Provincial Drinking Water Protection Regulations and administered by the FHA.

The City, as a distributor and purveyor of drinking water, is reliant on the Greater Vancouver Water District (GVWD) for source water quality control. While Coquitlam Lake is the primary source of water delivered to Maple Ridge, the GVWD can supply Maple Ridge with water from Seymour and Capilano Lakes in the event of disruptions at Coquitlam Lake.

The City's drinking water system operating permit requires a water quality monitoring program and that an annual report be prepared and submitted. While the monitoring program provides a representative picture of drinking water quality within municipal mains, it does not provide a definite picture of drinking water quality within buildings, where water quality can change significantly due to pipe materials, standing times, temperature, and other factors. It can be assumed that samples taken within buildings may be of different quality than those taken from municipal mains. The City is not responsible for testing/verifying water quality on private property.

Samples from 20 locations in the distribution system are taken weekly and analyzed by Metro Vancouver's laboratory staff. Test results are sent to the Operations and Engineering Departments as well as the FHA for review. In 2018, no samples tested positive for E. coli, and no samples exceeded the *BC Drinking Water Protection Regulation* microbiological standard of 10 total coliforms per 100mL.

In monitoring unregulated drinking water quality parameters, the City follows the 2018 Water Quality Monitoring and Reporting Plan for Metro Vancouver (GVWD) and Local Government Members and compares laboratory results to Health Canada's recommendations for drinking water quality. In 2018, City water did not exceed any maximum limits recommended by Health Canada for unregulated parameters, with the exception of temperature.

b) Strategic Alignment:

Financial Management

The City continues to provide high quality services to citizens and customers in a cost effective and efficient manner. The annual water quality monitoring program is intended to ensure that the water delivered by the City's utility is of high quality.

Growth

The Strategic Plan seeks to protect and manage municipal infrastructure through the preparation of appropriate plans to ensure maintenance of the system. A systematic water quality monitoring program assists in ensuring that the water distribution system is effectively managed and maintained.

Inter-Government Relations

The Strategic Plan directs the City to continue building strong relationships with the region and other levels of government. The City currently benefits from good working relationships with the GVWD and FHA in the cooperative provision of quality drinking water. The annual monitoring program and report facilitates this effective relationship.

c) Citizen/Customer Implications:

Maple Ridge water utility customers expect that the investment in the water distribution network be maintained to provide safe, reliable and high quality water. The annual reporting of water quality is a means to meet the accountability that customers expect.

d) Interdepartmental Implications:

As part of the Public Works and Development Services Division, the Engineering and Operations Departments collaborate in the Water Utility's planning, management, operation, maintenance and water quality reporting to meet water quality objectives.

e) Policy Implications:

The reporting of water quality is consistent with the public policy approach of transparency and accountability as well as meeting the requirements of the FHA.

11-5600-05 Page 2 of 3

CONCLUSION:

The City monitored drinking water quality in 2018 in accordance with the Provincial mandate and the 2018 Water Quality Monitoring and Reporting Plan for Metro Vancouver (GVWD) and Local Government Members. Testing indicated that all samples met BC Drinking Water Protection Regulation standards and did not exceed Health Canada guidelines with the exception of temperature. The "Drinking Water Quality Report 2018" documents the water quality monitoring program and test results. The document was prepared in accordance with Fraser Health Authority requirements and will be available to the public.

Prepared by;

Joe Dingwall, PEng.

Manager of Utility Engineering

Reviewed by:

David Pollock, PEng. Municipal Engineer

Approved by:

Frank Quinn, MBA, PEng.

General Manager Public Works & Development Services

Concurrence:

Kelly Swift, MBA

Acting Chief Administrative Officer

Attachments:

(A) Drinking Water Quality Report 2018



CITY OF MAPLE RIDGE DRINKING WATER QUALITY REPORT 2018



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List of Abbreviations

L = litre

mL = milliliter

g = gram

mg = milligram

 μg = microgram

ppb = parts per billion

°C = degree Celsius

E. coli = Escherichia coli

NTU = Nephelometric Turbidity Units

HPC = heterotrophic plate count

CFU = colony-forming unit

THM = trihalomethane

HAA = haloacetic acid

USEPA = United States Environmental Protection Agency

 Cl_2 = chlorine

MF = membrane filtration

EOCP = Environmental Operators Certification Program

Executive Summary

The City of Maple Ridge (City) is a distributor of water that is supplied and treated by Metro Vancouver from its Coquitlam Lake source. In 2018, the City distributed water to over 80,000 people.

In accordance with the requirements of the *BC Drinking Water Protection Regulation*, the City sends drinking water samples from 20 locations to a laboratory for analysis every week. Test results are communicated to the City and the Fraser Health Authority and documented in this annual report. In 2018, the City's water met all regulatory requirements for drinking water quality set out in the *BC Drinking Water Protection Regulation*:

- No samples tested positive for E. coli
- For each 30-day period, over 90% of samples had 0 total coliform per 100mL, and no sample had more than 10 total coliform per 100mL

In monitoring unregulated drinking water quality parameters, the City follows the 2018 Water Quality Monitoring and Reporting Plan for Metro Vancouver (GVWD) and Local Government Members and compares laboratory results to Health Canada's recommendations for drinking water quality. In 2018, City water did not exceed any maximum limits recommended by Health Canada for the unregulated parameters, with the exception of temperature.



Coquitlam Lake (Source Water for Maple Ridge)

1.0 Introduction

The City operates a Municipal Water Utility under the provisions of the provincial Local Government Act, the BC Drinking Water Protection Act, and the BC Drinking Water Protection Regulation. These obligate the City to meet several requirements, including:

- Operating the utility under a permit granted by the Provincial Ministry of Health Services
- Monitoring water quality

The roles and responsibilities for the Province, Fraser Health Authority, and Metro Vancouver/City of Maple Ridge (Water System Owners) are shown in Figure 1.



Figure 1: Agency Responsibilities for Water Quality

2.0 Background

The City is supplied with water from protected and undeveloped watersheds. Treated drinking water is conveyed to Maple Ridge through large diameter Metro Vancouver transmission mains and distributed to business and residents through approximately 400km of smaller diameter water mains.

2.1 Source Water

Metro Vancouver supplies water to the City through a series of pipes linking Maple Ridge to the Coquitlam, Seymour and Capilano watersheds (Figure Two). While the Coquitlam watershed is the primary source of water for Maple Ridge, Metro Vancouver has the ability to convey water from the Seymour/Capilano watersheds to Maple Ridge in the event of a service disruption at the Coquitlam source. Metro Vancouver treats drinking water at the Coquitlam reservoir using a combination of ozone and ultra violet (UV) light. Chlorine is added to water as it leaves the treatment plant in order to preserve the quality of drinking water as it travels through the distribution system. Additional information on how Metro Vancouver treats source water is available at www.metrovancouver.org (search the website using the key words "drinking water treatment processes").

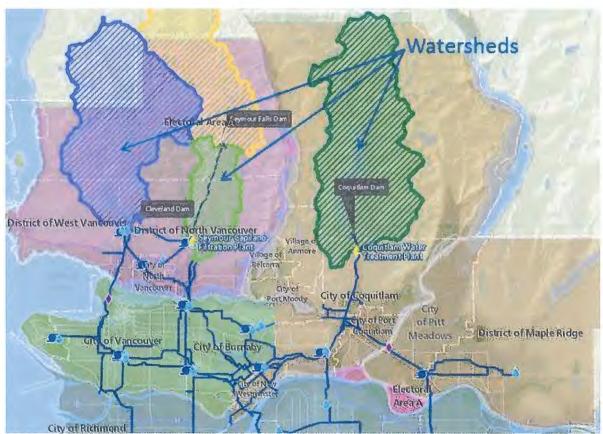


Figure 2: Regional Water Supply System (source: https://gis.metrovancouver.org/maps/Water)

2.2 Distribution System

The City distributes water to businesses, institutions and over 80,000 residents. Water distribution infrastructure includes approximately 400km of water mains, 19,000 service connections, 9 pump stations and 10 reservoir tanks. The Municipality also operates 8 re-chlorination stations to boost residual chlorine levels within the distribution system.

The distribution system is managed by a team of professionals within the City's Public Works and Development Services Division, under the leadership of the General Manager of Public Works and Development Services. System operators are *Environmental Operators Certification Program Level 4* compliant. The system is regulated by Maple Ridge's Water Service Bylaw 6002-2001.

2.3 Facility Maintenance

Water main flushing is conducted annually as a means of cleaning water mains. Flushing involves manipulating valves and discharging water through fire hydrants or blow off points. The discharged water carries sediment and other solids with it, thus cleaning the mains. The City cleaned 57km of water mains using this method in 2018. The City also cleans its reservoir tanks on a 5 year cycle. In 2018, the City cleaned the Grant Mountain Reservoir.

2.4 Re-Chlorination Stations

Chlorine levels are continually monitored at 8 re-chlorination stations throughout the distribution system. Additional chlorine is automatically injected into the drinking water at these locations if detected chlorine levels are low. The re-chlorination stations are inspected daily and adjusted as necessary.

3.0 Regulated Drinking Water Quality Parameters

The Province sets out drinking water quality requirements in its *Drinking Water Protection Regulation*. This section reports on the quality of the City's drinking water in relation to those regulations.

3.1 Water Quality Sampling and Monitoring

Water quality is monitored for regulatory compliance on a weekly basis at the City's 20 sampling locations. Sampling locations and codes are shown graphically in Appendix A. Samples are sent to the Metro Vancouver laboratory for analysis. Results are communicated to City and Fraser Health staff. Responses to undesirable test results can range from flushing water mains to possibly issuing a boil water advisory, depending on the water quality parameter of concern. If significant contamination were detected in a sample, further samples would be taken to confirm results before a large scale response is initiated.

The monitoring program indicates drinking water quality within municipal water mains. However, it does not provide information on the quality of drinking water within buildings where water quality can change significantly due to pipe material, standing time, temperature, and other factors. It can be assumed that samples taken within buildings would have a different quality of water compared to samples taken directly from municipal water mains. The City is not responsible for water quality on private property.

3.2 Bacteriological Monitoring and Results

The BC Drinking Water Protection Regulation requires the City to carry out routine sampling and testing for Escherichia coli (E. coli) and total coliform bacteria. These are considered "indicator organisms" because their presence or absence provides an indication of overall water quality. Figures 3 and 4 show Metro Vancouver Laboratory technicians processing a water sample and testing it for the presence of bacteria.

3.2.1 Escherichia Coli

E. coli is a type of coliform bacteria present exclusively in the feces of humans and other mammals. The existence of E. coli in a water sample indicates recent fecal contamination and the possible presence of intestinal disease-causing bacteria, viruses, and protozoa. The BC Drinking Water Protection Regulation standard for E. coli is none detectable per 100 mL. In 2018, no samples tested positive for E. coli.



Figure 3: Metro Vancouver Laboratory technician processing water sample in preparation for coliform bacteria check



Figure 4: Metro Vancouver Laboratory technician checking water sample for coliform bacteria

3.2.2 Total Coliform

The total coliform group includes various types of bacteria with similar characteristics. Members of this group range from being fecal-specific, such as E. coli, to being widely distributed throughout water, soil, and vegetation. The BC Drinking Water Protection Regulation standards for total coliform are described in Table 1.

Table 1: BC Drinking Water Protection Regulation Standards for Total Coliform

| Occurrence | Standard |
|--------------------------------|---|
| More than 1 sample in a 30 day | At least 90% of samples have 0 total coliform per 100mL |
| period | and no sample has more than 10 total coliform per 100mL |

In 2018, two samples had detectable total coliform per 100mL. However, for each 30 day period, over 90% of samples had 0 total coliform per 100mL. Also, no sample had more than 10 total coliform per 100mL. Thus City water met *BC Drinking Water Protection Regulation* requirements for total coliform bacteria in 2018.

Upon receiving results indicating the presence of total coliforms, City crews are dispatched to flush water mains in the area. After flushing is completed, additional samples are sent to the Metro Vancouver Laboratory for analysis to confirm water quality.

Table 2 lists the annual number of samples found to contain total coliforms between 2008 and 2018.

Table 2: Total Coliform Results by Year

| Year | Number of Samples with Total Coliform |
|------|---------------------------------------|
| 2018 | 2 |
| 2017 | 2 |
| 2016 | 0 |
| 2015 | 3 |
| 2014 | 0 |
| 2013 | 0 |
| 2012 | 2 |
| 2011 | 1 |
| 2010 | 3 |
| 2009 | 1 |
| 2008 | 0 |

3.2.3 Frequency of Monitoring Samples

The monitoring frequency for the detection of E. coli and total coliforms is stipulated by the *BC Drinking Water Protection Regulation*. Current requirements are identified in Table 3. With a total of 20 weekly sampling sites at various points in the City's water distribution system, the average number of monthly samples (87) exceeds the stipulated value of 80 (based on a directly serviced population of approximately 80,000). As the City's population grows, additional sampling sites will be added.

Table 3: Monitoring Frequency for the detection of E. coli and total coliforms

| Population Served | Target No. of Samples per Month |
|-------------------|--|
| Less than 5,000 | 4 |
| 5,000 to 90,000 | 1 per 1,000 of population |
| More than 90,000 | 90 plus 1 per 10,000 of population in excess of 90,000 |

4.0 Unregulated Drinking Water Quality Parameters

This section reports on water quality parameters that are not regulated through legislation.

4.1 Free Chlorine

In the Guidelines for Canadian Drinking Water Quality, Health Canada states that for health considerations, a "guideline value [maximum acceptable concentration level for chlorine] is not necessary due to low toxicity at concentrations found in drinking water."

With respect to a minimum chlorine concentration, no regulations exist for British Columbia. However, Health Canada reports the following:

"The U.S. Environmental Protection Agency (EPA) Surface Water Treatment Rule requires a minimum disinfectant residual of 0.2 mg/L for water entering the distribution system and that a detectable level be maintained throughout the distribution system. The World Health Organization (WHO) has suggested that, for areas with little risk of cholera or related outbreaks, a free chlorine residual range of 0.2-0.5 mg/L be maintained at all points in the supply. In general, a free chlorine residual of 0.2 mg/L is considered a minimum level for the control of bacterial regrowth in the distribution system."

Residual chlorine concentrations are affected by various parameters such as water age, turbidity, pipe material, and temperature.

Table 4 and the maps in Appendix B show that:

- In 2018, the average free chlorine residual at all stations in Maple Ridge was greater than 0.2 mg/L.
- Station 441 had the fewest number of samples with chlorine residuals greater than 0.2 mg/L.
- 7 stations had samples with chlorine levels less than 0.2 mg/L.

Detailed free chlorine residual data is charted in Appendix E and tabulated in Appendix F.

4.2 Turbidity

Turbidity, measured in Nephelometric Turbidity Units (NTU), is a measure of water clarity. There are no provincial guidelines for turbidity within a distribution system. Average turbidity values at sample stations are documented in Table 4. Detailed turbidity data for 2018 is charted in Appendix E and tabulated in Appendix F.

Turbidity levels within the distribution system vary over time. Higher levels may be associated with turbidity in the source water or local system events such as high flow rates from unidirectional flushing, fire-fighting, or water main breaks. In the event that a high level of turbidity is detected, the City will determine whether this is expected due to system operations. If the event is unexpected, the City will confirm the turbidity level and flush mains should high turbidity persist.

¹ Guidelines for Canadian Drinking Water Quality - Guideline Technical Document - Chlorine - (Health Canada, 2009)

Table 4: 2018 Chlorine Residual and Turbidity Results by Site

| Station | Total Samples Taken | Average Free Chlorine in mg/L | Average Turbidity in NTU | Samples Taken with Free Chlorine Greater Than or Equal to 0.2 mg/L (#) | Samples Taken with Free Chlorine Less Than 0.2 mg/L (#) | Samples Taken with Free Chlorine Greater Than or Equal to 0.2 mg/L (%) | Samples Taken with Free Chlorine Less Than 0.2 mg/L (%) |
|----------|---------------------------|--|--------------------------------|--|---|--|---|
| MPR-400 | 52 | 0.51 | 0.32 | 51 | 1 | 98% | 2% |
| MPR-431 | 52 | 0.95 | 0.42 | 52 | 0 | 100% | 0% |
| MPR-432 | 52 | 0.67 | 0.41 | 51 | 1 | 98% | 2% |
| MPR-433 | 52 | 0.76 | 0.41 | 52 | 0 | 100% | 0% |
| MPR-434 | 52 | 0.62 | 0.41 | 52 | 0 | 100% | 0% |
| MPR-435 | 52 | 0.65 | 0.52 | 52 | 0 | 100% | 0% |
| MPR-436 | 52 | 0.68 | 0.35 | 48 | 4 | 92% | 8% |
| MPR-437 | 52 | 1.00 | 0.42 | 52 | 0 | 100% | 0% |
| MPR-438 | 52 | 0.96 | 0.46 | 52 | 0 | 100% | 0% |
| MPR-439 | 52 | 0.90 | 0.37 | 52 | 0 | 100% | 0% |
| MPR-440 | 52 | 0.88 | 0.56 | 52 | 0 | 100% | 0% |
| MPR-441 | 52 | 0.36 | 0.38 | 38 | 14 | 73% | 27% |
| MPR-442 | 52 | 0.69 | 0.55 | 52 | 0 | 100% | 0% |
| MPR-443 | 52 | 0.73 | 0.40 | 50 | 2 | 96% | 4% |
| MPR-444* | 51 | 0.66 | 0.37 | 51 | 0 | 100% | 0% |
| MPR-445 | 52 | 0.66 | 0.47 | 48 | 4 | 92% | 8% |
| MPR-446 | 52 | 0.77 | 0.39 | 52 | 0 | 100% | 0% |
| MPR-447 | 52 | 0.78 | 0.57 | 52 | 0 | 100% | 0% |
| MPR-448 | 52 | 0.50 | 0.50 | 52 | 0 | 100% | 0% |
| MPR-449 | 52 | 0.29 | 0.33 | 42 | 10 | 81% | 19% |

^{*} Station MPR-444 was not sampled in first week of July as the station was temporarily taken offline as part of a construction project.

4.3 Heterotrophs

Heterotophs are microorganisms requiring organic carbon for growth. Health Canada does not suggest a maximum acceptable concentration for heterotrophs. Instead, it recommends that increases in heterotrophic plate count (HPC) concentrations above baseline levels be considered undesirable. Table 5 shows the annual number of samples with HPC's over 500 CFU/mL between 2006 and 2018. In response to HPC counts at or above 500 CFU/mL, the City will re-test and flush water mains. HPC data for each sample taken in 2018 is provided in Appendix F.

Table 5: HPC Results by Year

| Year | Number of Samples with HPC > 500 CFU/mL |
|------|---|
| 2018 | 9 |
| 2017 | 6 |
| 2016 | 0 |
| 2015 | 5 |
| 2014 | 0 |
| 2013 | 0 |
| 2012 | 0 |
| 2011 | 1 |
| 2010 | 1 |
| 2009 | 1 |
| 2008 | 4 |
| 2007 | 1 |
| 2006 | 7 |

4.4 Disinfection Byproducts

Disinfection byproducts such as trihalomethanes (THMs) and haloacetic acids (HAAs) can form when chlorine used to disinfect drinking water reacts with naturally occurring organic matter. Health risks may be associated with long-term exposure to high levels of THMs and HAAs.

Health Canada recommends that the running average (last 4 quarters) for Total THMs remain below 100 ppb. Quarterly samples were taken at four sites for THM analysis. The running quarterly average THM concentration in the samples remained below 100 ppb at all locations. Detailed THM test results are provided in Appendix C.

Health Canada recommends that the running average (last 4 quarters) total HAA concentration be below 80 ppb. Quarterly samples were taken at four sites for HAA analysis. The running quarterly average HAA concentration remained below 80 ppb at all locations. Detailed HAA test results are provided in Appendix C.

4.5 pH

pH is a measure of the acid-base equilibrium of water. pH is of concern in water distribution systems because at low values water becomes corrosive and at high values chlorine disinfection is less efficient. Health Canada indicates that an acceptable pH range for drinking water is 6.5 – 8.5 pH units. 8 distribution system samples were tested for pH. Test results ranged of 7.2 to 7.4 pH units (see Appendix C).

4.6 Metals

The City tested samples at 3 monitoring sites for concentrations of various metals. Test results are shown in Appendix D, along with maximum concentration limits suggested by Health Canada. As shown in Appendix D, all measured metal concentrations were below the limits recommended by Health Canada.

4.7 Temperature

Health Canada recommends a temperature of less than 15°C for drinking water. Water temperatures exceeding this objective can result in the growth of nuisance organisms that could lead to unpleasant tastes and odors. Figure 5 shows average monthly drinking water temperatures in Maple Ridge. In July, August and September the average monthly temperatures were 15, 17 and 16 °C, exceeding Health Canada's recommendation. Detailed temperature information is provided in Appendix F.

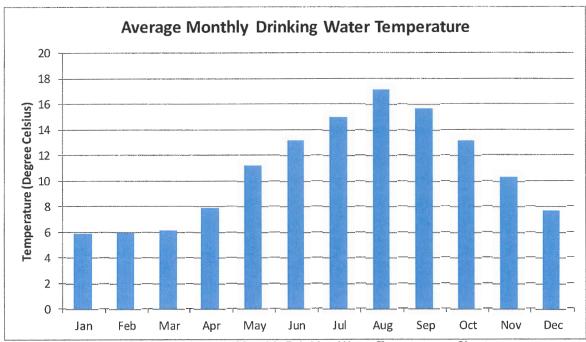


Figure 5: Average Monthly Drinking Water Temperature Chart

4.8 Vinyl Chloride

The concentration of vinyl chloride was tested in 6 samples during 2018. As indicated in Appendix D, all results were non-detectable (less than 0.0004 μ g/L), less than the Health Canada Guideline of 2 μ g/L.

5.0 Response to Potential Contamination

If health-related contaminants are detected in the water distribution system, City and Fraser Health Authority staff will be quickly notified. The City and Fraser Health will then work together to confirm the incident, determine the nature of the risk to public health, and issue public notices as appropriate. Depending on the level of risk a water quality advisory, boil water notice, or do-not-use water notice could be issued. Public notices would be communicated through various media. The City's contamination response plan is embedded in emergency planning documents which are available to water system users upon request.

6.0 Public Health Message from the Medical Health Officer

Fraser Health's Medical Health Officer has requested that a fact sheet entitled "Preventing Water-Borne Infections for People with weakened Immune Systems" be included in this report. The fact sheet is presented in Appendix G. Additionally, the Medical Health Officer has requested the following message be included in this report:

Anytime the water in a particular faucet has not been used for six hours or longer, "flush" your cold-water pipes by running the water until you notice a change in temperature. (This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer.) The more time water has been sitting in your home's pipes, the more lead it may contain.

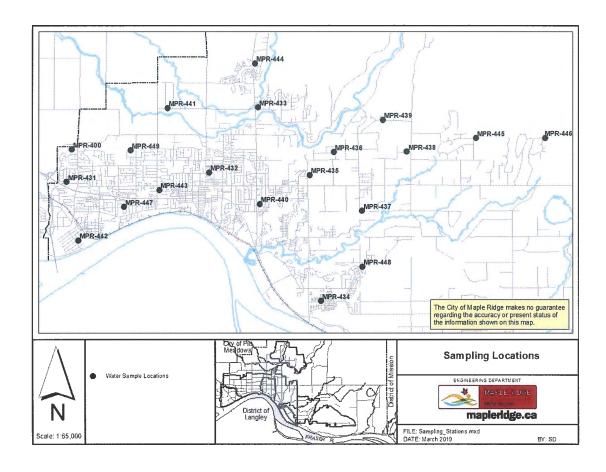
Use only water from the cold-tap for drinking, cooking, and especially making baby formula. Hot water is likely to contain higher levels of lead.

The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not the local water supply.

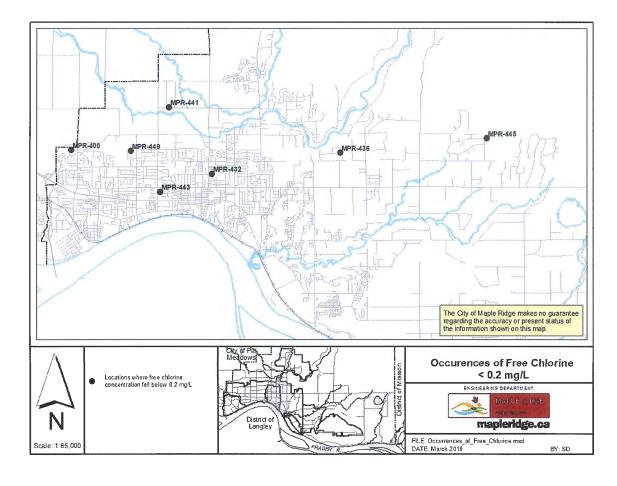
7.0 Conclusion

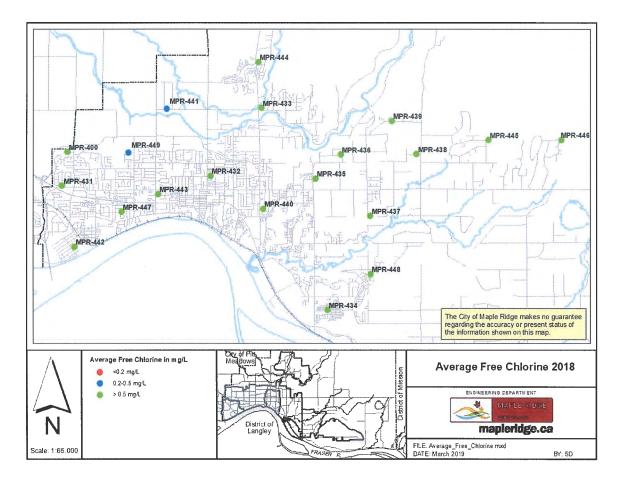
The City monitored drinking water quality in 2018 in accordance with Provincial regulations and the 2018 Water Quality Monitoring and Reporting Plan for Metro Vancouver (GVWD) and Local Government Members. Over 1,000 drinking water samples were obtained from the municipal water distribution system at 20 locations throughout the City. Metro Vancouver Laboratory testing indicated that all samples met BC Drinking Water Protection Regulation standards and did not exceed Health Canada guidelines with the exception of temperature.

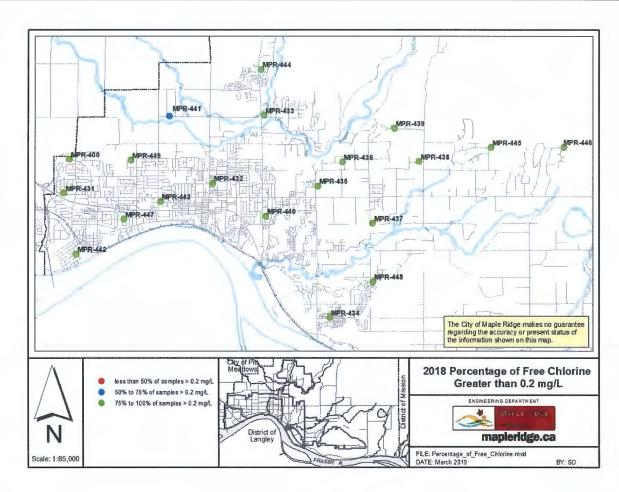
Appendix A: Sampling Station Locations



Appendix B: Residual Free Chlorine Figures







Appendix C: Disinfection By-Products and pH

| | | | | | THM | / (ppb) | | | | | | HAA (p | pb) | | | |
|---------------------------------------|---|--------------|----------------------|-----------|----------------------|------------|-----------------------|--------------------------------------|--------------------|---------------------|----------------------|-----------------------|----------------------|-----------------------|--------------------------------------|----------|
| Sample Site | Sample Location | Date Sampled | Bromodichloromethane | Bromoform | Chlorodibromomethane | Chloroform | Total Trihalomethanes | Running Average (Last 4 Quarters) | Dibromoacetic Acid | Dichloroacetic Acid | Monobromoscetic Acid | Monochioroacetic Acid | Trichloroacetic Acid | Total Haloacetic Acid | Running Average (Last 4 Quarters) | PH Units |
| Maximum Accepted Canadian Drinking | ole Concentration (Health Canada Gu Water Quality)Ma | delines for | 16 | | weenbûntenroomd | | | 100 | | 5H | NAME OF | | | | 80 | 6.5-8.5 |
| MPR-434 | 102 Ave. East of 241A St. | 16-05-2017 | <1 | <1 | <1 | 30 | 32 | | <0.5 | 20 | <1 | 2 | 29.7 | 52 | | |
| MPR-434 | 102 Ave. East of 241A St. | 22-08-2017 | <1 | <1 | <1 | 33 | 33 | | <0.5 | 15 | <1 | <2 | 20.7 | 37 | | |
| MPR-434 | 102 Ave. East of 241A St. | 28-11-2017 | <1 | <1 | <1 | 37 | 39 | | <0.5 | 21 | <1 | 2 | 40.8 | 66 | | |
| MPR-434 | 102 Ave. East of 241A 5t. | 13-02-2018 | <1 | <1 | <1 | 40 | 42 | 37 | 0.5 | 18 | <1 | <2 | 27.5 | 48 | 51 | |
| MPR-434 | 102 Ave. East of 241A St. | 29-05-2018 | <1 | <1 | <1 | 33 | 34 | 37 | 0.7 | 24 | <1 | 2 | 34.3 | 62 | 53 | |
| MPR-434 | 102 Ave. East of 241A St. | 07-08-2018 | <1 | <1 | <1 | 25 | 26 | 35 | <0.5 | 14 | <1 | <2 | 15.6 | 33 | 52 | |
| MPR-434 | 102 Ave. East of 241A St. | 20-11-2018 | <1 | <1 | <1 | 37 | 37 | 35 | <0.5 | 27 | <1 | 2 | 41.8 | 73 | 54 | |
| MPR-435 | 240 St. South of Abernethy Way | 16-05-2017 | 1 | <1 | <1 | 34 | 36 | | <0.5 | 20 | <1 | <2 | 34.3 | 56 | | |
| MPR-435 | 240 St. South of Abernethy Way | 22-08-2017 | <1 | <1 | <1 | 26 | 26 | | <0.5 | 13 | <1 | <2 | 15.3 | 29 | | |
| MPR-435 | 240 St. South of Abernethy Way | 28-11-2017 | <1 | <1 | <1 | 31 | 33 | | <0.5 | 15 | <1 | <2 | 22.8 | 40 | | |
| MPR-435 | 240 St. South of Abernethy Way | 13-02-2018 | <1 | <1 | <1 | 37 | 39 | 34 | <0.5 | 15 | <1 | <2 | 20.9 | 37 | 41 | 7,2 |
| MPR-435 | 240 St. South of Abernethy Way | 29-05-2018 | <1 | <1 | <1 | 27 | 29 | 32 | 0.8 | 20 | <1 | 2 | 26.3 | 49 | 39 | 7.2 |
| MPR-435 | 240 St. South of Abernethy Way | 07-08-2018 | 1 | <1 | <1 | 35 | 37 | 35 | <0.5 | 24 | <1 | 3 | 30.6 | 59 | 46 | 7.2 |
| MPR-435 | 240 St. South of Abernethy Way | 20-11-2018 | <1 | <1 | <1 | 48 | 49 | 39 | <0.5 | 20 | <1 | <2 | 40.6 | 64 | 52 | 7.3 |
| MPR-438 | 125 Ave. West off 256 St. | 16-05-2017 | 1 | <1 | <1 | 46 | 48 | | <0.5 | 29 | <1 | 3 | 45.1 | 77 | | |
| MPR-438 | 125 Ave. West off 256 St. | 22-08-2017 | <1 | <1 | <1 | 34 | 35 | | <0.5 | 17 | <1 | <2 | 24.4 | 42 | | |
| MPR-438 | 125 Ave. West off 256 St. | 28-11-2017 | <1 | <1 | <1 | 50 | 51 | | <0.5 | 24 | <1 | 2 | 54.3 | 81 | | |
| MPR-438 | 125 Ave. West off 256 St. | 13-02-2018 | 1 | <1 | <1 | 46 | 48 | 46 | 0.6 | 29 | <1 | 3 | 43.1 | 76 | 69 | 7.3 |
| MPR-438 | 125 Ave. West off 256 5t. | 29-05-2018 | <1 | <1 | <1 | 40 | 41 | 44 | 0.7 | 27 | <1 | 3 | 40.2 | 71 | 67 | 7.3 |
| MPR-438 | 125 Ave. West off 256 St. | 07-08-2018 | 1 | <1 | <1 | 41 | 42 | 46 | <0.5 | 22 | <1 | <2 | 28.3 | .53 | 70 | 7.4 |
| MPR-438 | 125 Ave. West off 256 St. | 20-11-2018 | <1 | <1 | <1 | 58 | 59 | 48 | <0.5 | 37 | <1 | 4 | 58.1 | 100 | 75 | 7.4 |
| MPR-440 | 232 St. @ 117 Ave. | 16-05-2017 | <1 | <1 | <1 | 24 | 26 | | <0.5 | 14 | <1 | <2 | 19 | 36 | | |
| MPR-440 | 232 St. @ 117 Ave. | 22-08-2017 | <1 | <1 | <1 | 25 | 25 | | <0.5 | 12 | <1 | <2 | 12.9 | 25 | | |
| MPR-440 | 232 St. @ 117 Ave. | 28-11-2017 | <1 | <1 | <1 | 30 | 31 | | <0.5 | 12 | <1 | <2 | 16.2 | 30 | | |
| MPR-440 | 232 St. @ 117 Ave. | 13-02-2018 | <1 | <1 | <1 | 28 | 30 | 28 | <0.5 | 15 | <1 | 2 | 14 | 31 | 31 | |
| MPR-440 | 232 St. @ 117 Ave. | 29-05-2018 | <1 | <1 | <1 | 26 | 27 | 28 | 0.9 | 18 | <1 | <2 | 22.5 | 44 | 32 | |
| MPR-440 | 232 St. @ 117 Ave. | 07-08-2018 | <1 | <1 | <1 | 28 | 29 | 29 | 0.5 | 17 | <1 | 2 | 14.9 | 34 | 35 | |
| MPR-440 | 232 St. @ 117 Ave. | 20-11-2018 | <1 | <1 | <1 | 39 | 40 | 32 | <0.5 | 23 | <1 | 2 | 26.3 | 52 | 40 | |

Appendix D: Metals and Vinyl Chloride

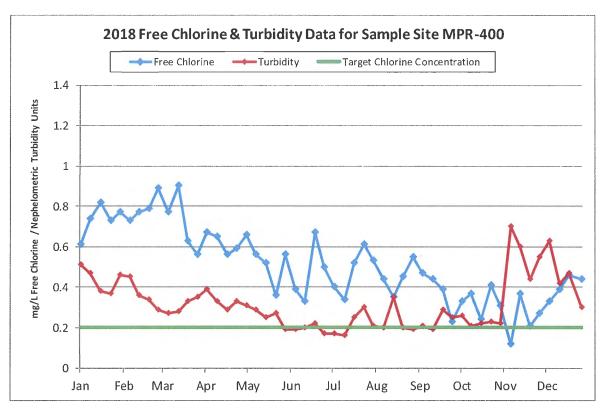
Metal Concentration

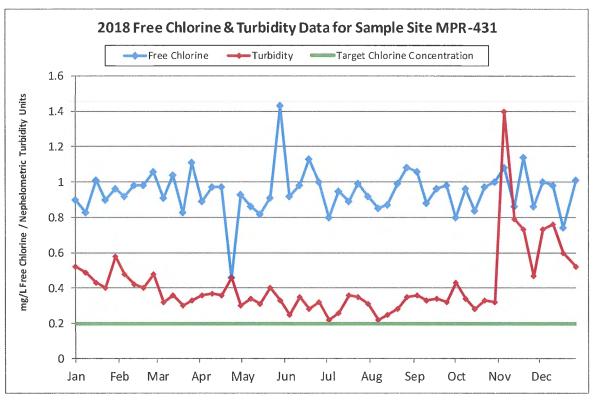
| | | | | | | | IV | Cla | 1 60 | lice | ilua | COL | | | | | | | | | | | | |
|---|---|--------------------|-------------------------|-----------------------|----------------------|---------------------|-------------------|----------------------|----------------------|-----------------------|----------------------|---------------------|-------------------|-------------------|------------------------|------------------------|----------------------|-------------------------|---------------------|------------------------|-----------------------|---------------------|---------------------|-------------------|
| Sample Name | Sample Location | Sampled Date | Aluminium Total (12g/L) | Antimony Total (µg/L) | Arsenic Total (µg/L) | Barium Total (µg/L) | Boron Total (知了L) | Cadmlum Total (µg/L) | Calcium Total (µg/L) | Chromium Total (µg/L) | Cobalt Total (Jug/L) | Copper Total (µg/L) | fron Total (µg/L) | Lead Total (µg/L) | Magnesium Total (µg/L) | Manganese Total (µg/L) | Mercury Total (µg/L) | Molybdenum Total (µg/L) | Nickel Total (µg/L) | Potassium Total (µg/L) | Selenium Total (ug/L) | Silver Total (µg/L) | Sodium Total (µg/L) | Zinc Total (µg/L) |
| Maximum Acceptable Concentration (Guidelines for Canadian Drinking Water Quality) | | | 200 | 6 | 10 | 1000 | 2000 | 5 | hohe | 50 | none | 1000 | 300 | 10 | none | ,50 | 1 | none | попе | none | 50 | none | 200,000 | 2000 |
| Reason Gu Aesthetic | | ed - Health (H) or | A | н | Н | Н | н | н | | Н | | - A - | A | Н | | A | Н | | | | н | A | A | A |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 12-Jun-18 | 84 | <0.5 | <0.5 | 2.2 | <10 | <0.2 | 812 | <0.05 | <0.5 | 10.2 | 50 | <0.5 | 92 | 3.2 | <0.05 | <0.5 | <0.5 | 105 | <0.5 | <0.5 | 4960 | ⊲.0 |
| MPR-435 | 240 St. South of Abernethy Way- Field Duplicate | 12-Jun-18 | 78 | <0.5 | <0.5 | 2.2 | <10 | <0.2 | 822 | <0.05 | <0.5 | 15.3 | 43 | <0.5 | 90 | 1.8 | <0.05 | <0.5 | <0.5 | 103 | <0.5 | <0.5 | 4960 | <3.0 |
| MPR-446 | 128th Ave and Willow Place | 12-Jun-18 | 91 | <0.5 | <0.5 | 3.4 | <10 | <0.2 | 1560 | 0.07 | <0.5 | 2.7 | 63 | <0.5 | 86 | 3.5 | <0.05 | <0.5 | <0.5 | 121 | <0.5 | <0.5 | 7630 | 3.8 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 04-Dec-18 | 135 | <0.5 | <0.5 | 2.7 | <10 | <0.2 | 801 | 0.06 | <0.5 | 19.9 | 61 | <0.5 | 102 | 1.9 | <0.05 | <0.5 | <0.5 | 111 | <0.5 | <0.5 | 5820 | <3.0 |
| MPR-435 | 240 St. South of Abernethy Way | 04-Dec-18 | 128 | <0.5 | <0.5 | 3.1 | <10 | <0,2 | 1050 | 0.07 | <0.5 | 20.4 | 55 | <0.5 | 100 | 1.3 | <0.05 | <0.5 | <0.5 | 108 | <0.5 | <0.5 | 6030 | <3.0 |
| MPR-446 | 128th Ave and Willow Place | 04-Dec-18 | 139 | <0.5 | <0.5 | 3.6 | <10 | <0.2 | 1610 | 0.09 | <0.5 | 3.6 | 100 | <0.5 | 96 | 6.5 | <0.05 | <0.5 | <0.5 | 124 | <0.5 | <0.5 | 10000 | 3.5 |

