Project: CIT132001.01

Stage 1
Preliminary Site Investigation
for
3561 Gislason Avenue, Phase 6A, Coquitlam, BC

Submitted to:
CITY OF COQUITLAM

Date of Report Validity:
February 2, 2021

Investigator
Jennifer Veitch, B.Sc., B.Eng., E.I.T.
Field Lead, Preliminary Site Investigations

Reviewer
Ryuji Marumo, B.Sc., P.Geo.
Manager, Field Investigations

Compliance Statement

This report was completed in general compliance with the Environmental Management Act and the regulations thereto, as well as the Canadian Standards Association Standard Z768-01 for Phase I Environmental Site Assessments as in effect at the date of the report. The staff at NEXT has over 120 years of combined experience in environmental investigation and remediation of contaminated sites. NEXT has completed over 8,000 environmental studies including Stage 1 and Stage 2 Preliminary Site Investigations, Detailed Site Investigations, Remediation Plans, Remediations, Risk Assessments, Confirmatory Sampling and Monitoring Reports. The reviewer has participated in, coordinated and/or reviewed all types of environmental studies. The staff work under the direct supervision of the senior reviewer, and has experience in on-site evaluations and investigations. Both the undersigned field staff and reviewer were directly involved in this project. Report does not constitute warranty. The assessment and conclusions in this report are based on the interpretation of information collected during investigations and/or from relevant knowledgeable parties/resources. The accuracy of the information available to or presented to NEXT cannot be warranted and/or is the responsibility of the issuers. NEXT does not therefore, warrant the information contained in this report. The responsibility of NEXT is to express an opinion on the information as obtained/presented regarding the environmental status of the Site, as at the date of the report. NEXT will render the Services outlined in the Contract to the Client with that degree of skill, care and diligence normally provided by environmental consultants in the performance of services in respect of projects of a similar nature to that contemplated by the Contract at the time and place that such Services are rendered. Services considered confidential and cannot be relied on by third parties. The contents of this report are confidential and are intended for the exclusive use of the Client, the Ministry of Environment & Climate Change Strategy, and the Society of Contaminated Sites Approved Professionals ("CSAP Society") of BC unless otherwise expressly permitted by NEXT. NEXT accepts no responsibility for any damages suffered by any third party as a result of decisions made or actions taken based on this report. Any use of the report or reliance on or decision made based on its contents by any third party is at the risk of said party. NEXT is not responsible for any representations made by the Client to a third party based on the contents of this report. The Client assumes full responsibility for damages sustained by any third party arising from representations made by the Client to a third party based on the contents of this report.

Next Environmental Inc.
Burnaby | Vancouver | Victoria

P: 604.419.3800
F: 604.419.3801
www.nextenvironmental.com

OQM CERTIFIED

STAGE 1 PRELIMINARY SITE INVESTIGATION – OPINION

Date of Report Validity:
February 2, 2021

Next Environmental Inc. ("NEXT") was engaged by City of Coquitlam ("Client") to conduct a Stage 1 Preliminary Site Investigation ("Stage 1 PSI") for a property located at 3561 Gislason Avenue, Phase 6A, Coquitlam, BC (herein referred to as the "Site"). This report has been prepared in support of due diligence. Authorization to proceed with this evaluation was provided by Mr. Curtis Scott on January 26, 2021.

This report summarizes the results of an environmental Stage 1 Preliminary Site Investigation conducted by Next Environmental Inc. Areas of Potential Environmental Concern ("**APECs**") and Items of Low Potential Environmental Concern ("**Items**") are noted in the text throughout Part 1 to Part 5 when identified from information sources, and then summarized and discussed further in Part 6 and 7. APECs require further investigation if identified. Items are not considered to be a significant environmental concern and do not require additional investigation. Please refer to the Appendices for the Methodology (including data sources), List of Acronyms, and other pertinent information provided by others.

In compliance with the Ministry's Environmental Management Act and CSA Guidelines, this report assesses the likelihood of contamination by reviewing available information, following generally accepted consulting practice and standards. The accuracy of historical and current information provided by others cannot be warranted. Our responsibility is to express an opinion on the likelihood of contamination based on our review. Please note that this summary should be read in conjunction with the entire report.

APECs Present	**No**
Further Investigation Recommended	**No**

Contents

Appendices

Documentation Search Date: January, 2021

Part 1 – Subject Site Description

Site Civic Address	3561 Gislason Avenue, Phase 6A, Coquitlam, BC *Refer to the Figure(s) for the General Site Location.*
Site Legal Address & Registered Owner	Lot 4, Section 7, Township 40, New Westminster District, Plan EPP54547. Except Plans EPP63984 and EPP82845. With Respective PID 029-760-283 City of Coquitlam 3000 Guildford Way Coquitlam, BC V3B 7N2 *Refer to Appendices for Land Title(s) and historical cancelled Land Title(s).*
Coordinates	49° 17' 24.96'' N and 122° 44' 04.32'' W at approximately the center of the Parent Lot.
Site Dimensions	**Frontage:** ~170m **Depth:** ~230m **Area:** ~25,800m^2 (2.58ha)
Current Land Use	Vacant land, undeveloped.
Future Land Use	According to Curtis Scott (Client Representative), the Site will be developed into 118 residential townhomes which will be 2.5-3 storeys. There are no plans to include underground parking. However, final development plans for the Site are still subject to final approval.
Zoning & Approved Municipal Zoning	<u>Current:</u> A-3 (Agricultural and Resource) <u>Approved Municipal Zoning:</u> According to the City of Coquitlam Official Community Plan ("OCP"), the Site is listed under the Northeast Coquitlam Area Plan[1] within the "Townhousing Residential" zone.

[1] https://www.coquitlam.ca/DocumentCenter/View/925/Schedule-B---Land-Use-Designations-PDF

Part 2 – Physical Setting

Topography	Based on City of Coquitlam topography map and Site visit observations, the regional topography slopes steeply downwards towards the south. The Site was noted to be sloping downwards towards the south.
% of Site Covered By:	From the information collected during this investigation, the following is a summary of the historical coverage of the Site: • c.1949 to Present: ~0% Building, ~0% Paved, ~100% Unpaved.
Surrounding Land Use	A general description of adjacent lands is as follows: • North: Wildlands; • East: Wildlands; • South: Gislason Avenue (industrial) followed by housing development in-progress; and • West: Unnamed road (industrial) followed by wildlands. *Refer to Figure(s) for the Site and Surrounding Land Use Plan Views*
Nearby Relevant Waterbodies	• A drainage ditch was present along Gislason Avenue, ~190m southwest of the Site, which connects to a Burke Mountain Creek Tributary; • Partington Creek ~220m east and inferred cross-gradient; • Tributary of Smiling Creek ~50m west of the Site and inferred cross gradient; • Drainage ditch located along Baycrest Avenue ~70m south and inferred downgradient
Geology/Stratigraphy	**Geological Survey of Canada and/or Surficial Geology Map:** Pre-Tertiary Deposits, consisting of "mesozoic bedrock including granitic and associated rock types; where bedrock is not at the surface it is overlain by glacial deposits and colluvium." **Water Resources Atlas - Detailed Well Record:** Based on a Detailed Well Record in the area, the underlying stratigraphy is likely as follows (in metres below ground surface ("mbgs")): • Till: ~0 mbgs to ~37 mbgs • Sand: ~37 mbgs to ~43 mbgs • Gravel: ~43 mbgs to ~44 mbgs • Till: ~44 mbgs to ~48 mbgs • Gravel: ~48 mbgs to ~51 mbgs The geology listed by the Geological Survey of Canada was consistent with other sources of information.
Inferred Groundwater Flow Direction	Based on the regional topography in this area of Coquitlam, groundwater was inferred to flow towards the south. However, further hydrogeological investigation would be required to determine this.
Depth to Groundwater	Based on a Detailed Well Record (Well Tag #32045) in the area, groundwater was encountered ~12mbgs. However, given that the well was likely drilled to access regional potable groundwater, there may also be a shallow perched aquifer present in the area. Further hydrogeological investigation would be required to determine the depth to groundwater below the Site.

Part 3 – Site Visit

Date of Site Visit	January 28, 2021, by Riley Donaldson. *Site Photos from the Date of Site Visit are provided in the attached Appendices.*
Site Configuration	The Site was an irregular triangle-shape. The southern Site boundary was bordered by Gislason Avenue and the northwestern Site boundary was bordered by an unnamed road. The Site area was occupied predominantly by trees with a small, cleared space following the unnamed road to the northwest of the Site. No buildings or other structures were present on-Site. Of note, the Site visit was conducted only on the southeastern portion of the parent lot occupying the Site (Phase 6A of development). The parent lot is further discussed in the surrounding land use section of this report. See Figure 1 for the boundaries of the Site and the parent parcel.
Construction	N/A
Year Built	Vacant (BC Assessment)
Heating/Cooling	N/A
Current Operations	The Site was vacant and undeveloped.
In-Ground Structures	No indications of UST(s), such as vent pipes, fill caps, backfilled excavations, or cut asphalt, were observed during the Site visit. Mr. Drew Hill (Site Superintendent) was unaware of any UST(s) on-Site. In addition, the City of Coquitlam did not have any tank permits for the installation and/or removal of any UST(s) on file. Given that the Site is currently, and was formerly, undeveloped (as per aerial photographs), it was considered unlikely that UST(s) would be present on the Site. *In-ground structures including but not limited to such structures as former (historical) or disused heating oil tanks may be difficult to identify during a Stage 1 Preliminary Site Investigation for a variety of reasons such as limited access or visibility, incorrect representations by third parties or the client, subsequent construction related activities, and so on. Therefore, Next Environmental Inc. ("NEXT"), is unable to warrant their absence and the absence of contamination from their current or former presence. In the event of demolition and/or excavation, if a UST, back-filled excavation, or contamination is discovered on-Site, please contact NEXT to be present on-Site during the UST removal and/or excavation of soil to collect confirmatory soil samples. The collection of confirmatory soil samples will allow for laboratory analyses to identify the presence and/or absence of the PCOCs associated with heating oil and for proper off-Site disposal of the soil.*
Above-Ground Structures	None identified.
Septic Systems (non-domestic)	None identified.
Special Attention Items	Based on the Site observations, and the British Columbia Radon Potential Map, the following Special Attention Items were evaluated. General information for each of these items is included in the Appendices and was used as a basis for addressing the likelihood of each of these Special Attention Items being present (or not) at the Site: • Polychlorinated Biphenyls ("PCBs"); • Asbestos-Containing Materials ("ACMs"); • Ozone-Depleting Substances ("ODSs"); • Lead-Based Paint; • Urea Formaldehyde Foam Insulation ("UFFI");

	• Mercury; and • Mould. Given that there were no on-Site buildings present at the time of the Site visit, there was a low potential for the Special Attention Items listed above to be present. ***Radon:*** Based on the Radon Potential Map of British Columbia, the Site was not listed in a High Hazard area. *In the event of renovation or demolition of the Site, a hazardous materials or pre-demolition survey is recommended to address the potential presence of the substances listed in the report to satisfy applicable WorkSafe BC, CSR, and HWR requirements.*
Additional Chemical Storage Manufacturing Processes Waste Streams (non-domestic Odours Stains Stressed Vegetation	None identified.
Fill Material	Some gravel fill material was noted along the northwestern boundary of the Site following the unnamed road. According to Mr. Drew Hill the Site Superintendent, used the gravel fill to level the driveway was sourced from Pitt River Quarries. Furthermore, based on historical Aerial Photographs (discussed below in Part 5), there has been no indication that a significant quantity of additional fill material was placed on-Site. *Fill material, including but not limited to that applied to improve Site grades or backfill excavations and utility trenches may be difficult to identify during a Stage 1 Preliminary Site Investigation for a variety of reasons such as limited access or visibility, incorrect representations by third parties or the client, subsequent construction related activities, limitations in historical documentation, and so on. Therefore, Next Environmental Inc. ("NEXT"), is unable to warrant the absence of fill material and the absence of contamination in that fill material. In the event of demolition, redevelopment, and/or excavation, if suspected fill material or contamination is discovered on-Site, please contact NEXT to attend the Site to assess the situation and/or collect characterization or confirmatory soil samples. The collection of soil samples will allow for laboratory analyses to identify the presence and/or absence of PCOCs commonly associated with imported fill material and allow for proper management and off-Site disposal of the soil, as well as satisfy applicable WorkSafe BC, CSR, and HWR requirements.*
Interviews	<u>Interview 1 – (conducted over the phone on January 26, 2021)</u> **Name:** Drew Hill **Position:** Site Superintendent **Contact:** 604-866-9229 **Site Familiarity:** Limited **Notes:** • Unaware of any USTs on-Site; • Most of the fill material (crushed rock, gravel, and sand) was sourced from native material within the Site. Material imported onto the Site was high quality construction grade fill from Pitt River Quarries.; and • No construction has begun on-Site thus far.