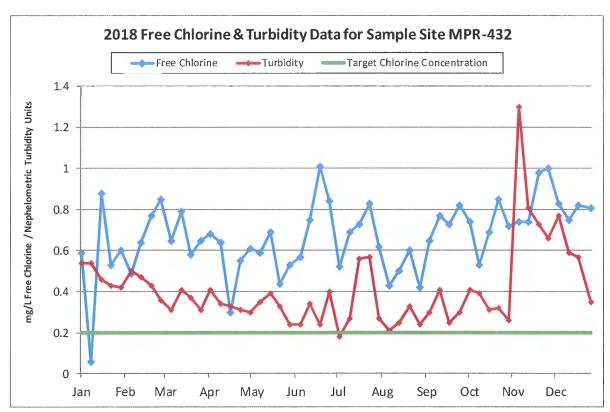
Vinyl Chloride Concentration

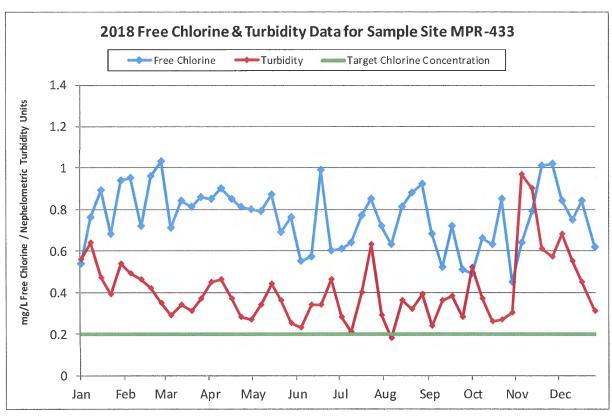
| Sample Site Number | Sample Reported Name | Sampled date | Vinyl Chloride (mg/L) |
|-----------------------|--------------------------------|--------------|--------------------------|
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 19-Jun-18 | <0.00040 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 27-Nov-18 | <0.00040 |
| | | | |
| MPR-435 | 240 St. South of Abernethy Way | 19-Jun-18 | <0.00040 |
| MPR-435 | 240 St. South of Abernethy Way | 27-Nov-18 | <0.00040 |
| | | | |
| MPR-446 | 128th Ave and Willow Place | 19-Jun-18 | <0.00040 |
| MPR-446 | 128th Ave and Willow Place | 27-Nov-18 | <0.00040 |

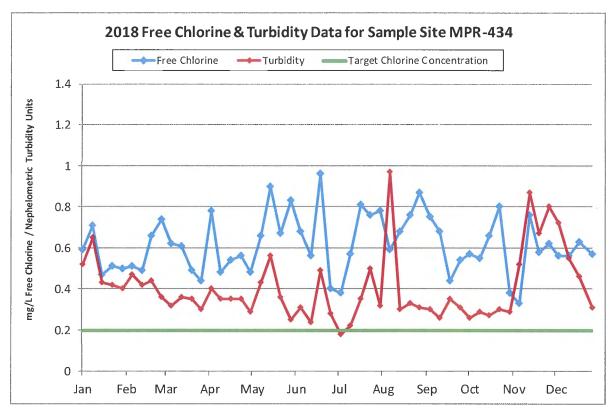
Appendix E: Free Chlorine and Turbidity Charts

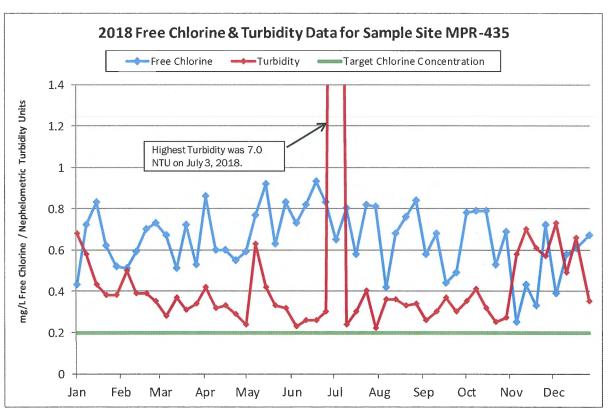


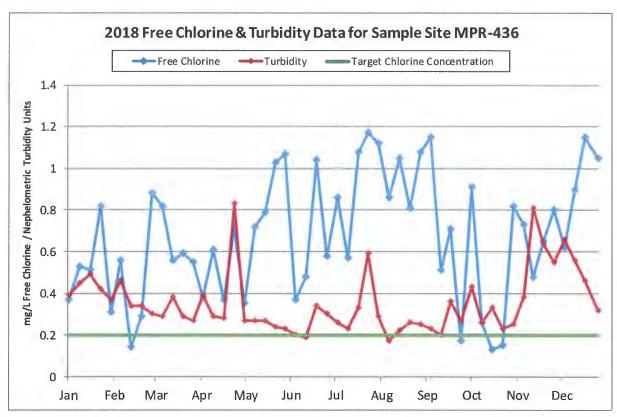


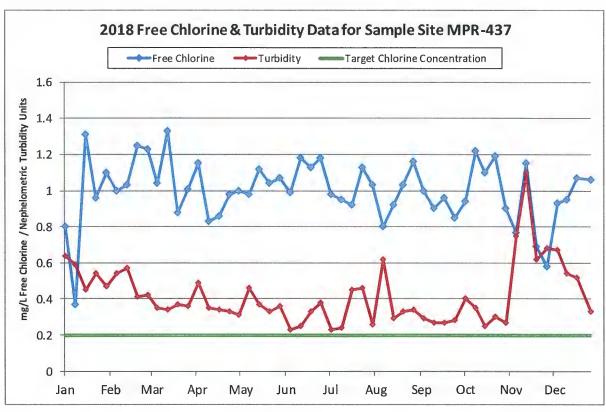


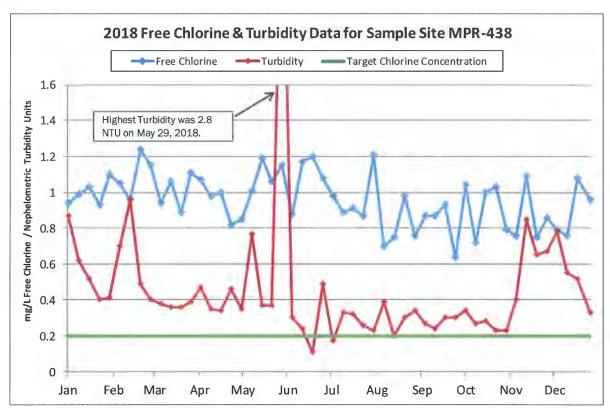


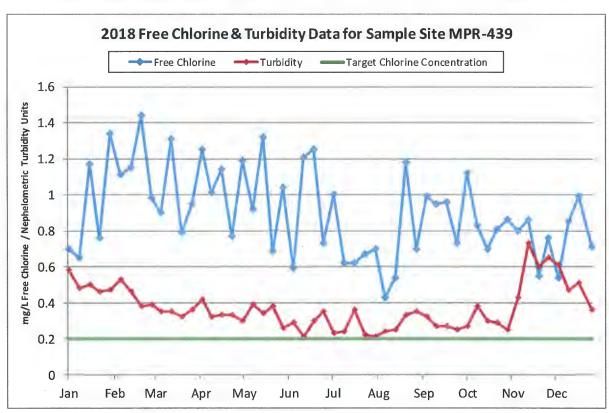


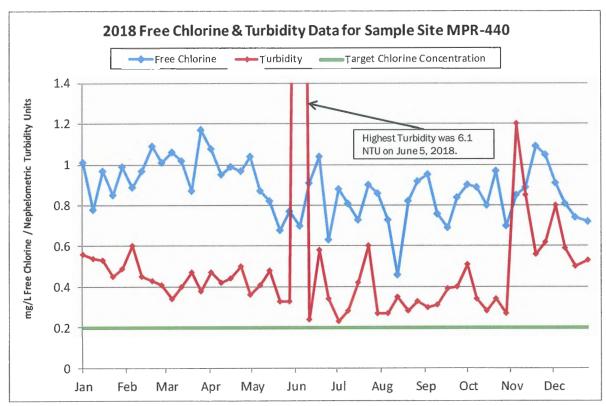


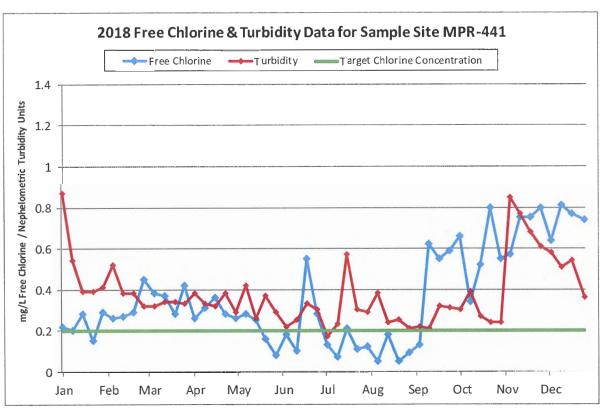


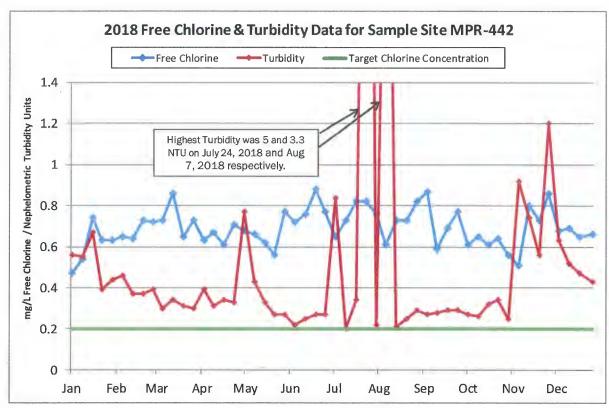


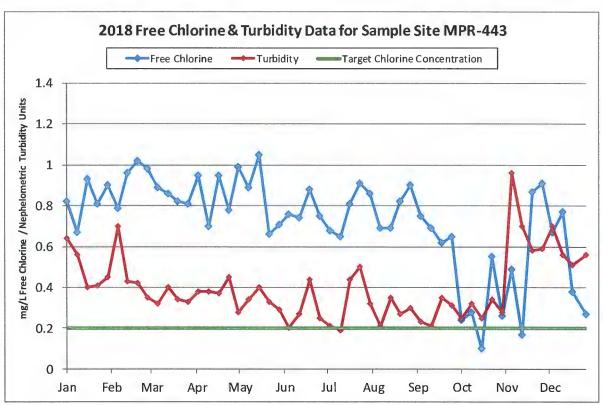


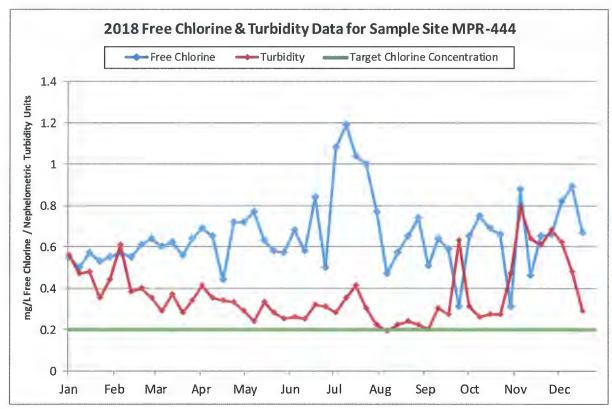


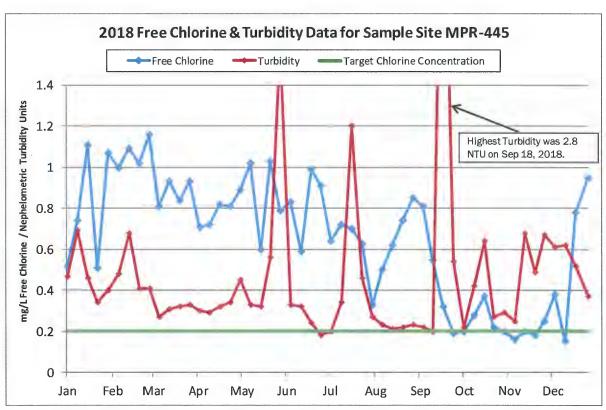


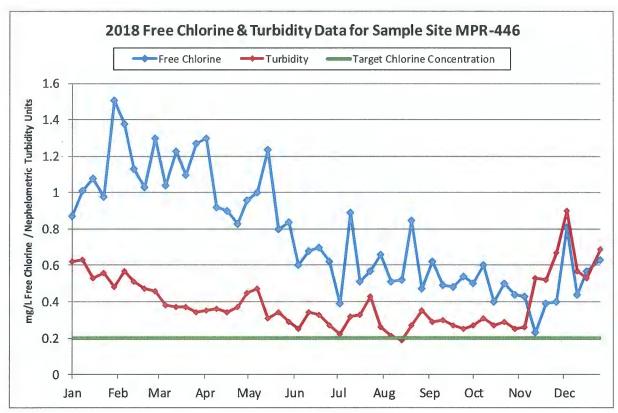


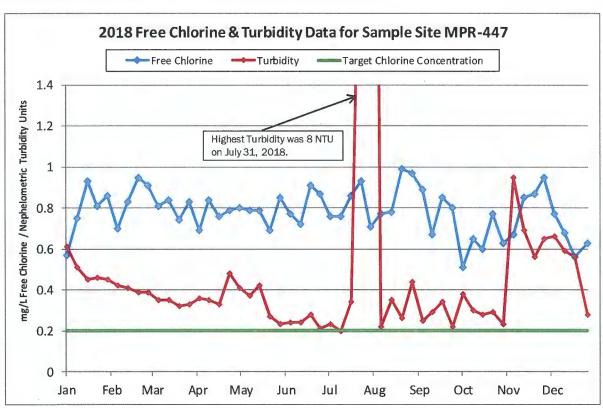


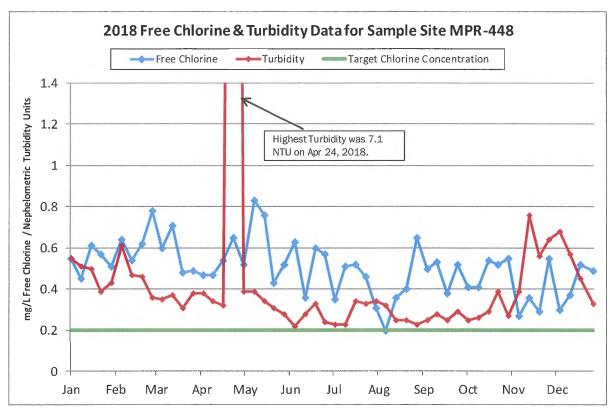


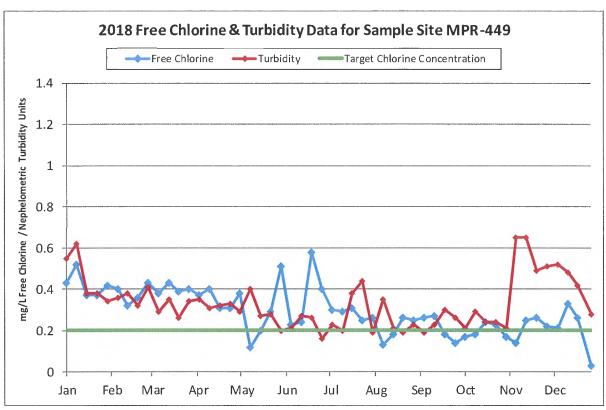












Appendix F: Weekly Sample Lab Results

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-400 | Powell Ave. West of 203rd Street | 2-Jan-18 | 0.61 | <1 | 4 | 8 | <1 | 0.51 |
| MPR-400 | Powell Ave. West of 203rd Street | 9-Jan-18 | 0.74 | <1 | <2 | 7 | <1 | 0.47 |
| MPR-400 | Powell Ave. West of 203rd Street | 16-Jan-18 | 0.82 | <1 | 2 | 8 | <1 | 0.38 |
| MPR-400 | Powell Ave. West of 203rd Street | 23-Jan-18 | 0.73 | <1 | 2 | 7 | <1 | 0.37 |
| MPR-400 | Powell Ave. West of 203rd Street | 30-Jan-18 | 0.77 | <1 | 14 | 8 | <1 | 0.46 |
| MPR-400 | Powell Ave. West of 203rd Street | 6-Feb-18 | 0.73 | <1 | 2 | 7 | <1 | 0.45 |
| MPR-400 | Powell Ave. West of 203rd Street | 13-Feb-18 | 0.77 | <1 | 4 | 8 | <1 | 0.36 |
| MPR-400 | Powell Ave. West of 203rd Street | 20-Feb-18 | 0.79 | <1 | 2 | 7 | <1 | 0.34 |
| MPR-400 | Powell Ave. West of 203rd Street | 27-Feb-18 | 0.89 | <1 | 4 | 7 | <1 | 0.29 |
| MPR-400 | Powell Ave. West of 203rd Street | 6-Mar-18 | 0.77 | <1 | <2 | 6 | <1 | 0.27 |
| MPR-400 | Powell Ave. West of 203rd Street | 13-Mar-18 | 0.9 | <1 | <2 | 7 | <1 | 0.28 |
| MPR-400 | Powell Ave. West of 203rd Street | 20-Mar-18 | 0.63 | <1 | 2 | 7 | <1 | 0.33 |
| MPR-400 | Powell Ave. West of 203rd Street | 27-Mar-18 | 0.56 | <1 | <2 | 8 | <1 | 0.35 |
| MPR-400 | Powell Ave. West of 203rd Street | 3-Apr-18 | 0.67 | <1 | <2 | 8 | <1 | 0.39 |
| MPR-400 | Powell Ave. West of 203rd Street | 10-Apr-18 | 0.65 | <1 | 4 | 8 | <1 | 0.33 |
| MPR-400 | Powell Ave. West of 203rd Street | 17-Apr-18 | 0.56 | <1 | 6 | 9 | <1 | 0.29 |
| MPR-400 | Powell Ave. West of 203rd Street | 24-Apr-18 | 0.59 | <1 | 6 | 8 | <1 | 0.33 |
| MPR-400 | Powell Ave. West of 203rd Street | 1-May-18 | 0.66 | <1 | 36 | 9 | <1 | 0.31 |
| MPR-400 | Powell Ave. West of 203rd Street | 8-May-18 | 0.56 | <1 | 16 | 10 | <1 | 0.29 |
| MPR-400 | Powell Ave. West of 203rd Street | 15-May-18 | 0.52 | <1 | 34 | 11 | <1 | 0.25 |
| MPR-400 | Powell Ave. West of 203rd Street | 22-May-18 | 0.36 | <1 | 160 | 12 | <1 | 0.27 |
| MPR-400 | Powell Ave. West of 203rd Street | 29-May-18 | 0.56 | <1 | 50 | 12 | <1 | 0.19 |
| MPR-400 | Powell Ave. West of 203rd Street | 5-Jun-18 | 0.39 | <1 | 96 | 13 | <1 | 0.19 |
| MPR-400 | Powell Ave. West of 203rd Street | 12-Jun-18 | 0.33 | <1 | 150 | 13 | <1 | 0.2 |
| MPR-400 | Powell Ave. West of 203rd Street | 19-Jun-18 | 0.67 | <1 | 140 | 13 | <1 | 0.22 |
| MPR-400 | Powell Ave. West of 203rd Street | 26-Jun-18 | 0.5 | <1 | 82 | 14 | <1 | 0.17 |
| MPR-400 | Powell Ave. West of 203rd Street | 3-Jul-18 | 0.4 | <1 | 110 | 14 | <1 | 0.17 |
| MPR-400 | Powell Ave. West of 203rd Street | 10-Jul-18 | 0.34 | <1 | 220 | 14 | <1 | 0.16 |
| MPR-400 | Powell Ave. West of 203rd Street | 17-Jul-18 | 0.52 | <1 | 190 | 15 | <1 | 0.25 |
| MPR-400 | Powell Ave. West of 203rd Street | 24-Jul-18 | 0.61 | <1 | 630 | 15 | <1 | 0.3 |
| MPR-400 | Powell Ave. West of 203rd Street | 31-Jul-18 | 0.53 | <1 | 54 | 16 | <1 | 0.21 |
| MPR-400 | Powell Ave. West of 203rd Street | 7-Aug-18 | 0.44 | <1 | 120 | 16 | <1 | 0.2 |
| MPR-400 | Powell Ave. West of 203rd Street | 14-Aug-18 | 0.35 | <1 | 380 | 17 | <1 | 0.35 |
| MPR-400 | Powell Ave. West of 203rd Street | 21-Aug-18 | 0.45 | <1 | 50 | 18 | <1 | 0.2 |
| MPR-400 | Powell Ave. West of 203rd Street | 28-Aug-18 | 0.55 | <1 | 220 | 19 | <1 | 0.19 |
| MPR-400 | Powell Ave. West of 203rd Street | 4-Sep-18 | 0.47 | <1 | 58 | 16 | <1 | 0.21 |
| MPR-400 | Powell Ave. West of 203rd Street | 11-Sep-18 | 0.44 | <1 | 130 | 17 | <1 | 0.19 |
| MPR-400 | Powell Ave. West of 203rd Street | 18-Sep-18 | 0.39 | <1 | 180 | 16 | <1 | 0.29 |
| MPR-400 | Powell Ave. West of 203rd Street | 25-Sep-18 | 0.23 | <1 | 340 | 14 | <1 | 0.25 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-400 | Powell Ave. West of 203rd Street | 2-Oct-18 | 0.33 | <1 | 320 | 16 | <1 | 0.26 |
| MPR-400 | Powell Ave. West of 203rd Street | 9-Oct-18 | 0.37 | <1 | 230 | 14 | <1 | 0.21 |
| MPR-400 | Powell Ave. West of 203rd Street | 16-Oct-18 | 0.24 | <1 | 140 | 14 | <1 | 0.22 |
| MPR-400 | Powell Ave. West of 203rd Street | 23-Oct-18 | 0.41 | <1 | 180 | 13 | <1 | 0.23 |
| MPR-400 | Powell Ave. West of 203rd Street | 30-Oct-18 | 0.31 | <1 | 180 | 13 | <1 | 0.22 |
| MPR-400 | Powell Ave. West of 203rd Street | 6-Nov-18 | 0.12 | <1 | 130 | 13 | <1 | 0.7 |
| MPR-400 | Powell Ave. West of 203rd Street | 13-Nov-18 | 0.37 | <1 | 82 | 13 | <1 | 0.6 |
| MPR-400 | Powell Ave. West of 203rd Street | 20-Nov-18 | 0.21 | <1 | 98 | 12 | <1 | 0.44 |
| MPR-400 | Powell Ave. West of 203rd Street | 27-Nov-18 | 0.27 | <1 | 62 | 12 | <1 | 0.55 |
| MPR-400 | Powell Ave. West of 203rd Street | 4-Dec-18 | 0.33 | <1 | 32 | 11 | <1 | 0.63 |
| MPR-400 | Powell Ave. West of 203rd Street | 11-Dec-18 | 0.39 | <1 | 18 | 11 | <1 | 0.42 |
| MPR-400 | Powell Ave. West of 203rd Street | 18-Dec-18 | 0.46 | <1 | NA | 10 | <1 | 0.47 |
| MPR-400 | Powell Ave. West of 203rd Street | 27-Dec-18 | 0.44 | <1 | NA | 10 | <1 | 0.3 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 2-Jan-18 | 0.9 | <1 | 2 | 5 | <1 | 0.52 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 9-Jan-18 | 0.83 | <1 | <2 | 7 | <1 | 0.49 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 16-Jan-18 | 1.01 | <1 | <2 | 6 | <1 | 0.43 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 23-Jan-18 | 0.9 | <1 | LA | 6 | <1 | 0.4 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 30-Jan-18 | 0.96 | <1 | <2 | 6 | <1 | 0.58 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 6-Feb-18 | 0.92 | <1 | <2 | 6 | <1 | 0.48 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 13-Feb-18 | 0.98 | <1 | <2 | 6 | <1 | 0.42 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 20-Feb-18 | 0.98 | <1 | <2 | 6 | <1 | 0.4 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 27-Feb-18 | 1.06 | <1 | 2 | 5 | <1 | 0.48 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 6-Mar-18 | 0.91 | <1 | <2 | 6 | <1 | 0.32 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 13-Mar-18 | 1.04 | <1 | 4 | 6 | <1 | 0.36 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 20-Mar-18 | 0.83 | <1 | <2 | 6 | <1 | 0.3 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 27-Mar-18 | 1.11 | <1 | <2 | 7 | <1 | 0.33 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 3-Apr-18 | 0.89 | <1 | <2 | 7 | <1 | 0.36 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 10-Apr-18 | 0.97 | <1 | <2 | 8 | <1 | 0.37 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 17-Apr-18 | 0.97 | <1 | <2 | 8 | <1 | 0.36 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 24-Apr-18 | 0.46 | <1 | <2 | 9 | <1 | 0.46 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 1-May-18 | 0.93 | <1 | <2 | 9 | <1 | 0.3 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 8-May-18 | 0.86 | <1 | <2 | 11 | <1 | 0.34 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 15-May-18 | 0.82 | <1 | <2 | 12 | <1 | 0.31 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 22-May-18 | 0.91 | <1 | 2 | 11 | <1 | 0.4 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 29-May-18 | 1.43 | <1 | <2 | 10 | <1 | 0.33 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 5-Jun-18 | 0.92 | <1 | <2 | 12 | <1 | 0.25 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 12-Jun-18 | 0.98 | <1 | <2 | 11 | <1 | 0.35 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 19-Jun-18 | 1.13 | <1 | <2 | 12 | <1 | 0.28 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 26-Jun-18 | 1 | <1 | 4 | 13 | <1 | 0.32 |

| Sample name | Sample reported name | Sampled Date | Cl₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|------------------------------|-----------------|---------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 3-Jul-18 | 0.8 | <1 | <2 | 14 | <1 | 0.22 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 10-Jul-18 | 0.95 | <1 | <2 | 14 | <1 | 0.26 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 17-Jul-18 | 0.89 | <1 | <2 | 15 | <1 | 0.36 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 24-Jul-18 | 0.99 | <1 | <2 | 15 | <1 | 0.35 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 31-Jul-18 | 0.92 | <1 | <2 | 16 | <1 | 0.31 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 7-Aug-18 | 0.85 | <1 | 4 | 17 | <1 | 0.22 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 14-Aug-18 | 0.87 | <1 | <2 | 17 | <1 | 0.25 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 21-Aug-18 | 0.99 | <1 | 6 | 17 | <1 | 0.28 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 28-Aug-18 | 1.08 | <1 | 2 | 17 | <1 | 0.35 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 4-Sep-18 | 1.06 | <1 | 8 | 17 | <1 | 0.36 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 11-Sep-18 | 0.88 | <1 | 2 | 16 | <1 | 0.33 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 18-Sep-18 | 0.96 | <1 | <2 | 14 | <1 | 0.34 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 25-Sep-18 | 0.98 | <1 | 2 | 15 | <1 | 0.32 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 2-Oct-18 | 0.8 | <1 | 2 | 15 | <1 | 0.43 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 9-Oct-18 | 0.96 | <1 | <2 | 13 | <1 | 0.34 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 16-Oct-18 | 0.84 | <1 | <2 | 13 | <1 | 0.28 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 23-Oct-18 | 0.97 | <1 | <2 | 11 | <1 | 0.33 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 30-Oct-18 | 1 | <1 | <2 | 13 | <1 | 0.32 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 6-Nov-18 | 1.08 | <1 | <2 | 11 | <1 | 1.4 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 13-Nov-18 | 0.86 | <1 | <2 | 10 | <1 | 0.79 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 20-Nov-18 | 1.14 | <1 | <2 | 9 | <1 | 0.73 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 28-Nov-18 | 0.86 | <1 | <2 | 9 | <1 | 0.47 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 4-Dec-18 | 1 | <1 | <2 | 8 | <1 | 0.73 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 11-Dec-18 | 0.98 | <1 | <2 | 7 | <1 | 0.76 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 18-Dec-18 | 0.74 | <1 | NA | 7 | <1 | 0.6 |
| MPR-431 | Dewdney Trunk Rd. @ 201B St. | 27-Dec-18 | 1.01 | <1 | NA | 6 | <1 | 0.52 |
| MPR-432 | 224 St. @ 122 Ave. | 2-Jan-18 | 0.59 | <1 | <2 | 5 | <1 | 0.54 |
| MPR-432 | 224 St. @ 122 Ave. | 9-Jan-18 | 0.06 | <1 | <2 | 5 | <1 | 0.54 |
| MPR-432 | 224 St. @ 122 Ave. | 16-Jan-18 | 0.88 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-432 | 224 St. @ 122 Ave. | 23-Jan-18 | 0.53 | <1 | <2 | 6 | <1 | 0.43 |
| MPR-432 | 224 St. @ 122 Ave. | 30-Jan-18 | 0.6 | <1 | <2 | 6 | <1 | 0.42 |
| MPR-432 | 224 St. @ 122 Ave. | 6-Feb-18 | 0.49 | <1 | <2 | 6 | <1 | 0.5 |
| MPR-432 | 224 St. @ 122 Ave. | 13-Feb-18 | 0.64 | <1 | <2 | 6 | <1 | 0.47 |
| MPR-432 | 224 St. @ 122 Ave. | 20-Feb-18 | 0.77 | <1 | <2 | 6 | <1 | 0.43 |
| MPR-432 | 224 St. @ 122 Ave. | 27-Feb-18 | 0.85 | <1 | <2 | 5 | <1 | 0.36 |
| MPR-432 | 224 St. @ 122 Ave. | 6-Mar-18 | 0.65 | <1 | <2 | 5 | <1 | 0.31 |
| MPR-432 | 224 St. @ 122 Ave. | 13-Mar-18 | 0.79 | <1 | <2 | 6 | <1 | 0.41 |
| MPR-432 | 224 St. @ 122 Ave. | 20-Mar-18 | 0.58 | <1 | <2 | 7 | <1 | 0.37 |
| MPR-432 | 224 St. @ 122 Ave. | 27-Mar-18 | 0.65 | <1 | <2 | 7 | <1 | 0.31 |