Off-Site Activities	The following operations were noted at neighbouring properties: • North: 3512 David Avenue: Wildlands area; • East: Victoria Drive: Wildlands area; • South: 3565 Baycrest Avenue: Residential development in-progress; • West: 3651 Gislason Avenue: Forested area;
Additional Observations	None.
Limitations	None.

Part 4 – Water Use Receptors

Water Wells	**On-Site:** One water well was identified on the Parent Lot. The well was installed in 1975 for unknown use. **Off-Site:** Four water wells were found within a 500m radius of the Parent Lot. *A map of the water well search (and any relevant detailed well records) is included in the Appendices.*
Aquatic Life Water Bodies	• A drainage ditch was present along Gislason Avenue, ~190m southwest of the Site, which connects to a Burke Mountain Creek Tributary; • Partington Creek ~220m east and inferred cross-gradient; • Tributary of Smiling Creek ~50m west of the Site and inferred cross gradient; • Drainage ditch located along Baycrest Avenue ~70m south and inferred downgradient
Surface Water Intakes	None identified on-Site or within a 500m radius of the Site.
CSAP GIS Info System & Ministry Determinations	None identified on-Site or within a 500m radius of the Site.

Part 5 – Records Review

Historical Site Plans	None available.
Historical Land Title(s)	This report includes a list of historical land titles ("cancelled titles") registered in the Title and Survey Authority of British Columbia ("LTSA") electronic database. The LTSA database typically includes titles dating back to the 1990s. Hard copies of land titles dating prior to the 1990s are available through an archive search. Since Site ownership does not necessarily correlate with Site activity, Land Titles may be of limited value to assess past Site activities. Further information regarding historical titles were not pursued as other sources of information were deemed sufficient to adequately determine the historical use(s) of the Site.
City Directories	**On-Site:** Based on aerial photographs and Google Earth Imagery, the development of the 3500 block of Gislason Avenue did not begin until c.2015. As such, the Site was not listed in city directories since they were no longer produced after 2001. Based on aerial photographs, the Site appeared to be undeveloped and forested land c.1949-2020. **Off-Site:** The following City Directories were reviewed for off-Site locations: • Baycrest Avenue – 1976 to 2000 (~5 year intervals) The majority of the area surrounding the Site was undeveloped, forested land therefore few City Directories were available. Baycrest Avenue was the closest street to the Site and consisted exclusively of residential property listings. Based on the City Directories reviewed no areas of potential environmental concern were identified.
Fire Insurance Map(s)	No fire insurance maps were available for this area of Coquitlam.
Site Registry	**On-Site:** A Site Registry PID Search, Area Search, and iMapBC database search were completed for the Site. The Site **was not** listed in search results. **Off-Site:** A Site Registry Area Search (500m) and iMapBC database search, centered on the Site, **did not** return any records. *Site Registry Search Results and iMapBC Database Results are included in the Appendices*
Aerial Photographs	Aerial photographs from 1949 to 2020 (5-10 year intervals) and Google Earth images from 2000 to 2020 (1-5 year intervals) were available for review for the Site and are summarized below: **On-Site:** • 1949 to 2020: The Site (Phase 6A) was forested, undeveloped land; **Off-Site:** • 1949 to 2008: The surrounding area was undeveloped, forested land; • 2014: Gislason Avenue to the south of the Site was developed. The rest of the area surrounding the Site was undeveloped, forested land; • 2020: An unnamed road was developed along the western boundary of the Site. The road will be associated with the townhome development that will occur on-Site.

	Upon the review of aerial photographs the surrounding area west, north, and east of the Site was undeveloped forested land until the mid to late 2010s when residential development began in the surrounding area. The area south of the Site was historically and currently composed of a mixture of wildlands and residential dwelling developments. No areas of potential environmental concern were identified.
Lost Streams	Lost streams are evaluated as they may have been backfilled with material of unknown quality, creating a potential source of contamination. In addition, these streams may provide preferential pathways for groundwater and/or vapour to flow onto or away from the Site. Based on the DFO Lost and Threatened Streams map, the City of Coquitlam GIS map, and historical aerial photographs, there were no lost streams identified on-Site.
Authorization Management System Database Search	None identified on-Site or within a 500m radius of the Site.
Environmental Monitoring	**On-Site:** None identified. **Off-Site:** Six Environmental Monitoring Stations (EMSs) were identified in the 500m Search radius of the Parent Lot. The nearest station was located ~450m south and inferred downgradient from the Site. Based on the distance and position of these monitoring stations, they were not considered an environmental risk to the Site.
Previous Report(s) & Documentation Review	None available, provided, or obtained for review.

Part 6 – Summary

Historical Site Summary	Based on the information presented in this report, the Site was historically occupied by the following activities: • 1949 to Present: Undeveloped, forested land.
Summary of Schedule 2 Activities	**Current & Former (On-Site):** • None identified. **Nearby (Off-Site) Schedule 2 Activities:** • None identified.

Items of Low Potential Environmental Concern

(refer to Figure(s) for Item locations)

On-Site & Off-Site Items

None identified.

Areas of Potential Environmental Concern (APEC)

(refer to Figure(s) for APEC locations)

On-Site & Off-Site APECs

None identified.

Part 7 – Conclusion & Recommendation

Based on the findings of this Stage 1 PSI, no APECs were identified. Therefore, no further investigation is recommended at this time.

Figure(s)

Site Photographs

Photograph 1

Front view of Site taken from the southern Site boundary facing north.

Photograph 2

Rear view of the Site taken from the north end of the Site facing south.

Photograph 3

View of the wildlands to the east of the Site.

Photograph 4

View of the wildlands areas under development to the north of the Site.

Photograph 5

View of the vacant, undeveloped area followed by cleared wildlands to the south of the Site.

Photograph 6

View from the western Site boundary facing west towards the unnamed road and wildlands area.