| Sample name | Sample reported name | Sampled Date | Cl₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------|-----------------|---------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-432 | 224 St. @ 122 Ave. | 3-Apr-18 | 0.68 | <1 | <2 | 7 | <1 | 0.41 |
| MPR-432 | 224 St. @ 122 Ave. | 10-Apr-18 | 0.64 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-432 | 224 St. @ 122 Ave. | 17-Apr-18 | 0.3 | <1 | <2 | 8 | <1 | 0.33 |
| MPR-432 | 224 St. @ 122 Ave. | 24-Apr-18 | 0.55 | <1 | <2 | 8 | <1 | 0.31 |
| MPR-432 | 224 St. @ 122 Ave. | 1-May-18 | 0.61 | <1 | 2 | 10 | <1 | 0.3 |
| MPR-432 | 224 St. @ 122 Ave. | 8-May-18 | 0.59 | <1 | <2 | 12 | <1 | 0.35 |
| MPR-432 | 224 St. @ 122 Ave. | 15-May-18 | 0.69 | <1 | <2 | 12 | <1 | 0.39 |
| MPR-432 | 224 St. @ 122 Ave. | 22-May-18 | 0.44 | <1 | <2 | 13 | <1 | 0.33 |
| MPR-432 | 224 St. @ 122 Ave. | 29-May-18 | 0.53 | <1 | <2 | 13 | <1 | 0.24 |
| MPR-432 | 224 St. @ 122 Ave. | 5-Jun-18 | 0.57 | <1 | 4 | 13 | <1 | 0.24 |
| MPR-432 | 224 St. @ 122 Ave. | 12-Jun-18 | 0.75 | <1 | <2 | 12 | <1 | 0.34 |
| MPR-432 | 224 St. @ 122 Ave. | 19-Jun-18 | 1.01 | <1 | 2 | 13 | <1 | 0.24 |
| MPR-432 | 224 St. @ 122 Ave. | 26-Jun-18 | 0.84 | <1 | <2 | 13 | <1 | 0.4 |
| MPR-432 | 224 St. @ 122 Ave. | 3-Jul-18 | 0.52 | <1 | <2 | 14 | <1 | 0.18 |
| MPR-432 | 224 St. @ 122 Ave. | 10-Jul-18 | 0.69 | <1 | 2 | 14 | <1 | 0.27 |
| MPR-432 | 224 St. @ 122 Ave. | 17-Jul-18 | 0.73 | <1 | <2 | 15 | <1 | 0.56 |
| MPR-432 | 224 St. @ 122 Ave. | 24-Jul-18 | 0.83 | <1 | <2 | 15 | <1 | 0.57 |
| MPR-432 | 224 St. @ 122 Ave. | 31-Jul-18 | 0.62 | <1 | LA | 17 | <1 | 0.27 |
| MPR-432 | 224 St. @ 122 Ave. | 7-Aug-18 | 0.43 | <1 | 36 | 17 | <1 | 0.21 |
| MPR-432 | 224 St. @ 122 Ave. | 14-Aug-18 | 0.5 | <1 | 16 | 17 | <1 | 0.25 |
| MPR-432 | 224 St. @ 122 Ave. | 21-Aug-18 | 0.6 | <1 | 10 | 17 | <1 | 0.33 |
| MPR-432 | 224 St. @ 122 Ave. | 28-Aug-18 | 0.42 | <1 | <2 | 17 | <1 | 0.24 |
| MPR-432 | 224 St. @ 122 Ave. | 4-Sep-18 | 0.65 | <1 | <2 | 16 | <1 | 0.3 |
| MPR-432 | 224 St. @ 122 Ave. | 11-Sep-18 | 0.77 | <1 | <2 | 16 | <1 | 0.41 |
| MPR-432 | 224 St. @ 122 Ave. | 18-Sep-18 | 0.73 | <1 | 2 | 13 | <1 | 0.25 |
| MPR-432 | 224 St. @ 122 Ave. | 25-Sep-18 | 0.82 | <1 | <2 | 14 | <1 | 0.3 |
| MPR-432 | 224 St. @ 122 Ave. | 2-Oct-18 | 0.74 | <1 | <2 | 13 | <1 | 0.41 |
| MPR-432 | 224 St. @ 122 Ave. | 9-Oct-18 | 0.53 | <1 | <2 | 14 | <1 | 0.39 |
| MPR-432 | 224 St. @ 122 Ave. | 16-Oct-18 | 0.69 | <1 | <2 | 13 | <1 | 0.31 |
| MPR-432 | 224 St. @ 122 Ave. | 23-Oct-18 | 0.85 | <1 | 2 | 12 | <1 | 0.32 |
| MPR-432 | 224 St. @ 122 Ave. | 30-Oct-18 | 0.72 | <1 | <2 | 12 | <1 | 0.26 |
| MPR-432 | 224 St. @ 122 Ave. | 6-Nov-18 | 0.74 | <1 | 4 | 10 | <1 | 1.3 |
| MPR-432 | 224 St. @ 122 Ave. | 13-Nov-18 | 0.74 | <1 | <2 | 10 | <1 | 0.81 |
| MPR-432 | 224 St. @ 122 Ave. | 20-Nov-18 | 0.98 | <1 | <2 | 10 | <1 | 0.73 |
| MPR-432 | 224 St. @ 122 Ave. | 27-Nov-18 | 1 | <1 | <2 | 9 | <1 | 0.66 |
| MPR-432 | 224 St. @ 122 Ave. | 4-Dec-18 | 0.83 | <1 | <2 | 8 | <1 | 0.77 |
| MPR-432 | 224 St. @ 122 Ave. | 11-Dec-18 | 0.75 | <1 | <2 | 7 | <1 | 0.59 |
| MPR-432 | 224 St. @ 122 Ave. | 18-Dec-18 | 0.82 | <1 | NA | 7 | <1 | 0.57 |
| MPR-432 | 224 St. @ 122 Ave. | 27-Dec-18 | 0.81 | <1 | NA | 6 | <1 | 0.35 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-433 | 232 St. North of 130 Ave. | 2-Jan-18 | 0.54 | <1 | 2 | 5 | <1 | 0.56 |
| MPR-433 | 232 St. North of 130 Ave. | 9-Jan-18 | 0.76 | <1 | <2 | 5 | <1 | 0.64 |
| MPR-433 | 232 St. North of 130 Ave. | 16-Jan-18 | 0.89 | <1 | <2 | 5 | <1 | 0.47 |
| MPR-433 | 232 St. North of 130 Ave. | 23-Jan-18 | 0.68 | <1 | <2 | 6 | <1 | 0.39 |
| MPR-433 | 232 St. North of 130 Ave. | 30-Jan-18 | 0.94 | <1 | <2 | 5 | <1 | 0.54 |
| MPR-433 | 232 St. North of 130 Ave. | 6-Feb-18 | 0.95 | <1 | 2 | 6 | <1 | 0.49 |
| MPR-433 | 232 St. North of 130 Ave. | 13-Feb-18 | 0.72 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-433 | 232 St. North of 130 Ave. | 20-Feb-18 | 0.96 | <1 | <2 | 5 | <1 | 0.42 |
| MPR-433 | 232 St. North of 130 Ave. | 27-Feb-18 | 1.03 | <1 | <2 | 4 | <1 | 0.35 |
| MPR-433 | 232 St. North of 130 Ave. | 6-Mar-18 | 0.71 | <1 | <2 | 5 | <1 | 0.29 |
| MPR-433 | 232 St. North of 130 Ave. | 13-Mar-18 | 0.84 | <1 | <2 | 6 | <1 | 0.34 |
| MPR-433 | 232 St. North of 130 Ave. | 20-Mar-18 | 0.81 | <1 | <2 | 6 | <1 | 0.31 |
| MPR-433 | 232 St. North of 130 Ave. | 27-Mar-18 | 0.86 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-433 | 232 St. North of 130 Ave. | 3-Apr-18 | 0.85 | <1 | <2 | 6 | <1 | 0.45 |
| MPR-433 | 232 St. North of 130 Ave. | 10-Apr-18 | 0.9 | <1 | <2 | 7 | <1 | 0.46 |
| MPR-433 | 232 St. North of 130 Ave. | 17-Apr-18 | 0.85 | <1 | <2 | 7 | <1 | 0.37 |
| MPR-433 | 232 St. North of 130 Ave. | 24-Apr-18 | 0.81 | <1 | <2 | 7 | <1 | 0.28 |
| MPR-433 | 232 St. North of 130 Ave. | 1-May-18 | 0.8 | <1 | <2 | 8 | <1 | 0.27 |
| MPR-433 | 232 St. North of 130 Ave. | 8-May-18 | 0.79 | <1 | 2 | 9 | <1 | 0.34 |
| MPR-433 | 232 St. North of 130 Ave. | 15-May-18 | 0.87 | <1 | <2 | 9 | <1 | 0.44 |
| MPR-433 | 232 St. North of 130 Ave. | 22-May-18 | 0.69 | <1 | <2 | 10 | <1 | 0.36 |
| MPR-433 | 232 St. North of 130 Ave. | 29-May-18 | 0.76 | <1 | <2 | 11 | <1 | 0.25 |
| MPR-433 | 232 St. North of 130 Ave. | 5-Jun-18 | 0.55 | <1 | <2 | 11 | <1 | 0.23 |
| MPR-433 | 232 St. North of 130 Ave. | 12-Jun-18 | 0.57 | <1 | <2 | 12 | <1 | 0.34 |
| MPR-433 | 232 St. North of 130 Ave. | 19-Jun-18 | 0.99 | <1 | <2 | 11 | <1 | 0.34 |
| MPR-433 | 232 St. North of 130 Ave. | 26-Jun-18 | 0.6 | <1 | <2 | 12 | <1 | 0.46 |
| MPR-433 | 232 St. North of 130 Ave. | 3-Jul-18 | 0.61 | <1 | <2 | 14 | <1 | 0.28 |
| MPR-433 | 232 St. North of 130 Ave. | 10-Jul-18 | 0.64 | <1 | <2 | 13 | <1 | 0.21 |
| MPR-433 | 232 St. North of 130 Ave. | 17-Jul-18 | 0.77 | <1 | <2 | 13 | <1 | 0.4 |
| MPR-433 | 232 St. North of 130 Ave. | 24-Jul-18 | 0.85 | <1 | <2 | 13 | <1 | 0.63 |
| MPR-433 | 232 St. North of 130 Ave. | 31-Jul-18 | 0.72 | <1 | <2 | 14 | <1 | 0.29 |
| MPR-433 | 232 St. North of 130 Ave. | 7-Aug-18 | 0.63 | <1 | <2 | 15 | <1 | 0.18 |
| MPR-433 | 232 St. North of 130 Ave. | 14-Aug-18 | 0.81 | <1 | <2 | 15 | <1 | 0.36 |
| MPR-433 | 232 St. North of 130 Ave. | 21-Aug-18 | 0.88 | <1 | <2 | 15 | <1 | 0.32 |
| MPR-433 | 232 St. North of 130 Ave. | 28-Aug-18 | 0.92 | <1 | <2 | 15 | <1 | 0.39 |
| MPR-433 | 232 St. North of 130 Ave. | 4-Sep-18 | 0.68 | <1 | <2 | 15 | <1 | 0.24 |
| MPR-433 | 232 St. North of 130 Ave. | 11-Sep-18 | 0.52 | <1 | <2 | 15 | <1 | 0.36 |
| MPR-433 | 232 St. North of 130 Ave. | 18-Sep-18 | 0.72 | <1 | <2 | 14 | <1 | 0.38 |
| MPR-433 | 232 St. North of 130 Ave. | 25-Sep-18 | 0.51 | <1 | <2 | 14 | <1 | 0.28 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-433 | 232 St. North of 130 Ave. | 2-Oct-18 | 0.49 | <1 | 2 | 15 | 1 | 0.52 |
| MPR-433 | 232 St. North of 130 Ave. | 9-Oct-18 | 0.66 | <1 | <2 | 13 | <1 | 0.37 |
| MPR-433 | 232 St. North of 130 Ave. | 16-Oct-18 | 0.63 | <1 | 4 | 13 | <1 | 0.26 |
| MPR-433 | 232 St. North of 130 Ave. | 23-Oct-18 | 0.85 | <1 | <2 | 12 | <1 | 0.27 |
| MPR-433 | 232 St. North of 130 Ave. | 30-Oct-18 | 0.45 | <1 | <2 | 12 | <1 | 0.3 |
| MPR-433 | 232 St. North of 130 Ave. | 6-Nov-18 | 0.64 | <1 | 2 | 11 | <1 | 0.97 |
| MPR-433 | 232 St. North of 130 Ave. | 13-Nov-18 | 0.79 | <1 | <2 | 10 | <1 | 0.9 |
| MPR-433 | 232 St. North of 130 Ave. | 20-Nov-18 | 1.01 | <1 | <2 | 9 | <1 | 0.61 |
| MPR-433 | 232 St. North of 130 Ave. | 27-Nov-18 | 1.02 | <1 | <2 | 9 | <1 | 0.57 |
| MPR-433 | 232 St. North of 130 Ave. | 4-Dec-18 | 0.84 | <1 | <2 | 8 | <1 | 0.68 |
| MPR-433 | 232 St. North of 130 Ave. | 11-Dec-18 | 0.75 | <1 | <2 | 8 | <1 | 0.55 |
| MPR-433 | 232 St. North of 130 Ave. | 18-Dec-18 | 0.84 | <1 | NA | 7 | <1 | 0.45 |
| MPR-433 | 232 St. North of 130 Ave. | 27-Dec-18 | 0.62 | <1 | NA | 6 | <1 | 0.31 |
| MPR-434 | 102 Ave. East of 241A St. | 2-Jan-18 | 0.59 | <1 | <2 | 5 | <1 | 0.52 |
| MPR-434 | 102 Ave. East of 241A St. | 9-Jan-18 | 0.71 | <1 | <2 | 6 | <1 | 0.65 |
| MPR-434 | 102 Ave. East of 241A St. | 16-Jan-18 | 0.47 | <1 | <2 | 6 | <1 | 0.43 |
| MPR-434 | 102 Ave. East of 241A St. | 23-Jan-18 | 0.51 | <1 | <2 | 6 | <1 | 0.42 |
| MPR-434 | 102 Ave. East of 241A St. | 30-Jan-18 | 0.5 | <1 | 2 | 6 | <1 | 0.4 |
| MPR-434 | 102 Ave. East of 241A St. | 6-Feb-18 | 0.51 | <1 | 2 | 7 | <1 | 0.47 |
| MPR-434 | 102 Ave. East of 241A St. | 13-Feb-18 | 0.49 | <1 | <2 | 6 | <1 | 0.42 |
| MPR-434 | 102 Ave. East of 241A St. | 20-Feb-18 | 0.66 | <1 | <2 | 6 | <1 | 0.44 |
| MPR-434 | 102 Ave. East of 241A St. | 27-Feb-18 | 0.74 | <1 | <2 | 5 | <1 | 0.36 |
| MPR-434 | 102 Ave. East of 241A St. | 6-Mar-18 | 0.62 | <1 | <2 | 6 | <1 | 0.32 |
| MPR-434 | 102 Ave. East of 241A St. | 13-Mar-18 | 0.61 | <1 | 2 | 6 | <1 | 0.36 |
| MPR-434 | 102 Ave. East of 241A St. | 20-Mar-18 | 0.49 | <1 | <2 | 7 | <1 | 0.35 |
| MPR-434 | 102 Ave. East of 241A St. | 27-Mar-18 | 0.44 | <1 | <2 | 7 | <1 | 0.3 |
| MPR-434 | 102 Ave. East of 241A St. | 3-Apr-18 | 0.78 | <1 | <2 | 7 | <1 | 0.4 |
| MPR-434 | 102 Ave. East of 241A St. | 10-Apr-18 | 0.48 | <1 | 2 | 7 | <1 | 0.35 |
| MPR-434 | 102 Ave. East of 241A St. | 17-Apr-18 | 0.54 | <1 | 2 | 8 | <1 | 0.35 |
| MPR-434 | 102 Ave. East of 241A St. | 24-Apr-18 | 0.56 | <1 | <2 | 8 | <1 | 0.35 |
| MPR-434 | 102 Ave. East of 241A St. | 1-May-18 | 0.48 | <1 | 2 | 9 | <1 | 0.29 |
| MPR-434 | 102 Ave. East of 241A St. | 8-May-18 | 0.66 | <1 | <2 | 10 | <1 | 0.43 |
| MPR-434 | 102 Ave. East of 241A St. | 15-May-18 | 0.9 | <1 | <2 | 10 | <1 | 0.56 |
| MPR-434 | 102 Ave. East of 241A St. | 22-May-18 | 0.67 | <1 | <2 | 11 | <1 | 0.36 |
| MPR-434 | 102 Ave. East of 241A St. | 29-May-18 | 0.83 | <1 | <2 | 13 | <1 | 0.25 |
| MPR-434 | 102 Ave. East of 241A St. | 5-Jun-18 | 0.68 | <1 | <2 | 13 | <1 | 0.31 |
| MPR-434 | 102 Ave. East of 241A St. | 12-Jun-18 | 0.56 | <1 | <2 | 11 | <1 | 0.24 |
| MPR-434 | 102 Ave. East of 241A St. | 19-Jun-18 | 0.96 | <1 | <2 | 13 | <1 | 0.49 |
| MPR-434 | 102 Ave. East of 241A St. | 26-Jun-18 | 0.4 | <1 | <2 | 14 | <1 | 0.28 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|--------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-434 | 102 Ave. East of 241A St. | 3-Jul-18 | 0.38 | <1 | <2 | 13 | <1 | 0.18 |
| MPR-434 | 102 Ave. East of 241A St. | 10-Jul-18 | 0.57 | <1 | 4 | 14 | <1 | 0.22 |
| MPR-434 | 102 Ave. East of 241A St. | 17-Jul-18 | 0.81 | <1 | <2 | 15 | <1 | 0.35 |
| MPR-434 | 102 Ave. East of 241A St. | 24-Jul-18 | 0.76 | <1 | <2 | 15 | <1 | 0.5 |
| MPR-434 | 102 Ave. East of 241A St. | 31-Jul-18 | 0.78 | <1 | LA | 15 | <1 | 0.32 |
| MPR-434 | 102 Ave. East of 241A St. | 7-Aug-18 | 0.59 | <1 | <2 | 16 | <1 | 0.97 |
| MPR-434 | 102 Ave. East of 241A St. | 14-Aug-18 | 0.68 | <1 | <2 | 17 | <1 | 0.3 |
| MPR-434 | 102 Ave. East of 241A St. | 21-Aug-18 | 0.76 | <1 | 2 | 17 | <1 | 0.33 |
| MPR-434 | 102 Ave. East of 241A St. | 28-Aug-18 | 0.87 | <1 | <2 | 17 | <1 | 0.31 |
| MPR-434 | 102 Ave. East of 241A St. | 4-Sep-18 | 0.75 | <1 | 2 | 15 | <1 | 0.3 |
| MPR-434 | 102 Ave. East of 241A St. | 11-Sep-18 | 0.68 | <1 | <2 | 16 | <1 | 0.26 |
| MPR-434 | 102 Ave. East of 241A St. | 18-Sep-18 | 0.44 | <1 | <2 | 15 | <1 | 0.35 |
| MPR-434 | 102 Ave. East of 241A St. | 25-Sep-18 | 0.54 | <1 | <2 | 15 | <1 | 0.31 |
| MPR-434 | 102 Ave. East of 241A St. | 2-Oct-18 | 0.57 | <1 | 6 | 15 | <1 | 0.26 |
| MPR-434 | 102 Ave. East of 241A St. | 9-Oct-18 | 0.55 | <1 | <2 | 13 | <1 | 0.29 |
| MPR-434 | 102 Ave. East of 241A St. | 16-Oct-18 | 0.66 | <1 | 2 | 11 | <1 | 0.27 |
| MPR-434 | 102 Ave. East of 241A St. | 23-Oct-18 | 0.8 | <1 | <2 | 10 | <1 | 0.3 |
| MPR-434 | 102 Ave. East of 241A St. | 30-Oct-18 | 0.38 | <1 | <2 | 13 | <1 | 0.29 |
| MPR-434 | 102 Ave. East of 241A St. | 6-Nov-18 | 0.33 | <1 | <2 | 12 | <1 | 0.52 |
| MPR-434 | 102 Ave. East of 241A St. | 13-Nov-18 | 0.76 | <1 | <2 | 11 | <1 | 0.87 |
| MPR-434 | 102 Ave. East of 241A St. | 20-Nov-18 | 0.58 | <1 | <2 | 10 | <1 | 0.67 |
| MPR-434 | 102 Ave. East of 241A St. | 27-Nov-18 | 0.62 | <1 | <2 | 10 | <1 | 0.8 |
| MPR-434 | 102 Ave. East of 241A St. | 4-Dec-18 | 0.56 | <1 | <2 | 9 | <1 | 0.72 |
| MPR-434 | 102 Ave. East of 241A St. | 11-Dec-18 | 0.56 | <1 | <2 | 8 | <1 | 0.55 |
| MPR-434 | 102 Ave. East of 241A St. | 18-Dec-18 | 0.63 | <1 | NA | 8 | <1 | 0.46 |
| MPR-434 | 102 Ave. East of 241A St. | 27-Dec-18 | 0.57 | <1 | NA | 7 | <1 | 0.31 |
| MPR-435 | 240 St. South of Abernethy Way | 2-Jan-18 | 0.43 | <1 | <2 | 5 | <1 | 0.68 |
| MPR-435 | 240 St. South of Abernethy Way | 9-Jan-18 | 0.72 | <1 | <2 | 5 | <1 | 0.58 |
| MPR-435 | 240 St. South of Abernethy Way | 16-Jan-18 | 0.83 | <1 | <2 | 6 | <1 | 0.43 |
| MPR-435 | 240 St. South of Abernethy Way | 23-Jan-18 | 0.62 | <1 | <2 | 6 | <1 | 0.38 |
| MPR-435 | 240 St. South of Abernethy Way | 30-Jan-18 | 0.52 | <1 | <2 | 6 | <1 | 0.38 |
| MPR-435 | 240 St. South of Abernethy Way | 6-Feb-18 | 0.51 | <1 | <2 | 7 | <1 | 0.5 |
| MPR-435 | 240 St. South of Abernethy Way | 13-Feb-18 | 0.59 | <1 | <2 | 6 | <1 | 0.39 |
| MPR-435 | 240 St. South of Abernethy Way | 20-Feb-18 | 0.7 | <1 | 2 | 6 | <1 | 0.39 |
| MPR-435 | 240 St. South of Abernethy Way | 27-Feb-18 | 0.73 | <1 | <2 | 5 | <1 | 0.35 |
| MPR-435 | 240 St. South of Abernethy Way | 6-Mar-18 | 0.67 | <1 | <2 | 5 | <1 | 0.28 |
| MPR-435 | 240 St. South of Abernethy Way | 13-Mar-18 | 0.51 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-435 | 240 St. South of Abernethy Way | 20-Mar-18 | 0.72 | <1 | <2 | 7 | <1 | 0.31 |
| MPR-435 | 240 St. South of Abernethy Way | 27-Mar-18 | 0.53 | <1 | LA | 7 | <1 | 0.34 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|--------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-435 | 240 St. South of Abernethy Way | 3-Apr-18 | 0.86 | <1 | <2 | 7 | <1 | 0.42 |
| MPR-435 | 240 St. South of Abernethy Way | 10-Apr-18 | 0.6 | <1 | <2 | 8 | <1 | 0.32 |
| MPR-435 | 240 St. South of Abernethy Way | 17-Apr-18 | 0.6 | <1 | <2 | 8 | <1 | 0.33 |
| MPR-435 | 240 St. South of Abernethy Way | 24-Apr-18 | 0.55 | <1 | 6 | 9 | <1 | 0.29 |
| MPR-435 | 240 St. South of Abernethy Way | 1-May-18 | 0.59 | <1 | 12 | 10 | <1 | 0.24 |
| MPR-435 | 240 St. South of Abernethy Way | 8-May-18 | 0.77 | <1 | <2 | 9 | <1 | 0.63 |
| MPR-435 | 240 St. South of Abernethy Way | 15-May-18 | 0.92 | <1 | <2 | 9 | <1 | 0.42 |
| MPR-435 | 240 St. South of Abernethy Way | 22-May-18 | 0.63 | <1 | <2 | 10 | <1 | 0.33 |
| MPR-435 | 240 St. South of Abernethy Way | 29-May-18 | 0.83 | <1 | <2 | 10 | <1 | 0.32 |
| MPR-435 | 240 St. South of Abernethy Way | 5-Jun-18 | 0.73 | <1 | <2 | 11 | <1 | 0.23 |
| MPR-435 | 240 St. South of Abernethy Way | 12-Jun-18 | 0.82 | <1 | <2 | 12 | <1 | 0.26 |
| MPR-435 | 240 St. South of Abernethy Way | 19-Jun-18 | 0.93 | <1 | <2 | 12 | <1 | 0.26 |
| MPR-435 | 240 St. South of Abernethy Way | 26-Jun-18 | 0.83 | <1 | <2 | 13 | <1 | 0.3 |
| MPR-435 | 240 St. South of Abernethy Way | 3-Jul-18 | 0.65 | <1 | 130 | 12 | <1 | 7 |
| MPR-435 | 240 St. South of Abernethy Way | 10-Jul-18 | 0.8 | <1 | <2 | 12 | <1 | 0.24 |
| MPR-435 | 240 St. South of Abernethy Way | 17-Jul-18 | 0.58 | <1 | <2 | 13 | <1 | 0.3 |
| MPR-435 | 240 St. South of Abernethy Way | 24-Jul-18 | 0.82 | <1 | <2 | 14 | <1 | 0.4 |
| MPR-435 | 240 St. South of Abernethy Way | 31-Jul-18 | 0.81 | <1 | <2 | 15 | <1 | 0.22 |
| MPR-435 | 240 St. South of Abernethy Way | 7-Aug-18 | 0.42 | <1 | <2 | 15 | <1 | 0.36 |
| MPR-435 | 240 St. South of Abernethy Way | 14-Aug-18 | 0.68 | <1 | <2 | 16 | <1 | 0.36 |
| MPR-435 | 240 St. South of Abernethy Way | 21-Aug-18 | 0.76 | <1 | 6 | 17 | <1 | 0.33 |
| MPR-435 | 240 St. South of Abernethy Way | 28-Aug-18 | 0.84 | <1 | <2 | 17 | <1 | 0.34 |
| MPR-435 | 240 St. South of Abernethy Way | 4-Sep-18 | 0.58 | <1 | 70 | 16 | <1 | 0.26 |
| MPR-435 | 240 St. South of Abernethy Way | 11-Sep-18 | 0.68 | <1 | <2 | 16 | <1 | 0.3 |
| MPR-435 | 240 St. South of Abernethy Way | 18-Sep-18 | 0.44 | <1 | <2 | 17 | <1 | 0.37 |
| MPR-435 | 240 St. South of Abernethy Way | 25-Sep-18 | 0.49 | <1 | 4 | 17 | <1 | 0.3 |
| MPR-435 | 240 St. South of Abernethy Way | 2-Oct-18 | 0.78 | <1 | <2 | 14 | <1 | 0.35 |
| MPR-435 | 240 St. South of Abernethy Way | 9-Oct-18 | 0.79 | <1 | <2 | 15 | <1 | 0.41 |
| MPR-435 | 240 St. South of Abernethy Way | 16-Oct-18 | 0.79 | <1 | <2 | 13 | <1 | 0.32 |
| MPR-435 | 240 St. South of Abernethy Way | 23-Oct-18 | 0.53 | <1 | <2 | 14 | <1 | 0.25 |
| MPR-435 | 240 St. South of Abernethy Way | 30-Oct-18 | 0.69 | <1 | <2 | 12 | <1 | 0.27 |
| MPR-435 | 240 St. South of Abernethy Way | 6-Nov-18 | 0.25 | <1 | LA | 12 | <1 | 0.58 |
| MPR-435 | 240 St. South of Abernethy Way | 13-Nov-18 | 0.43 | <1 | 2 | 11 | <1 | 0.7 |
| MPR-435 | 240 St. South of Abernethy Way | 20-Nov-18 | 0.33 | <1 | 2 | 10 | <1 | 0.61 |
| MPR-435 | 240 St. South of Abernethy Way | 27-Nov-18 | 0.72 | <1 | <2 | 10 | <1 | 0.57 |
| MPR-435 | 240 St. South of Abernethy Way | 4-Dec-18 | 0.39 | <1 | 2 | 9 | <1 | 0.73 |
| MPR-435 | 240 St. South of Abernethy Way | 11-Dec-18 | 0.58 | <1 | 2 | 7 | <1 | 0.49 |
| MPR-435 | 240 St. South of Abernethy Way | 18-Dec-18 | 0.61 | <1 | NA | 7 | <1 | 0.66 |
| MPR-435 | 240 St. South of Abernethy Way | 27-Dec-18 | 0.67 | <1 | NA | 7 | <1 | 0.35 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|-----------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-436 | 125 Ave. West of Ansell St. | 2-Jan-18 | 0.37 | <1 | 130 | . 5 | <1 | 0.39 |
| MPR-436 | 125 Ave. West of Ansell St. | 9-Jan-18 | 0.53 | <1 | 4 | 6 | <1 | 0.45 |
| MPR-436 | 125 Ave. West of Ansell St. | 16-Jan-18 | 0.51 | <1 | 76 | 6 | <1 | 0.49 |
| MPR-436 | 125 Ave. West of Ansell St. | 23-Jan-18 | 0.82 | <1 | 22 | 6 | <1 | 0.42 |
| MPR-436 | 125 Ave. West of Ansell St. | 30-Jan-18 | 0.31 | <1 | 160 | 6 | <1 | 0.37 |
| MPR-436 | 125 Ave. West of Ansell St. | 6-Feb-18 | 0.56 | <1 | 56 | 7 | <1 | 0.46 |
| MPR-436 | 125 Ave. West of Ansell St. | 13-Feb-18 | 0.14 | <1 | 290 | 7 | <1 | 0.34 |
| MPR-436 | 125 Ave. West of Ansell St. | 20-Feb-18 | 0.29 | <1 | 270 | 6 | <1 | 0.34 |
| MPR-436 | 125 Ave. West of Ansell St. | 27-Feb-18 | 0.88 | <1 | 38 | 5 | <1 | 0.3 |
| MPR-436 | 125 Ave. West of Ansell St. | 6-Mar-18 | 0.82 | <1 | 42 | 5 | <1 | 0.29 |
| MPR-436 | 125 Ave. West of Ansell St. | 13-Mar-18 | 0.56 | <1 | 86 | 6 | <1 | 0.38 |
| MPR-436 | 125 Ave. West of Ansell St. | 20-Mar-18 | 0.59 | <1 | 88 | 6 | <1 | 0.29 |
| MPR-436 | 125 Ave. West of Ansell St. | 27-Mar-18 | 0.55 | <1 | 150 | 7 | <1 | 0.27 |
| MPR-436 | 125 Ave. West of Ansell St. | 3-Apr-18 | 0.38 | <1 | 270 | . 7 | <1 | 0.39 |
| MPR-436 | 125 Ave. West of Ansell St. | 10-Apr-18 | 0.61 | <1 | 310 | 8 | <1 | 0.29 |
| MPR-436 | 125 Ave. West of Ansell St. | 17-Apr-18 | 0.37 | <1 | 500 | 9 | <1 | 0.28 |
| MPR-436 | 125 Ave. West of Ansell St. | 24-Apr-18 | 0.72 | <1 | 52 | 9 | <1 | 0.83 |
| MPR-436 | 125 Ave. West of Ansell St. | 1-May-18 | 0.35 | <1 | 200 | 11 | <1 | 0.27 |
| MPR-436 | 125 Ave. West of Ansell St. | 8-May-18 | 0.72 | <1 | 400 | 12 | <1 | 0.27 |
| MPR-436 | 125 Ave. West of Ansell St. | 15-May-18 | 0.79 | <1 | 26 | 12 | <1 | 0.27 |
| MPR-436 | 125 Ave. West of Ansell St. | 22-May-18 | 1.03 | <1 | 14 | 13 | <1 | 0.24 |
| MPR-436 | 125 Ave. West of Ansell St. | 29-May-18 | 1.07 | <1 | <2 | 13 | <1 | 0.23 |
| MPR-436 | 125 Ave. West of Ansell St. | 5-Jun-18 | 0.37 | <1 | 64 | 14 | <1 | 0.2 |
| MPR-436 | 125 Ave. West of Ansell St. | 12-Jun-18 | 0.48 | <1 | 58 | 15 | <1 | 0.19 |
| MPR-436 | 125 Ave. West of Ansell St. | 19-Jun-18 | 1.04 | <1 | <2 | 14 | <1 | 0.34 |
| MPR-436 | 125 Ave. West of Ansell St. | 26-Jun-18 | 0.58 | <1 | 34 | 16 | <1 | 0.3 |
| MPR-436 | 125 Ave. West of Ansell St. | 3-Jul-18 | 0.86 | <1 | 2 | 15 | <1 | 0.26 |
| MPR-436 | 125 Ave. West of Ansell St. | 10-Jul-18 | 0.57 | <1 | 60 | 17 | <1 | 0.23 |
| MPR-436 | 125 Ave. West of Ansell St. | 17-Jul-18 | 1.08 | <1 | <2 | 15 | <1 | 0.33 |
| MPR-436 | 125 Ave. West of Ansell St. | 24-Jul-18 | 1.17 | <1 | <2 | 16 | <1 | 0.59 |
| MPR-436 | 125 Ave. West of Ansell St. | 31-Jul-18 | 1.12 | <1 | 4 | 16 | <1 | 0.29 |
| MPR-436 | 125 Ave. West of Ansell St. | 7-Aug-18 | 0.86 | <1 | 18 | 17 | <1 | 0.17 |
| MPR-436 | 125 Ave. West of Ansell St. | 14-Aug-18 | 1.05 | <1 | 4 | 17 | <1 | 0.22 |
| MPR-436 | 125 Ave. West of Ansell St. | 21-Aug-18 | 0.81 | <1 | <2 | 16 | <1 | 0.26 |
| MPR-436 | 125 Ave. West of Ansell St. | 28-Aug-18 | 1.08 | <1 | 4 | 17 | <1 | 0.25 |
| MPR-436 | 125 Ave. West of Ansell St. | 4-Sep-18 | 1.15 | <1 | 2 | 17 | <1 | 0.23 |
| MPR-436 | 125 Ave. West of Ansell St. | 11-Sep-18 | 0.51 | <1 | 30 | 17 | <1 | 0.2 |
| MPR-436 | 125 Ave. West of Ansell St. | 18-Sep-18 | 0.71 | <1 | <2 | 16 | <1 | 0.36 |
| MPR-436 | 125 Ave. West of Ansell St. | 25-Sep-18 | 0.17 | <1 | 7400 | 16 | <1 | 0.27 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 | Turb. NTU |
|----------------|-----------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|-----------------------------|--------------|
| | | | | | _ | | mLs | |
| MPR-436 | 125 Ave. West of Ansell St. | 2-Oct-18 | 0.91 | <1 | 2 | 14 | <1 | 0.43 |
| MPR-436 | 125 Ave. West of Ansell St. | 9-Oct-18 | 0.26 | <1 | 82 | 15 | <1 | 0.26 |
| MPR-436 | 125 Ave. West of Ansell St. | 16-Oct-18 | 0.13 | <1 | 120 | 14 | <1 | 0.33 |
| MPR-436 | 125 Ave. West of Ansell St. | 23-Oct-18 | 0.15 | <1 | 1600 | 12 | <1 | 0.23 |
| MPR-436 | 125 Ave. West of Ansell St. | 30-Oct-18 | 0.82 | <1 | 6 | 12 | <1 | 0.25 |
| MPR-436 | 125 Ave. West of Ansell St. | 6-Nov-18 | 0.73 | <1 | 6 | 11 | <1 | 0.38 |
| MPR-436 | 125 Ave. West of Ansell St. | 13-Nov-18 | 0.48 | <1 | <2 | 10 | <1 | 0.81 |
| MPR-436 | 125 Ave. West of Ansell St. | 20-Nov-18 | 0.65 | <1 | 2 | 9 | <1 | 0.64 |
| MPR-436 | 125 Ave. West of Ansell St. | 27-Nov-18 | 0.8 | <1 | <2 | 9 | <1 | 0.55 |
| MPR-436 | 125 Ave. West of Ansell St. | 4-Dec-18 | 0.62 | <1 | 2 | 9 | <1 | 0.66 |
| MPR-436 | 125 Ave. West of Ansell St. | 11-Dec-18 | 0.9 | <1 | <2 | 7 | <1 | 0.56 |
| MPR-436 | 125 Ave. West of Ansell St. | 18-Dec-18 | 1.15 | <1 | NA | 7 | <1 | 0.46 |
| MPR-436 | 125 Ave. West of Ansell St. | 27-Dec-18 | 1.05 | <1 | NA | 7 | <1 | 0.32 |
| MPR-437 | 248 St. @ 116 Ave. | 2-Jan-18 | 0.8 | <1 | 2 | 5 | <1 | 0.64 |
| MPR-437 | 248 St. @ 116 Ave. | 9-Jan-18 | 0.37 | <1 | <2 | 5 | <1 | 0.59 |
| MPR-437 | 248 St. @ 116 Ave. | 16-Jan-18 | 1.31 | <1 | <2 | 5 | <1 | 0.45 |
| MPR-437 | 248 St. @ 116 Ave. | 23-Jan-18 | 0.96 | <1 | <2 | 6 | <1 | 0.54 |
| MPR-437 | 248 St. @ 116 Ave. | 30-Jan-18 | 1.1 | <1 | <2 | 6 | <1 | 0.47 |
| MPR-437 | 248 St. @ 116 Ave. | 6-Feb-18 | 1 | <1 | <2 | 6 | <1 | 0.54 |
| MPR-437 | 248 St. @ 116 Ave. | 13-Feb-18 | 1.03 | <1 | <2 | 6 | <1 | 0.57 |
| MPR-437 | 248 St. @ 116 Ave. | 20-Feb-18 | 1.25 | <1 | <2 | 5 | <1 | 0.41 |
| MPR-437 | 248 St. @ 116 Ave. | 27-Feb-18 | 1.23 | <1 | <2 | 5 | <1 | 0.42 |
| MPR-437 | 248 St. @ 116 Ave. | 6-Mar-18 | 1.04 | <1 | <2 | 5 | <1 | 0.35 |
| MPR-437 | 248 St. @ 116 Ave. | 13-Mar-18 | 1.33 | <1 | <2 | 6 | <1 | 0.34 |
| MPR-437 | 248 St. @ 116 Ave. | 20-Mar-18 | 0.88 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-437 | 248 St. @ 116 Ave. | 27-Mar-18 | 1.01 | <1 | <2 | 6 | <1 | 0.36 |
| MPR-437 | 248 St. @ 116 Ave. | 3-Apr-18 | 1.15 | <1 | <2 | 7 | <1 | 0.49 |
| MPR-437 | 248 St. @ 116 Ave. | 10-Apr-18 | 0.83 | <1 | 2 | 7 | <1 | 0.35 |
| MPR-437 | 248 St. @ 116 Ave. | 17-Apr-18 | 0.86 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-437 | 248 St. @ 116 Ave. | 24-Apr-18 | 0.98 | <1 | 2 | 8 | <1 | 0.33 |
| MPR-437 | 248 St. @ 116 Ave. | 1-May-18 | 1 | <1 | <2 | 9 | <1 | 0.31 |
| MPR-437 | 248 St. @ 116 Ave. | 8-May-18 | 0.98 | <1 | <2 | 10 | <1 | 0.46 |
| MPR-437 | 248 St. @ 116 Ave. | 15-May-18 | 1.12 | <1 | <2 | 10 | <1 | 0.37 |
| MPR-437 | 248 St. @ 116 Ave. | 22-May-18 | 1.04 | <1 | <2 | 11 | <1 | 0.33 |
| MPR-437 | 248 St. @ 116 Ave. | 29-May-18 | 1.07 | <1 | 4 | 11 | <1 | 0.36 |
| MPR-437 | 248 St. @ 116 Ave. | 5-Jun-18 | 0.99 | <1 | <2 | 12 | <1 | 0.23 |
| MPR-437 | 248 St. @ 116 Ave. | 12-Jun-18 | 1.18 | <1 | <2 | 12 | <1 | 0.25 |
| MPR-437 | 248 St. @ 116 Ave. | 19-Jun-18 | 1.13 | <1 | 2 | 12 | <1 | 0.33 |
| MPR-437 | 248 St. @ 116 Ave. | 26-Jun-18 | 1.18 | <1 | <2 | 13 | <1 | 0.38 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-437 | 248 St. @ 116 Ave. | 3-Jul-18 | 0.98 | <1 | <2 | 13 | <1 | 0.23 |
| MPR-437 | 248 St. @ 116 Ave. | 10-Jul-18 | 0.95 | <1 | <2 | 13 | <1 | 0.24 |
| MPR-437 | 248 St. @ 116 Ave. | 17-Jul-18 | 0.92 | <1 | <2 | 14 | <1 | 0.45 |
| MPR-437 | 248 St. @ 116 Ave. | 24-Jul-18 | 1.13 | <1 | 2 | 14 | <1 | 0.46 |
| MPR-437 | 248 St. @ 116 Ave. | 31-Jul-18 | 1.03 | <1 | <2 | 15 | <1 | 0.26 |
| MPR-437 | 248 St. @ 116 Ave. | 7-Aug-18 | 0.8 | <1 | 2 | 15 | <1 | 0.62 |
| MPR-437 | 248 St. @ 116 Ave. | 14-Aug-18 | 0.92 | <1 | <2 | 16 | <1 | 0.29 |
| MPR-437 | 248 St. @ 116 Ave. | 21-Aug-18 | 1.03 | <1 | <2 | 16 | <1 | 0.33 |
| MPR-437 | 248 St. @ 116 Ave. | 28-Aug-18 | 1.16 | <1 | <2 | 17 | <1 | 0.34 |
| MPR-437 | 248 St. @ 116 Ave. | 4-Sep-18 | 1 | <1 | <2 | 15 | <1 | 0.29 |
| MPR-437 | 248 St. @ 116 Ave. | 11-Sep-18 | 0.9 | <1 | 4 | 16 | <1 | 0.27 |
| MPR-437 | 248 St. @ 116 Ave. | 18-Sep-18 | 0.96 | <1 | 110 | 15 | <1 | 0.27 |
| MPR-437 | 248 St. @ 116 Ave. | 25-Sep-18 | 0.85 | <1 | <2 | 14 | <1 | 0.28 |
| MPR-437 | 248 St. @ 116 Ave. | 2-Oct-18 | 0.94 | <1 | <2 | 14 | <1 | 0.4 |
| MPR-437 | 248 St. @ 116 Ave. | 9-Oct-18 | 1.22 | <1 | <2 | 13 | <1 | 0.35 |
| MPR-437 | 248 St. @ 116 Ave. | 16-Oct-18 | 1.1 | <1 | <2 | 12 | <1 | 0.25 |
| MPR-437 | 248 St. @ 116 Ave. | 23-Oct-18 | 1.19 | <1 | 2 | 12 | <1 | 0.3 |
| MPR-437 | 248 St. @ 116 Ave. | 30-Oct-18 | 0.9 | <1 | <2 | 13 | <1 | 0.27 |
| MPR-437 | 248 St. @ 116 Ave. | 6-Nov-18 | 0.77 | <1 | <2 | 11 | <1 | 0.75 |
| MPR-437 | 248 St. @ 116 Ave. | 13-Nov-18 | 1.15 | <1 | <2 | 10 | <1 | 1.1 |
| MPR-437 | 248 St. @ 116 Ave. | 20-Nov-18 | 0.69 | <1 | 2 | 9 | <1 | 0.62 |
| MPR-437 | 248 St. @ 116 Ave. | 27-Nov-18 | 0.58 | <1 | <2 | 9 | <1 | 0.68 |
| MPR-437 | 248 St. @ 116 Ave. | 4-Dec-18 | 0.93 | <1 | 2 | 8 | <1 | 0.67 |
| MPR-437 | 248 St. @ 116 Ave. | 11-Dec-18 | 0.95 | <1 | <2 | 7 | <1 | 0.54 |
| MPR-437 | 248 St. @ 116 Ave. | 18-Dec-18 | 1.07 | <1 | NA | 7 | <1 | 0.52 |
| MPR-437 | 248 St. @ 116 Ave. | 27-Dec-18 | 1.06 | <1 | NA | 7 | <1 | 0.33 |
| MPR-438 | 125 Ave. West off 256 St. | 2-Jan-18 | 0.94 | <1 | <2 | 5 | <1 | 0.87 |
| MPR-438 | 125 Ave. West off 256 St. | 9-Jan-18 | 0.99 | <1 | <2 | 5 | <1 | 0.62 |
| MPR-438 | 125 Ave. West off 256 St. | 16-Jan-18 | 1.03 | <1 | <2 | 6 | <1 | 0.52 |
| MPR-438 | 125 Ave. West off 256 St. | 23-Jan-18 | 0.93 | <1 | <2 | 6 | <1 | 0.4 |
| MPR-438 | 125 Ave. West off 256 St. | 30-Jan-18 | 1.1 | <1 | 2 | 6 | <1 | 0.41 |
| MPR-438 | 125 Ave. West off 256 St. | 6-Feb-18 | 1.05 | <1 | <2 | 6 | <1 | 0.7 |
| MPR-438 | 125 Ave. West off 256 St. | 13-Feb-18 | 0.96 | <1 | <2 | 6 | <1 | 0.96 |
| MPR-438 | 125 Ave. West off 256 St. | 20-Feb-18 | 1.24 | <1 | <2 | 5 | <1 | 0.49 |
| MPR-438 | 125 Ave. West off 256 St. | 27-Feb-18 | 1.15 | <1 | <2 | 5 | <1 | 0.4 |
| MPR-438 | 125 Ave. West off 256 St. | 6-Mar-18 | 0.94 | <1 | <2 | 5 | <1 | 0.38 |
| MPR-438 | 125 Ave. West off 256 St. | 13-Mar-18 | 1.06 | <1 | <2 | 6 | <1 | 0.36 |
| MPR-438 | 125 Ave. West off 256 St. | 20-Mar-18 | 0.89 | <1 | <2 | 6 | <1 | 0.36 |
| MPR-438 | 125 Ave. West off 256 St. | 27-Mar-18 | 1.11 | <1 | LA | 6 | <1 | 0.39 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-438 | 125 Ave. West off 256 St. | 3-Apr-18 | 1.07 | <1 | <2 | 7 | <1 | 0.47 |
| MPR-438 | 125 Ave. West off 256 St. | 10-Apr-18 | 0.98 | <1 | <2 | 7 | <1 | 0.35 |
| MPR-438 | 125 Ave. West off 256 St. | 17-Apr-18 | 1 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-438 | 125 Ave. West off 256 St. | 24-Apr-18 | 0.82 | <1 | <2 | 8 | <1 | 0.46 |
| MPR-438 | 125 Ave. West off 256 St. | 1-May-18 | 0.85 | <1 | 2 | 9 | <1 | 0.35 |
| MPR-438 | 125 Ave. West off 256 St. | 8-May-18 | 1.01 | <1 | <2 | 10 | 1 | 0.77 |
| MPR-438 | 125 Ave. West off 256 St. | 15-May-18 | 1.19 | <1 | <2 | 11 | <1 | 0.37 |
| MPR-438 | 125 Ave. West off 256 St. | 22-May-18 | 1.06 | <1 | <2 | 11 | <1 | 0.37 |
| MPR-438 | 125 Ave. West off 256 St. | 29-May-18 | 1.15 | <1 | <2 | 12 | <1 | 2.8 |
| MPR-438 | 125 Ave. West off 256 St. | 5-Jun-18 | 0.88 | <1 | <2 | 12 | <1 | 0.3 |
| MPR-438 | 125 Ave. West off 256 St. | 12-Jun-18 | 1.17 | <1 | <2 | 12 | <1 | 0.24 |
| MPR-438 | 125 Ave. West off 256 St. | 19-Jun-18 | 1.2 | <1 | <2 | 14 | <1 | 0.11 |
| MPR-438 | 125 Ave. West off 256 St. | 26-Jun-18 | 1.08 | <1 | <2 | 13 | <1 | 0.49 |
| MPR-438 | 125 Ave. West off 256 St. | 3-Jul-18 | 0.98 | <1 | <2 | 13 | <1 | 0.17 |
| MPR-438 | 125 Ave. West off 256 St. | 10-Jul-18 | 0.89 | <1 | <2 | 14 | <1 | 0.33 |
| MPR-438 | 125 Ave. West off 256 St. | 17-Jul-18 | 0.91 | <1 | <2 | 14 | <1 | 0.32 |
| MPR-438 | 125 Ave. West off 256 St. | 24-Jul-18 | 0.87 | <1 | <2 | 15 | <1 | 0.26 |
| MPR-438 | 125 Ave. West off 256 St. | 31-Jul-18 | 1.21 | <1 | <2 | 15 | <1 | 0.23 |
| MPR-438 | 125 Ave. West off 256 St. | 7-Aug-18 | 0.7 | <1 | 2 | 22 | <1 | 0.39 |
| MPR-438 | 125 Ave. West off 256 St. | 14-Aug-18 | 0.75 | <1 | <2 | 17 | <1 | 0.2 |
| MPR-438 | 125 Ave. West off 256 St. | 21-Aug-18 | 0.98 | <1 | <2 | 17 | <1 | 0.3 |
| MPR-438 | 125 Ave. West off 256 St. | 28-Aug-18 | 0.76 | <1 | 6 | 16 | <1 | 0.34 |
| MPR-438 | 125 Ave. West off 256 St. | 4-Sep-18 | 0.87 | <1 | <2 | 16 | <1 | 0.27 |
| MPR-438 | 125 Ave. West off 256 St. | 11-Sep-18 | 0.87 | <1 | 2 | 16 | <1 | 0.24 |
| MPR-438 | 125 Ave. West off 256 St. | 18-Sep-18 | 0.93 | <1 | <2 | 15 | <1 | 0.3 |
| MPR-438 | 125 Ave. West off 256 St. | 25-Sep-18 | 0.64 | <1 | <2 | 15 | <1 | 0.3 |
| MPR-438 | 125 Ave. West off 256 St. | 2-Oct-18 | 1.04 | <1 | LA | 14 | <1 | 0.34 |
| MPR-438 | 125 Ave. West off 256 St. | 9-Oct-18 | 0.72 | <1 | <2 | 13 | <1 | 0.27 |
| MPR-438 | 125 Ave. West off 256 St. | 16-Oct-18 | 1 | <1 | <2 | 13 | <1 | 0.28 |
| MPR-438 | 125 Ave. West off 256 St. | 23-Oct-18 | 1.03 | <1 | <2 | 12 | <1 | 0.23 |
| MPR-438 | 125 Ave. West off 256 St. | 30-Oct-18 | 0.79 | <1 | 2 | 12 | <1 | 0.23 |
| MPR-438 | 125 Ave. West off 256 St. | 6-Nov-18 | 0.76 | <1 | 2 | 11 | <1 | 0.4 |
| MPR-438 | 125 Ave. West off 256 St. | 13-Nov-18 | 1.09 | <1 | <2 | 10 | <1 | 0.85 |
| MPR-438 | 125 Ave. West off 256 St. | 20-Nov-18 | 0.75 | <1 | <2 | 10 | <1 | 0.65 |
| MPR-438 | 125 Ave. West off 256 St. | 27-Nov-18 | 0.86 | <1 | <2 | 9 | <1 | 0.67 |
| MPR-438 | 125 Ave. West off 256 St. | 4-Dec-18 | 0.79 | <1 | <2 | 9 | <1 | 0.78 |
| MPR-438 | 125 Ave. West off 256 St. | 11-Dec-18 | 0.76 | <1 | <2 | 7 | <1 | 0.55 |
| MPR-438 | 125 Ave. West off 256 St. | 18-Dec-18 | 1.08 | <1 | NA | 7 | <1 | 0.52 |
| MPR-438 | 125 Ave. West off 256 St. | 27-Dec-18 | 0.96 | <1 | NA | 7 | <1 | 0.33 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|-------------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 2-Jan-18 | 0.7 | <1 | <2 | 5 | <1 | 0.58 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 9-Jan-18 | 0.65 | <1 | <2 | 5 | <1 | 0.48 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 16-Jan-18 | 1.17 | <1 | 2 | 6 | <1 | 0.5 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 23-Jan-18 | 0.76 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 30-Jan-18 | 1.34 | <1 | <2 | 6 | <1 | 0.47 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 6-Feb-18 | 1.11 | <1 | <2 | 7 | <1 | 0.53 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 13-Feb-18 | 1.15 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 20-Feb-18 | 1.44 | <1 | 2 | 5 | <1 | 0.38 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 27-Feb-18 | 0.98 | <1 | <2 | 5 | <1 | 0.39 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 6-Mar-18 | 0.9 | <1 | <2 | 5 | <1 | 0.35 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 13-Mar-18 | 1.31 | <1 | <2 | 6 | <1 | 0.35 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 20-Mar-18 | 0.79 | <1 | <2 | 6 | <1 | 0.32 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 27-Mar-18 | 0.95 | <1 | <2 | 6 | <1 | 0.36 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 3-Apr-18 | 1.25 | <1 | <2 | 7 | <1 | 0.42 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 10-Apr-18 | 1.01 | <1 | <2 | 7 | <1 | 0.32 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 17-Apr-18 | 1.14 | <1 | 2 | . 8 | <1 | 0.33 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 24-Apr-18 | 0.77 | <1 | <2 | 9 | <1 | 0.33 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 1-May-18 | 1.19 | <1 | 2 | 10 | <1 | 0.3 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 8-May-18 | 0.92 | <1 | <2 | 12 | <1 | 0.39 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 15-May-18 | 1.32 | <1 | <2 | 13 | <1 | 0.34 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 22-May-18 | 0.69 | <1 | <2 | 14 | <1 | 0.38 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 29-May-18 | 1.04 | <1 | <2 | 14 | <1 | 0.26 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 5-Jun-18 | 0.59 | <1 | <2 | 14 | <1 | 0.29 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 12-Jun-18 | 1.21 | <1 | <2 | 14 | <1 | 0.21 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 19-Jun-18 | 1.25 | <1 | <2 | 15 | <1 | 0.3 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 26-Jun-18 | 0.73 | <1 | <2 | 16 | <1 | 0.35 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 3-Jul-18 | 1 | <1 | <2 | 15 | <1 | 0.23 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 10-Jul-18 | 0.62 | <1 | <2 | 16 | <1 | 0.24 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 17-Jul-18 | 0.62 | <1 | <2 | 17 | <1 | 0.36 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 24-Jul-18 | 0.67 | <1 | 44 | 19 | <1 | 0.22 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 31-Jul-18 | 0.7 | <1 | 100 | 20 | <1 | 0.21 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 7-Aug-18 | 0.43 | <1 | 550 | 20 | <1 | 0.24 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 14-Aug-18 | 0.54 | <1 | <2 | 19 | <1 | 0.25 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 21-Aug-18 | 1.18 | <1 | 2 | 17 | <1 | 0.33 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 28-Aug-18 | 0.7 | <1 | <2 | 17 | <1 | 0.35 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 4-Sep-18 | 0.99 | <1 | <2 | 17 | <1 | 0.32 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 11-Sep-18 | 0.95 | <1 | <2 | 16 | <1 | 0.27 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 18-Sep-18 | 0.96 | <1 | <2 | 15 | <1 | 0.27 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 25-Sep-18 | 0.73 | <1 | 2 | 15 | <1 | 0.25 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|-------------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 2-Oct-18 | 1.12 | <1 | <2 | 15 | <1 | 0.27 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 9-Oct-18 | 0.83 | <1 | <2 | 13 | <1 | 0.38 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 16-Oct-18 | 0.7 | <1 | 2 | 12 | <1 | 0.3 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 23-Oct-18 | 0.81 | <1 | 2 | 12 | <1 | 0.29 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 30-Oct-18 | 0.86 | <1 | 32 | 12 | <1 | 0.25 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 6-Nov-18 | 0.8 | <1 | <2 | 12 | <1 | 0.43 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 13-Nov-18 | 0.86 | <1 | <2 | 10 | <1 | 0.73 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 20-Nov-18 | 0.55 | <1 | 4 | 9 | <1 | 0.6 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 27-Nov-18 | 0.76 | <1 | <2 | 9 | <1 | 0.65 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 4-Dec-18 | 0.54 | <1 | <2 | 8 | <1 | 0.61 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 11-Dec-18 | 0.85 | <1 | <2 | 6 | <1 | 0.47 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 18-Dec-18 | 0.99 | <1 | NA | 7 | <1 | 0.51 |
| MPR-439 | 130 Ave. @ 251A St. (W. of 256 St.) | 27-Dec-18 | 0.71 | <1 | NA | 7 | <1 | 0.36 |
| MPR-440 | 232 St. @ 117 Ave. | 2-Jan-18 | 1.01 | <1 | <2 | 4 | <1 | 0.56 |
| MPR-440 | 232 St. @ 117 Ave. | 9-Jan-18 | 0.78 | <1 | <2 | 5 | <1 | 0.54 |
| MPR-440 | 232 St. @ 117 Ave. | 16-Jan-18 | 0.97 | <1 | <2 | 5 | <1 | 0.53 |
| MPR-440 | 232 St. @ 117 Ave. | 23-Jan-18 | 0.85 | <1 | <2 | 5 | <1 | 0.45 |
| MPR-440 | 232 St. @ 117 Ave. | 30-Jan-18 | 0.99 | <1 | <2 | 5 | <1 | 0.49 |
| MPR-440 | 232 St. @ 117 Ave. | 6-Feb-18 | 0.89 | <1 | <2 | 5 | <1 | 0.6 |
| MPR-440 | 232 St. @ 117 Ave. | 13-Feb-18 | 0.97 | <1 | <2 | 5 | <1 | 0.45 |
| MPR-440 | 232 St. @ 117 Ave. | 20-Feb-18 | 1.09 | <1 | <2 | 5 | <1 | 0.43 |
| MPR-440 | 232 St. @ 117 Ave. | 27-Feb-18 | 1.01 | <1 | <2 | 5 | <1 | 0.41 |
| MPR-440 | 232 St. @ 117 Ave. | 6-Mar-18 | 1.06 | <1 | <2 | 5 | <1 | 0.34 |
| MPR-440 | 232 St. @ 117 Ave. | 13-Mar-18 | 1.02 | <1 | <2 | 6 | <1 | 0.4 |
| MPR-440 | 232 St. @ 117 Ave. | 20-Mar-18 | 0.87 | <1 | <2 | 6 | <1 | 0.47 |
| MPR-440 | 232 St. @ 117 Ave. | 27-Mar-18 | 1.17 | <1 | <2 | 6 | <1 | 0.38 |
| MPR-440 | 232 St. @ 117 Ave. | 3-Apr-18 | 1.08 | <1 | 2 | 6 | <1 | 0.47 |
| MPR-440 | 232 St. @ 117 Ave. | 10-Apr-18 | 0.95 | <1 | <2 | 7 | <1 | 0.42 |
| MPR-440 | 232 St. @ 117 Ave. | 17-Apr-18 | 0.99 | <1 | <2 | 7 | <1 | 0.44 |
| MPR-440 | 232 St. @ 117 Ave. | 24-Apr-18 | 0.97 | <1 | <2 | 6 | <1 | 0.5 |
| MPR-440 | 232 St. @ 117 Ave. | 1-May-18 | 1.04 | <1 | <2 | 8 | <1 | 0.36 |
| MPR-440 | 232 St. @ 117 Ave. | 8-May-18 | 0.87 | <1 | <2 | 8 | <1 | 0.41 |
| MPR-440 | 232 St. @ 117 Ave. | 15-May-18 | 0.82 | <1 | <2 | 9 | <1 | 0.48 |
| MPR-440 | 232 St. @ 117 Ave. | 22-May-18 | 0.68 | <1 | <2 | 10 | <1 | 0.33 |
| MPR-440 | 232 St. @ 117 Ave. | 29-May-18 | 0.77 | <1 | <2 | 10 | <1 | 0.33 |
| MPR-440 | 232 St. @ 117 Ave. | 5-Jun-18 | 0.7 | <1 | 4 | 12 | <1 | 6.1 |
| MPR-440 | 232 St. @ 117 Ave. | 12-Jun-18 | 0.91 | <1 | <2 | 11 | <1 | 0.24 |
| MPR-440 | 232 St. @ 117 Ave. | 19-Jun-18 | 1.04 | <1 | <2 | 11 | <1 | 0.58 |
| MPR-440 | 232 St. @ 117 Ave. | 26-Jun-18 | 0.63 | <1 | <2 | 11 | <1 | 0.34 |