Methodology & List of Acronyms

METHODOLOGY

The Stage 1 is an opinion on the likelihood of significant contamination on the Site from on- or off-Site sources that may pose a risk to human health and/or the environment. The conclusions of the Stage 1 are constrained by the availability of reviewed information. Visual inspection of neighbouring properties is typically limited to observations made from the Site or public areas. The Stage 1 consisted of a Site visit and review of information from the following sources:

- Legal description, current land title, and legal lot plan from BC Online and/or Title and Survey Authority of British Columbia ("LTSA");
- Geological data from a Regional Surficial Geology map;
- Topography from iMapBC and/or municipal GIS;
- Surface waterbodies from iMapBC and/or municipal GIS and/or google maps
- Water supply information (including utilities and/or water wells and/or surface water intakes) from the municipality and/or iMapBC;
- Surface Water Intakes from iMapBC;
- Aquifer information from iMapBC;
- Water Use Determinations (from CSAP GIS info system and/or MOE);
- Climate and precipitation charts from Environment Canada Climate Normals for 1981-2010
- Zoning information from the municipality;
- Aerial photographs from various archives (primarily UBC Geography Information Centre) and/or google earth;
- Site Registry details from BC Online and iMapBC;
- Environmental Monitoring stations from iMapBC;
- Borehole Lithology Logs from iMapBC;
- Environmental Management Authorization Database from the Ministry;
- Lost streams information from DFO Lost Streams of Lower Fraser Valley map and/or municipal sources;
- City directories for the Site and surrounding properties from various libraries (primarily Vancouver Public Library);
- Fire Insurance Maps from various municipal archives or libraries (primarily UBC Library - Rare Books and Special Collections);
- Previous environmental investigation reports identified in the report;
- Historical Site Plans from municipal archives and/or client;
- Visual inspection of the Site and adjacent properties; and,
- Interviews with knowledgeable persons.

Depending on Site specifics, not all the above mentioned sources are always available. NEXT can be contacted at any time for specific details on the available information reviewed for this Stage 1. The Stage 1 does not include the sampling and/or analysis of any environmental media.

City Directories, if available, were reviewed as part of this report are not attached to the Appendices. However, digital copies of the City Directories applicable to this report (if any) are available upon request.

LIST OF ACRONYMS

APEC(s)	Area(s) of Potential Environmental Concern (further investigation required)
AST(s)	Aboveground Storage Tank(s)
AW	Aquatic Life Standard
BTEXS	Benzene, Toluene, Ethylbenzene, Xylenes, Styrene
CL	Commercial Land Use
CSA	Canadian Standards Association
CSR	BC Ministry of Environment's Contaminated Sites Regulation
CU	Commercial Use Vapour Standard
DNAPL	Dense Non-Aqueous Phase Liquid
DFO	Department of Fisheries and Oceans Canada
DSI	Detailed Site Investigation
DW	Drinking Water Use Standard
EMA	Environmental Management Act
EPH	Extractable Petroleum Hydrocarbon
ESA	Environmental Site Assessment
GW	Groundwater
ha	Hectares
HDPE	High-density Polyethylene
HEPH	Heavy Extractable Petroleum Hydrocarbon
HWR	BC Ministry of Environment Hazardous Waste Regulation
ICOC(s)	Identified Contaminant(s) of Concern
IL	Industrial Land Use
Item(s)	An activity, operation or structure of low potential environmental concern (no further investigation recommended)
IU	Industrial Use Vapour Standard
IW	Irrigation Water Use Standard
km	Kilometres
LEPH	Light Extractable Petroleum Hydrocarbon
LNAPL	Light Non-Aqueous Phase Liquid
LW	Livestock Water Use Standard
m	Metres
mbg	Metres below grade
mm	Millimetres
MTBE	Methyl Tert-Butyl Ether
Ministry	BC Ministry of Environment & Climate Change Strategy
NEXT	Next Environmental Inc.
OCP	Official Community Plan (OCP)
PAHs	Polycyclic Aromatic Hydrocarbons
PCOC(s)	Potential Contaminant(s) of Concern
Phase I	Phase I Environmental Site Assessment
Phase II	Phase II Environmental Site Assessment
QA/QC	Quality Assurance/Quality Control
RL	Residential Land Use
RU	Residential Use Vapour Standard
ROW(s)	Right of Way(s)
Stage 1	Stage 1 Preliminary Site Investigation
Stage 2	Stage 2 Preliminary Site Investigation
TG10	BC Ministry of Environment's Technical Guidance 10
UST(s)	Underground Storage Tank(s)
VOCs	Volatile Organic Compounds
VPH	Volatile Petroleum Hydrocarbons

Land Title(s)

CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN

Title Issued Under SECTION 189 LAND TITLE ACT

Land Title District NEW WESTMINSTER
Land Title Office NEW WESTMINSTER

Title Number BB3052594
From Title Number BB4102109

Application Received 2018-09-04

Application Entered 2018-09-04

Registered Owner in Fee Simple
Registered Owner/Mailing Address: CITY OF COQUITLAM
3000 GUILDFORD WAY
COQUITLAM, BC
V3B 7N2

Taxation Authority Coquitlam, City of

Description of Land
Parcel Identifier: 029-760-283
Legal Description:
LOT 4 SECTION 7 TOWNSHIP 40 NEW WESTMINSTER DISTRICT PLAN EPP54547
EXCEPT PLANS EPP63984 AND EPP82845

Legal Notations
THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 26 OF THE LOCAL GOVERNMENT ACT, SEE BB1496541

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 26 OF THE LOCAL GOVERNMENT ACT, SEE BB4067050

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE CA5893083

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE CA6850191

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE CA6985317

NOTICE OF INTEREST, BUILDERS LIEN ACT (S.3(2)), SEE CA7995677
FILED 2020-01-23

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE CA8180792

Charges, Liens and Interests

Nature:	UNDERSURFACE AND OTHER EXC & RES
Registration Number:	BB4029967
Registration Date and Time:	2012-03-19 13:39
Registered Owner:	THE CROWN IN RIGHT OF BRITISH COLUMBIA
Remarks:	INTER ALIA PURSUANT TO SECTION 50 LAND ACT SEE BB1485506 AND SECTION 35 COMMUNITY CHARTER PART FORMERLY THAT PORTION OF SECTION 7 TOWNSHIP 40 SHOWN AS PARCEL A PLAN BCP50405

Nature:	UNDERSURFACE AND OTHER EXC & RES
Registration Number:	BB4029968
Registration Date and Time:	2012-03-19 13:40
Registered Owner:	THE CROWN IN RIGHT OF BRITISH COLUMBIA
Remarks:	INTER ALIA PURSUANT TO SECTION 50 LAND ACT SEE BB1485507 AND SECTION 35 COMMUNITY CHARTER PART FORMERLY THAT PORTION OF SECTION 7 TOWNSHIP 40 SHOWN AS PARCEL A PLAN BCP50406

Nature:	STATUTORY RIGHT OF WAY
Registration Number:	BB3021791
Registration Date and Time:	2014-05-06 10:51
Registered Owner:	CITY OF COQUITLAM
Remarks:	INTER ALIA PART IN PLAN EPP39775 MODIFIED BY CA7489237 MODIFIED BY CA8593295

Nature:	COVENANT
Registration Number:	CA4967008
Registration Date and Time:	2016-02-02 16:06
Registered Owner:	CITY OF COQUITLAM
Remarks:	INTER ALIA

Nature:	MODIFICATION
Registration Number:	CA8593295
Registration Date and Time:	2020-11-25 11:03
Remarks:	MODIFICATION OF BB3021791

Duplicate Indefeasible Title NONE OUTSTANDING

Transfers NONE

Pending Applications NONE

myLTSA

2021-01-26 15:57:55

Title Search Results

Requestor: Brittany Puckey

File Reference: CIT131901.01

3 search results found in Land Title District: All Land Title Districts

PID 029-760-283 S/EPP54547/////4 REM
PENDING APPLICATIONS: There are no pending applications

	Title Number	Land Title District	Status	First Owner Name on Title
☐	BB3052594	New Westminster	REGISTERED	CI*
☐	BB4102109	New Westminster	CANCELLED	CI*
☐	CA4967003	New Westminster	CANCELLED	CI*

Special Attention Items

SPECIAL ATTENTION ITEMS – General Information

Polychlorinated Biphenyls:
The manufacture of polychlorinated biphenyl (PCBs) in North America was prohibited under the Toxic Substances Control Act (1977). PCB use, as a constituent of new products manufactured in or imported into Canada, was prohibited by regulations enacted in 1977 and 1980. As such, sites developed or significantly renovated after 1980 are unlikely to operate equipment containing PCBs. Equipment, which could contain PCBs, includes fluorescent mercury and sodium vapour light ballasts, oil-filled capacitors, and transformers.

As long as this electrical equipment is being used for its intended purpose, and is in good operating condition, it is not considered to be a waste material. However, if such equipment is removed during renovation or building demolition, storage or disposal of any PCBs greater than 5 kg is regulated under the EMA and HWR. Renovation and demolition activities should also be conducted in accordance with Section 20.112 of the WCB OHSR.

Asbestos-Containing Materials:
Asbestos-containing material (ACM) is fibrous hydrated silicates, and can be found in building materials as either "unbound" or "bound" asbestos. Friable asbestos refers to materials where the asbestos fibres can be separated from the material with which it is associated. Non-Friable asbestos refers to asbestos, which is associated with a binding agent (such as tar or cement). Friable asbestos is commonly found in boiler and pipe insulation. Non-Friable asbestos is typically found in roofing tars, floor and ceiling tiles, linoleum, insulations, plaster, cement products, grouts, sealants, and protective coatings.

The use of friable asbestos as a building material was banned in the U.S. in the mid-1970s. The manufacture of building materials containing asbestos was generally phased out in North America by the mid-1980s. If demolition or renovation of the structure is considered, the identification and safe removal or containment of asbestos is regulated under Section 20.112 of the OHSR. When these materials are in use they are not waste materials; however, following removal it is recommended that they be managed in accordance with the *Hazardous Waste Regulation* (HWR) and the *Environmental Management Act* (EMA).

Ozone-Depleting Substances
Chlorofluorocarbons (CFCs) are comprised of ozone-depleting substances (ODSs) such as Freon and halon, which were banned from production in Canada in 1996, with several ODSs phased out in 2010. The use of ODSs is still permitted: with the condition that a licensed contractor must service equipment such that ODSs are contained and not released to the environment. Prior to disposal, refrigerators and air-conditioning units should be degassed by a certified contractor as required by BC Ozone Depleting Substances Regulation.

Lead-Based Paint
Lead has frequently been used in oil-based paints, roofing materials, cornices, tank linings, electrical conduits and soft solders for tinplate and plumbing. The use of lead-based paint (LBP) was phased out circa 1976. Paint that was produced or used between 1976 and 1980 may contain small amounts of lead. Paint that was produced or used prior to 1950 may contain high levels of lead. The main concern regarding LBP is its potential to become airborne either through deterioration or mechanical means (i.e., sanding, abrasion, etc.).

Up until the mid-1950s, lead was the standard material for service lines. Lead pipes were banned by the National Plumbing Code of Canada in 1975. By the mid-1990s, the public portion of most lead service lines — the lateral pipe running from the main line to the sidewalk — were converted to copper. However, older homes may still have lead containing services pipes and indoor plumbing (lead solders and faucets). If demolition is considered it should be identified, removed or contained in accordance with Section 20.112 of the OHSR.

Urea Formaldehyde Foam Insulation
Urea Formaldehyde Foam Insulation (UFFI) is a type of insulation that was widely used in the 1970's for insulating and retrofitting industrial, commercial and older residential buildings. UFFI is a low density foam that has the appearance and consistency of shaving cream, and becomes stiff and self-supporting when it dries or cures (hardens).

The insulation was typically made on-site where the urea formaldehyde-based resin is mixed with a catalyst and water and foamed in place in walls or used for block fill. The foam can be forced through small openings and delivered to the entire area of any cavity before it cures. UFFI was discontinued from commercial use in the early 1980s.

Mercury
Based on an investigation by Consumer and Corporate Affairs Canada, and an assessment of potential health risks by Health and Welfare Canada, the use of mercury compounds in indoor latex paints was discontinued in 1991. The Canadian Paint and Coatings Association (CPCA) supported the withdrawal and all Canadian manufacturers and formulators of the preservative voluntarily agreed to remove “interior uses” from their product labels. Mercury can still be found in some batteries, light bulbs, old paints, thermostats, old mirrors, etc.