| Sample name | Sample reported name | Sampled Date | Cl₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------|-----------------|---------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-440 | 232 St. @ 117 Ave. | 3-Jul-18 | 0.88 | <1 | 2 | 11 | <1 | 0.23 |
| MPR-440 | 232 St. @ 117 Ave. | 10-Jul-18 | 0.81 | <1 | <2 | 13 | <1 | 0.28 |
| MPR-440 | 232 St. @ 117 Ave. | 17-Jul-18 | 0.73 | <1 | <2 | 13 | <1 | 0.42 |
| MPR-440 | 232 St. @ 117 Ave. | 24-Jul-18 | 0.9 | <1 | <2 | 13 | <1 | 0.6 |
| MPR-440 | 232 St. @ 117 Ave. | 31-Jul-18 | 0.86 | <1 | <2 | 14 | <1 | 0.27 |
| MPR-440 | 232 St. @ 117 Ave. | 7-Aug-18 | 0.73 | <1 | <2 | 15 | <1 | 0.27 |
| MPR-440 | 232 St. @ 117 Ave. | 14-Aug-18 | 0.46 | <1 | <2 | 16 | <1 | 0.35 |
| MPR-440 | 232 St. @ 117 Ave. | 21-Aug-18 | 0.82 | <1 | <2 | 15 | <1 | 0.28 |
| MPR-440 | 232 St. @ 117 Ave. | 28-Aug-18 | 0.92 | <1 | <2 | 15 | <1 | 0.33 |
| MPR-440 | 232 St. @ 117 Ave. | 4-Sep-18 | 0.95 | <1 | <2 | 15 | <1 | 0.3 |
| MPR-440 | 232 St. @ 117 Ave. | 11-Sep-18 | 0.76 | <1 | 2 | 16 | <1 | 0.31 |
| MPR-440 | 232 St. @ 117 Ave. | 18-Sep-18 | 0.69 | <1 | 2 | 13 | <1 | 0.39 |
| MPR-440 | 232 St. @ 117 Ave. | 25-Sep-18 | 0.84 | <1 | <2 | 13 | <1 | 0.4 |
| MPR-440 | 232 St. @ 117 Ave. | 2-Oct-18 | 0.9 | <1 | <2 | 13 | <1 | 0.51 |
| MPR-440 | 232 St. @ 117 Ave. | 9-Oct-18 | 0.89 | <1 | <2 | 13 | <1 | 0.34 |
| MPR-440 | 232 St. @ 117 Ave. | 16-Oct-18 | 0.8 | <1 | 4 | 12 | <1 | 0.28 |
| MPR-440 | 232 St. @ 117 Ave. | 23-Oct-18 | 0.97 | <1 | 2 | 12 | <1 | 0.34 |
| MPR-440 | 232 St. @ 117 Ave. | 30-Oct-18 | 0.7 | <1 | 2 | 12 | <1 | 0.27 |
| MPR-440 | 232 St. @ 117 Ave. | 6-Nov-18 | 0.85 | <1 | <2 | 10 | <1 | 1.2 |
| MPR-440 | 232 St. @ 117 Ave. | 13-Nov-18 | 0.89 | <1 | <2 | 10 | <1 | 0.85 |
| MPR-440 | 232 St. @ 117 Ave. | 20-Nov-18 | 1.09 | <1 | <2 | 9 | <1 | 0.56 |
| MPR-440 | 232 St. @ 117 Ave. | 27-Nov-18 | 1.05 | <1 | <2 | 9 | <1 | 0.62 |
| MPR-440 | 232 St. @ 117 Ave. | 4-Dec-18 | 0.91 | <1 | <2 | 7 | <1 | 0.8 |
| MPR-440 | 232 St. @ 117 Ave. | 11-Dec-18 | 0.81 | <1 | <2 | 7 | <1 | 0.59 |
| MPR-440 | 232 St. @ 117 Ave. | 18-Dec-18 | 0.74 | <1 | NA | 7 | <1 | 0.5 |
| MPR-440 | 232 St. @ 117 Ave. | 27-Dec-18 | 0.72 | <1 | NA | 6 | <1 | 0.53 |
| MPR-441 | 132 Ave. @ Cedar Way | 2-Jan-18 | 0.22 | <1 | 10 | 5 | <1 | 0.87 |
| MPR-441 | 132 Ave. @ Cedar Way | 9-Jan-18 | 0.2 | <1 | <2 | 6 | <1 | 0.54 |
| MPR-441 | 132 Ave. @ Cedar Way | 16-Jan-18 | 0.28 | <1 | 48 | 6 | <1 | 0.39 |
| MPR-441 | 132 Ave. @ Cedar Way | 23-Jan-18 | 0.15 | <1 | <2 | 6 | <1 | 0.39 |
| MPR-441 | 132 Ave. @ Cedar Way | 30-Jan-18 | 0.29 | <1 | 6 | 7 | <1 | 0.41 |
| MPR-441 | 132 Ave. @ Cedar Way | 6-Feb-18 | 0.26 | <1 | 4 | 7 | <1 | 0.52 |
| MPR-441 | 132 Ave. @ Cedar Way | 13-Feb-18 | 0.27 | <1 | <2 | 7 | <1 | 0.38 |
| MPR-441 | 132 Ave. @ Cedar Way | 20-Feb-18 | 0.29 | <1 | <2 | 6 | <1 | 0.38 |
| MPR-441 | 132 Ave. @ Cedar Way | 27-Feb-18 | 0.45 | <1 | <2 | 5 | <1 | 0.32 |
| MPR-441 | 132 Ave. @ Cedar Way | 6-Mar-18 | 0.38 | <1 | <2 | 6 | <1 | 0.32 |
| MPR-441 | 132 Ave. @ Cedar Way | 13-Mar-18 | 0.37 | <1 | <2 | 6 | <1 | 0.34 |
| MPR-441 | 132 Ave. @ Cedar Way | 20-Mar-18 | 0.28 | <1 | 2 | 7 | <1 | 0.34 |
| MPR-441 | 132 Ave. @ Cedar Way | 27-Mar-18 | 0.42 | <1 | <2 | 7 | <1 | 0.33 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-441 | 132 Ave. @ Cedar Way | 3-Apr-18 | 0.26 | <1 | 2 | 8 | <1 | 0.38 |
| MPR-441 | 132 Ave. @ Cedar Way | 10-Apr-18 | 0.31 | <1 | 2 | 9 | <1 | 0.33 |
| MPR-441 | 132 Ave. @ Cedar Way | 17-Apr-18 | 0.36 | <1 | <2 | 9 | <1 | 0.32 |
| MPR-441 | 132 Ave. @ Cedar Way | 24-Apr-18 | 0.28 | <1 | 2 | 9 | <1 | 0.38 |
| MPR-441 | 132 Ave. @ Cedar Way | 1-May-18 | 0.26 | <1 | <2 | 11 | <1 | 0.29 |
| MPR-441 | 132 Ave. @ Cedar Way | 8-May-18 | 0.28 | <1 | 4 | 12 | <1 | 0.42 |
| MPR-441 | 132 Ave. @ Cedar Way | 15-May-18 | 0.25 | <1 | 2 | 14 | <1 | 0.26 |
| MPR-441 | 132 Ave. @ Cedar Way | 22-May-18 | 0.16 | <1 | 22 | 15 | <1 | 0.37 |
| MPR-441 | 132 Ave. @ Cedar Way | 29-May-18 | 0.08 | <1 | 36 | 16 | <1 | 0.29 |
| MPR-441 | 132 Ave. @ Cedar Way | 5-Jun-18 | 0.18 | <1 | 130 | 16 | <1 | 0.22 |
| MPR-441 | 132 Ave. @ Cedar Way | 12-Jun-18 | 0.1 | <1 | 220 | 15 | <1 | 0.25 |
| MPR-441 | 132 Ave. @ Cedar Way | 19-Jun-18 | 0.55 | <1 | 52 | 16 | <1 | 0.33 |
| MPR-441 | 132 Ave. @ Cedar Way | 26-Jun-18 | 0.28 | <1 | 270 | 17 | <1 | 0.3 |
| MPR-441 | 132 Ave. @ Cedar Way | 3-Jul-18 | 0.13 | <1 | 210 | 16 | <1 | 0.17 |
| MPR-441 | 132 Ave. @ Cedar Way | 10-Jul-18 | 0.07 | <1 | 170 | 17 | <1 | 0.23 |
| MPR-441 | 132 Ave. @ Cedar Way | 17-Jul-18 | 0.21 | <1 | 56 | 18 | <1 | 0.57 |
| MPR-441 | 132 Ave. @ Cedar Way | 24-Jul-18 | 0.11 | <1 | 30 | 18 | <1 | 0.3 |
| MPR-441 | 132 Ave. @ Cedar Way | 31-Jul-18 | 0.12 | <1 | 56 | 19 | <1 | 0.29 |
| MPR-441 | 132 Ave. @ Cedar Way | 7-Aug-18 | 0.05 | <1 | 40 | 19 | <1 | 0.38 |
| MPR-441 | 132 Ave. @ Cedar Way | 14-Aug-18 | 0.18 | <1 | 280 | 20 | <1 | 0.24 |
| MPR-441 | 132 Ave. @ Cedar Way | 21-Aug-18 | 0.05 | <1 | 280 | 20 | <1 | 0.25 |
| MPR-441 | 132 Ave. @ Cedar Way | 28-Aug-18 | 0.09 | <1 | 270 | 19 | <1 | 0.21 |
| MPR-441 | 132 Ave. @ Cedar Way | 4-Sep-18 | 0.13 | <1 | 180 | 19 | <1 | 0.22 |
| MPR-441 | 132 Ave. @ Cedar Way | 11-Sep-18 | 0.62 | <1 | <2 | 16 | <1 | 0.21 |
| MPR-441 | 132 Ave. @ Cedar Way | 18-Sep-18 | 0.55 | <1 | 2 | 13 | <1 | 0.32 |
| MPR-441 | 132 Ave. @ Cedar Way | 25-Sep-18 | 0.59 | <1 | 2 | 14 | <1 | 0.31 |
| MPR-441 | 132 Ave. @ Cedar Way | 2-Oct-18 | 0.66 | <1 | <2 | 14 | <1 | 0.3 |
| MPR-441 | 132 Ave. @ Cedar Way | 9-Oct-18 | 0.34 | <1 | <2 | 13 | <1 | 0.39 |
| MPR-441 | 132 Ave. @ Cedar Way | 16-Oct-18 | 0.52 | <1 | <2 | 12 | <1 | 0.27 |
| MPR-441 | 132 Ave. @ Cedar Way | 23-Oct-18 | 0.8 | <1 | <2 | 12 | <1 | 0.24 |
| MPR-441 | 132 Ave. @ Cedar Way | 30-Oct-18 | 0.55 | <1 | <2 | 12 | <1 | 0.24 |
| MPR-441 | 132 Ave. @ Cedar Way | 6-Nov-18 | 0.57 | <1 | <2 | 11 | <1 | 0.85 |
| MPR-441 | 132 Ave. @ Cedar Way | 13-Nov-18 | 0.75 | <1 | <2 | 10 | <1 | 0.77 |
| MPR-441 | 132 Ave. @ Cedar Way | 20-Nov-18 | 0.75 | <1 | <2 | 8 | <1 | 0.68 |
| MPR-441 | 132 Ave. @ Cedar Way | 27-Nov-18 | 0.8 | <1 | <2 | 9 | <1 | 0.61 |
| MPR-441 | 132 Ave. @ Cedar Way | 4-Dec-18 | 0.64 | <1 | <2 | 8 | <1 | 0.58 |
| MPR-441 | 132 Ave. @ Cedar Way | 11-Dec-18 | 0.81 | <1 | <2 | 8 | <1 | 0.51 |
| MPR-441 | 132 Ave. @ Cedar Way | 18-Dec-18 | 0.77 | <1 | NA | 7 | <1 | 0.54 |
| MPR-441 | 132 Ave. @ Cedar Way | 27-Dec-18 | 0.74 | <1 | NA | 6 | <1 | 0.36 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-442 | Princess St. @ Ditton St. | 2-Jan-18 | 0.47 | <1 | <2 | 6 | <1 | 0.56 |
| MPR-442 | Princess St. @ Ditton St. | 9-Jan-18 | 0.54 | <1 | <2 | 6 | <1 | 0.55 |
| MPR-442 | Princess St. @ Ditton St. | 16-Jan-18 | 0.74 | <1 | 2 | 6 | <1 | 0.67 |
| MPR-442 | Princess St. @ Ditton St. | 23-Jan-18 | 0.63 | <1 | <2 | 6 | <1 | 0.39 |
| MPR-442 | Princess St. @ Ditton St. | 30-Jan-18 | 0.63 | <1 | <2 | 6 | <1 | 0.44 |
| MPR-442 | Princess St. @ Ditton St. | 6-Feb-18 | 0.65 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-442 | Princess St. @ Ditton St. | 13-Feb-18 | 0.64 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-442 | Princess St. @ Ditton St. | 20-Feb-18 | 0.73 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-442 | Princess St. @ Ditton St. | 27-Feb-18 | 0.72 | <1 | <2 | 6 | <1 | 0.39 |
| MPR-442 | Princess St. @ Ditton St. | 6-Mar-18 | 0.73 | <1 | <2 | 6 | <1 | 0.3 |
| MPR-442 | Princess St. @ Ditton St. | 13-Mar-18 | 0.86 | <1 | <2 | 6 | <1 | 0.34 |
| MPR-442 | Princess St. @ Ditton St. | 20-Mar-18 | 0.65 | <1 | <2 | 7 | <1 | 0.31 |
| MPR-442 | Princess St. @ Ditton St. | 27-Mar-18 | 0.73 | <1 | <2 | 7 | <1 | 0.3 |
| MPR-442 | Princess St. @ Ditton St. | 3-Apr-18 | 0.63 | <1 | 4 | 8 | <1 | 0.39 |
| MPR-442 | Princess St. @ Ditton St. | 10-Apr-18 | 0.67 | <1 | <2 | 8 | <1 | 0.31 |
| MPR-442 | Princess St. @ Ditton St. | 17-Apr-18 | 0.61 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-442 | Princess St. @ Ditton St. | 24-Apr-18 | 0.71 | <1 | <2 | 9 | <1 | 0.33 |
| MPR-442 | Princess St. @ Ditton St. | 1-May-18 | 0.68 | <1 | <2 | 10 | <1 | 0.77 |
| MPR-442 | Princess St. @ Ditton St. | 8-May-18 | 0.66 | <1 | <2 | 11 | <1 | 0.43 |
| MPR-442 | Princess St. @ Ditton St. | 15-May-18 | 0.62 | <1 | <2 | 12 | <1 | 0.33 |
| MPR-442 | Princess St. @ Ditton St. | 22-May-18 | 0.56 | <1 | <2 | 11 | <1 | 0.27 |
| MPR-442 | Princess St. @ Ditton St. | 29-May-18 | 0.77 | <1 | <2 | 12 | <1 | 0.27 |
| MPR-442 | Princess St. @ Ditton St. | 5-Jun-18 | 0.72 | <1 | <2 | 12 | <1 | 0.22 |
| MPR-442 | Princess St. @ Ditton St. | 12-Jun-18 | 0.76 | <1 | <2 | 12 | <1 | 0.25 |
| MPR-442 | Princess St. @ Ditton St. | 19-Jun-18 | 0.88 | <1 | <2 | 13 | <1 | 0.27 |
| MPR-442 | Princess St. @ Ditton St. | 26-Jun-18 | 0.77 | <1 | <2 | 13 | <1 | 0.27 |
| MPR-442 | Princess St. @ Ditton St. | 3-Jul-18 | 0.65 | <1 | <2 | 13 | <1 | 0.84 |
| MPR-442 | Princess St. @ Ditton St. | 10-Jul-18 | 0.73 | <1 | <2 | 14 | <1 | 0.2 |
| MPR-442 | Princess St. @ Ditton St. | 17-Jul-18 | 0.82 | <1 | <2 | 14 | <1 | 0.34 |
| MPR-442 | Princess St. @ Ditton St. | 24-Jul-18 | 0.82 | <1 | 80 | 14 | <1 | 5 |
| MPR-442 | Princess St. @ Ditton St. | 31-Jul-18 | 0.76 | <1 | <2 | 15 | <1 | 0.22 |
| MPR-442 | Princess St. @ Ditton St. | 7-Aug-18 | 0.61 | <1 | <2 | 16 | <1 | 3.3 |
| MPR-442 | Princess St. @ Ditton St. | 14-Aug-18 | 0.73 | <1 | <2 | 16 | <1 | 0.21 |
| MPR-442 | Princess St. @ Ditton St. | 21-Aug-18 | 0.73 | <1 | <2 | 16 | <1 | 0.25 |
| MPR-442 | Princess St. @ Ditton St. | 28-Aug-18 | 0.82 | <1 | <2 | 16 | <1 | 0.29 |
| MPR-442 | Princess St. @ Ditton St. | 4-Sep-18 | 0.87 | <1 | 2 | 16 | <1 | 0.27 |
| MPR-442 | Princess St. @ Ditton St. | 11-Sep-18 | 0.59 | <1 | <2 | 16 | <1 | 0.28 |
| MPR-442 | Princess St. @ Ditton St. | 18-Sep-18 | 0.69 | <1 | 2 | 14 | <1 | 0.29 |
| MPR-442 | Princess St. @ Ditton St. | 25-Sep-18 | 0.77 | <1 | 2 | 15 | <1 | 0.29 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-442 | Princess St. @ Ditton St. | 2-Oct-18 | 0.61 | <1 | <2 | 15 | <1 | 0.27 |
| MPR-442 | Princess St. @ Ditton St. | 9-Oct-18 | 0.65 | <1 | <2 | 13 | <1 | 0.26 |
| MPR-442 | Princess St. @ Ditton St. | 16-Oct-18 | 0.61 | <1 | <2 | 12 | <1 | 0.32 |
| MPR-442 | Princess St. @ Ditton St. | 23-Oct-18 | 0.64 | <1 | <2 | 12 | <1 | 0.34 |
| MPR-442 | Princess St. @ Ditton St. | 30-Oct-18 | 0.56 | <1 | <2 | 13 | <1 | 0.25 |
| MPR-442 | Princess St. @ Ditton St. | 6-Nov-18 | 0.51 | <1 | <2 | 12 | <1 | 0.92 |
| MPR-442 | Princess St. @ Ditton St. | 13-Nov-18 | 0.8 | <1 | <2 | 11 | <1 | 0.74 |
| MPR-442 | Princess St. @ Ditton St. | 20-Nov-18 | 0.73 | <1 | <2 | 10 | <1 | 0.56 |
| MPR-442 | Princess St. @ Ditton St. | 27-Nov-18 | 0.86 | <1 | <2 | 10 | <1 | 1.2 |
| MPR-442 | Princess St. @ Ditton St. | 4-Dec-18 | 0.68 | <1 | 2 | 9 | <1 | 0.63 |
| MPR-442 | Princess St. @ Ditton St. | 11-Dec-18 | 0.69 | <1 | <2 | 8 | <1 | 0.52 |
| MPR-442 | Princess St. @ Ditton St. | 18-Dec-18 | 0.65 | <1 | NA | 8 | <1 | 0.47 |
| MPR-442 | Princess St. @ Ditton St. | 27-Dec-18 | 0.66 | <1 | NA | 7 | <1 | 0.43 |
| MPR-443 | 216 St. @ Donovan | 2-Jan-18 | 0.82 | <1 | <2 | 5 | <1 | 0.64 |
| MPR-443 | 216 St. @ Donovan | 9-Jan-18 | 0.67 | <1 | <2 | 6 | <1 | 0.56 |
| MPR-443 | 216 St. @ Donovan | 16-Jan-18 | 0.93 | <1 | <2 | 6 | <1 | 0.4 |
| MPR-443 | 216 St. @ Donovan | 23-Jan-18 | 0.81 | <1 | <2 | 6 | <1 | 0.41 |
| MPR-443 | 216 St. @ Donovan | 30-Jan-18 | 0.9 | <1 | 2 | 6 | <1 | 0.45 |
| MPR-443 | 216 St. @ Donovan | 6-Feb-18 | 0.79 | <1 | <2 | 7 | <1 | 0.7 |
| MPR-443 | 216 St. @ Donovan | 13-Feb-18 | 0.96 | <1 | <2 | 6 | <1 | 0.43 |
| MPR-443 | 216 St. @ Donovan | 20-Feb-18 | 1.02 | <1 | <2 | 6 | <1 | 0.42 |
| MPR-443 | 216 St. @ Donovan | 27-Feb-18 | 0.98 | <1 | <2 | 5 | <1 | 0.35 |
| MPR-443 | 216 St. @ Donovan | 6-Mar-18 | 0.89 | <1 | <2 | 5 | <1 | 0.32 |
| MPR-443 | 216 St. @ Donovan | 13-Mar-18 | 0.86 | <1 | <2 | 6 | <1 | 0.4 |
| MPR-443 | 216 St. @ Donovan | 20-Mar-18 | 0.82 | <1 | <2 | 7 | <1 | 0.34 |
| MPR-443 | 216 St. @ Donovan | 27-Mar-18 | 0.81 | <1 | <2 | 7 | <1 | 0.33 |
| MPR-443 | 216 St. @ Donovan | 3-Apr-18 | 0.95 | <1 | <2 | 7 | <1 | 0.38 |
| MPR-443 | 216 St. @ Donovan | 10-Apr-18 | 0.7 | <1 | <2 | 7 | <1 | 0.38 |
| MPR-443 | 216 St. @ Donovan | 17-Apr-18 | 0.95 | <1 | <2 | 8 | <1 | 0.37 |
| MPR-443 | 216 St. @ Donovan | 24-Apr-18 | 0.78 | <1 | 4 | 7 | <1 | 0.45 |
| MPR-443 | 216 St. @ Donovan | 1-May-18 | 0.99 | <1 | <2 | 9 | <1 | 0.28 |
| MPR-443 | 216 St. @ Donovan | 8-May-18 | 0.89 | <1 | <2 | 9 | <1 | 0.34 |
| MPR-443 | 216 St. @ Donovan | 15-May-18 | 1.05 | <1 | <2 | 10 | <1 | 0.4 |
| MPR-443 | 216 St. @ Donovan | 22-May-18 | 0.66 | <1 | <2 | 12 | <1 | 0.33 |
| MPR-443 | 216 St. @ Donovan | 29-May-18 | 0.71 | <1 | <2 | 13 | <1 | 0.29 |
| MPR-443 | 216 St. @ Donovan | 5-Jun-18 | 0.76 | <1 | <2 | 13 | <1 | 0.2 |
| MPR-443 | 216 St. @ Donovan | 12-Jun-18 | 0.74 | <1 | <2 | 13 | <1 | 0.27 |
| MPR-443 | 216 St. @ Donovan | 19-Jun-18 | 0.88 | <1 | <2 | 13 | <1 | 0.44 |
| MPR-443 | 216 St. @ Donovan | 26-Jun-18 | 0.75 | <1 | <2 | 14 | <1 | 0.25 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-443 | 216 St. @ Donovan | 3-Jul-18 | 0.68 | <1 | <2 | 14 | <1 | 0.21 |
| MPR-443 | 216 St. @ Donovan | 10-Jul-18 | 0.65 | <1 | <2 | 14 | <1 | 0.19 |
| MPR-443 | 216 St. @ Donovan | 17-Jul-18 | 0.81 | <1 | <2 | 14 | <1 | 0.44 |
| MPR-443 | 216 St. @ Donovan | 24-Jul-18 | 0.91 | <1 | 4 | 15 | <1 | 0.5 |
| MPR-443 | 216 St. @ Donovan | 31-Jul-18 | 0.86 | <1 | 2 | 15 | <1 | 0.32 |
| MPR-443 | 216 St. @ Donovan | 7-Aug-18 | 0.69 | <1 | 2 | 16 | <1 | 0.21 |
| MPR-443 | 216 St. @ Donovan | 14-Aug-18 | 0.69 | <1 | <2 | 17 | <1 | 0.35 |
| MPR-443 | 216 St. @ Donovan | 21-Aug-18 | 0.82 | <1 | 2 | 17 | <1 | 0.27 |
| MPR-443 | 216 St. @ Donovan | 28-Aug-18 | 0.9 | <1 | <2 | 17 | <1 | 0.3 |
| MPR-443 | 216 St. @ Donovan | 4-Sep-18 | 0.75 | <1 | 6 | 17 | <1 | 0.23 |
| MPR-443 | 216 St. @ Donovan | 11-Sep-18 | 0.69 | <1 | <2 | 17 | <1 | 0.21 |
| MPR-443 | 216 St. @ Donovan | 18-Sep-18 | 0.62 | <1 | <2 | 15 | <1 | 0.35 |
| MPR-443 | 216 St. @ Donovan | 25-Sep-18 | 0.65 | <1 | 2 | 14 | <1 | 0.31 |
| MPR-443 | 216 St. @ Donovan | 2-Oct-18 | 0.24 | <1 | 8 | 16 | <1 | 0.25 |
| MPR-443 | 216 St. @ Donovan | 9-Oct-18 | 0.28 | <1 | 130 | 14 | <1 | 0.32 |
| MPR-443 | 216 St. @ Donovan | 16-Oct-18 | 0.1 | <1 | 84 | 14 | <1 | 0.25 |
| MPR-443 | 216 St. @ Donovan | 23-Oct-18 | 0.55 | <1 | 12 | 13 | <1 | 0.34 |
| MPR-443 | 216 St. @ Donovan | 30-Oct-18 | 0.26 | <1 | 12 | 13 | <1 | 0.28 |
| MPR-443 | 216 St. @ Donovan | 6-Nov-18 | 0.49 | <1 | <2 | 11 | <1 | 0.96 |
| MPR-443 | 216 St. @ Donovan | 13-Nov-18 | 0.17 | <1 | 6 | 11 | <1 | 0.7 |
| MPR-443 | 216 St. @ Donovan | 20-Nov-18 | 0.87 | <1 | <2 | 10 | <1 | 0.58 |
| MPR-443 | 216 St. @ Donovan | 27-Nov-18 | 0.91 | <1 | <2 | 9 | <1 | 0.59 |
| MPR-443 | 216 St. @ Donovan | 4-Dec-18 | 0.67 | <1 | <2 | 9 | <1 | 0.7 |
| MPR-443 | 216 St. @ Donovan | 11-Dec-18 | 0.77 | <1 | <2 | 7 | <1 | 0.56 |
| MPR-443 | 216 St. @ Donovan | 18-Dec-18 | 0.38 | <1 | NA | 8 | <1 | 0.51 |
| MPR-443 | 216 St. @ Donovan | 27-Dec-18 | 0.27 | <1 | NA | 7 | <1 | 0.56 |
| MPR-444 | Foreman Drive @ 232nd St. | 2-Jan-18 | 0.55 | <1 | 2 | 5 | <1 | 0.56 |
| MPR-444 | Foreman Drive @ 232nd St. | 9-Jan-18 | 0.5 | <1 | <2 | 5 | <1 | 0.47 |
| MPR-444 | Foreman Drive @ 232nd St. | 16-Jan-18 | 0.57 | <1 | <2 | 6 | <1 | 0.48 |
| MPR-444 | Foreman Drive @ 232nd St. | 23-Jan-18 | 0.53 | <1 | LA | 6 | <1 | 0.35 |
| MPR-444 | Foreman Drive @ 232nd St. | 30-Jan-18 | 0.55 | <1 | <2 | 6 | <1 | 0.44 |
| MPR-444 | Foreman Drive @ 232nd St. | 6-Feb-18 | 0.57 | <1 | <2 | 6 | <1 | 0.61 |
| MPR-444 | Foreman Drive @ 232nd St. | 13-Feb-18 | 0.55 | <1 | 2 | 6 | <1 | 0.38 |
| MPR-444 | Foreman Drive @ 232nd St. | 20-Feb-18 | 0.61 | <1 | <2 | 5 | <1 | 0.4 |
| MPR-444 | Foreman Drive @ 232nd St. | 27-Feb-18 | 0.64 | <1 | 2 | 5 | <1 | 0.35 |
| MPR-444 | Foreman Drive @ 232nd St. | 6-Mar-18 | 0.6 | <1 | <2 | 5 | <1 | 0.29 |
| MPR-444 | Foreman Drive @ 232nd St. | 13-Mar-18 | 0.62 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-444 | Foreman Drive @ 232nd St. | 20-Mar-18 | | <1 | <2 | 5 | <1 | 0.28 |
| MPR-444 | Foreman Drive @ 232nd St. | 27-Mar-18 | | <1 | <2 | 7 | <1 | 0.34 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|---------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-444 | Foreman Drive @ 232nd St. | 3-Apr-18 | 0.69 | <1 | <2 | 7 | <1 | 0.41 |
| MPR-444 | Foreman Drive @ 232nd St. | 10-Apr-18 | 0.65 | <1 | <2 | 8 | <1 | 0.35 |
| MPR-444 | Foreman Drive @ 232nd St. | 17-Apr-18 | 0.44 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-444 | Foreman Drive @ 232nd St. | 24-Apr-18 | 0.72 | <1 | 4 | 8 | <1 | 0.33 |
| MPR-444 | Foreman Drive @ 232nd St. | 1-May-18 | 0.72 | <1 | 2 | 9 | <1 | 0.29 |
| MPR-444 | Foreman Drive @ 232nd St. | 8-May-18 | 0.77 | <1 | <2 | 10 | <1 | 0.24 |
| MPR-444 | Foreman Drive @ 232nd St. | 15-May-18 | 0.63 | <1 | <2 | 11 | <1 | 0.33 |
| MPR-444 | Foreman Drive @ 232nd St. | 22-May-18 | 0.58 | <1 | <2 | 11 | <1 | 0.28 |
| MPR-444 | Foreman Drive @ 232nd St. | 29-May-18 | 0.57 | <1 | <2 | 12 | <1 | 0.25 |
| MPR-444 | Foreman Drive @ 232nd St. | 5-Jun-18 | 0.68 | <1 | <2 | 12 | <1 | 0.26 |
| MPR-444 | Foreman Drive @ 232nd St. | 12-Jun-18 | 0.58 | <1 | <2 | 12 | <1 | 0.25 |
| MPR-444 | Foreman Drive @ 232nd St. | 19-Jun-18 | 0.84 | <1 | <2 | 12 | <1 | 0.32 |
| MPR-444 | Foreman Drive @ 232nd St. | 26-Jun-18 | 0.5 | <1 | <2 | 13 | <1 | 0.31 |
| MPR-444 | Foreman Drive @ 232nd St. | 10-Jul-18 | 1.08 | <1 | <2 | 14 | <1 | 0.28 |
| MPR-444 | Foreman Drive @ 232nd St. | 17-Jul-18 | 1.19 | <1 | <2 | 15 | <1 | 0.35 |
| MPR-444 | Foreman Drive @ 232nd St. | 24-Jul-18 | 1.04 | <1 | 2 | 15 | <1 | 0.41 |
| MPR-444 | Foreman Drive @ 232nd St. | 31-Jul-18 | 1 | <1 | <2 | 16 | <1 | 0.3 |
| MPR-444 | Foreman Drive @ 232nd St. | 7-Aug-18 | 0.77 | <1 | 2 | 18 | <1 | 0.22 |
| MPR-444 | Foreman Drive @ 232nd St. | 14-Aug-18 | 0.47 | <1 | 8 | 18 | <1 | 0.19 |
| MPR-444 | Foreman Drive @ 232nd St. | 21-Aug-18 | 0.57 | <1 | <2 | 18 | <1 | 0.22 |
| MPR-444 | Foreman Drive @ 232nd St. | 28-Aug-18 | 0.65 | <1 | 2 | 18 | <1 | 0.24 |
| MPR-444 | Foreman Drive @ 232nd St. | 4-Sep-18 | 0.74 | <1 | 20 | 17 | <1 | 0.22 |
| MPR-444 | Foreman Drive @ 232nd St. | 11-Sep-18 | 0.51 | <1 | LA | 18 | <1 | 0.2 |
| MPR-444 | Foreman Drive @ 232nd St. | 18-Sep-18 | 0.64 | <1 | 86 | 16 | <1 | 0.3 |
| MPR-444 | Foreman Drive @ 232nd St. | 25-Sep-18 | 0.59 | <1 | 68 | 15 | <1 | 0.27 |
| MPR-444 | Foreman Drive @ 232nd St. | 2-Oct-18 | 0.31 | <1 | <2 | 15 | <1 | 0.63 |
| MPR-444 | Foreman Drive @ 232nd St. | 9-Oct-18 | 0.65 | <1 | 26 | 14 | <1 | 0.31 |
| MPR-444 | Foreman Drive @ 232nd St. | 16-Oct-18 | 0.75 | <1 | 60 | 13 | <1 | 0.26 |
| MPR-444 | Foreman Drive @ 232nd St. | 23-Oct-18 | 0.69 | <1 | 2 | 12 | <1 | 0.27 |
| MPR-444 | Foreman Drive @ 232nd St. | 30-Oct-18 | 0.66 | <1 | 2 | 13 | <1 | 0.27 |
| MPR-444 | Foreman Drive @ 232nd St. | 6-Nov-18 | 0.31 | <1 | <2 | 12 | <1 | 0.47 |
| MPR-444 | Foreman Drive @ 232nd St. | 13-Nov-18 | 0.88 | <1 | <2 | 10 | <1 | 0.79 |
| MPR-444 | Foreman Drive @ 232nd St. | 20-Nov-18 | 0.46 | <1 | <2 | 10 | <1 | 0.64 |
| MPR-444 | Foreman Drive @ 232nd St. | 27-Nov-18 | 0.65 | <1 | <2 | 10 | <1 | 0.61 |
| MPR-444 | Foreman Drive @ 232nd St. | 4-Dec-18 | 0.66 | <1 | <2 | 8 | <1 | 0.68 |
| MPR-444 | Foreman Drive @ 232nd St. | 11-Dec-18 | 0.82 | <1 | <2 | 8 | <1 | 0.62 |
| MPR-444 | Foreman Drive @ 232nd St. | 18-Dec-18 | 0.89 | <1 | NA | 7 | <1 | 0.48 |
| MPR-444 | Foreman Drive @ 232nd St. | 27-Dec-18 | 0.67 | <1 | NA | 7 | <1 | 0.29 |
| MPR-445 | 127th Ave. and 266 St. | 2-Jan-18 | 0.52 | <1 | 6 | 5 | <1 | 0.47 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-445 | 127th Ave. and 266 St. | 9-Jan-18 | 0.74 | <1 | 2 | 5 | <1 | 0.69 |
| MPR-445 | 127th Ave. and 266 St. | 16-Jan-18 | 1.11 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-445 | 127th Ave. and 266 St. | 23-Jan-18 | 0.51 | <1 | 22 | 6 | <1 | 0.34 |
| MPR-445 | 127th Ave. and 266 St. | 30-Jan-18 | 1.07 | <1 | <2 | 6 | <1 | 0.4 |
| MPR-445 | 127th Ave. and 266 St. | 6-Feb-18 | 1 | <1 | <2 | 6 | <1 | 0.48 |
| MPR-445 | 127th Ave. and 266 St. | 13-Feb-18 | 1.09 | <1 | <2 | 6 | <1 | 0.68 |
| MPR-445 | 127th Ave. and 266 St. | 20-Feb-18 | 1.02 | <1 | <2 | 6 | <1 | 0.41 |
| MPR-445 | 127th Ave. and 266 St. | 27-Feb-18 | 1.16 | <1 | <2 | 5 | <1 | 0.41 |
| MPR-445 | 127th Ave. and 266 St. | 6-Mar-18 | 0.81 | <1 | 2 | 5 | <1 | 0.27 |
| MPR-445 | 127th Ave. and 266 St. | 13-Mar-18 | 0.93 | <1 | 16 | 6 | <1 | 0.31 |
| MPR-445 | 127th Ave. and 266 St. | 20-Mar-18 | 0.84 | <1 | 2 | 6 | <1 | 0.32 |
| MPR-445 | 127th Ave. and 266 St. | 27-Mar-18 | 0.93 | <1 | <2 | 7 | <1 | 0.33 |
| MPR-445 | 127th Ave. and 266 St. | 3-Apr-18 | 0.71 | <1 | <2 | 7 | <1 | 0.3 |
| MPR-445 | 127th Ave. and 266 St. | 10-Apr-18 | 0.72 | <1 | 12 | 8 | <1 | 0.29 |
| MPR-445 | 127th Ave. and 266 St. | 17-Apr-18 | 0.82 | <1 | <2 | 8 | <1 | 0.32 |
| MPR-445 | 127th Ave. and 266 St. | 24-Apr-18 | 0.81 | <1 | <2 | 9 | <1 | 0.34 |
| MPR-445 | 127th Ave. and 266 St. | 1-May-18 | 0.89 | <1 | 4 | 10 | <1 | 0.45 |
| MPR-445 | 127th Ave. and 266 St. | 8-May-18 | 1.02 | <1 | <2 | 11 | <1 | 0.33 |
| MPR-445 | 127th Ave. and 266 St. | 15-May-18 | 0.6 | <1 | 62 | 13 | <1 | 0.32 |
| MPR-445 | 127th Ave. and 266 St. | 22-May-18 | 1.03 | <1 | 4 | 14 | <1 | 0.56 |
| MPR-445 | 127th Ave. and 266 St. | 29-May-18 | 0.79 | <1 | 4 | 13 | <1 | 1.6 |
| MPR-445 | 127th Ave. and 266 St. | 5-Jun-18 | 0.83 | <1 | 12 | 15 | <1 | 0.33 |
| MPR-445 | 127th Ave. and 266 St. | 12-Jun-18 | 0.59 | <1 | 100 | 14 | <1 | 0.32 |
| MPR-445 | 127th Ave. and 266 St. | 19-Jun-18 | 0.99 | <1 | 16 | 14 | <1 | 0.24 |
| MPR-445 | 127th Ave. and 266 St. | 26-Jun-18 | 0.91 | <1 | 30 | 16 | <1 | 0.18 |
| MPR-445 | 127th Ave. and 266 St. | 3-Jul-18 | 0.64 | <1 | 230 | 16 | <1 | 0.2 |
| MPR-445 | 127th Ave. and 266 St. | 10-Jul-18 | 0.72 | <1 | 120 | 16 | <1 | 0.34 |
| MPR-445 | 127th Ave. and 266 St. | 17-Jul-18 | 0.7 | <1 | 24 | 17 | <1 | 1.2 |
| MPR-445 | 127th Ave. and 266 St. | 24-Jul-18 | 0.63 | <1 | 4 | 17 | <1 | 0.46 |
| MPR-445 | 127th Ave. and 266 St. | 31-Jul-18 | 0.33 | <1 | 12 | 19 | <1 | 0.27 |
| MPR-445 | 127th Ave. and 266 St. | 7-Aug-18 | 0.5 | <1 | 54 | 19 | <1 | 0.23 |
| MPR-445 | 127th Ave. and 266 St. | 14-Aug-18 | 0.62 | <1 | 6 | 19 | <1 | 0.21 |
| MPR-445 | 127th Ave. and 266 St. | 21-Aug-18 | 0.74 | <1 | 2 | 19 | <1 | 0.22 |
| MPR-445 | 127th Ave. and 266 St. | 28-Aug-18 | 0.85 | <1 | 14 | 19 | <1 | 0.23 |
| MPR-445 | 127th Ave. and 266 St. | 4-Sep-18 | 0.81 | <1 | 10 | 18 | <1 | 0.22 |
| MPR-445 | 127th Ave. and 266 St. | 11-Sep-18 | 0.55 | <1 | 360 | 18 | <1 | 0.2 |
| MPR-445 | 127th Ave. and 266 St. | 18-Sep-18 | 0.32 | <1 | 1700 | 17 | <1 | 2.8 |
| MPR-445 | 127th Ave. and 266 St. | 25-Sep-18 | 0.19 | <1 | 4900 | 15 | <1 | 0.54 |
| MPR-445 | 127th Ave. and 266 St. | 2-Oct-18 | 0.2 | <1 | 4100 | 16 | <1 | 0.22 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-445 | 127th Ave. and 266 St. | 9-Oct-18 | 0.28 | <1 | 650 | 14 | <1 | 0.42 |
| MPR-445 | 127th Ave. and 266 St. | 16-Oct-18 | 0.37 | <1 | 560 | 14 | <1 | 0.64 |
| MPR-445 | 127th Ave. and 266 St. | 23-Oct-18 | 0.22 | <1 | 340 | 13 | <1 | 0.27 |
| MPR-445 | 127th Ave. and 266 St. | 30-Oct-18 | 0.2 | <1 | 140 | 13 | <1 | 0.29 |
| MPR-445 | 127th Ave. and 266 St. | 6-Nov-18 | 0.16 | <1 | 92 | 13 | <1 | 0.25 |
| MPR-445 | 127th Ave. and 266 St. | 13-Nov-18 | 0.2 | <1 | 48 | 11 | <1 | 0.68 |
| MPR-445 | 127th Ave. and 266 St. | 20-Nov-18 | 0.18 | <1 | 36 | 11 | <1 | 0.49 |
| MPR-445 | 127th Ave. and 266 St. | 27-Nov-18 | 0.25 | <1 | 34 | 10 | <1 | 0.67 |
| MPR-445 | 127th Ave. and 266 St. | 4-Dec-18 | 0.38 | <1 | 16 | 9 | <1 | 0.61 |
| MPR-445 | 127th Ave. and 266 St. | 11-Dec-18 | 0.15 | <1 | 16 | 8 | <1 | 0.62 |
| MPR-445 | 127th Ave. and 266 St. | 18-Dec-18 | 0.78 | <1 | NA | 8 | <1 | 0.52 |
| MPR-445 | 127th Ave. and 266 St. | 27-Dec-18 | 0.95 | <1 | NA | 7 | <1 | 0.37 |
| MPR-446 | 128th Ave and Willow Place | 2-Jan-18 | 0.87 | <1 | 8 | 5 | <1 | 0.62 |
| MPR-446 | 128th Ave and Willow Place | 9-Jan-18 | 1.01 | <1 | <2 | 6 | <1 | 0.63 |
| MPR-446 | 128th Ave and Willow Place | 16-Jan-18 | 1.08 | <1 | <2 | 6 | <1 | 0.53 |
| MPR-446 | 128th Ave and Willow Place | 23-Jan-18 | 0.98 | <1 | <2 | 6 | <1 | 0.56 |
| MPR-446 | 128th Ave and Willow Place | 30-Jan-18 | 1.51 | <1 | <2 | 7 | <1 | 0.48 |
| MPR-446 | 128th Ave and Willow Place | 6-Feb-18 | 1.38 | <1 | <2 | 7 | <1 | 0.57 |
| MPR-446 | 128th Ave and Willow Place | 13-Feb-18 | 1.13 | <1 | <2 | 7 | <1 | 0.51 |
| MPR-446 | 128th Ave and Willow Place | 20-Feb-18 | 1.03 | <1 | <2 | 5 | <1 | 0.47 |
| MPR-446 | 128th Ave and Willow Place | 27-Feb-18 | 1.3 | <1 | <2 | 5 | <1 | 0.46 |
| MPR-446 | 128th Ave and Willow Place | 6-Mar-18 | 1.04 | <1 | <2 | 5 | <1 | 0.38 |
| MPR-446 | 128th Ave and Willow Place | 13-Mar-18 | 1.23 | <1 | <2 | 5 | <1 | 0.37 |
| MPR-446 | 128th Ave and Willow Place | 20-Mar-18 | 1.1 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-446 | 128th Ave and Willow Place | 27-Mar-18 | 1.27 | <1 | <2 | 6 | <1 | 0.34 |
| MPR-446 | 128th Ave and Willow Place | 3-Apr-18 | 1.3 | <1 | <2 | 7 | <1 | 0.35 |
| MPR-446 | 128th Ave and Willow Place | 10-Apr-18 | 0.92 | <1 | <2 | 7 | <1 | 0.36 |
| MPR-446 | 128th Ave and Willow Place | 17-Apr-18 | 0.9 | <1 | <2 | 7 | <1 | 0.34 |
| MPR-446 | 128th Ave and Willow Place | 24-Apr-18 | 0.83 | <1 | <2 | 11 | <1 | 0.37 |
| MPR-446 | 128th Ave and Willow Place | 1-May-18 | 0.96 | <1 | <2 | 9 | <1 | 0.45 |
| MPR-446 | 128th Ave and Willow Place | 8-May-18 | 1 | <1 | 2 | 11 | <1 | 0.47 |
| MPR-446 | 128th Ave and Willow Place | 15-May-18 | 1.24 | <1 | <2 | 11 | <1 | 0.31 |
| MPR-446 | 128th Ave and Willow Place | 22-May-18 | 0.8 | <1 | 2 | 12 | <1 | 0.34 |
| MPR-446 | 128th Ave and Willow Place | 29-May-18 | 0.84 | <1 | 4 | 13 | <1 | 0.29 |
| MPR-446 | 128th Ave and Willow Place | 5-Jun-18 | 0.6 | <1 | 2 | 12 | <1 | 0.25 |
| MPR-446 | 128th Ave and Willow Place | 12-Jun-18 | 0.68 | <1 | <2 | 12 | <1 | 0.34 |
| MPR-446 | 128th Ave and Willow Place | 19-Jun-18 | 0.7 | <1 | <2 | 12 | <1 | 0.33 |
| MPR-446 | 128th Ave and Willow Place | 26-Jun-18 | 0.62 | <1 | <2 | 14 | <1 | 0.27 |
| MPR-446 | 128th Ave and Willow Place | 3-Jul-18 | 0.39 | <1 | <2 | 13 | <1 | 0.22 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/ml _s | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------------|-----------------|---------------------------------|--------------------------|----------------------------|------------|------------------------------------|--------------|
| MPR-446 | 128th Ave and Willow Place | 10-Jul-18 | 0.89 | <1 | <2 | 14 | <1 | 0.32 |
| MPR-446 | 128th Ave and Willow Place | 17-Jul-18 | 0.51 | <1 | <2 | 16 | <1 | 0.33 |
| MPR-446 | 128th Ave and Willow Place | 24-Jul-18 | 0.57 | <1 | <2 | 16 | <1 | 0.43 |
| MPR-446 | 128th Ave and Willow Place | 31-Jul-18 | 0.66 | <1 | <2 | 16 | <1 | 0.26 |
| MPR-446 | 128th Ave and Willow Place | 7-Aug-18 | 0.51 | <1 | <2 | 17 | <1 | 0.21 |
| MPR-446 | 128th Ave and Willow Place | 14-Aug-18 | 0.52 | <1 | 2 | 17 | <1 | 0.19 |
| MPR-446 | 128th Ave and Willow Place | 21-Aug-18 | 0.85 | <1 | <2 | 17 | <1 | 0.27 |
| MPR-446 | 128th Ave and Willow Place | 28-Aug-18 | 0.47 | <1 | 24 | 16 | <1 | 0.35 |
| MPR-446 | 128th Ave and Willow Place | 4-Sep-18 | 0.62 | <1 | 26 | 16 | <1 | 0.29 |
| MPR-446 | 128th Ave and Willow Place | 11-Sep-18 | 0.49 | <1 | 4 | 15 | <1 | 0.3 |
| MPR-446 | 128th Ave and Willow Place | 18-Sep-18 | 0.48 | <1 | 6 | 14 | <1 | 0.27 |
| MPR-446 | 128th Ave and Willow Place | 25-Sep-18 | 0.54 | <1 | LA | 14 | <1 | 0.25 |
| MPR-446 | 128th Ave and Willow Place | 2-Oct-18 | 0.5 | <1 | 8 | 13 | <1 | 0.27 |
| MPR-446 | 128th Ave and Willow Place | 9-Oct-18 | 0.6 | <1 | 14 | 13 | <1 | 0.31 |
| MPR-446 | 128th Ave and Willow Place | 16-Oct-18 | 0.4 | <1 | 2 | 12 | <1 | 0.27 |
| MPR-446 | 128th Ave and Willow Place | 23-Oct-18 | 0.5 | <1 | 14 | 12 | <1 | 0.29 |
| MPR-446 | 128th Ave and Willow Place | 30-Oct-18 | 0.44 | <1 | 14 | 12 | <1 | 0.25 |
| MPR-446 | 128th Ave and Willow Place | 6-Nov-18 | 0.43 | <1 | <2 | 11 | <1 | 0.26 |
| MPR-446 | 128th Ave and Willow Place | 13-Nov-18 | 0.23 | <1 | 4 | 10 | <1 | 0.53 |
| MPR-446 | 128th Ave and Willow Place | 20-Nov-18 | 0.39 | <1 | <2 | 10 | <1 | 0.52 |
| MPR-446 | 128th Ave and Willow Place | 27-Nov-18 | 0.4 | <1 | <2 | 9 | <1 | 0.67 |
| MPR-446 | 128th Ave and Willow Place | 4-Dec-18 | 0.81 | <1 | <2 | 8 | <1 | 0.9 |
| MPR-446 | 128th Ave and Willow Place | 11-Dec-18 | 0.44 | <1 | 12 | 8 | <1 | 0.57 |
| MPR-446 | 128th Ave and Willow Place | 18-Dec-18 | 0.57 | <1 | NA | 7 | <1 | 0.53 |
| MPR-446 | 128th Ave and Willow Place | 27-Dec-18 | 0.63 | <1 | NA | 7 | <1 | 0.69 |
| MPR-447 | 117 Ave. @ 210 St. | 2-Jan-18 | 0.57 | <1 | <2 | 5 | <1 | 0.61 |
| MPR-447 | 117 Ave. @ 210 St. | 9-Jan-18 | 0.75 | <1 | 12 | 7 | <1 | 0.51 |
| MPR-447 | 117 Ave. @ 210 St. | 16-Jan-18 | 0.93 | <1 | <2 | 6 | <1 | 0.45 |
| MPR-447 | 117 Ave. @ 210 St. | 23-Jan-18 | 0.81 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-447 | 117 Ave. @ 210 St. | 30-Jan-18 | 0.86 | <1 | <2 | 6 | <1 | 0.45 |
| MPR-447 | 117 Ave. @ 210 St. | 6-Feb-18 | 0.7 | <1 | <2 | 6 | <1 | 0.42 |
| MPR-447 | 117 Ave. @ 210 St. | 13-Feb-18 | 0.83 | <1 | <2 | 7 | <1 | 0.41 |
| MPR-447 | 117 Ave. @ 210 St. | 20-Feb-18 | 0.95 | <1 | 4 | 6 | <1 | 0.39 |
| MPR-447 | 117 Ave. @ 210 St. | 27-Feb-18 | 0.91 | <1 | <2 | 5 | <1 | 0.39 |
| MPR-447 | 117 Ave. @ 210 St. | 6-Mar-18 | 0.81 | <1 | <2 | 5 | <1 | 0.35 |
| MPR-447 | 117 Ave. @ 210 St. | 13-Mar-18 | 0.84 | <1 | <2 | 6 | <1 | 0.35 |
| MPR-447 | 117 Ave. @ 210 St. | 20-Mar-18 | 0.74 | <1 | <2 | 7 | <1 | 0.32 |
| MPR-447 | 117 Ave. @ 210 St. | 27-Mar-18 | 0.83 | <1 | <2 | 7 | <1 | 0.33 |
| MPR-447 | 117 Ave. @ 210 St. | 3-Apr-18 | 0.69 | <1 | <2 | 8 | <1 | 0.36 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-447 | 117 Ave. @ 210 St. | 10-Apr-18 | 0.84 | <1 | <2 | 8 | <1 | 0.35 |
| MPR-447 | 117 Ave. @ 210 St. | 17-Apr-18 | 0.76 | <1 | <2 | 8 | <1 | 0.33 |
| MPR-447 | 117 Ave. @ 210 St. | 24-Apr-18 | 0.79 | <1 | <2 | 8 | <1 | 0.48 |
| MPR-447 | 117 Ave. @ 210 St. | 1-May-18 | 0.8 | <1 | <2 | 10 | <1 | 0.41 |
| MPR-447 | 117 Ave. @ 210 St. | 8-May-18 | 0.79 | <1 | <2 | 10 | <1 | 0.37 |
| MPR-447 | 117 Ave. @ 210 St. | 15-May-18 | 0.79 | <1 | <2 | 11 | <1 | 0.42 |
| MPR-447 | 117 Ave. @ 210 St. | 22-May-18 | 0.69 | <1 | 2 | 12 | <1 | 0.27 |
| MPR-447 | 117 Ave. @ 210 St. | 29-May-18 | 0.85 | <1 | <2 | 12 | <1 | 0.23 |
| MPR-447 | 117 Ave. @ 210 St. | 5-Jun-18 | 0.77 | <1 | <2 | 12 | <1 | 0.24 |
| MPR-447 | 117 Ave. @ 210 St. | 12-Jun-18 | 0.72 | <1 | <2 | 12 | <1 | 0.24 |
| MPR-447 | 117 Ave. @ 210 St. | 19-Jun-18 | 0.91 | <1 | <2 | 13 | <1 | 0.28 |
| MPR-447 | 117 Ave. @ 210 St. | 26-Jun-18 | 0.87 | <1 | <2 | 13 | <1 | 0.21 |
| MPR-447 | 117 Ave. @ 210 St. | 3-Jul-18 | 0.76 | <1 | <2 | 13 | <1 | 0.23 |
| MPR-447 | 117 Ave. @ 210 St. | 10-Jul-18 | 0.76 | <1 | <2 | 14 | <1 | 0.2 |
| MPR-447 | 117 Ave. @ 210 St. | 17-Jul-18 | 0.86 | <1 | <2 | 14 | <1 | 0.34 |
| MPR-447 | 117 Ave. @ 210 St. | 24-Jul-18 | 0.93 | <1 | <2 | 15 | <1 | 2.6 |
| MPR-447 | 117 Ave. @ 210 St. | 31-Jul-18 | 0.71 | <1 | <2 | 15 | <1 | 8 |
| MPR-447 | 117 Ave. @ 210 St. | 7-Aug-18 | 0.77 | <1 | <2 | 16 | <1 | 0.22 |
| MPR-447 | 117 Ave. @ 210 St. | 14-Aug-18 | 0.78 | <1 | <2 | 17 | <1 | 0.35 |
| MPR-447 | 117 Ave. @ 210 St. | 21-Aug-18 | 0.99 | <1 | <2 | 17 | <1 | 0.26 |
| MPR-447 | 117 Ave. @ 210 St. | 28-Aug-18 | 0.97 | <1 | <2 | 16 | <1 | 0.44 |
| MPR-447 | 117 Ave. @ 210 St. | 4-Sep-18 | 0.89 | <1 | <2 | 16 | <1 | 0.25 |
| MPR-447 | 117 Ave. @ 210 St. | 11-Sep-18 | 0.67 | <1 | <2 | 16 | <1 | 0.29 |
| MPR-447 | 117 Ave. @ 210 St. | 18-Sep-18 | 0.85 | <1 | 2 | 15 | <1 | 0.34 |
| MPR-447 | 117 Ave. @ 210 St. | 25-Sep-18 | 0.8 | <1 | <2 | 14 | <1 | 0.22 |
| MPR-447 | 117 Ave. @ 210 St. | 2-Oct-18 | 0.51 | <1 | 4 | 15 | <1 | 0.38 |
| MPR-447 | 117 Ave. @ 210 St. | 9-Oct-18 | 0.65 | <1 | <2 | 13 | <1 | 0.3 |
| MPR-447 | 117 Ave. @ 210 St. | 16-Oct-18 | 0.6 | <1 | <2 | 13 | <1 | 0.28 |
| MPR-447 | 117 Ave. @ 210 St. | 23-Oct-18 | 0.77 | <1 | 4 | 13 | <1 | 0.29 |
| MPR-447 | 117 Ave. @ 210 St. | 30-Oct-18 | 0.63 | <1 | <2 | 12 | <1 | 0.23 |
| MPR-447 | 117 Ave. @ 210 St. | 6-Nov-18 | 0.67 | <1 | 4 | 11 | <1 | 0.95 |
| MPR-447 | 117 Ave. @ 210 St. | 13-Nov-18 | 0.85 | <1 | 2 | 10 | <1 | 0.69 |
| MPR-447 | 117 Ave. @ 210 St. | 20-Nov-18 | 0.87 | <1 | <2 | 10 | <1 | 0.56 |
| MPR-447 | 117 Ave. @ 210 St. | 27-Nov-18 | 0.95 | <1 | <2 | 9 | <1 | 0.65 |
| MPR-447 | 117 Ave. @ 210 St. | 4-Dec-18 | 0.77 | <1 | <2 | 8 | <1 | 0.66 |
| MPR-447 | 117 Ave. @ 210 St. | 11-Dec-18 | 0.68 | <1 | 2 | 7 | <1 | 0.59 |
| MPR-447 | 117 Ave. @ 210 St. | 18-Dec-18 | 0.56 | <1 | NA | 8 | <1 | 0.56 |
| MPR-447 | 117 Ave. @ 210 St. | 27-Dec-18 | 0.63 | <1 | NA | 7 | <1 | 0.28 |
| MPR-448 | 248th St. & McClure | 2-Jan-18 | 0.55 | <1 | <2 | 5 | <1 | 0.55 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|----------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-448 | 248th St. & McClure | 9-Jan-18 | 0.45 | <1 | <2 | 6 | <1 | 0.51 |
| MPR-448 | 248th St. & McClure | 16-Jan-18 | 0.61 | <1 | 2 | 6 | <1 | 0.5 |
| MPR-448 | 248th St. & McClure | 23-Jan-18 | 0.57 | <1 | <2 | 6 | <1 | 0.39 |
| MPR-448 | 248th St. & McClure | 30-Jan-18 | 0.51 | <1 | <2 | 7 | <1 | 0.43 |
| MPR-448 | 248th St. & McClure | 6-Feb-18 | 0.64 | <1 | 2 | 7 | <1 | 0.61 |
| MPR-448 | 248th St. & McClure | 13-Feb-18 | 0.54 | <1 | <2 | 7 | <1 | 0.47 |
| MPR-448 | 248th St. & McClure | 20-Feb-18 | 0.62 | <1 | <2 | 6 | <1 | 0.46 |
| MPR-448 | 248th St. & McClure | 27-Feb-18 | 0.78 | <1 | <2 | 5 | <1 | 0.36 |
| MPR-448 | 248th St. & McClure | 6-Mar-18 | 0.6 | <1 | <2 | 6 | <1 | 0.35 |
| MPR-448 | 248th St. & McClure | 13-Mar-18 | 0.71 | <1 | <2 | 6 | <1 | 0.37 |
| MPR-448 | 248th St. & McClure | 20-Mar-18 | 0.48 | <1 | <2 | 7 | <1 | 0.31 |
| MPR-448 | 248th St. & McClure | 27-Mar-18 | 0.49 | <1 | <2 | 7 | <1 | 0.38 |
| MPR-448 | 248th St. & McClure | 3-Apr-18 | 0.47 | <1 | <2 | 8 | <1 | 0.38 |
| MPR-448 | 248th St. & McClure | 10-Apr-18 | 0.47 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-448 | 248th St. & McClure | 17-Apr-18 | 0.54 | <1 | <2 | 9 | <1 | 0.32 |
| MPR-448 | 248th St. & McClure | 24-Apr-18 | 0.65 | <1 | <2 | 10 | <1 | 7.1 |
| MPR-448 | 248th St. & McClure | 1-May-18 | 0.52 | <1 | 2 | 11 | <1 | 0.39 |
| MPR-448 | 248th St. & McClure | 8-May-18 | 0.83 | <1 | 2 | 12 | <1 | 0.39 |
| MPR-448 | 248th St. & McClure | 15-May-18 | 0.76 | <1 | <2 | 13 | <1 | 0.34 |
| MPR-448 | 248th St. & McClure | 22-May-18 | 0.43 | <1 | <2 | 14 | <1 | 0.31 |
| MPR-448 | 248th St. & McClure | 29-May-18 | 0.52 | <1 | <2 | 14 | <1 | 0.28 |
| MPR-448 | 248th St. & McClure | 5-Jun-18 | 0.63 | <1 | 2 | 14 | <1 | 0.22 |
| MPR-448 | 248th St. & McClure | 12-Jun-18 | 0.36 | <1 | <2 | 14 | <1 | 0.28 |
| MPR-448 | 248th St. & McClure | 19-Jun-18 | 0.6 | <1 | <2 | 15 | <1 | 0.33 |
| MPR-448 | 248th St. & McClure | 26-Jun-18 | 0.57 | <1 | <2 | 15 | <1 | 0.24 |
| MPR-448 | 248th St. & McClure | 3-Jul-18 | 0.35 | <1 | <2 | 15 | <1 | 0.23 |
| MPR-448 | 248th St. & McClure | 10-Jul-18 | 0.51 | <1 | <2 | 16 | <1 | 0.23 |
| MPR-448 | 248th St. & McClure | 17-Jul-18 | 0.52 | <1 | <2 | 16 | <1 | 0.34 |
| MPR-448 | 248th St. & McClure | 24-Jul-18 | 0.46 | <1 | <2 | 17 | <1 | 0.33 |
| MPR-448 | 248th St. & McClure | 31-Jul-18 | 0.31 | <1 | 2 | 17 | <1 | 0.34 |
| MPR-448 | 248th St. & McClure | 7-Aug-18 | 0.2 | <1 | <2 | 17 | <1 | 0.32 |
| MPR-448 | 248th St. & McClure | 14-Aug-18 | 0.36 | <1 | <2 | 19 | <1 | 0.25 |
| MPR-448 | 248th St. & McClure | 21-Aug-18 | 0.4 | <1 | <2 | 18 | <1 | 0.25 |
| MPR-448 | 248th St. & McClure | 28-Aug-18 | 0.65 | <1 | <2 | 18 | <1 | 0.23 |
| MPR-448 | 248th St. & McClure | 4-Sep-18 | 0.5 | <1 | <2 | 17 | <1 | 0.25 |
| MPR-448 | 248th St. & McClure | 11-Sep-18 | 0.53 | <1 | <2 | 18 | <1 | 0.28 |
| MPR-448 | 248th St. & McClure | 18-Sep-18 | 0.38 | <1 | <2 | 17 | <1 | 0.25 |
| MPR-448 | 248th St. & McClure | 25-Sep-18 | 0.52 | <1 | <2 | 16 | <1 | 0.29 |
| MPR-448 | 248th St. & McClure | 2-Oct-18 | 0.41 | <1 | 2 | 15 | <1 | 0.25 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|-------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-448 | 248th St. & McClure | 9-Oct-18 | 0.41 | <1 | <2 | 14 | <1 | 0.26 |
| MPR-448 | 248th St. & McClure | 16-Oct-18 | 0.54 | <1 | 2 | 13 | <1 | 0.29 |
| MPR-448 | 248th St. & McClure | 23-Oct-18 | 0.52 | <1 | <2 | 13 | <1 | 0.39 |
| MPR-448 | 248th St. & McClure | 30-Oct-18 | 0.55 | <1 | <2 | 13 | <1 | 0.27 |
| MPR-448 | 248th St. & McClure | 6-Nov-18 | 0.27 | <1 | <2 | 12 | <1 | 0.39 |
| MPR-448 | 248th St. & McClure | 13-Nov-18 | 0.36 | <1 | <2 | 11 | <1 | 0.76 |
| MPR-448 | 248th St. & McClure | 20-Nov-18 | 0.29 | <1 | <2 | 10 | <1 | 0.56 |
| MPR-448 | 248th St. & McClure | 27-Nov-18 | 0.55 | <1 | <2 | 10 | <1 | 0.64 |
| MPR-448 | 248th St. & McClure | 4-Dec-18 | 0.3 | <1 | <2 | 9 | <1 | 0.68 |
| MPR-448 | 248th St. & McClure | 11-Dec-18 | 0.37 | <1 | <2 | 8 | <1 | 0.57 |
| MPR-448 | 248th St. & McClure | 18-Dec-18 | 0.52 | <1 | NA | 8 | <1 | 0.45 |
| MPR-448 | 248th St. & McClure | 27-Dec-18 | 0.49 | <1 | NA | 7 | <1 | 0.33 |
| MPR-449 | Meadow Brook North of Douglas | 2-Jan-18 | 0.43 | <1 | <2 | 7 | <1 | 0.55 |
| MPR-449 | Meadow Brook North of Douglas | 9-Jan-18 | 0.52 | <1 | 2 | 7 | <1 | 0.62 |
| MPR-449 | Meadow Brook North of Douglas | 16-Jan-18 | 0.37 | <1 | <2 | 8 | <1 | 0.38 |
| MPR-449 | Meadow Brook North of Douglas | 23-Jan-18 | 0.37 | <1 | <2 | 7 | <1 | 0.38 |
| MPR-449 | Meadow Brook North of Douglas | 30-Jan-18 | 0.42 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-449 | Meadow Brook North of Douglas | 6-Feb-18 | 0.4 | <1 | <2 | 8 | <1 | 0.36 |
| MPR-449 | Meadow Brook North of Douglas | 13-Feb-18 | 0.32 | <1 | <2 | 8 | <1 | 0.38 |
| MPR-449 | Meadow Brook North of Douglas | 20-Feb-18 | 0.36 | <1 | <2 | 7 | <1 | 0.32 |
| MPR-449 | Meadow Brook North of Douglas | 27-Feb-18 | 0.43 | <1 | <2 | 7 | <1 | 0.41 |
| MPR-449 | Meadow Brook North of Douglas | 6-Mar-18 | 0.38 | <1 | <2 | 6 | <1 | 0.29 |
| MPR-449 | Meadow Brook North of Douglas | 13-Mar-18 | 0.43 | <1 | <2 | 7 | <1 | 0.35 |
| MPR-449 | Meadow Brook North of Douglas | 20-Mar-18 | 0.39 | <1 | <2 | 8 | <1 | 0.26 |
| MPR-449 | Meadow Brook North of Douglas | 27-Mar-18 | 0.4 | <1 | <2 | 8 | <1 | 0.34 |
| MPR-449 | Meadow Brook North of Douglas | 3-Apr-18 | 0.37 | <1 | <2 | 8 | <1 | 0.35 |
| MPR-449 | Meadow Brook North of Douglas | 10-Apr-18 | 0.4 | <1 | <2 | 9 | <1 | 0.31 |
| MPR-449 | Meadow Brook North of Douglas | 17-Apr-18 | 0.31 | <1 | <2 | 9 | <1 | 0.32 |
| MPR-449 | Meadow Brook North of Douglas | 24-Apr-18 | 0.31 | <1 | <2 | 10 | <1 | 0.33 |
| MPR-449 | Meadow Brook North of Douglas | 1-May-18 | 0.38 | <1 | <2 | 11 | <1 | 0.29 |
| MPR-449 | Meadow Brook North of Douglas | 8-May-18 | 0.12 | <1 | <2 | 12 | <1 | 0.4 |
| MPR-449 | Meadow Brook North of Douglas | 15-May-18 | 0.2 | <1 | 2 | 14 | <1 | 0.27 |
| MPR-449 | Meadow Brook North of Douglas | 22-May-18 | 0.29 | <1 | 2 | 14 | <1 | 0.28 |
| MPR-449 | Meadow Brook North of Douglas | 29-May-18 | 0.51 | <1 | <2 | 15 | <1 | 0.2 |
| MPR-449 | Meadow Brook North of Douglas | 5-Jun-18 | 0.23 | <1 | 8 | 16 | <1 | 0.21 |
| MPR-449 | Meadow Brook North of Douglas | 12-Jun-18 | 0.24 | <1 | 2 | 15 | <1 | 0.27 |
| MPR-449 | Meadow Brook North of Douglas | 19-Jun-18 | 0.58 | <1 | <2 | 15 | <1 | 0.26 |
| MPR-449 | Meadow Brook North of Douglas | 26-Jun-18 | 0.4 | <1 | <2 | 16 | <1 | 0.16 |
| MPR-449 | Meadow Brook North of Douglas | 3-Jul-18 | 0.3 | <1 | <2 | 16 | <1 | 0.23 |