As long as mercury-containing equipment is in use and in good operating condition, there are no environmental management requirements associated with it. The WCB OHSR also regulates the identification and safe removal or containment of mercury containing equipment prior to demolition or salvage. If such equipment is removed during renovation or demolition and is not to be reused, it is recommended that it be disposed of in accordance with the HWR and EMA.

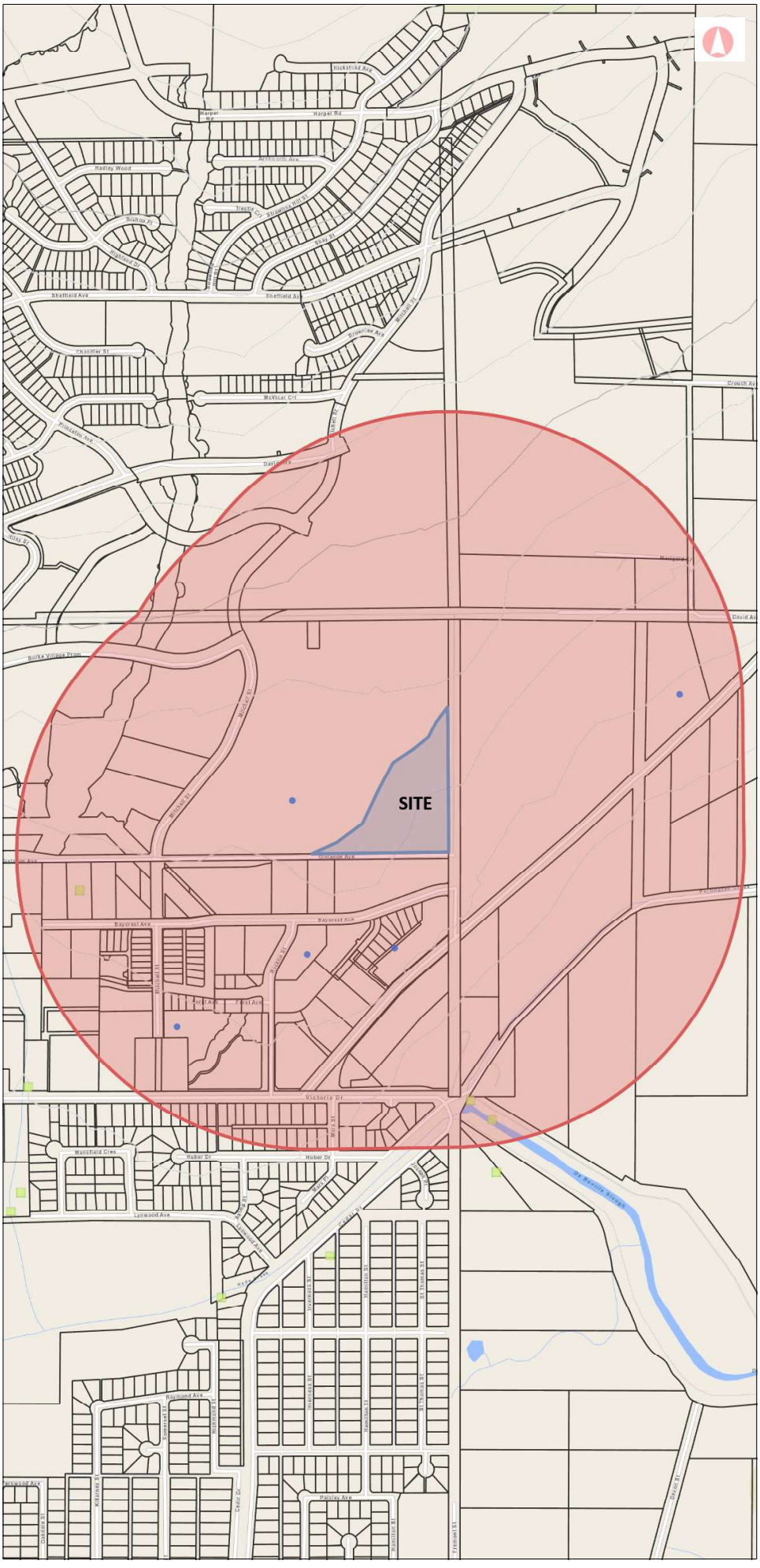
Radon
Radon is a colourless, odourless gas that occurs naturally from the breakdown of uranium. Radon can be found where soils and rocks contain uranium mineral, often in uranium rich black shale and/or granite bedrock. In open air or in areas with high air circulation, radon is not considered a health problem. However, in confined spaces (such as basements or underground structures), radon can concentrate and become a health hazard.

The Ministry of Health has completed a regional study of radon in homes in British Columbia. The results of the study indicated that radon is a concern in areas east of Hope, British Columbia (particularly the Okanagan Valley, Thompson Valley, Shuswap Valley, and West Kootenays) but not in lower mainland or costal area.

Mould
Health Canada considers indoor mould growth to be a significant health hazard. Damp conditions and mould growth in homes increases the risk of respiratory allergy symptoms and exacerbate asthma in mold-sensitive individuals.

In the event of renovation or demolition of the Site, a hazardous materials or pre-demolition survey is recommended to address the potential presence of the substances listed in the report to satisfy applicable WorkSafe BC, CSR, and HWR requirements.

iMapBC Database



BRITISH COLUMBIA

iMapBC Mapping

Legend

Water Rights - Licences
POD_STATUS
- Active
- Inactive

Borehole Lithology Sites - Tc
TOTAL_DEPTH
- 1.8 - 7.4
- 7.5 - 13.1
- 13.2 - 21.4
- 21.5 - 32.6
- 32.7 - 96.0

Water Licence Points of Dive
STATUS
- Active Application
- Active Application and Licence
- Active Licence
- Inactive

Water Licence Points of Dive Water Sources
STATUS
- Active Application
- Active Application and Licence
- Active Licence

Groundwater Wells - All
ARTESIAN_IND
- Reported Artesian Well
- Well

EMS - All Stations

Environmental Remediation

Contours - (1:20,000)
FCODE
- Contour - Index
- Contour - Index Indefinite
- Contour - Index Depression
- Contour - Index Depression Inde
- Contour - Intermediate
- Contour - Intermediate Indefinite
- Contour - Intermediate Depressi
- Contour - Intermediate Depressi