| Sample name | Sample reported name | Sampled Date | Cl ₂ Free mg/L | E. coli MF/ 100mLs | HPC CFU/mls | Temp °C | Total Coliform MF/100 mLs | Turb. NTU |
|----------------|-------------------------------|-----------------|---------------------------------|--------------------------|----------------|------------|------------------------------------|--------------|
| MPR-449 | Meadow Brook North of Douglas | 10-Jul-18 | 0.29 | <1 | <2 | 17 | <1 | 0.2 |
| MPR-449 | Meadow Brook North of Douglas | 17-Jul-18 | 0.31 | <1 | 8 | 17 | <1 | 0.38 |
| MPR-449 | Meadow Brook North of Douglas | 24-Jul-18 | 0.25 | <1 | <2 | 18 | <1 | 0.44 |
| MPR-449 | Meadow Brook North of Douglas | 31-Jul-18 | 0.26 | <1 | 8 | 19 | <1 | 0.19 |
| MPR-449 | Meadow Brook North of Douglas | 7-Aug-18 | 0.13 | <1 | 18 | 19 | <1 | 0.35 |
| MPR-449 | Meadow Brook North of Douglas | 14-Aug-18 | 0.18 | <1 | 20 | 20 | <1 | 0.21 |
| MPR-449 | Meadow Brook North of Douglas | 21-Aug-18 | 0.26 | <1 | 8 | 18 | <1 | 0.19 |
| MPR-449 | Meadow Brook North of Douglas | 28-Aug-18 | 0.25 | <1 | 4 | 20 | <1 | 0.23 |
| MPR-449 | Meadow Brook North of Douglas | 4-Sep-18 | 0.26 | <1 | 8 | 19 | <1 | 0.19 |
| MPR-449 | Meadow Brook North of Douglas | 11-Sep-18 | 0.27 | <1 | <2 | 19 | <1 | 0.23 |
| MPR-449 | Meadow Brook North of Douglas | 18-Sep-18 | 0.18 | <1 | 8 | 18 | <1 | 0.3 |
| MPR-449 | Meadow Brook North of Douglas | 25-Sep-18 | 0.14 | <1 | 6 | 17 | <1 | 0.26 |
| MPR-449 | Meadow Brook North of Douglas | 2-Oct-18 | 0.17 | <1 | 8 | 17 | <1 | 0.21 |
| MPR-449 | Meadow Brook North of Douglas | 9-Oct-18 | 0.18 | <1 | <2 | 16 | <1 | 0.29 |
| MPR-449 | Meadow Brook North of Douglas | 16-Oct-18 | 0.24 | <1 | 2 | 15 | <1 | 0.24 |
| MPR-449 | Meadow Brook North of Douglas | 23-Oct-18 | 0.23 | <1 | 4 | 15 | <1 | 0.24 |
| MPR-449 | Meadow Brook North of Douglas | 30-Oct-18 | 0.17 | <1 | <2 | 14 | <1 | 0.21 |
| MPR-449 | Meadow Brook North of Douglas | 6-Nov-18 | 0.14 | <1 | 2 | 14 | <1 | 0.65 |
| MPR-449 | Meadow Brook North of Douglas | 13-Nov-18 | 0.25 | <1 | <2 | 13 | <1 | 0.65 |
| MPR-449 | Meadow Brook North of Douglas | 20-Nov-18 | 0.26 | <1 | <2 | 11 | <1 | 0.49 |
| MPR-449 | Meadow Brook North of Douglas | 27-Nov-18 | 0.22 | <1 | <2 | 11 | <1 | 0.51 |
| MPR-449 | Meadow Brook North of Douglas | 4-Dec-18 | 0.21 | <1 | <2 | 11 | <1 | 0.52 |
| MPR-449 | Meadow Brook North of Douglas | 11-Dec-18 | 0.33 | <1 | <2 | 10 | <1 | 0.48 |
| MPR-449 | Meadow Brook North of Douglas | 18-Dec-18 | 0.26 | <1 | NA | 9 | <1 | 0.42 |
| MPR-449 | Meadow Brook North of Douglas | 27-Dec-18 | 0.031 | <1 | NA | 8 | <1 | 0.28 |

| City of Maple Ridge Drinking Water Quality Report 2018 |
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| Appendix G: Preventing Water-Borne Infections for People with Weakened Immune Systems |
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Number 56 June 2013

Preventing Water-Borne Infections For People with Weakened Immune Systems

Who is at higher risk from water-borne infections?

People with very weak immune systems who are at higher risk of certain water-borne diseases include those with:

- HIV infection who have a CD4+ count of less than 100 cells/mm³;
- lymphoma or leukemia (hematological malignancies) who are being actively treated or have been in remission and off treatment for less than 1 year;
- hematopoietic stem cell transplant recipients; and
- people born with diseases that severely affect their immune systems.

Some people with weakened immune systems, such as those with certain types of cancers or taking certain medications, may not be at higher risk of severe water-borne diseases. These people do not need to take extra precautions with their drinking water.

Ask your health care provider how weak your immune system is, and whether you need to take extra precautions.

How can drinking water become contaminated?

Drinking water can contain different organisms, including bacteria, viruses and parasites, which can cause disease. These organisms can exist in the source water such as lake water and survive through treatment, or they can enter the water supply in the distribution system. Well water can be contaminated if the well is not built properly or if it draws on water from the surface of the ground, such as shallow wells or wells drilled in fractured rock. Surface water, such as

rivers, lakes and streams, can also contain disease-causing organisms from animal feces. If you have a weak immune system, you should not drink water from surface sources or wells potentially contaminated by surface water such as dug wells, unless the water has been treated to remove or inactivate at least 99.9 per cent of parasites (protozoa), 99.99 per cent of viruses and all harmful bacteria.

Most community water systems in B.C. have effective treatment, such as disinfection or chlorination, against bacteria and viruses. However, in many cases, treatment may not provide a 99.9 per cent reduction in infectious parasites. Some water systems and many private supplies have no treatment at all. If the water you drink has not been disinfected, please refer to HealthLinkBC File #49b How to Disinfect Drinking Water.

How can I further treat disinfected water?

People with very weak immune systems need to take extra precautions with their drinking water.

Boiling: If your water supply has already been disinfected, bring the water to a full boil to inactivate any *Cryptosporidium* parasites - a major concern for people with weakened immune systems. For more information, see HealthLinkBC File #48 *Cryptosporidium* Infection.

If the water has not already been disinfected, bring the water to a full boil for at least 1 minute. This will kill or inactivate bacteria, viruses and parasites. At elevations over 2,000 meters (6,500 feet), boil water for at least 2 minutes to disinfect it.

Do not drink or use tap water to brush your teeth, rinse your mouth, mix drinks or make ice cubes without boiling it first.

Please note that boiling water will get rid of viruses, bacteria and parasites but not chemicals which may be found in the water.

Reverse Osmosis (RO): RO is effective against all disease-causing organisms and many chemical contaminants. Unless it has a high capacity, it will only produce small amounts of water and waste a large volume. Speak to a water treatment specialist to see if this is the best option for you.

Ultraviolet (UV) Treatment: UV light will kill many disease-causing organisms, and is effective against almost all parasites. UV will not kill some bacterial spores and some viruses, so it should not be used unless the water supply is at least disinfected. UV treatment units should meet NSF Standard #55A.

Filters: Filters do not remove bacteria and viruses and should not be used unless the water supply is disinfected first.

If you plan to install a drinking water filter in your home, you will need a system labeled as Absolute 1 micron or smaller, and labeled as meeting ANSI/NSF International Standard #53 for removal of parasites.

Jug-type filters, such as a Brita®, which sit in a jug and allow water to trickle through, and some tap-mounted and built-in devices are not an appropriate solution. The jug filter models are not effective in removing many disease-causing organisms.

Can I drink bottled water?

Bottled water in B.C. may or may not have been treated. If you have a very weak immune system, check with the bottling company to find out what treatment, if any, it has had. Bottled water that has been properly treated using one of the methods list above can be used for drinking, brushing teeth, making ice cubes and for recipes where water is used but not boiled, such as cold soups.

For More Information

For more information, including the level of treatment in your local water system, please contact:

- your drinking water purveyor or supplier; or
- the local environmental health officer or drinking water officer; or
- visit <u>www.health.gov.bc.ca/protect/dw_ha_con</u> tacts.html.

Please also see the following HealthLinkBC Files:

- #49a Water-borne Diseases in British Columbia
- #49b How to Disinfect Drinking Water
- #69b Formula Feeding Your Baby: Safely Preparing and Storing Formula.

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/healthfiles or your local public health unit.

Click on www.HealthLinkBC.ca or call 8-1-1 for non-emergency health information and services in B.C.

For deaf and hearing-impaired assistance, call 7-1-1 in B.C.

Translation services are available in more than 130 languages on request.

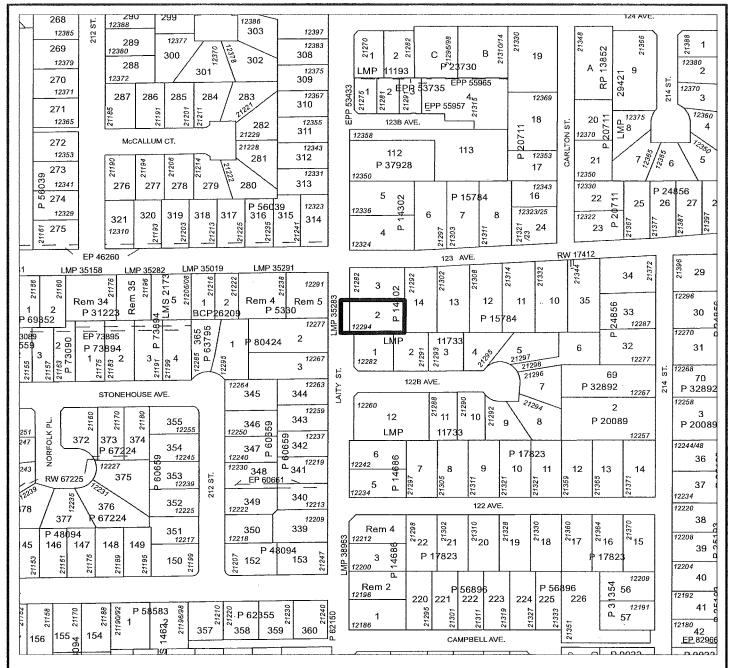




CITY OF MAPLE RIDGE BYLAW NO. 7486-2018

A Bylaw to amend Map "A" forming part of Zoning Bylaw No. 3510 - 1985 as amended

| WHER amend | EAS, it is deemed expedient to amend Maple Ridge 2 ded; | Zoning Bylaw No. 3510 - 1985 as |
|---------------|--|-------------------------------------|
| F WO | THEREFORE, the Municipal Council of the City of Map | le Ridge enacts as follows: |
| 1. | This Bylaw may be cited as "Maple Ridge Zone Ame | nding Bylaw No. 7486-2018." |
| 2. | That parcel or tract of land and premises known an | d described as: |
| | Lot 2 District Lot 248 Group 1 New Westminster Dis | strict Plan 14302 |
| | and outlined in heavy black line on Map No. 1770 a forms part of this Bylaw, is hereby rezoned to R-1 (F | |
| 3. | Maple Ridge Zoning Bylaw No. 3510 – 1985, as an are hereby amended accordingly. | nended and Map "A" attached thereto |
| | READ a first time the 18th day of September, 2018. | |
| | READ a second time the 23 rd day of April, 2019. | |
| | PUBLIC HEARING held the 21st day of May, 2019. | |
| | READ a third time the day of | , 20 |
| | ADOPTED, the day of , 20 | |
| | | |
| PRESI | DING MEMBER | CORPORATE OFFICER |
| | | |



MAPLE RIDGE ZONE AMENDING

Bylaw No.

7486-2018

Map No.

1770

From:

RS-1 (One Family Urban Residential)

To:

R-1 (Residential District)







City of Maple Ridge

TO:

His Worship Mayor Michael Morden

MEETING DATE: May 21, 2019

and Members of Council

FILE NO:

2018-180-RZ

FROM:

Chief Administrative Officer

MEETING:

CoW

SUBJECT:

First Reading

Zone Amending Bylaw No. 7481-2018

22057 and 22083 Lougheed Highway and PID 001-844-652

EXECUTIVE SUMMARY:

An application has been received to rezone the subject properties, located at 22057 and 22083 Lougheed Highway and PID 001-844-652, from RS-1 (One Family Urban Residential) to RM-2 (Medium Density Apartment Residential) to allow a five storey apartment building with approximately 86 units and underground parking.

The subject application was previously deferred at the July 24, 2018 Council meeting with the following resolution:

That first reading of Zone Amending Bylaw No. 7481-2018 be deferred until the receipt of a report outlining a land use study for both sides of the Lougheed Highway corridor.

Following deferral of the subject application, Council endorsed a process and engagement strategy and study areas boundaries for the Lougheed Transit Corridor Study on September 4, 2018. On February 26, 2019, staff summarized the Transit Corridor Phase 1, which focused on a land use and monitoring study led by Metro Vancouver. Over the spring, the City has conducted several public engagement events as part of Phases II and III of the Lougheed Transit Corridor Study.

At this time, the subject application is being brought forward for consideration of first reading. In keeping with precedence, consideration of second reading is proposed to be held until after Council endorsement of a Lougheed Transit Corridor Concept Plan, anticipated for fall 2019. This would provide the applicant time to work through the many other items necessary to proceed to second reading without additional delays.

To proceed further with this application additional information is required as outlined below. Pursuant to Council Policy 6.31, this application is subject to the Community Amenity Contribution charge of approximately \$3,100 per apartment dwelling unit totalling approximately \$226,600.00.

RECOMMENDATIONS:

- 1. That Zone Amending Bylaw No. 7481-2018 be given first reading, and that consideration of second reading be deferred until such time as the Lougheed Transit Corridor Study Concept Plan is endorsed by Council; and
- 2. That the applicant provide further information as described on Schedules C, D and E of the Development Procedures Bylaw No. 5879-1999.

DISCUSSION:

Background Context: a)

Applicant: Bissky Architecture And Urban Design Inc.

Lot 3 District Lot 397 Group 1 New Westminster District Plan Legal Description:

11251:

Lot 4 District Lot 397 Group 1 New Westminster District Plan

11251

Parcel B (Y89442) District Lot 397 Group 1 New Westminster

District Plan 11251

OCP:

Existing:

Urban Residential

Zoning:

Existing:

RS-1 (One Family Urban Residential)

RM-2 (Medium Density Apartment Residential) Proposed:

Surrounding Uses:

North: Use: Single Family Residential

Zone:

RS-1 (One Family Urban Residential)

Urban Residential Designation:

South:

Use:

Single Family Residential

Zone:

RS-1 (One Family Urban Residential)

Designation:

Urban Residential

East:

Use:

Maple Ridge Baptist Church

Zone:

P-4 (Place of Worship)

Designation:

Institutional

West:

Use:

Single Family Residential

Zone:

RS-1 (One Family Urban Residential)

Designation:

Urban Residential

Existing Use of Property:

Single Family Residential (Group Home)

Proposed Use of Property:

Multi-Family Residential

Site Area:

0.33 ha (0.82 acres)

Access:

221 Street; Lane

Servicing requirement:

Urban Standard

b) Site Characteristics:

The three subject properties, addressed at 22057 and 22083 Lougheed Highway and PID 001-844-652, are located on the north side of Lougheed Highway, between 220 Street and 221 Street (see Appendicies A and B). The subject properties are relatively flat and are currently occupied by single family houses that are being rented out to a registered charity.

c) Project Description:

The applicant is proposing to rezone the three subject properties from RS-1 (One Family Urban Residential) to RM-2 (Medium Density Apartment Residential) to allow for a five storey apartment building with approximately 86 units and underground parking. The applicant is proposing four storeys at the rear, adjacent to the lane, and five storeys along Lougheed Highway. The four storeys is proposed as a transition to the surrounding single family residential properties to the north. The application proposes a mix of studio, one, two and three bedroom units. A variance would be required to the RM-2 (Medium Density Apartment Residential) zone to allow for a five storey apartment building, as well as a variance to setbacks along the south (Lougheed Highway) and east (221 Street) property boundaries.

Lougheed Transit Corridor Study

The subject properties are located within the Lougheed Transit Corridor study area. The study area encompasses the future B-Line rapid bus route, which will run between Haney Transit Exchange and Coquitlam Central Station along the Lougheed Highway. Initially, bus stops will be located at Laity Street and 203 Street, with the opportunity to add an additional stop in the future at 222 Street in proximity to the subject properties. Council endorsed a process and engagement strategy and study area boundaries for the Lougheed Transit Corridor Study on September 4, 2018. On February 26, 2019, staff summarized the Transit Corridor Phase 1, which focused on a land use and monitoring study led by Metro Vancouver. Over the spring, the City has conducted several public engagement events as part of Phases II and III of the Lougheed Transit Corridor Study. A report summarizing all public engagement feedback is scheduled for a Council Workshop in June 2019.

The proposed apartment building reflects the existing Major Corridor Residential Infill policies. Based on feedback captured through the consultation events, it is anticipated that the use and density along Lougheed Highway east of 216 Street will remain consistent with current Major Corridor policies. Opportunities for land use changes are anticipated to be focused around the bus stop nodes at 203 Street and Laity Street.

As mentioned above, Translink has identified a potential additional B-Line rapid stop at 222 Street which may be added in the future. Should a third stop be added at a later date, the bus stop would likely be located closer to the 222 Street intersection, based on the other bus stop locations identified for Laity Street and 203 Street.

At this time the current application has been assessed to determine its compliance with the OCP and provide a land use assessment only. Detailed review and comments will need to be made once full application packages have been received. A more detailed analysis and a further report will be required prior to second reading. Such assessment may impact proposed lot boundaries and yields, OCP designations and Bylaw particulars, and may require application for further development permits.

d) Planning Analysis:

Official Community Plan:

The subject properties are located to the west, just outside, of the Town Centre Area Plan. The OCP designates the subject properties *Urban Residential – Major Corridor*, and development of the properties are subject to the *Major Corridor Residential* infill policies of the OCP. The *Major Corridor Residential* category identifies the various types of housing forms which are encouraged along major road corridors to include: single detached dwellings, duplexes, triplexes, fourplexes, townhouses, apartments, and small lot intensive residential developments. These policies require that

development be compatible with the surrounding neighbourhood, with particular attention given to site design, setbacks, and lot configuration with the existing pattern of development in the area. It is noted that one of the underlying principles in the OCP is to encourage growth within the Urban Area Boundary (UAB) and to accommodate growth through infill by promoting a mix of housing types and tenures (Policy 3-1). The proposed rezoning of the subject property to RM-2 (Medium Density Apartment Residential) aligns with the *Major Corridor Residential* infill policies.

Policy 3-20 c) Major Corridor Residential indicates apartment buildings have a maximum height of four storeys; however, other OCP policies provide support for the increase in height noting density bonus and the provision of rental housing or a cash-in-lieu contribution are mechanisms for achieving additional density and height. Based on Council direction, on July 17, 2018 Council reviewed a draft framework of density bonus regulations. As a result of the discussion, Council directed staff to begin preparing bylaw amendments to incorporate the density bonus framework into the New Zoning Bylaw.

In developing the proposed density bonus framework staff worked closely with Rollo + Associates, the consultant that prepared the original analysis for the City's Albion Density Bonus scheme and our existing CAC program, to complete a financial analysis to determine both the value of land at the various base densities currently available, as well as the possible increase in land values that may be associated with a proposed bonus density opportunity. The consultant also looked at the costs associated with the required amenities (be they affordable rental units or a cash in-lieu contribution) to ensure the opportunity of the density bonus zoning is calibrated appropriately to the cost of providing the associated amenities. In preparing the density bonus framework, staff also consulted with local developers and industry representatives. The Urban Development Institute and the Homebuilders Association of Vancouver (formerly the Greater Vancouver Home Builders' Association) called the draft framework a "win-win-win" opportunity for Maple Ridge, the development industry, and residents looking for affordable housing solutions.

Relating this application, under the proposed density bonus regulations for the RM-2 zone (the zone under consideration in the current application) the base density of 1.8 FSR could be bonused in exchange for either:

- 10% of the gross floor area being rental units, with rents at minimum 10% below CMHC average market rents for the Ridge-Meadows area; OR
- A cash in-lieu, at a rate of \$9.00 per square foot.

Like all density bonus programs, the proposed framework is optional in nature. To be clear, under the proposed density bonus framework the provision of affordable rental units or a cash in-lieu contribution would only be applicable if the developer chose to pursue the available bonused density. In the current application before Council, the applicant has indicated they are open to either option, however, based on recent conversations with Council, staff will not pursue the rental option and instead focus on the cash-in-lieu scenario. The details of the cash-in-lieu option will form part of the second reading report. It should be noted that Council are interested in revisiting the above noted City-wide density bonus regulations and the report on this topic is expected to be presented to Council shortly.

The following OCP policies would also apply to this rezoning application:

3-30 Maple Ridge will consider density bonus as a means of encouraging the provision of affordable, rental and special needs housing, and amenities.

- **3-31** Maple Ridge supports the provision of rental accommodation and encourages the construction of rental units that vary in size and number of bedrooms.
- **3-32** Maple Ridge supports the provision of affordable, rental and special needs housing throughout the District.
- **3-33** Maple Ridge will encourage housing that incorporates "age-in-place" concepts and senior housing designed to accommodate special needs.

Housing Action Plan:

Maple Ridge's vision and commitment to towards housing is encompassed in this statement contained in the Maple Ridge Housing Action Plan (MRHAP):

"Access to safe, affordable, and appropriate housing that meets the diverse and changing needs of the community is a priority."

The current application will provide approximately 86 new apartment units directly adjacent to the Town Centre, and as mentioned above, the applicant offers a diverse mix of studio, one, two and three bedroom units. The applicant also intends to meet the need for rental, affordable, special needs or age-in place housing, as discussed above, with details to be determined prior to second reading.

Zoning Bylaw:

The applicant is proposing to rezone the three subject properties from RS-1 (One Family Urban Residential) to RM-2 (Medium Density Apartment Residential) (see Appendix C) to allow for a five storey apartment building with approximately 86 units and underground parking (see Appendix D). The applicant is proposing a mix of studio, one, two and three bedroom units. The maximum floor space ratio (FSR) permitted in the RM-2 (Medium Density Apartment Residential) zone is 1.8. This application is proposing an FSR of 2.0. As mentioned above, discussions with the applicant suggest they are willing to provide a percentage of the units as market rental, in exchange for the increased density and height. The applicant has also suggested that, alternative to providing rental, a cash-in-lieu option could be provided for the increase in density. Recent conversations with Council have identified that cash-in-lieu is the prefered option; therefore, staff will work with the applicant for cash-in-lieu and report those details back to Council within the second reading report.

It has also been suggested by the applicant, that they will provide some electric vehicle charging infrastructure, the number and type are to be determined prior to second reading.

The minimum lot size for the proposed RM-2 (Medium Density Apartment Residential) zone is 0.13 ha (0.3 acres) and the proposed consolidated lot area is approximately 0.33 ha (0.8 acres). The applicant has indicated that variances to height and setbacks will be applied for through a Development Variance Permit application.

Development Permits:

Pursuant to Section 8.7 of the OCP, a Multi-Family Development Permit application is required to ensure the current proposal enhances existing neighbourhoods with compatible housing styles that meet diverse needs, and minimize potential conflicts with neighbouring land uses.

Advisory Design Panel:

A Multi-Family Development Permit is required and must be reviewed by the Advisory Design Panel prior to second reading.

Development Information Meeting:

A Development Information Meeting is required for this application. Prior to second reading the applicant is required to host a Development Information Meeting in accordance with Council Policy 6.20.

e) Interdepartmental Implications:

In order to advance the current application, after first reading, comments and input, will be sought from the various internal departments and external agencies listed below:

- a) Engineering Department;
- b) Fire Department;
- c) Building Department;
- d) Parks Department;
- e) School District;
- f) Ministry of Transportation and Infrastructure; and
- g) Canada Post.

The above list is intended to be indicative only and it may become necessary, as the application progresses, to liaise with agencies and/or departments not listed above.

This application has not been forwarded to the Engineering Department for comments at this time; therefore, an evaluation of servicing requirements has not been undertaken. We anticipate that this evaluation will take place between first and second reading.

f) Intergovernmental Implications

This development application will be referred to the Ministry of Transportation and Infrastructure (MOTI) after first reading to determine if they have any concerns or requirements that will impact the proposed development. MOTI will need to approve of *Zoning Bylaw No. 7481-2018* prior to the bylaw obtaining final reading.

g) Alternatives

Council may choose to defer the subject development application until such time as a City-led Lougheed Transit Corridor Study Concept Plan is complete. The anticipated completion time of the concept plan is the end of year, 2019. If Council prefers this alternative, the recommendation at the start of this report should be replaced with:

1. That Zone Amending Bylaw No. 7481-2018 be deferred until Council endorses the Lougheed Transit Corridor Study draft concept plan.

h) Development Applications:

In order for this application to proceed the following information must be provided, as required by Development Procedures Bylaw No. 5879–1999 as amended:

- 1. A complete Rezoning Application (Schedule C);
- 2. A Multi-Family Residential Development Permit Application (Schedule D); and
- 3. A Development Variance Permit (Schedule E).

As part of the information being submitted above, to include details about provision of market rental and adaptable units, stormwater management, public art and shadow analysis.

The above list is intended to be indicative only, other applications may be necessary as the assessment of the proposal progresses.

CONCLUSION:

The development form is generally in compliance with the OCP, noting there is policy support for density bonusing and the provision a cash-in-lieu option, or alternatively, a provision of providing a percentage of rental units. As the subject properties are located in the Lougheed Transit Corridor study area, staff are recommending first reading. Consideration of second reading will take place following Council endorsement of the Lougheed Transit Corridor Concept Plan, anticipated for fall 2019. In addition, compatibility of this projects design, proposed height, setbacks and density bonus details will be determined prior to second reading. Therefore, it is recommended that Council grant first reading subject to additional information being provided and assessed prior to second reading.

It is recommended that Council not require any further additional OCP consultation.

Prepared by:

Adam Rieu

Planning Technician

Approved by:

Christine Carter, M.PL, MCIP, RPP

Director of Planning

Approved by:

Frank Quinn, MBA, P. Eng

GM Public Works & Development Services

Concurrence:

Kelly Swift, MBA

Acting Chief Administrative Officer

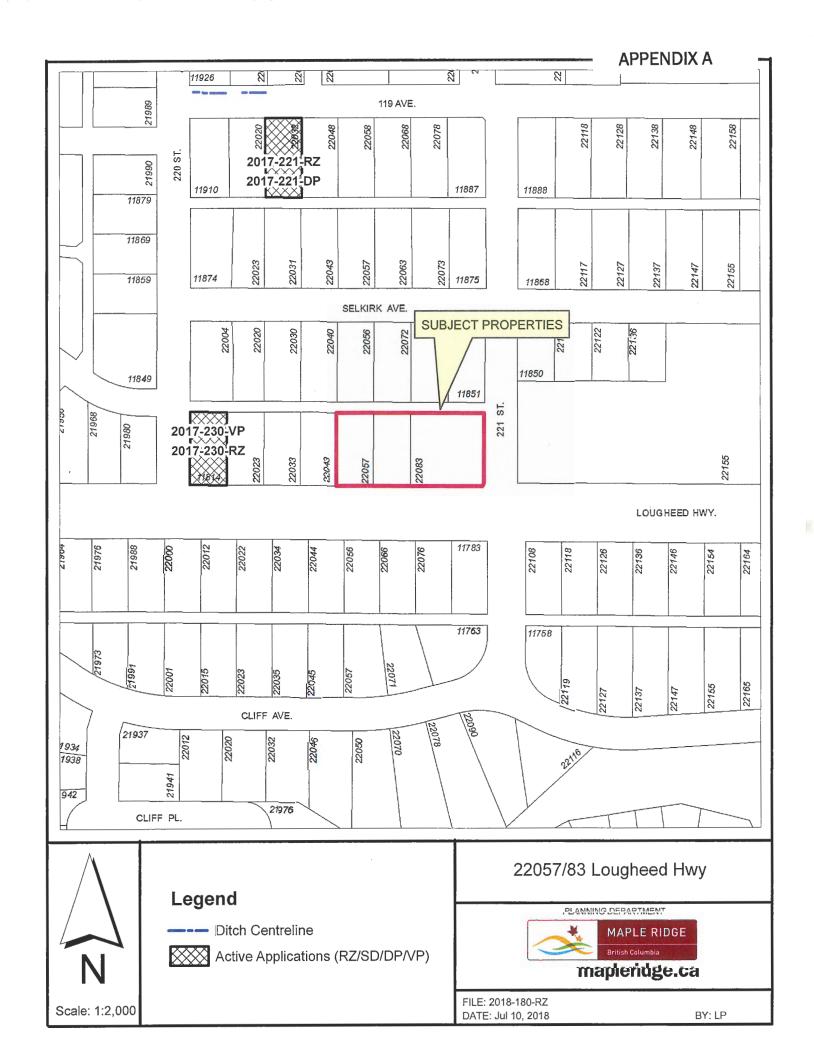
The following appendices are attached hereto:

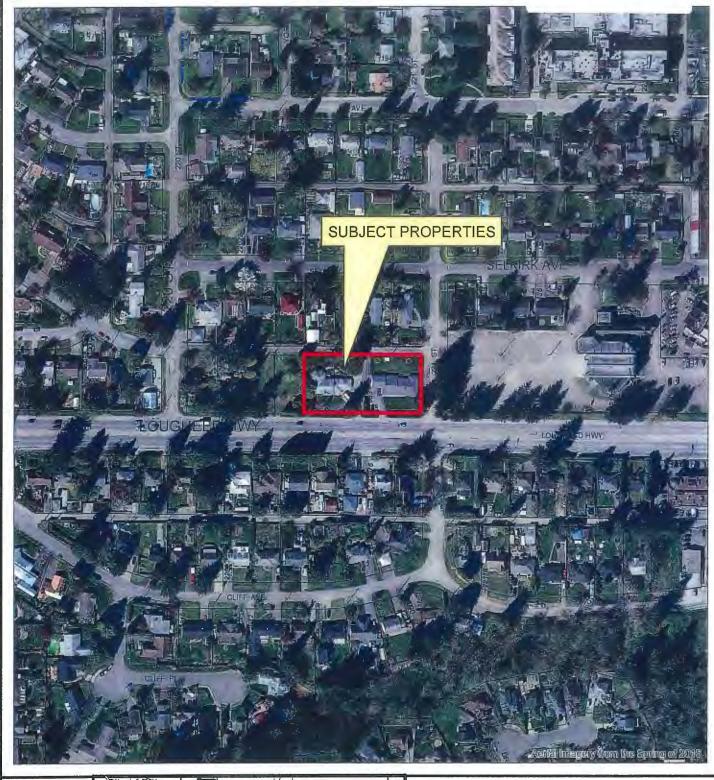
Appendix A - Subject Map

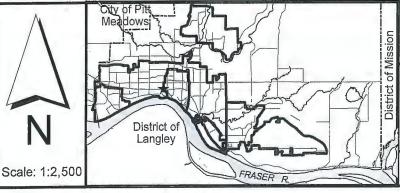
Appendix B - Ortho Map

Appendix C - Zone Amending Bylaw No. 7481-2018

Appendix D - Proposed Site Plan







22057 & 22083 Lougheed Hwy

PLANNING DEPARTMENT



mapleridge.ca

2018-180-RZ DATE: May 2, 2018

BY: JV

CITY OF MAPLE RIDGE BYLAW NO. 7481-2018

A Bylaw to amend Map "A" forming part of Zoning Bylaw No. 3510 - 1985 as amended

| WHEREAS, it | is deemed | expedient to | amend | Maple | Ridge | Zoning | Bylaw No | o. 3510 - | 1985 | as |
|-------------|-----------|--------------|-------|-------|-------|--------|----------|-----------|------|----|
| amended; | | | | | | | | | | |

NOW THEREFORE, the Municipal Council of the City of Maple Ridge enacts as follows:

- 1. This Bylaw may be cited as "Maple Ridge Zone Amending Bylaw No. 7481-2018."
- 2. Those parcels or tracts of land and premises known and described as:

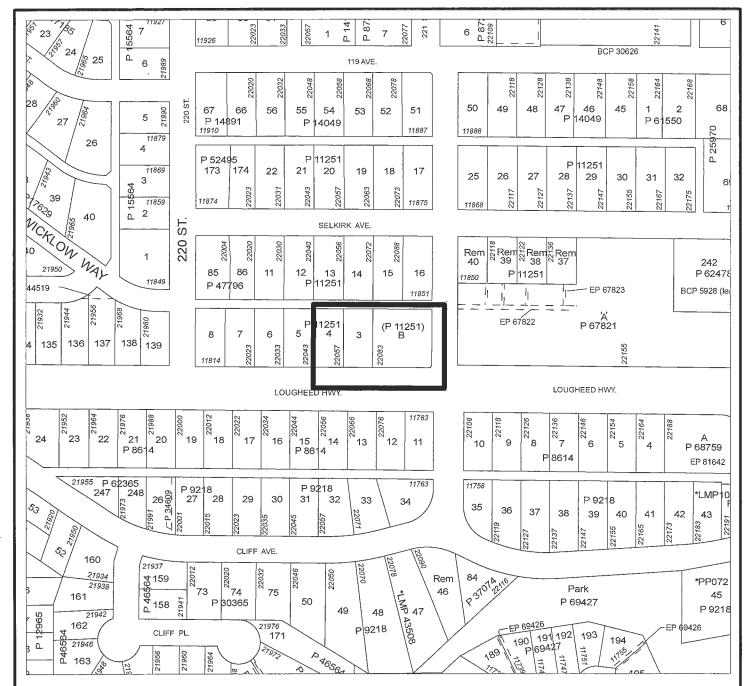
Lot 3 District Lot 397 Group 1 New Westminster District Plan 11251 Lot 4 District Lot 397 Group 1 New Westminster District Plan 11251 Parcel B (Y89442) District Lot 397 Group 1 New Westminster District Plan 11251

and outlined in heavy black line on Map No. 1766 a copy of which is attached hereto and forms part of this Bylaw, are hereby rezoned to RM-2 (Medium Density Apartment Residential).

3. Maple Ridge Zoning Bylaw No. 3510 - 1985 as amended and Map "A" attached thereto are hereby amended accordingly.

READ a first time the 24th day of July, 2018.

| PRESIDING MEMBER | (| CORPORATE OFFICER |
|-------------------------------|--------------------------|------------------------|
| | _ | |
| ADOPTED, the day of | , 20 | |
| APPROVED by the Ministry of 1 | Fransportation and Infra | astructure this day of |
| READ a third time the | day of | , 20 |
| PUBLIC HEARING held the | day of | , 20 |
| READ a second time the | day of | , 20 |



MAPLE RIDGE ZONE AMENDING

Bylaw No.

7481-2018

Map No.

1766

From:

RS-1 (One Family Urban Residential)

To:

RM-2 (Medium Density Apartment Residential)









City of Maple Ridge

TO:

His Worship Mayor Michael Morden

MEETING DATE: May 21, 2019

and Members of Council

FILE NO: 2019-081-RZ

FROM: Chief Administrative Officer

MEETING: C o W

SUBJECT:

First Reading

Zone Amending Bylaw No. 7540-2019 21358 and 21366 Dewdney Trunk Road

EXECUTIVE SUMMARY:

An application has been received to rezone the subject property, located at 21358 and 21366 Dewdney Trunk Road, from RS-1 (One Family Urban Residential) and RS-1b (One Family Urban (Medium Density) Residential) to RM-2 (Medium Density Apartment Residential) to allow future construction of a five storey, 54 unit, purpose-built rental apartment building.

Council endorsed a process and engagement strategy and study area boundaries for the Lougheed Transit Corridor Study on September 4, 2018. On February 26, 2019, staff summarized the Transit Corridor Phase 1, which focused on a land use and monitoring study led by Metro Vancouver. Over the spring, the City has conducted several public engagement events as part of Phases II and III of the Lougheed Transit Corridor Study.

At this time, the subject application is being brought forward for consideration of first reading. In keeping with precedence, consideration of second reading is proposed to be held until after Council endorsement of a Lougheed Transit Corridor Concept Plan, anticipated to be presented by the end of 2019. This would provide the applicant time to work through the many other items necessary to proceed to second reading without additional delays.

The subject application is exempt from paying the Community Amenity Contribution, Policy 6.31, as the applicant is proposing 100% of the units as rental to be secured through a Housing Agreement. To proceed further with this application additional information is required as outlined below.

RECOMMENDATIONS:

- That Zone Amending Bylaw No. 7540-2019 be given first reading; and that consideration of second reading be deferred until such time as the Lougheed Transit Corridor Study Concept Plan is endorsed by Council; and
- 2. That the applicant provide further information as described on Schedules C, D and E of the Development Procedures Bylaw No. 5879–1999.

DISCUSSION:

a) Background Context:

Applicant: Westurban Developments Ltd. (Purpose-Built Rental Apartment

Developer)

Legal Description: Lot 4 Except: Firstly; Part Dedicated Road on Plan 77386,

Secondly; Part Dedicated Road on Plan LMP10702 District Lot

248 Group 1 New Westminster District Plan 17075

Lot A District Lot 248 Group 1 New Westminster District Plan

14984

OCP:

Existing: Urban Residential Proposed: Urban Residential

Zoning:

Existing: RS-1b (One Family Urban (Medium Density) Residential) and

RS-1 (One Family Urban Residential)

Proposed: RM-2 (Medium Density Apartment Residential)

Surrounding Uses:

North: Use: Single Family Residential

Zone: R-1 (Residential District)
Designation: Urban Residential

South: Use: Single Family Residential

Zone: RS-1 (One Family Urban Residential)

Designation: Urban Residential

East: Use: Multi-Family Residential

Zone: RM-1 (Townhouse Residential)

Designation: Urban Residential

West: Use: Single Family Residential

Zone: RS-1 (One Family Urban Residential)

Designation: Urban Residential

Existing Use of Property: Single Family Residential Proposed Use of Property: Multi-Family Residential Site Area: 1,780 m² (0.44 acres)

Access: Hood Street
Servicing requirement: Urban Standard

b) Site Characteristics:

The subject properties, located at 21358 and 21366 Dewdney Trunk Road, are located south of Dewdney Trunk Road, east of Hood Street and north of the Maple Ridge Cemetery. Consolidation of the subject properties will be a condition of final reading with a combined total area of 1,780 m² (0.44 acres). Both lots currently have structures located on them; however, these will need to be removed as a condition of final reading. The subject properties are flat with trees, shrubs and lawn located throughout each property.

c) Project Description:

The current application proposes to rezone the subject properties from RS-1 (One Family Urban Residential) and RS-1b (One Family Urban (Medium Density) Residential) to RM-2 (Medium Density Apartment) to permit the construction of a five storey, purpose-built rental apartment proposing approximately 54 units. The applicant, Westurban Developments Ltd., specializes in purpose-built rental buildings and is proposing 100% of the units as rental. The proposed structure will consist of a concrete base and wood frame construction with a mix of studio, one and two bedroom units. Residential parking will be located underground and accessed from Hood Street. Ample bicycle storage is proposed with the development to help off-set a proposed reduction in the amount of car parking stalls.

Lougheed Transit Corridor Study

The subject properties are located within the Lougheed Transit Corridor study area. The study area encompasses the future B-Line rapid bus route, which will run between Haney Transit Exchange and Coquitlam Central Station along the Lougheed Highway. Initially, bus stops will be located at Laity Street and 203 Street, with the opportunity to add an additional stop in the future at 222 Street in proximity to the subject properties. Council endorsed a process and engagement strategy and study area boundaries for the Lougheed Transit Corridor Study on September 4, 2018. On February 26, 2019, staff summarized the Transit Corridor Phase 1, which focused on a land use and monitoring study led by Metro Vancouver. Over the spring, the City has conducted several public engagement events as part of Phases II and III of the Lougheed Transit Corridor Study. A report summarizing all public engagement feedback is scheduled for a Council Workshop in June 2019.

At this time the current application has been assessed to determine its compliance with the Official Community Plan (OCP) and provide a land use assessment only. Detailed review and comments will need to be made once full application packages have been received. A more detailed analysis and a further report will be required prior to second reading. Such assessment may impact proposed lot boundaries and yields, OCP designations and Bylaw particulars, and may require application for further development permits.

d) Planning Analysis:

Official Community Plan:

The subject properties are located along Dewdney Trunk Road, where the OCP designates the subject properties *Urban Residential – Major Corridor*, and development of the properties are subject to the *Major Corridor* infill policies of the OCP. The *Major Corridor Residential* category identifies the various types of housing forms which are encouraged along major road corridors to include: single detached dwellings, duplexes, triplexes, fourplexes, townhouses, apartments, and small lot intensive residential developments. These policies require that development be compatible with the surrounding neighbourhood, with particular attention given to site design, setbacks, and lot configuration with the existing pattern of development in the area. It is noted that one of the underlying principles in the OCP is to encourage growth within the Urban Area Boundary (UAB) and to accommodate growth through infill by promoting a mix of housing types and tenures (Policy 3-1). The proposed rezoning of the subject properties to RM-2 (Medium Density Apartment Residential) aligns with the *Major Corridor Residential* infill policies.

Policy 3-20 c) Major Corridor Residential indicates apartment buildings have a maximum height of four storeys; however, other OCP policies provide support for the increase in height as a means of encouraging affordable rental and special needs housing.

The following other OCP policies would also apply to this rezoning application:

3-30 Maple Ridge will consider density bonus as a means of encouraging the provision of affordable, rental and special needs housing, and amenities.

The applicant proposes to increase the density within the RM-2 (Medium Density Apartment) zone from 1.8 to 2.1 FSR, which is generally in keeping with the City's draft density bonus framework that forms part of the new zoning bylaw. The draft density bonus framework is premised on the exchange of density for either affordable rental units or a cash-in-lieu alternative. The applicant is also providing 100% of the units as rental with further details regarding affordable rental to be determined prior to second reading.

3-31 Maple Ridge supports the provision of rental accommodation and encourages the construction of rental units that vary in size and number of bedrooms...

This project proposes to add approximately 54 new rental housing units in West-Central Maple Ridge. The applicant proposes a mix of studio, one and two bedroom units, details of which will form part of the second reading report. No three or more bedroom units are proposed with the subject application.

A recommended approach to secure these units as rental housing (in perpetuity) will be through a Restrictive Covenant placed on title and a Housing Agreement with the property owner.

Housing Action Plan:

The Housing Action Plan (HAP), which was endorsed by Council in September, 2014 identifies rental housing as a priority. This was reaffirmed with the endorsement of the Housing Action Plan Implementation Framework in September, 2015.

This project meets many of the objectives of the Housing Action Plan to encourage more rental, affordable and special needs housing in Maple Ridge. The applicant will provide a more detailed amount of information about the unit mix and potential affordable rent for the second reading report. A Housing Agreement will ensure that these units will be retained for such rental purposes over time.

Zoning Bylaw:

The applicant is proposing to rezone the two subject properties from RS-1 (One Family Urban Residential) and RS-1b (One Family Urban (Medium Density) Residential) to RM-2 (Medium Density Apartment Residential) (see Appendix C) to allow for a five storey, purpose-built rental apartment building with approximately 54 units. The applicant, who specializes in purpose-built rental buildings, is proposing the development be 100% rental units and secured through a housing agreement in perpetuity. The proposed building will contain a mix of studio, one and two bedroom units. The maximum floor space ratio permitted in the RM-2 (Medium Density Apartment Residential) zone is 1.8 FSR; however, the applicant is proposing an increase in density, to 2.1 FSR, details of which are to be determined before proceeding to second reading.

Underground parking is provided; however, the applicant will be seeking a variance to the number of spaces from 92 required spaces to 47 spaces. The applicant, as suggested above, is proposing the

development as 100% rental, and justifies the reduction in required parking on the basis that residents of rental buildings have less reliance on automobiles and seek other forms of mobility, including walking, cycling and transit.