Integrated Cadastral Fabric

0 0.20 0.4 km

1: 10,000.00

Copyright/Disclaimer

Datum: NAD83

Projection: WGS_1984_Web_Mercator_Auxiliary_Sphere

Key Map of British Columbia

Monitoring Location ID	Monitoring Location Name	Established Date	Description	Office Code	Latitude	Longitude	First Sample Date	Last Sample Date	Location Type Code	Location Purpose Code	Sample Count	Result Count	OBJECTID
E283891	SMILING CR. AT GISLASON AVE	2010-10-18	Smiling Cr. in Coquitlam, BC. Sampled downstream of storm drainage entering adjacent to street. Smiling Cr. is eastern branch of Smiling Creek. Joins 1) Burke Mtn Cr. and 2) West Smiling Cr. further downstream. Tributary to Hyde Creek.	20	49.289243	122.744847	2010-10-25	2011-11-24	21	2	19	344	50794709
E273867	WEST SMILING CREEK AT END OF ROXTON AVE	2008-10-06		20	49.2885	122.746	2008-10-07	2011-11-24	21	2	33	798	50792431
E274003	HYDE WATERSHED STORM DIVERSION SYSTEM OUTFALL	2008-10-22	Outfall into DeBoville Slough from network of storm overflow diversion channels in Hyde-Smiling Watershed.	20	49.2857	122.7334	2008-11-03	2011-11-24	21	2	26	738	50794696
E281237	SMILING CREEK NEAR PORT COQUITLAM	2010-06-01	WSC	RFC	49.28889	122.7425			21	6	0	0	50793051
E273870	DEBOVILLE SLOUGH SOUTH OF VICTORIA DRIVE	2008-10-06	DeBoville Slough south of Victoria Drive, from west bank downstream of creek inputs	20	49.2854	122.7329	2008-10-07	2011-11-24	21	2	29	749	50792434
E273868	SMILING CR NORTH OF VICTORIA DRIVE	2008-10-06	Smiling Creek downstream of confluence with Burke Mtn creek. Immediately North of Victoria Drive, East of Burke Mtn St.	20	49.2859	122.7437	2008-10-07	2011-11-24	21	2	30	748	50792432

Groundwater Wells and Aquifers

Well Summary

Well Tag Number: 32045
Well Identification Plate Number:
Owner Name: WAYNE COOLEDGE
Intended Water Use: Unknown Well Use

Well Status: New
Well Class: Unknown
Well Subclass:
Aquifer Number: 926

Observation Well Number:
Observation Well Status:
Environmental Monitoring System (EMS) ID:
Alternative specs submitted: No

Licensing Information

Licensed Status: Unlicensed

Licence Number:

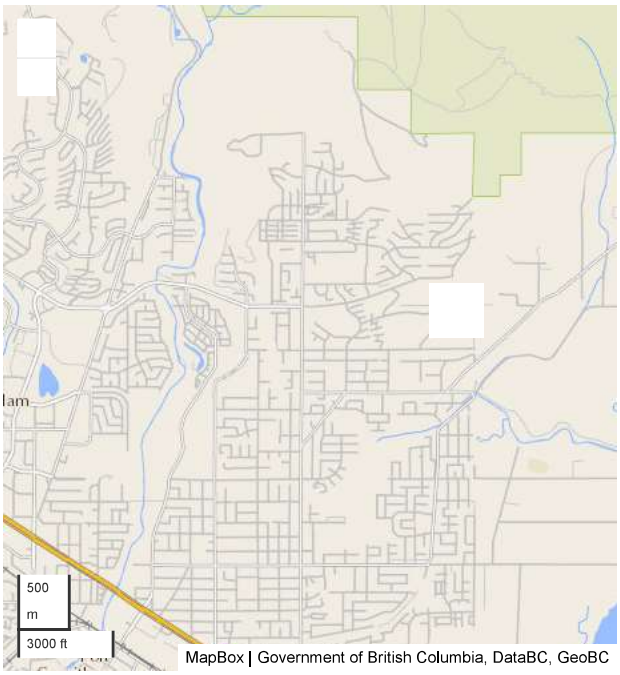
Location Information

Street Address: 3564 BAYCREST DR.
Town/City: PORT COQUITLAM

Legal Description:

Lot	20
Plan	22154
District Lot	
Block	
Section	7
Township	40
Range	
Land District	36
Property Identification Description (PID)	

Description of Well Location:



Geographic Coordinates - North American Datum of 1983 (NAD 83)
Latitude: 49.290264
Longitude: -122.737542
UTM Easting: 519085
UTM Northing: 5459757
Zone: 10
Coordinate Acquisition Code: (50 m accuracy) Digitized from 1:20,000 mapping

Well Activity

Activity	Work Start Date	Work End Date	Drilling Company	Date Entered
Legacy record	1975-01-30	1975-01-30	Jay Dee Drilling	August 13th 2003 at 6:48 AM

Well Work Dates

Start Date of Construction	End Date of Construction	Start Date of Alteration	End Date of Alteration	Start Date of Decommission	End Date of Decommission
1975-01-30	1975-01-30				

Well Completion Data

Total Depth Drilled:
Finished Well Depth: 168.00 feet
Final Casing Stick Up:
Depth to Bedrock:
Ground elevation:

Static Water Level (BTOC): 118.00 feet
Estimated Well Yield: 15.000 USGPM
Artesian Flow:
Artesian Pressure:
Method of determining elevation: Unknown

Well Cap:
Well Disinfected Status: Not Disinfected
Drilling Method: Other
Orientation of Well: VERTICAL

Lithology

From (ft bgl)	To (ft bgl)	Raw Data	Description	Moisture	Colour	Hardness	Observations	Water Bearing Flow Estimate (USGPM)
0.00	6.00	Brown clay till, boulders to 4'						
6.00	14.00	Grey clay till, boulders						
14.00	42.00	Lean grey clay till water bearing at 42'						
42.00	120.00	Grey lean till						
120.00	141.00	Grey sand dense water bearing at 141'						
141.00	144.00	Gravel						
144.00	156.00	Grey till						
156.00	168.00	Gravel, water bearing						

Casing Details

From (ft)	To (ft)	Casing Type	Casing Material	Diameter	Wall Thickness	Drive Shoe
There are no records to show						