A Parking Study, conducted by Watt Consulting Group, has been provided and will be reviewed as part of the submission requirements required before going to second reading. Early findings in the Parking Study suggest the applicant is proposing to increase the amount of bicycle parking, in the form of 92 long-term spaces, which is 78 spaces more than the required amount. The applicant is also considering contributing towards a transportation mobility fund that could be used towards puchasing transit passes for residents for a defined period of time. Other suggestions within the Parking Study indicate that there may be opportunties to approach carsharing programs, which do not currently operate in the City of Maple Ridge, for an on-site vehicle; as well, looking at the possibility of creating an information package, to be distributed to new residents, identifying transportation options and services available in the surrounding area. The location of the subject properties also lends itself well to transit options, as there are bus stops located just west of the development along Dewdney Trunk Road (east of Laity Street, eastbound and west of Laity Street, westbound), as well as northbound and southbound stops along Laity Street and the new location of the B-Line along Lougheed Highway at Laity Street. It should be noted that the Parking Study provided by the applicant is supported by the 2018 Metro Vancouver Regional Parking Study findings that suggest in instances where rental units are located in proximity to transit, a reduction in parking may be warranted. It should also be noted that other applications proposing a significant reduction in parking have been supported, based on providing 100% rental and proximity to services and transit.

The minimum lot size for the proposed RM-2 (Medium Density Apartment Residential) zone is 1,214 m² (0.3 acres) and the proposed consolidated lot area is approximately 1,780 m² (0.44 acres). The applicant has indicated that variances to height, setbacks and parking will be applied for through a Development Variance Permit application.

Development Permits:

Pursuant to Section 8.7 of the OCP, a Multi-Family Development Permit application is required to ensure the current proposal enhances existing neighbourhoods with compatible housing styles that meet diverse needs, and minimize potential conflicts with neighbouring land uses.

Advisory Design Panel:

A Form and Character Development Permit is required and must be reviewed by the Advisory Design Panel prior to second reading.

Development Information Meeting:

A Development Information Meeting is required for this application. Prior to second reading the applicant is required to host a Development Information Meeting in accordance with Council Policy 6.20.

e) Interdepartmental Implications:

In order to advance the current application, after first reading, comments and input, will be sought from the various internal departments and external agencies listed below:

- a) Engineering Department;
- b) Operations Department;
- c) Fire Department;
- d) Building Department;
- e) Parks Department;
- f) School District;
- g) Ministry of Transportation and Infrastructure; and
- h) Canada Post.

The above list is intended to be indicative only and it may become necessary, as the application progresses, to liaise with agencies and/or departments not listed above.

This application has not been forwarded to the Engineering Department for comments at this time; therefore, an evaluation of servicing requirements has not been undertaken. We anticipate that this evaluation will take place between first and second reading.

f) Alternative:

Council may choose to defer the subject development application until such time as a City-led Lougheed Transit Corridor Study Concept Plan is complete. The anticipated completion time of the concept plan is the end of year, 2019. If Council prefers this alternative, the recommendation at the start of this report should be replaced with:

1. That Zone Amending Bylaw No. 7540-2019 be deferred until Council endorses the Lougheed Transit Corridor Study Concept Plan.

g) Development Applications:

In order for this application to proceed the following information must be provided, as required by Development Procedures Bylaw No. 5879–1999 as amended:

- 1. A complete Rezoning Application (Schedule C);
- 2. A Multi-Family Residential Development Permit Application (Schedule D); and
- 3. A Development Variance Permit (Schedule E);

The above list is intended to be indicative only, other applications may be necessary as the assessment of the proposal progresses.

CONCLUSION:

The development form is generally in compliance with the OCP, noting there is draft policy support for density bonusing and the provision of providing a percentage of affordable rental units, or alternatively, a cash-in-lieu option. As the subject properties are located in the Lougheed Transit Corridor study area, staff are recommending first reading. Consideration of second reading will take place following Council endorsement of the Lougheed Transit Corridor Concept Plan, anticipated by the end of 2019. In addition, compatibility of this projects design, proposed height, setbacks and density bonus details will be determined prior to second reading. Therefore, it is recommended that Council grant first reading subject to additional information being provided and assessed prior to second reading.

Prepared by:

Adam Rieu

Planning Technician

Reviewed by:

Christine Carter, M.PL, MCIP, RPP

Director of Planning

Approved by:

Frank Quinn, MBA, P. Eng

GM Public Works & Development Services

Concurrence:

Kelly Swift, MBA

Acting Chief Administrative Officer

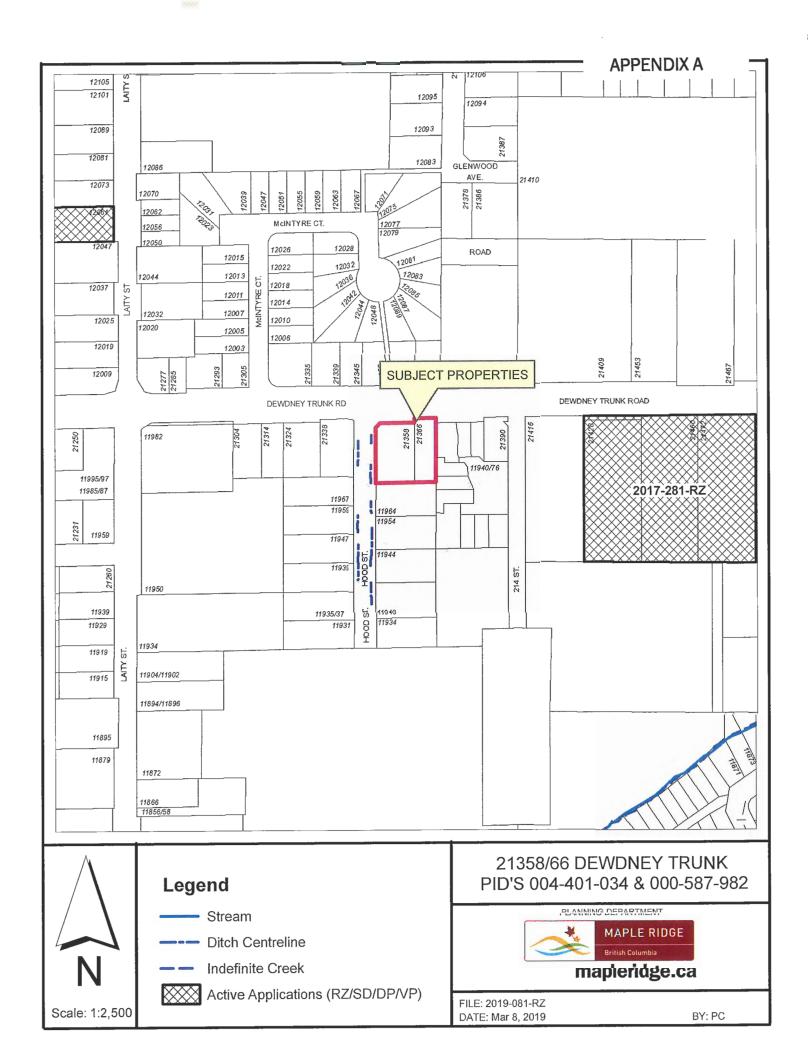
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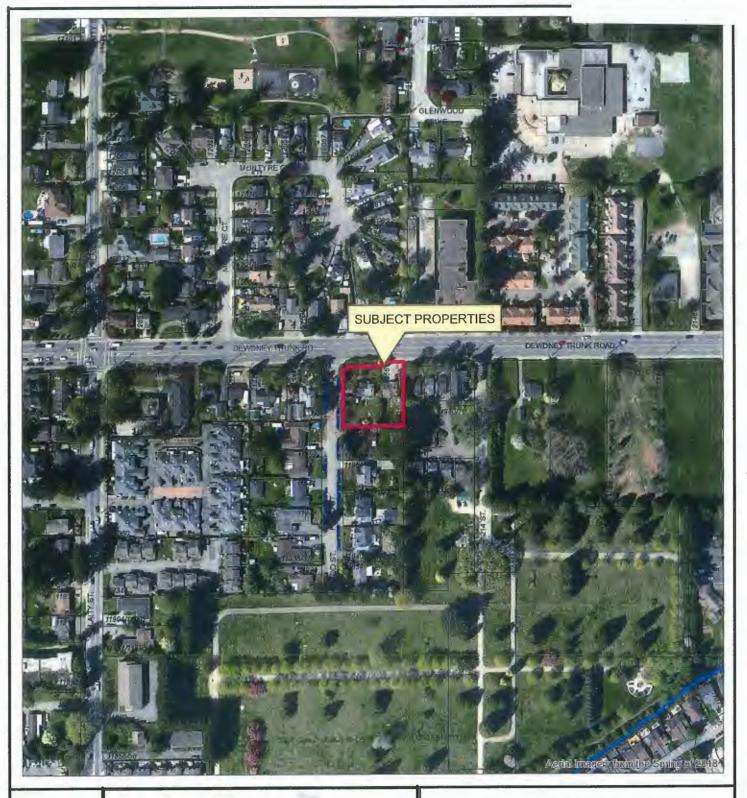
Appendix A - Subject Map

Appendix B - Ortho Map

Appendix C - Zone Amending Bylaw No. 7540-2019

Appendix D - Proposed Site Plan







Scale: 1:2,500

21358/66 DEWDNEY TRUNK PID'S 004-401-034 & 000-587-982



FILE: 2019-081-RZ DATE: Mar 8, 2019

BY: PC

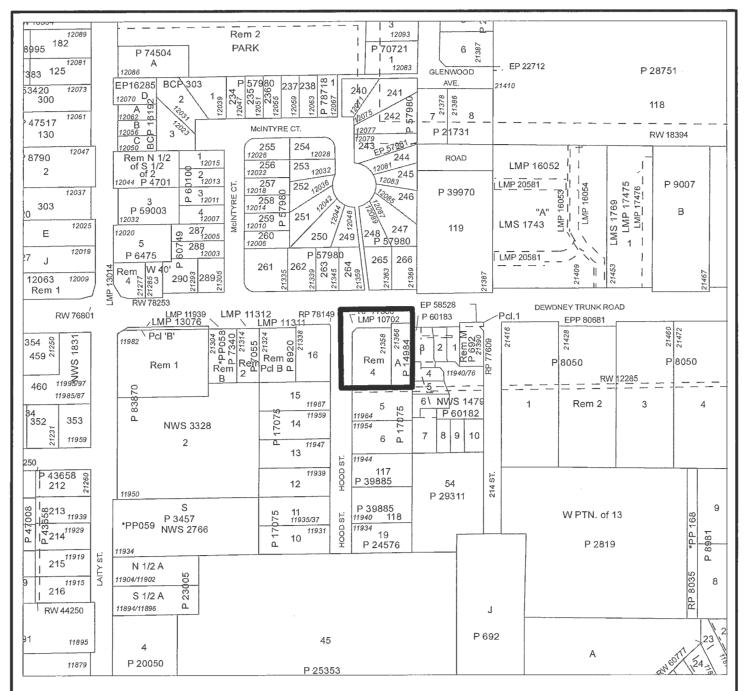
CITY OF MAPLE RIDGE BYLAW NO. 7540-2019

A Bylaw to amend Map "A" forming part of Zoning Bylaw No. 3510 - 1985 as amended

| WHERI amend | E AS , it is deemed expedierled; | nt to amend Maple Ridge | Zoning Bylaw No. 3510 | 0 - 1985 as | | | | |
|--|---|----------------------------|-----------------------|----------------|--|--|--|--|
| NOW THEREFORE, the Municipal Council of the City of Maple Ridge enacts as follows: | | | | | | | | |
| 1. | This Bylaw may be cited a | as "Maple Ridge Zone Am | ending Bylaw No. 7540 | 0-2019." | | | | |
| 2. | Those parcels or tracts of | land and premises know | n and described as: | | | | | |
| | Lot 4 Except: Firstly; Part on Plan LMP10702 Distr | | | | | | | |
| | Lot A District Lot 248 Gro | up 1 New Westminster D | istrict Plan 14984 | | | | | |
| | and outlined in heavy bla forms part of this Bylaw, a Residential). | • | | | | | | |
| 3. | Maple Ridge Zoning Bylav are hereby amended according | | ended and Map "A" att | tached thereto | | | | |
| | READ a first time the | day of | , 20 | | | | | |
| | READ a second time the | day of | , 20 | | | | | |
| | PUBLIC HEARING held the | e day of | , 20 | | | | | |
| | READ a third time the | day of | , 20 | | | | | |
| | APPROVED by the Ministr | y of Transportation and Ir | nfrastructure this da | ay of | | | | |
| | ADOPTED, the day | of , 20 | | | | | | |

CORPORATE OFFICER

PRESIDING MEMBER



MAPLE RIDGE ZONE AMENDING

Bylaw No. 7540-2019

Map No. 1794

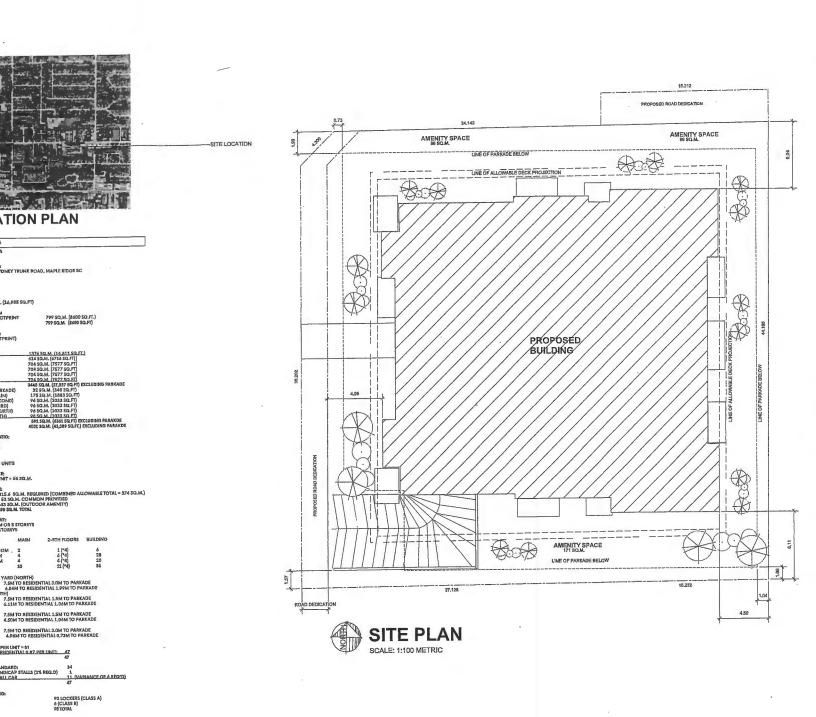
From: RS-1 (One Family Urban Residential)

RS-1b (One Family Urban (Medium Density) Residential)

To: RM-2 (Medium Density Apartment Residential)









City of Maple Ridge

TO:

His Worship Mayor Michael Morden

MEETING DATE: May 21, 2019

and Members of Council

FILE NO:

2019-091-RZ

FROM:

Chief Administrative Officer

MEETING:

CoW

SUBJECT:

First Reading

Zone Amending Bylaw No. 7541-2019

21585 River Road

EXECUTIVE SUMMARY:

An application has been received to rezone the subject property, located at 21585 River Road, from RS-1 (One Family Urban Residential) to RT-2 (Ground-Oriented Residential Infill) a newly adopted zone, to permit the development of courtyard residential housing. This project proposes a total of five dwelling units, clustered around a common courtyard.

Pursuant to Council resolution, this application is subject to the Community Amenity Contribution (CAC) Program, Policy 6.31, at a rate of \$4,100.00 per ground-oriented unit. Note that the original unit is exempt from the policy.

To proceed further with this application additional information is required as outlined below.

RECOMMENDATIONS:

That Zone Amending Bylaw No. 7541-2019 be given first reading; and

That the applicant provide further information as described on Schedules C, D and E of the Development Procedures Bylaw No. 5879-1999.

DISCUSSION:

a) **Background Context:**

Applicant:

Salenco Developments Inc.

Legal Description:

Lot 274 District Lot 247 Group 1 New Westminster District Plan

38052

OCP:

Zoning:

Existing:

Urban Residential

Existing:

RS-1 (One Family Urban Residential)

Proposed:

RT-2 (Ground-Oriented Residential Infill)

Surrounding Uses:

North:

Use:

Single Family Residential

Zone:

RS-1 (One Family Urban Residential)

Designation:

Urban Residential

South:

Use:

Single Family Residential

Zone:

RS-1 (One Family Urban Residential)

Designation:

Urban Residential

East:

Use:

Single Family Residential

Zone:

RS-1 (One Family Urban Residential)

Designation:

Urban Residential

West:

Use:

Single Family Residential

Zone:

RS-1 (One Family Urban Residential)

Designation:

Urban Residential

Existing Use of Property:

Proposed Use of Property:

Single Family Residential Multi-Family Residential 1,220 m² (0.3 acres)

Site Area: Access:

Lane

Servicing requirement:

Urban Standard

b) Site Characteristics:

The subject property is approximately 1,220 m² in area, and is bound by a single family lot to the north, a lane to the west, 216 Street to the east and River Road to the south (see Appendix B). The subject property is a corner lot, is relatively flat and has some vegetation and trees located throughout the property. There is an existing house on the subject property that will require removal as part of rezoning conditions.

c) Project Description:

The current application proposes to rezone the subject property from RS-1 (One Family Urban Residential) to RT-2 (Ground-Oriented Residential Infill) to permit the development of courtyard housing containing five units. The site is located on River Road, which is a Major Corridor as identified on Figure 4 of the Official Community Plan (OCP).

This new zone provides for the infill of ground-oriented residential buildings within established residential neighbourhoods in a form that will be incremental and sensitive to the existing and emerging context. Dwelling units for the new zone may be in one building with shared party walls to create triplexes or fourplexes that will resemble a single family home in order to fit seamlessly into neighbourhoods, or dwelling units may also be arranged individually or attached around a shared open space.

The applicant is proposing a courtyard development consisting of five units located within two buildings, where each dwelling unit is provided with ample greenspace and faces into a central courtyard. The development is located on a corner lot, therefore, the street presence of the buildings will appear as two separate single family dwellings, yet will contain five separate units. Access to the development will be located from the lane to the west.

At this time the current application has been assessed to determine its compliance with the OCP and provide a land use assessment only. Detailed review and comments will need to be made once full application packages have been received. A more detailed analysis and a further report will be required prior to second reading. Such assessment may impact proposed lot boundaries and yields, OCP designations and Bylaw particulars, and may require application for further development permits.

d) Planning Analysis:

Official Community Plan:

The OCP designates the subject property *Urban Residential – Major Corridor*, and development of the property is subject to the *Major Corridor* infill policies of the OCP. The *Major Corridor Residential* category identifies the types of ground-oriented housing forms which are encouraged along major road corridors, including fourplexes and courtyard residential development. These policies require that development be compatible with the surrounding neighbourhood, with particular attention given to site design, setbacks, and lot configuration with the existing pattern of development in the area. It is noted that one of the underlying principles in the OCP is to encourage growth within the Urban Area Boundary (UAB) and to accommodate growth through infill by promoting a mix of housing types and tenures (Policy 3-1). The proposed rezoning of the subject property to RT-2 (Ground-Oriented Residential Infill) aligns with the *Major Corridor Residential* infill policies.

Zoning Bylaw:

The current application proposes to rezone the subject property from RS-1 (One Family Urban Residential) to RT-2 (Ground-Oriented Residential Infill) to permit the development of courtyard housing. The minimum lot size for the current RS-1 (One Family Urban Residential) zone is 668 m² and the minimum lot size for Courtyard Housing in the RT-2 (Ground-Oriented Residential Infill) zone is 950 m². Any variations from the requirements of the proposed zone will require a Development Variance Permit application.

Courtyard Residential development is supported on this property because it will be similar in scale to the established single family neighbourhood. The maximum height requirements for courtyard residential developments are 9.5 m (31 ft.), which are less than today's new single family homes (11 m (36 ft.) maximum height). There is a recognition that existing older homes in the area were built to a lower height, therefore, the 9.5 m maximum height restriction for the RT-2 (Ground-Oriented Residential Infill) zone does not significantly alter the existing neighbourhood context. Each dwelling unit is also provided with ample greenspace with a central courtyard separating the two buildings. The development is also proposing one shared driveway, to be accessed from the lane. As the development is located on a corner lot, the street presence of the buildings will appear as two separate single family dwellings, but will actually contain five units between them. The density permitted for courtyard residential is not much greater than the surrounding area at 0.75 FSR, whereas single family homes are typically in the 0.6 FSR range.

Development Permits:

Pursuant to Section 8.7 of the OCP, a Multi-Family Development Permit application is required to ensure the current proposal enhances existing neighbourhoods with compatible housing styles that meet diverse needs, and minimize potential conflicts with neighbouring land uses.

Advisory Design Panel:

A Multi-Family Development Permit is required and must be reviewed by the Advisory Design Panel prior to second reading.

Development Information Meeting:

A Development Information Meeting is required for this application. Prior to second reading the applicant is required to host a Development Information Meeting in accordance with Council Policy 6.20.

e) Interdepartmental Implications:

In order to advance the current application, after first reading, comments and input, will be sought from the various internal departments and external agencies listed below:

- a) Engineering Department;
- b) Operations Department;
- c) Fire Department;
- d) Building Department;
- e) Parks Department;
- f) School District;
- g) Ministry of Transportation and Infrastructure; and
- h) Canada Post.

The above list is intended to be indicative only and it may become necessary, as the application progresses, to liaise with agencies and/or departments not listed above.

This application has not been forwarded to the Engineering Department for comments at this time; therefore, an evaluation of servicing requirements has not been undertaken. We anticipate that this evaluation will take place between first and second reading.

f) Development Applications:

In order for this application to proceed the following information must be provided, as required by Development Procedures Bylaw No. 5879–1999 as amended:

- 1. A complete Rezoning Application (Schedule B or Schedule C);
- 2. A Multi-Family Residential Development Permit Application (Schedule D); and
- 3. A Development Variance Permit (Schedule E);

The above list is intended to be indicative only, other applications may be necessary as the assessment of the proposal progresses.

CONCLUSION:

The development proposal is in compliance with the OCP, therefore, it is recommended that Council grant first reading subject to additional information being provided and assessed prior to second reading.

Prepared by:

Adam Rieu

Planning Technician

Reviewed by:

Christine Carter, M.PL, MCIP, RPP

Director of Planning

Approved by:

Frank Quinn, MBA, P. Eng

GM Public Works & Development Services

Concurrence:

Kelly Swift, MBA

Acting Chief Administrative Officer

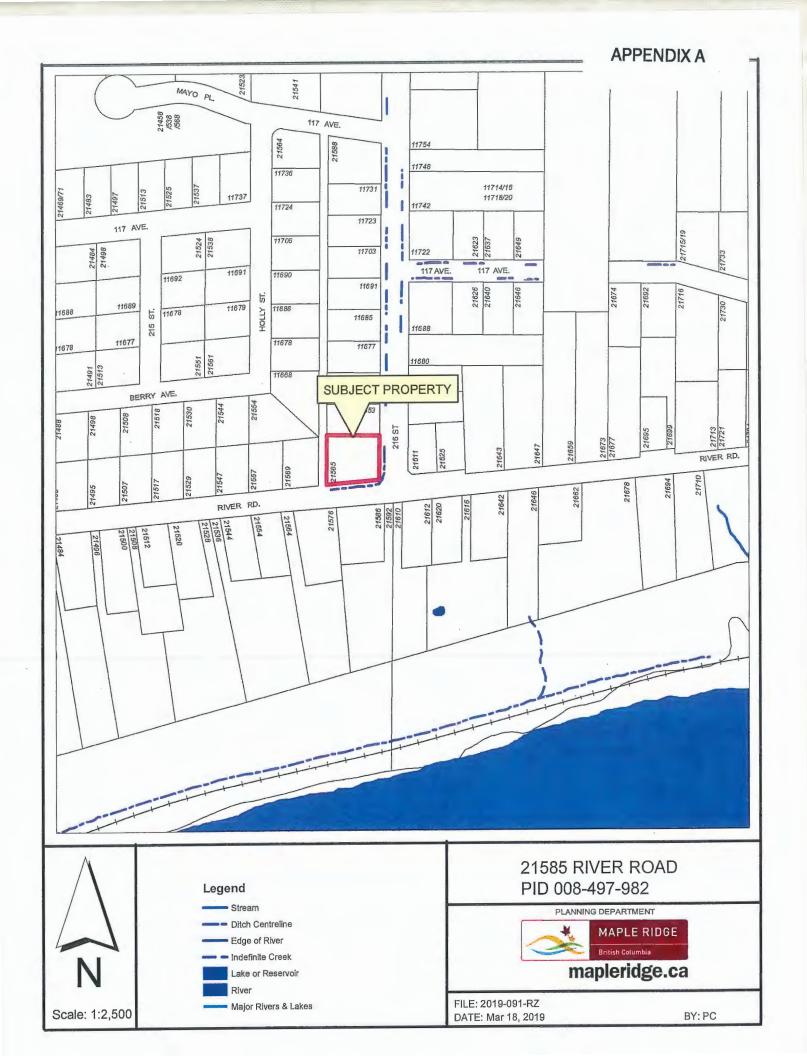
The following appendices are attached hereto:

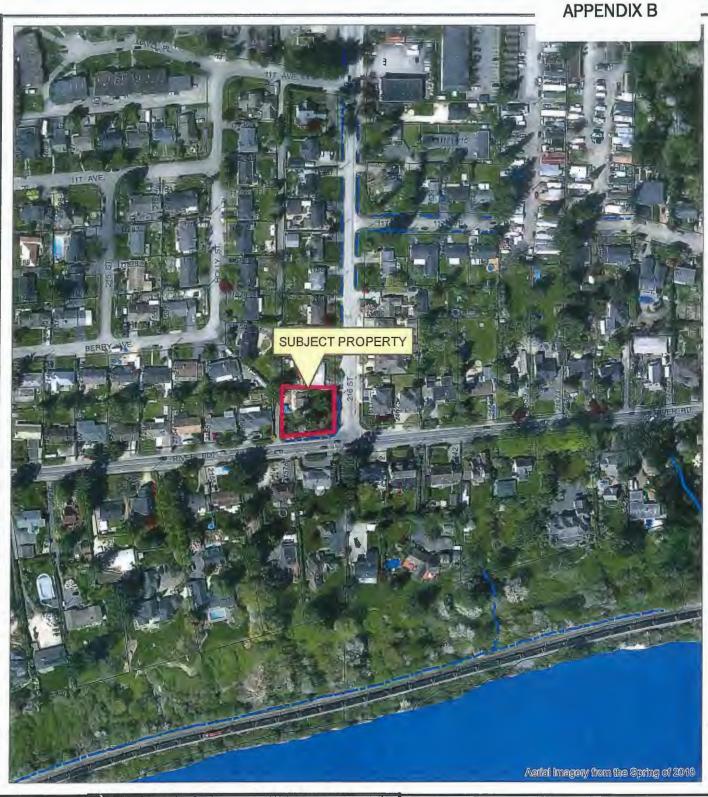
Appendix A - Subject Map

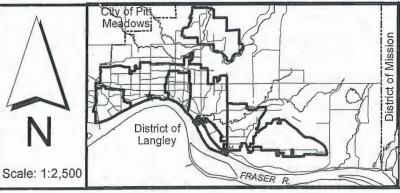
Appendix B - Ortho Map

Appendix C – Zone Amending Bylaw No. 7541-2019

Appendix D - Proposed Site Plan







21585 RIVER ROAD PID 008-497-982

PLANNING DEPARTMENT



mapleridge.ca

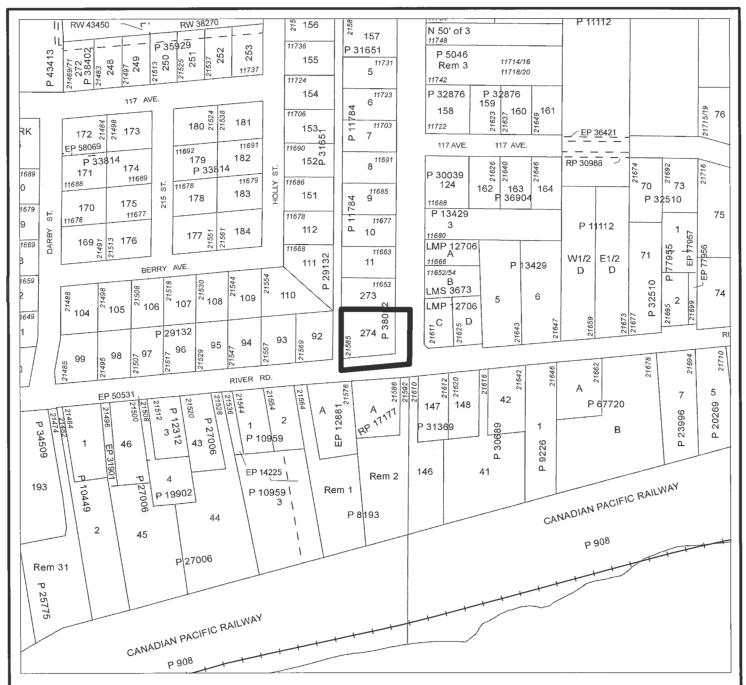
FILE: 2019-091-RZ DATE: Mar 18, 2019

BY: PC

CITY OF MAPLE RIDGE BYLAW NO. 7541-2019

A Bylaw to amend Map "A" forming part of Zoning Bylaw No. 3510 - 1985 as amended

| WHER | | t to amend Ma | ple Ridge Zoning Bylaw No. 39 | 510 - 1985 as | |
|-------------|---|------------------|-------------------------------|---------------|--|
| NOW . | THEREFORE, the Municipal | Council of the (| City of Maple Ridge enacts as | follows: | |
| 1. | This Bylaw may be cited as "Maple Ridge Zone Amending Bylaw No. 7541-2019." | | | | |
| 2. | That parcel or tract of land and premises known and described as: | | | | |
| | Lot 274 District Lot 247 Group 1 New Westminster District Plan38052 | | | | |
| | and outlined in heavy black line on Map No. 1795 a copy of which is attached hereto and forms part of this Bylaw, is hereby rezoned to RT-2 (Ground-Oriented Residential Infill). | | | | |
| 3. | Maple Ridge Zoning Bylaw No. 3510 - 1985 as amended and Map "A" attached thereto are hereby amended accordingly. | | | | |
| | READ a first time the | day of | , 20 | | |
| | READ a second time the | day of | , 20 | | |
| | PUBLIC HEARING held the | day of | , 20 | | |
| | READ a third time the | day of | , 20 | | |
| | APPROVED by the Ministry of Transportation and Infrastructure this day of , 20 | | | | |
| | ADOPTED, the day of | of | , 20 | | |
| | | | | | |
| PRES | IDING MEMBER | _ | CORPORATE OFFI | CER | |



MAPLE RIDGE ZONE AMENDING

Bylaw No. 7541-2019

Map No. 1795

From: RS-1 (One Family Urban Residential)

To: RT-2 (Ground-Oriented Residential Infill)





SALENCO

1) mains for re-corest Aspirates (1) mains for re-corest Aspirates (1) mains for pre-corest (1) mains

MOUNTY ATC 21585 River Rd. Maple Ridge B.C. Courtyard Home - Residential

ACTISSIE DATE REVENED
MAR 2, 2019

APPENDIX D





City of Maple Ridge

TO:

His Worship Mayor Michael Morden

MEETING DATE:

May 21, 2019

and Members of Council

FILE NO:

2017-117-RZ

FROM:

Chief Administrative Officer

MEETING:

CoW

SUBJECT:

Second Reading

Zone Amending Bylaw No. 7351-2017; 11865, 11839, 11831 232 Street

EXECUTIVE SUMMARY:

An application has been received to rezone the subject properties located at 11865, 11839, 11831 232 Street (Appendix A and B) from RS-1 (One Family Urban Residential) to RM-1 (Townhouse Residential) to permit the future construction of a 46 unit residential townhouse development. Council granted first reading to Zone Amending Bylaw No. 7351-2017 on September 19, 2017.

This application is in compliance with the OCP.

Pursuant to Council policy, this application is subject to the Community Amenity Contribution Program at a rate of \$4,100.00 per townhouse dwelling unit, for an estimated amount of \$188,600.00.

RECOMMENDATIONS:

- 1) That Zone Amending Bylaw No. 7351-2017 be given second reading, and be forwarded to Public Hearing;
- That the following terms and conditions be met prior to final reading:
 - i) Registration of a Rezoning Servicing Agreement as a Restrictive Covenant and receipt of the deposit of a security, as outlined in the Agreement;
 - ii) Road dedication on 232 Street as required;
 - iii) Consolidation of the subject properties;
 - iv) Registration of a Restrictive Covenant for the Geotechnical Report, which addresses the suitability of the subject properties for the proposed development;
 - v) Registration of a Restrictive Covenant for protecting the Visitor Parking, and Stormwater Management;
 - vi) Removal of existing buildings;
 - vii) In addition to the site profile, a disclosure statement must be submitted by a Professional Engineer advising whether there is any evidence of underground fuel storage tanks on the subject properties. If so, a Stage 1 Site Investigation Report is required to ensure that the subject property is not a contaminated site.

That a voluntary contribution, in the amount of \$188,600.00 be provided in keeping with the viii) Council Policy with regard to Community Amenity Contributions.

DISCUSSION:

Background Context: 1)

Planvan Development Consultants Applicant:

Lot 1 Except: South 83 feet, Section 17 Township 12 New Legal Description:

Westminster District Plan 12599;

South 83 feet Lot 1 Section 17 Township 12 New Westminster

District Plan 12599:

Lot 35 Section 17 Township 12 New Westminster District Plan 24972.

OCP:

Urban Residential Existing:

Proposed: No change

Zoning:

Existing: RS-1 (One Family Urban Residential) Proposed: RM-1 (Townhouse Residential District)

Surrounding Uses:

North: Use: Residential

> Zone: RS-1 (One Family Urban Residential)

Designation: Urban Residential

Residential South: Use:

> RS-1b (One Family Urban Medium Density Residential) Zone:

Urban Residential Designation:

East: Use: Residential

> Zone: RS-1 and RM-1 (Townhouse Residential District)

Designation: Urban Residential

Use: Residential West:

> Zone: RS-1

Designation: Urban Residential

Existing Use of Property: Single family dwelling

Proposed Use of Property: Townhouses

Site Area: 1.075 ha (2.66 acres)

232 Street Access: **Urban Standard** Servicing requirement:

2) **Project Description:**

The applicant proposes to rezone the subject property from RS-1 (One Family Urban Residential) to RM-1 (Townhouse Residential District). The proposed development is a 46 unit, three storey, three bedroom, townhouse development with a floor space ratio (FSR) of approximately 0.6. Each unit has a two car garage with no tandem stalls or parking aprons. Nine visitor parking spaces are located around the development site and 10 are required, therefore a variance will be required. Each unit has a usable open space either as a backyard or front yard, while the site also has common outdoor amenity (see Appendix D)

3) Planning Analysis:

i) Official Community Plan:

The development site is located within the Urban Area Boundary and is currently designated Urban Residential. No OCP amendment is required to support the proposed RM-1 (Townhouse Residential District) zoning.

The development of the property is subject to the Major Corridor infill policies of the OCP. These policies require that development be compatible with the surrounding neighborhood, with particular attention given to site design setbacks and lot configuration with the existing pattern of development in the area. The proposed rezoning to RM-1 (Townhouse Residential District) is in conformance with the *Urban Residential* designation and Major Corridor infill policies.

It is noted that one of the underlying principles in the OCP is to encourage growth within the Urban Area Boundary (UAB) and to accommodate growth through infill by promoting a mix of housing types and tenures (Policy 3-1). The Major Corridor Residential Infill and Compatibility Criteria all support a change in the unit type, and specifically cite that townhouse development is both compatible and desirable in the City (Policies 3-19 and 3-20).

ii) Zoning Bylaw:

The application is to rezone the subject properties located at 11831, 11839, and 11865 232 Street from RS-1 (One Family Urban Residential) to RM-1 (Townhouse Residential District) to permit a 46 unit residential townhouse development (see Appendix C)

iii) Off-Street Parking And Loading Bylaw:

Required parking for 46 unit residential townhouse development in the RM-1 (Townhouse Residential District) is 2.0 per unit, or 92 stalls. An additional parking requirement for visitor parking is 0.2 stalls per unit, or 10 stalls, 9 have been provided which include 2 disabled spaces. The minimum requirement of parking stalls required is 102 stalls. The proposal only contains 101 parking stalls being deficient by 1 visitor stall which will require a variance.

iv) Proposed Variances:

A Development Variance Permit application has been received for this project and involves the following relaxations:

Maple Ridge Zoning Bylaw No. 3510 -1985, Section 602, Part 6

- To vary the front yard setback from 7.5 metres to 6.38 metres to the building face;
- To vary the front yardsetback fron 7.5 metres to 4.5 metres to the porch element;
- To vary north setback from 6.0 metres to 4.57 metres; and
- To vary the south setback from 6.0 metres to 2.56 metres.

Maple Ridge Off-Street Parlong and Loading By, aw No. 4350-1990, Schedule "A"

• To vary the visitor parking requirement from 10 stalls to 9 stalls...

These relaxations are reasonable for this form of development. The requested variances to RM-1 (Townhouse Residential District) zone will be the subject of a future Council report.

v) Development Permits:

Pursuant to Section 8.7 of the OCP, a Multi-Family Development Permit application is required to ensure the current proposal enhances existing neighbourhoods with compatible housing styles that meet diverse needs, and minimize potential conflicts with neighbouring land uses.

vi) Advisory Design Panel:

The Advisory Design Panel (ADP) reviewed the form and character of the proposed development and the landscaping plans at a meeting held on November 21, 2018 (see Appendix E and F)

Following presentations by the project Architect and Landscape Architect, the ADP made the following resolution:

That File No. 2017-117-RZ be supported and the following concerns be addressed as the design develops and submitted to Planning staff for follow-up:

Landscape Comments:

- 1. Difficult to interpret planting symbols on the plan- adjust scale or line weights or otherwise make clearer:
- 2. Consider providing more private enclosed backyard on the West property line;
- 3. Provide a planting strip between the yard fence and peripheral walkway of the West facing units;
- 4. Provide a recess in the fence line at the private yard gate locations to reduce pedestrian conflicts:
- 5. Provide a tree in a raised planter at children's amenity space;
- 6. Consider providing a shade structure at children's playground;
- 7. Provide suitable edge conditions between the play tiles and sod with a detail shown on the plan;
- 8. Provide trellis to demarcate entrance gate for amenity space;
- 9. Provide wayfinding at pedestrian path entrances and additional signage to direct visitors to front door of all units, and peripheral ones in particular, from the visitor parking areas and the internal road system;
- Address the difficult wayfinding conditions that will face visitors and pedestrians by ensuring a well-coordinated wayfinding signage system with lighting, landscaping and surfacing;
- 11. Pedestrian path between building 2 and 3 to be coordinated, continued and extended to sidewalk along 232 Street;
- 12. Provide sidewalk connections from hammer heads to perimeter path on the North side of the project;
- 13. Provide a continuous surface treatment or accent different than asphalt road surfacing to direct pedestrians safely through the site;
- 14. Ensure type and location of trees along neighbouring property lines align with glazing to provide additional privacy;
- 15. Provide for recycling and garbage at mailbox kiosk and amenity spaces;

- 16. Resolve the conflict for the mailbox kiosk shown on the site plan and the landscape plan;
- 17. Provide main entrance feature or identifier;
- 18. Reflect details as required of storm water management elements within landscape plans.

Architectural Comments:

1. Provide front door appeal to the sides facing north and south along the perimeter walkway.

The ADP concerns have been addressed and are reflected in the current plans. A detailed description of how these items were incorporated into the final design will be included in a future development permit report to Council.

vii) Development Information Meeting:

A Development Information Meeting was held at Golden Ears Elementary School on April 8, 2019. Approximately 27 people attended the meeting plus the architect, traffic consultant facilitator and owner. A summary of the main comments and discussions with the attendees was provided by the applicant and include the following main points:

Summary of verbal comments:

- Where will workers park during construction? Response: on a gravel pad on site.
- What is the setback on the south edge, and is a variance being requested? Response: South setback meets the City zoning. There is a variance request for one electrical closet.
- How will the on-site drainage work? Response: The site is designed to retain all of its onsite drainage, with a detention facility on-site under the common amenity area.
- How much visitor parking and resident parking? Response: Nine (9) visitor stalls are provided, as well as two stalls in garages for each unit. No tandem stalls are proposed.
- Verbal concerns were expressed on the amount of people not using their garage for a car, and therefore parking on the street, like 232 Street now. School is at capacity now.

Details of Written comments:

- ... will surely attract homebuyers either from Maple Ridge or other towns nearby. The townhomes are good as shown in the drawings, sq footage are basically normal, location is perfect in front of a school.
- gave us new perspective in housing needs in Lower Mainland. We hope the prices would be competitive to others.
- Needs more visitor parking 9 spots is not enough. 232 is already at a premium. The
 dogwood tree should be retained. BC's tree. The City needs to address sidewalks and
 pedestrian crossings. It is already very dangerous.
- Street parking along 232nd needs to be reviewed. Reviewing the parking of Residence of the Complexes along 232nd east side. Concerned with the addition of more students to the elementary school it is already at capacity.
- ... very good and convenient. The location is right beside a school and not very far from downtown Maple Ridge. Size of the townhouse is great but would like to see more rooms, even a basement suite.
- ... very nice future development. I am looking forward this area having more living options in this area which is needed.

- ... concern will be around street parking but more importantly the amount of traffic affecting the school crossing at 118th Avenue. I would want to see a pedestrian activated light put in by the City at that crossing.
- ...support this project for low cost housing this area need to cleanup and multifamily low cost
- ...support the project...this good devement near the school...good design and layout...
- Support the project because development in the area will help people to buy the homes.
- Support the project and I am in favour of the more affordable housing.
- Support the development because townhouses are good for the first time home buyers.
- I support the development because of the good location.
- We are interested to see the development in the area so that more families can have their own homes.
- I support the development. Affordable housing and good location.

4) Interdepartmental Implications:

i) Engineering Department:

The applicant's engineer will have to confirm that there is sufficient capacity within the City's storm and sanitary sewer, if upgrades are required they will be the sole responsibility of the applicant. Road dedication of 3 m along 232 Street is required the length of the property.

ii) Fire Department:

The proposed building will be reviewed in more detail at the building permit stage.

5) School District No. 42 Comments:

Pursuant to Section 476 of the *Local Government Act*, consultation with School District No. 42 is required at the time of preparing or amending the OCP. A referral was sent to School District No. 42 and the following response was received.

"The proposed application would affect the student population for the catchment areas currently served by Golden Ears Elementary and Thomas Haney Secondary School.

Golden Ears Elementary has an operating capacity of 523 students. For the 2017-18 school year the student enrolment at Golden Ears Elementary was 491 students (94% utilization) including 178 students from out of catchment.

Thomas Haney Secondary School has an operating capacity of 1200 students. For the 2017-18 school year the student enrolment at Thomas Haney Secondary School was 1162 (97% utilization) including 724 students from out of catchment."

CONCLUSION:

It is recommended that second reading be given to Zone Amending Bylaw No. 7351-2017, and that application 2017-117-RZ be forwarded to Public Hearing.

Prepared by:

Wendy Cooper, M¢IP,R

Planner

Reviewed by:

Christine Carter, M.PL, MCIP, RPP

Director of Planning

Approved by:

Frank Quinn, MBA, P. Eng

GM Public Works & Development Services

Concurrence:

Kelly Swift, MBA

Acting Chief Administrative Officer

The following appendices are attached hereto:

Appendix A - Subject Map

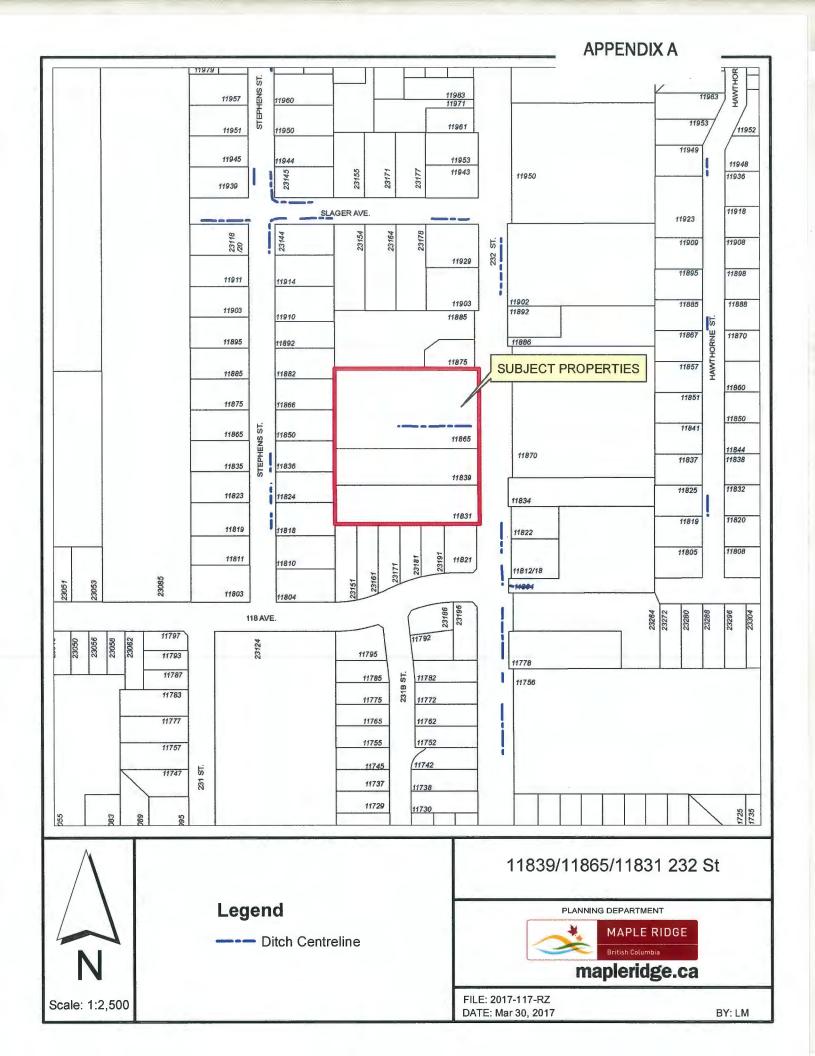
Appendix B - Ortho Map

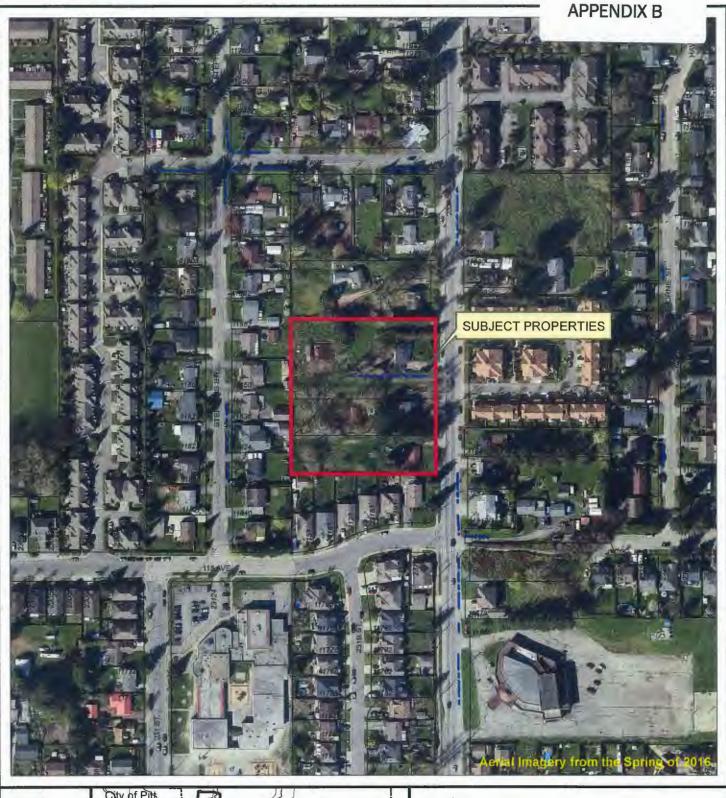
Appendix C - Zone Amending Bylaw No. 7351-2017

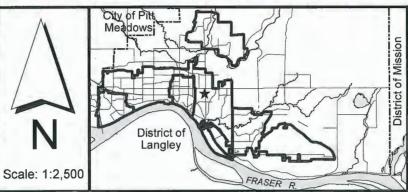
Appendix D - Site Plan

Appendix E - Building Elevation Plans

Appendix F - Landscape Plan







11839/11865/11831 232 ST

PLANNING DEPARTMENT



mapleridge.ca

FILE: 2017-117-DP DATE: Mar 30, 2017

BY: LM

CITY OF MAPLE RIDGE

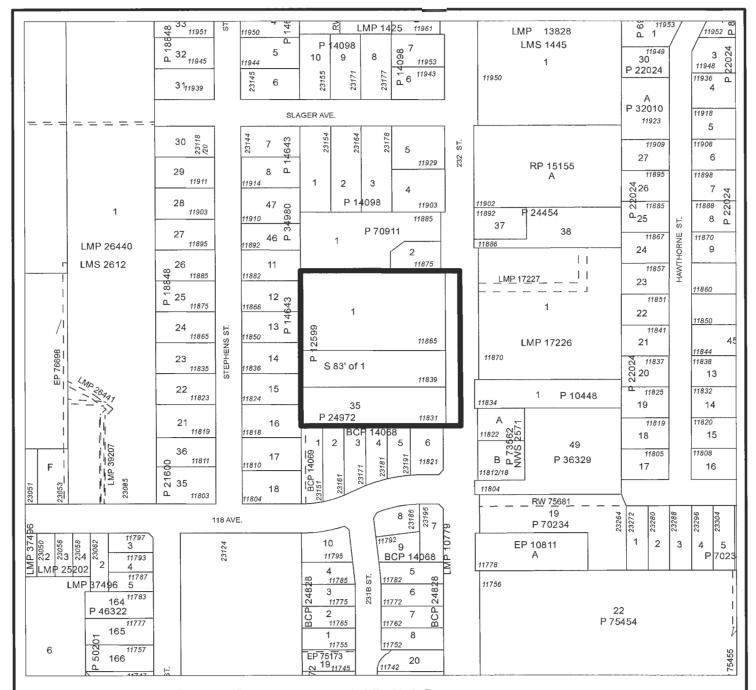
BYLAW NO. 7351-2017

A Bylaw to amend Map "A" forming part of Zoning Bylaw No. 3510 - 1985 as amended

| WHERI amend | · · · · · · · · · · · · · · · · · · · | to amend M | laple Ridge Zoning Bylaw No. 3510 - 1985 as | | |
|---|--|--|---|--|--|
| NOW T | HEREFORE, the Municipal Co | ouncil of the | e City of Maple Ridge enacts as follows: | | |
| 1. | This Bylaw may be cited as "Maple Ridge Zone Amending Bylaw No. 7351-2017." | | | | |
| 2. | Those parcels or tracts of land and premises known and described as: | | | | |
| | 12599; South 83 Feet Lot 1, Section | 17 Township 12 New Westminster District Plan ship 12 New Westminster District Plan 12599; Jestminster District Plan 24972; | | | |
| | and outlined in heavy black line on Map No. 1716 a copy of which is attached hereto an forms part of this Bylaw, are hereby rezoned to RM-1 (Townhouse Residential). | | | | |
| 3. | Maple Ridge Zoning Bylaw No. 3510 - 1985 as amended and Map "A" attached thereto are hereby amended accordingly. | | | | |
| READ a first time the 19 th day of September, 2017. | | | | | |
| | READ a second time the | day of | , 20 | | |
| | PUBLIC HEARING held the | day of | , 20 | | |
| | READ a third time the | day of | , 20 | | |
| | ADOPTED the day of | | , 20 | | |

PRESIDING MEMBER

CORPORATE OFFICER



MAPLE RIDGE ZONE AMENDING

Bylaw No. 7351-2017

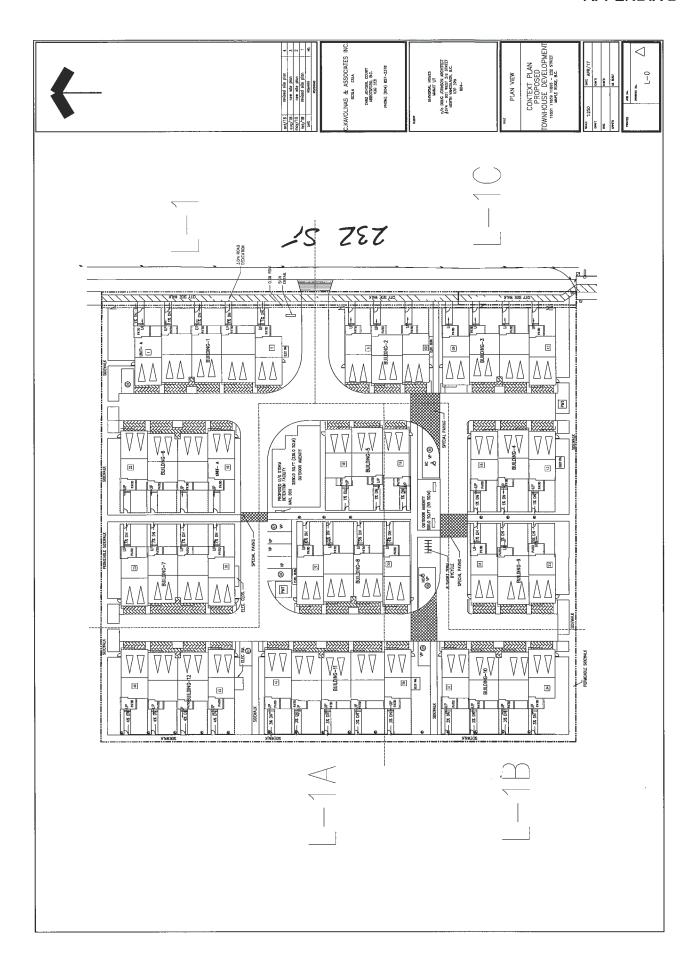
Map No. 1716

From: RS-1 (One Family Urban Residential)

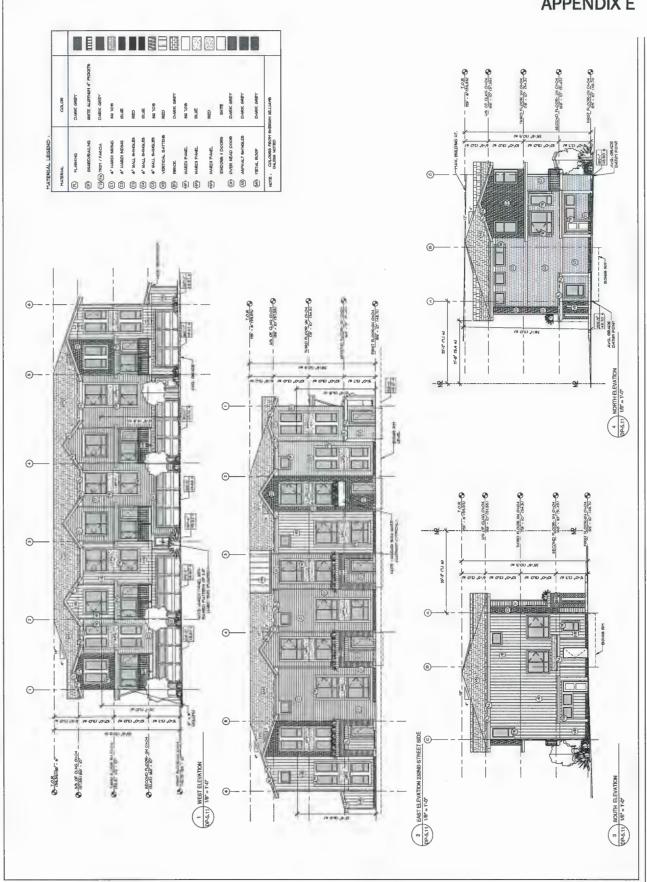
To: RM-1 (Townhouse Residential)

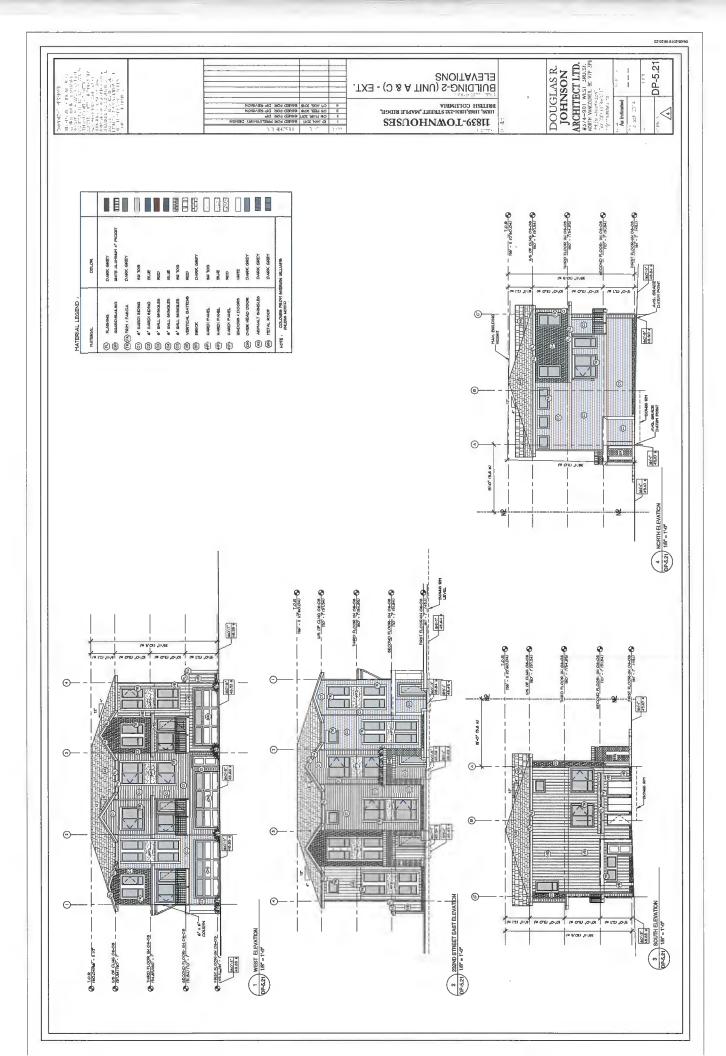


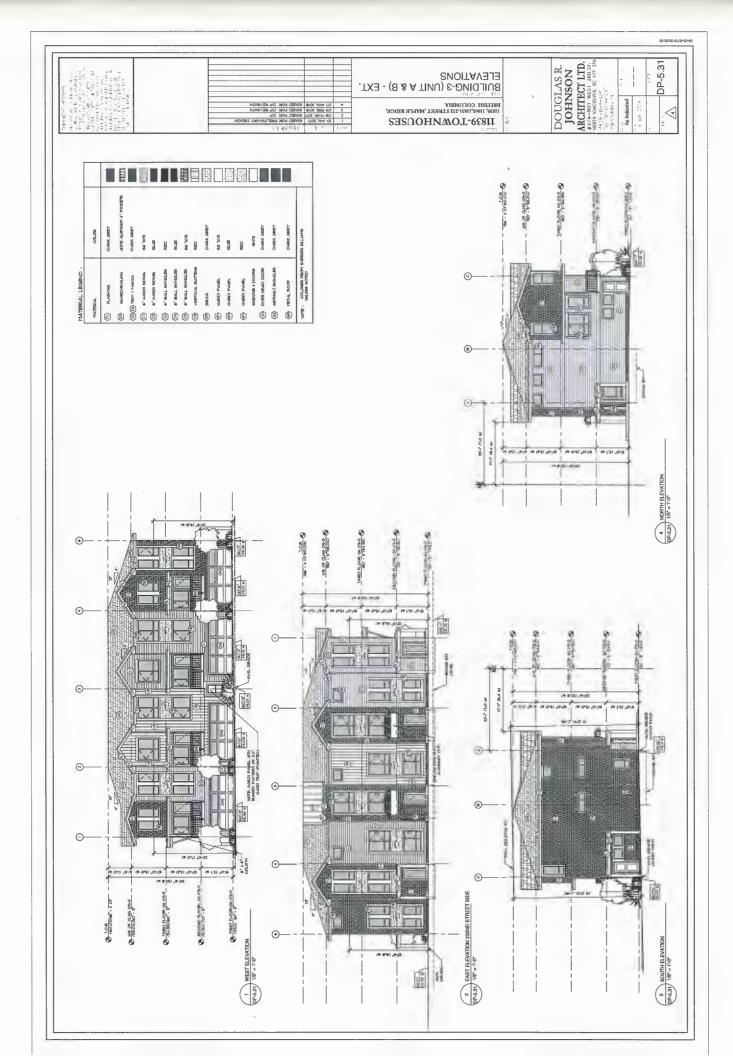




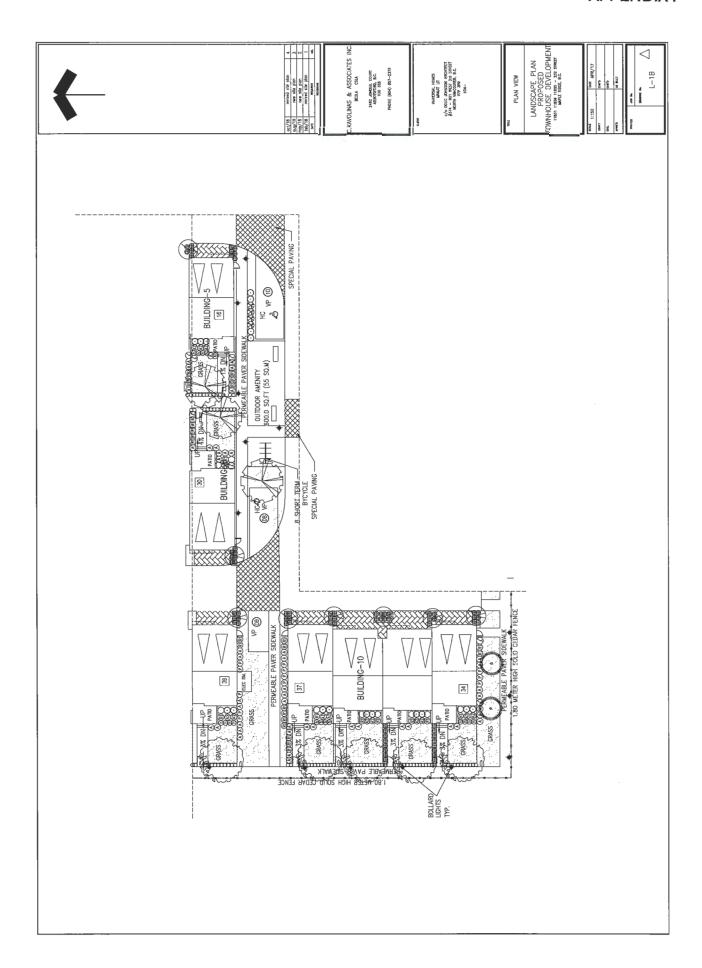
APPENDIX E

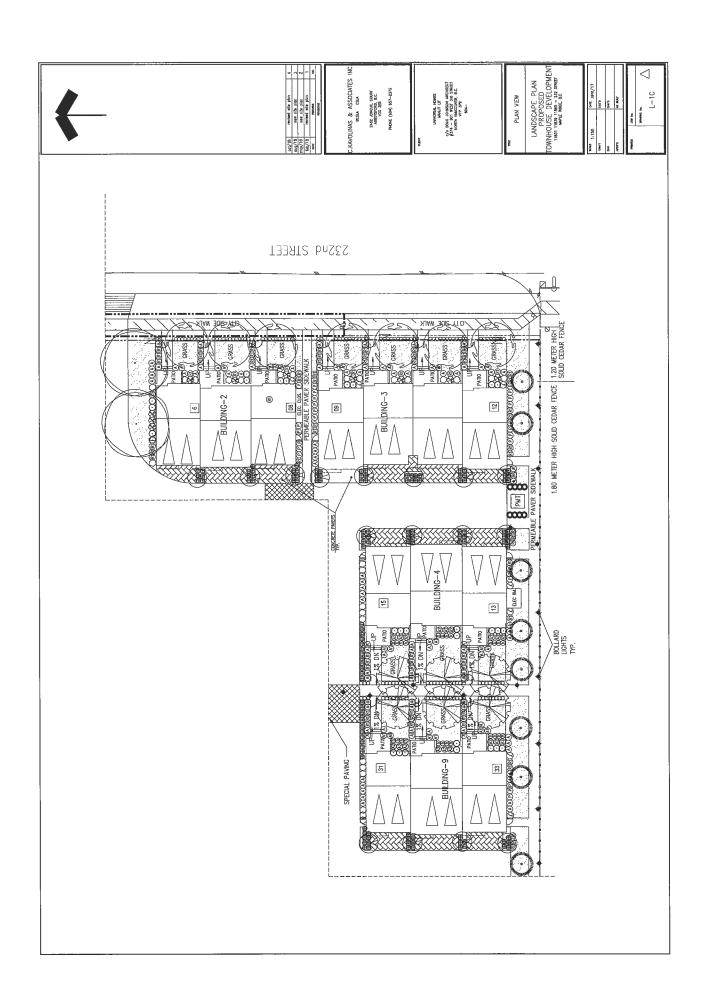


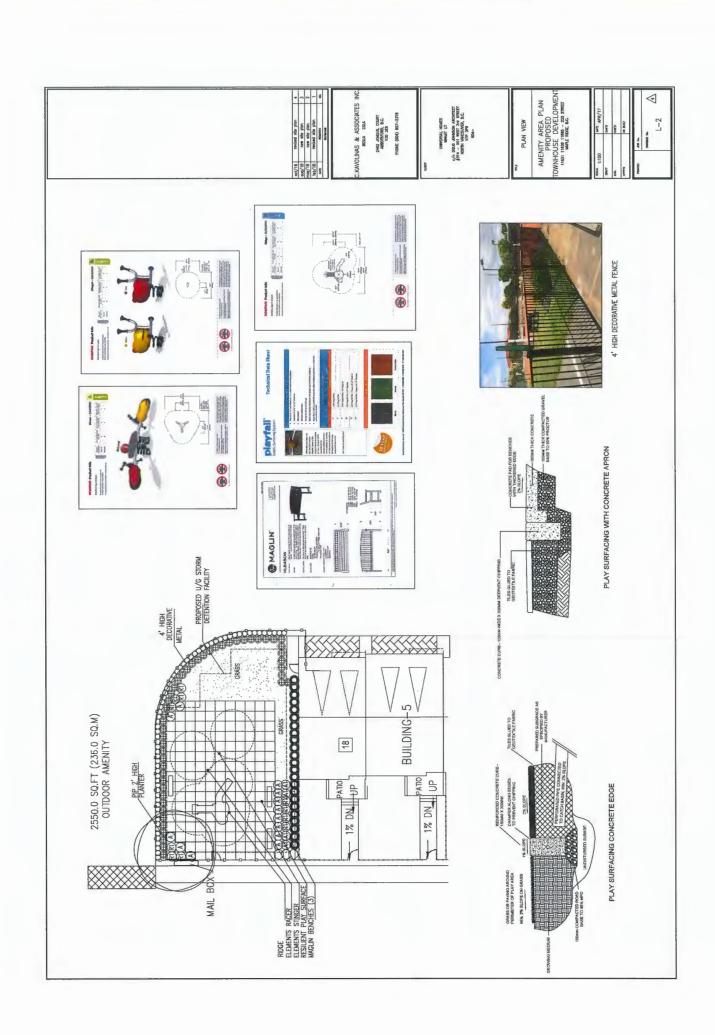


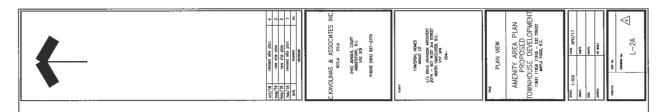


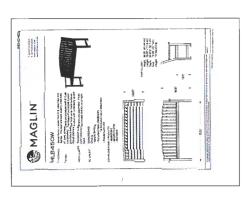
APPENDIX F

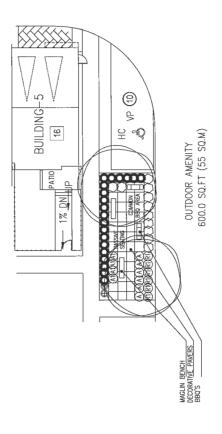


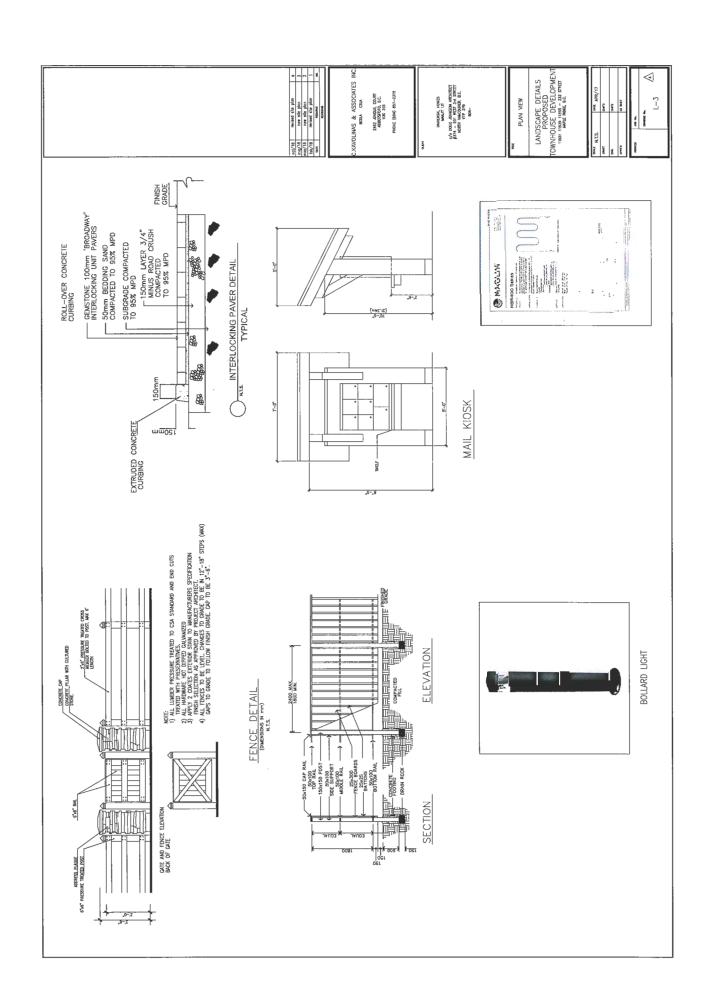














City of Maple Ridge

TO:

His Worship Mayor Michael Morden

MEETING DATE:

May 21, 2019

and Members of Council

FILE NO:

RFP-0P18-82

FROM:

Chief Administrative Officer

MEETING:

Committee of the Whole

SUBJECT:

Contract Award: Hydrovac Services

EXECUTIVE SUMMARY:

The City of Maple Ridge invited proposals from qualified proponents with experience in providing Hydrovac Services on an as, if and when required basis at various locations in the City of Maple Ridge.

Hydrovac services will be utilized by the Engineering Operations Department in the Operation, Maintenance and Construction of the City's various underground utilities.

RECOMMENDATION:

That a one (1) year agreement for Hydrovac services on an as, if and when required basis be awarded to Badger Daylighting Limited Partnership and McCrae's Environmental Services Ltd., with the option to renew for four (4) additional one (1) year periods; and

That the Corporate Officer be authorized to execute the agreements.

DISCUSSION:

a) Background Context:

A publicly advertised request for proposal invited proposals from qualified proponent(s) with experience in providing Bulk Hydrovac Excavation Services on an as, if and when required basis at various locations in the City of Maple Ridge, with the intent to establish a short list of preferred service providers. Nine proposals were received and evaluated in accordance with established evaluation criteria, with Badger Daylighting Limited Partnership and McCrae's Environmental Services Ltd selected as the successful shortlisted proponents.

Services from qualified Hydrovac companies will be required Monday to Friday during regular business hours as well as after hours, weekends and holidays to support the City of Maple Ridge Operations Department for a one (1) year period with the option to renew for four (4) additional one (1) year periods.

The City's intentions is to award an agreement to two Hydrovac service providers, with callout order given to the highest ranking proponent.

b) Financial Implications:

This service is to support the Engineering Operations Department in bulk excavation works including scheduled works and emergency call outs. Hydrovac services will be utilized by the various utilities within Operations such as Roadworks, Waterworks, Sewerworks and Electrical/Mechanical divisions. Services will be provided utilizing established hourly rates. The approximate value spent in 2017 and 2018 was \$283,000 and \$339,000 respectively. Estimated annual value of this contract is anticipated to be similar to previous years and estimated annual amount to be in the range of \$350,000.

CONCLUSIONS:

The City of Maple Ridge award an agreement to Badger Daylighting Limited Partnership and McCrae's Environmental Services Ltd. for Hydrovac Service for twelve month period with the option to renew for four (4) additional one (1) year periods.

Prepared by:

Davin Wilson, P.Tech, AScT Superintendent of Waterworks

Reviewed by: James Storey, AScT

Director of Engineering Operations

Approved

Frank Quinn, P.Eng

General Manager, Public Works and Development

Services

Concurrence:

Kelly Swift

Acting Chief Administrative Officer



City of Maple Ridge

mapleridge.ca

TO:

His Worship Mayor Michael Morden

MEETING DATE:

May 21, 2019

and Members of Council

FILE NO:

2199063

FROM:

Chief Administrative Officer

MEETING:

CoW

SUBJECT:

Award of Contract for Phase One of the Albion Community Centre

EXECUTIVE SUMMARY:

The Albion Community Centre (ACC) is one of the Parks, Recreation & Culture infrastructure projects approved to proceed as part of the Alternate Approval Process in 2017. This Award of Contract recommendation is for the construction of Phase One of the ACC which includes site development, earth works, retaining walls, concrete forming, under slab utilities and building foundations.

Double V Construction Ltd. (DVC Ltd.) was previously awarded a "Construction Manager at Risk" contract which is a delivery method which entails a commitment by the Construction Manager to deliver the project within a fixed price. DVC Ltd. has provided the City with pre construction services including assistance with design development and value engineering. As required by the Construction Manager at Risk contract, DVC Ltd. provided a fixed price to construct Phase One of the ACC project. The DVC Ltd. cost proposal has been reviewed by James Bush and Associates Ltd. (JBL), who are professional quantity surveyors and construction cost managers. JBL has confirmed the fixed price is consistent with the October 2018, Class A cost estimate provided for the project and demonstrates fair value in the current construction market. Council approval to award the contract is required for the work to proceed.

RECOMMENDATION:

That the Contract for Construction of Phase One of the Albion Community Centre be awarded to Double V Construction Ltd. in the amount of \$5,306,981 excluding taxes, and that a contingency of \$530,698 be authorized; and

That the Corporate Officer be authorized to execute the contract.

DISCUSSION:

a) Background Context:

A Request for Proposal (RFP-PL18-29 Construction Manager at Risk) was issued by the City through BC Bid on July 4, 2018. A Construction Manager at Risk is a delivery method which entails a commitment by the Construction Manager to deliver the project at a fixed price based on construction documents and specifications as developed by the design team and City Staff. The Construction Manager at Risk contract with the City stipulates DVC Ltd. is to assist with design development and value engineering of the ACC then submit a fixed price to complete Phase One and subsequently Phase Two of the project.

DVC Ltd. recently conducted a competitive tendering process and has provided the City with a fixed price of \$5,306,981 (excluding tax) for the construction of Phase One of the ACC which includes site development, earth works, retaining walls, concrete forming, under slab utilities and building foundations.

The intent is to start Phase One as soon as possible to ensure work requiring heavy equipment and site disturbances is complete prior to the opening of the adjacent elementary school this Fall. It is anticipated the Phase One works will take up to 10 months to complete, Phase Two construction will commence in early 2020 once the City has received notification regarding the outcome of its \$5 million recreation infrastructure grant application. The entire project (Phase One and Two) should be completed by the Fall of 2020.

b) Desired Outcome:

The desired outcome is to move forward with the development of parks and recreation infrastructure projects to meet the demands of our rapidly growing community and provide enhanced opportunities for citizens to engage in activities that promote an active, healthy lifestyle and community wellbeing.

c) Citizen/Customer Implications

The City of Maple Ridge supports its citizens in maintaining healthy lifestyles through their participation in sport, recreation, arts and culture in venues that allow them to connect with their neighbours and other groups with common interests. This project is a great example of partnerships and co-location of facilities to provide much needed community infrastructure.

d) Strategic Alignment:

This project aligns with many existing plans including Council's Strategic Plan (intergovernment relations, growth, community pride and spirit and the environment), School District No. 42's 2015 Strategic Facilities Plan, the 2010 Parks, Recreation & Culture Master Plan, and lastly the Master Agreement between the School District No. 42 and the City for the joint use of public facilities and coordination of services. The land use designation is also consistent with the City's Official Community Plan.

e) Business Plan/Financial Implications:

The fixed price for Phase One as provided by DVC Ltd. (\$5,306,981- excluding tax) has been reviewed by James Bush and Associates Ltd. (JBL - professional quantity surveyors and construction cost managers) and is within the October 2018, Class A costing estimate provided for the project.

The Class "A" estimate identified a cost of \$15.4 million to construct the ACC with an additional \$800,000 to build to LEED Silver standard and a construction escalation contingency of \$600,000 to support the City's eligibility for a recreation infrastructure grant. At the time, the Class A did not include offsite servicing; however, an additional \$750,000 has been accounted for in the project budget to address this.

The funding plan in place to accommodate the estimated \$17 - 18 Million in costs include:

- 2016 estimate based on a concept \$10 million (\$8.5 million debt and \$1.5 million Amenity Contributions);
- \$0.75 million for Albion Community Centre land servicing/development fees;
- \$2.25 million from Parks & Recreation Projects Construction Contingency; and
- \$4 5 million in grants

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If the grants do not achieve this amount (\$4-5 million), an increased reliance on Community Amenity Contributions (CAC's) is recommended to be utilized in place of grant funding.

CONCLUSION:

The Albion Community Centre project is an important part of Council's vision for enhanced services in the Albion neighbourhood that includes an elementary school, community centre, sports field, playground, natural areas and trails. To support this project moving forward in a timely manner and in coordination with the co-located Elementary School, it is recommended that the contract for construction of phase one of the ACC be awarded to Double V Construction Ltd.

Prepared by:

Don Cramb

Sr. Recreation Manager

Reviewed by:

Valoree Richmond, MBCSLA

Acting Director of Parks & Facilities

Reviewed by:

Trevor Thompson, BBA, CPA, CGA

Chief Financial Officer

Approved by:

David Boag

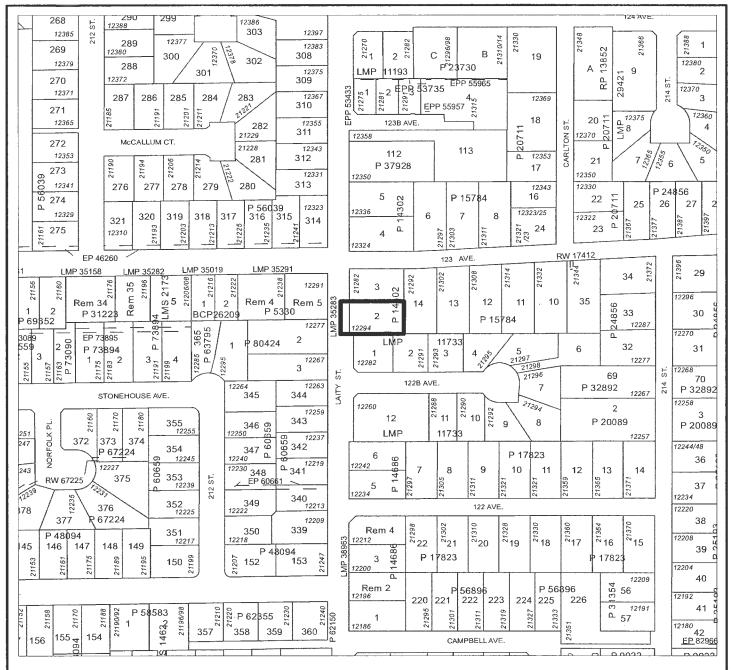
Acting General Manager Parks, Recreation & Culture

Concurrence:

Kelly Swift, MBA

Acting Chief Administrative Officer

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MAPLE RIDGE ZONE AMENDING

Bylaw No. 7486-2018

Map No. 1770

From: RS-1 (One Family Urban Residential)

To: R-1 (Residential District)