Surface Seal and Backfill Details

Surface Seal Material:
Surface Seal Installation Method:
Surface Seal Thickness:
Surface Seal Depth:

Backfill Material Above Surface Seal:
Backfill Depth:

Liner Details

Liner Material:
Liner Diameter:
Liner from:

Liner Thickness:
Liner to:

Liner perforations

From	To
There are no records to show	

Screen Details

Intake Method:
Type:
Material:
Opening:
Bottom:

Installed Screens

From	To	Diameter	Assembly Type	Slot Size
There are no records to show				

Well Development

Developed by:

Development Total Duration:

Well Yield

Estimation Method:
Static Water Level Before Test:
Hydrofracturing Performed: No

Estimation Rate:
Drawdown:
Increase in Yield Due to Hydrofracturing:

Estimation Duration:

Well Decommission Information

Reason for Decommission:
Sealant Material:
Decommission Details:

Method of Decommission:
Backfill Material:

Comments

REC. PUMP SET 145' METHOD OF DRILLING = DRILLED

Alternative Specs Submitted: No

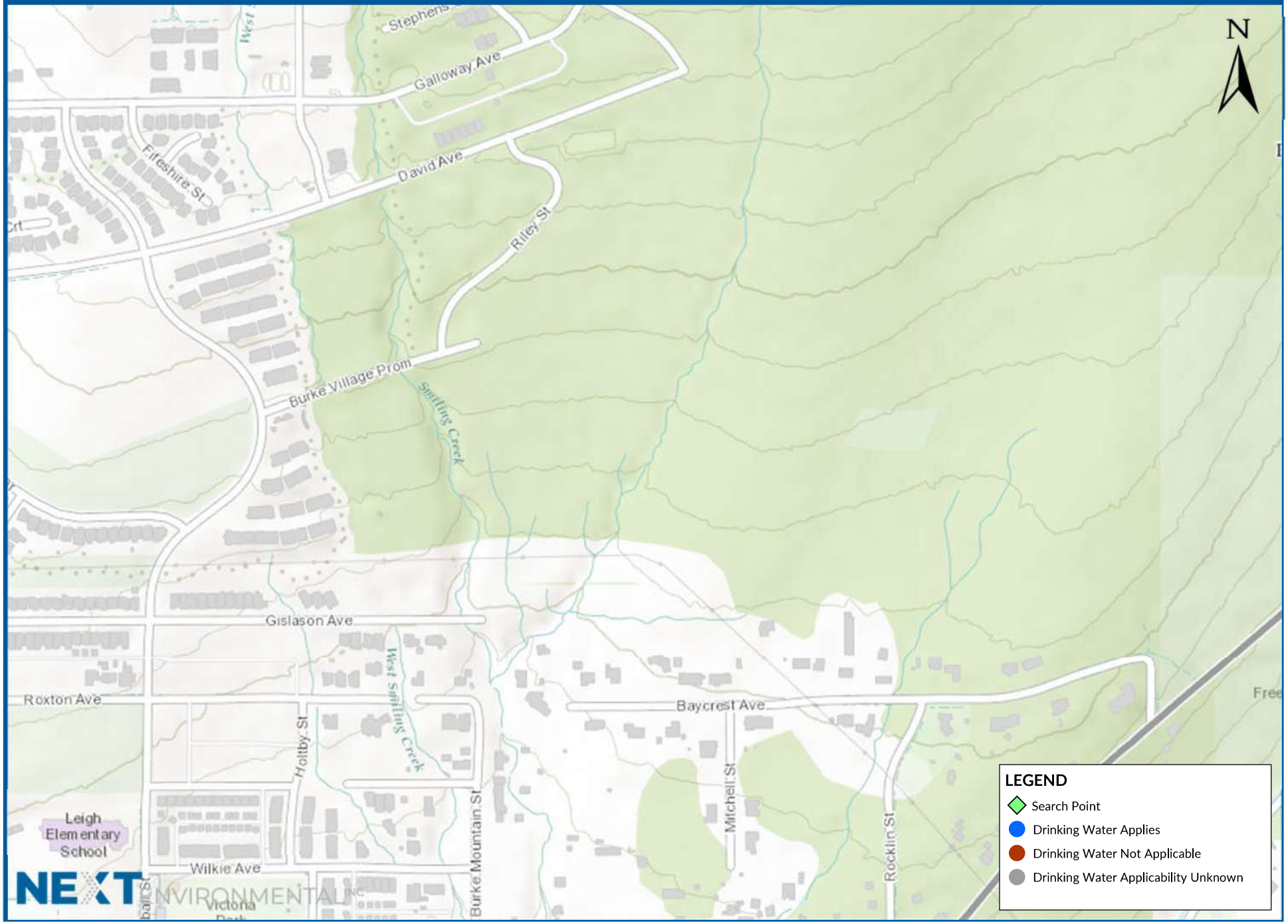
Documents

- WTN 32045_Well Record.pdf

Disclaimer

CSAP GIS Info System

CSAP GIS Info System Search



Site Registry

As Of: JAN 24, 2021 BC Online: Site Registry 21/01/26
For: PJ93506 NEXT ENVIRONMENTAL INC. 17:12:31
Folio: CIT132001.01 Page 1

PID Nil Search

As of JAN 24, 2021, no records from Site Registry match
Land Titles PID 029760283

You have been charged for this information.

Sites may be revealed by searching with alternate search methods. For example, a site not revealed in an Area search may be revealed by searching with another piece of information such as PID, PIN, address or Crown Lands File Number

As Of: JAN 24, 2021 BC Online: Site Registry 21/01/26
For: PJ93506 NEXT ENVIRONMENTAL INC. 17:12:54
Folio: CIT132001.01 Page 1

Area Nil Search

As of JAN 24, 2021, no records from Site Registry
fall within 0.5 kilometers of coordinates
Latitude 49 degrees, 17 minutes, 24.9 seconds, and
Longitude 122 degrees, 44 minutes, 4.32 seconds.

You have been charged for this information.

Sites may be revealed by searching with alternate search methods. For example, a site not revealed in an Area search may be revealed by searching with another piece of information such as PID, PIN, address or Crown Lands File Number

Aerial Photographs

Historical Aerial Photograph —2019

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —2014

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —2008

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —2004

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1996

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1991

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1984

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1979

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1974

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1969

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1963

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

Historical Aerial Photograph —1954

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

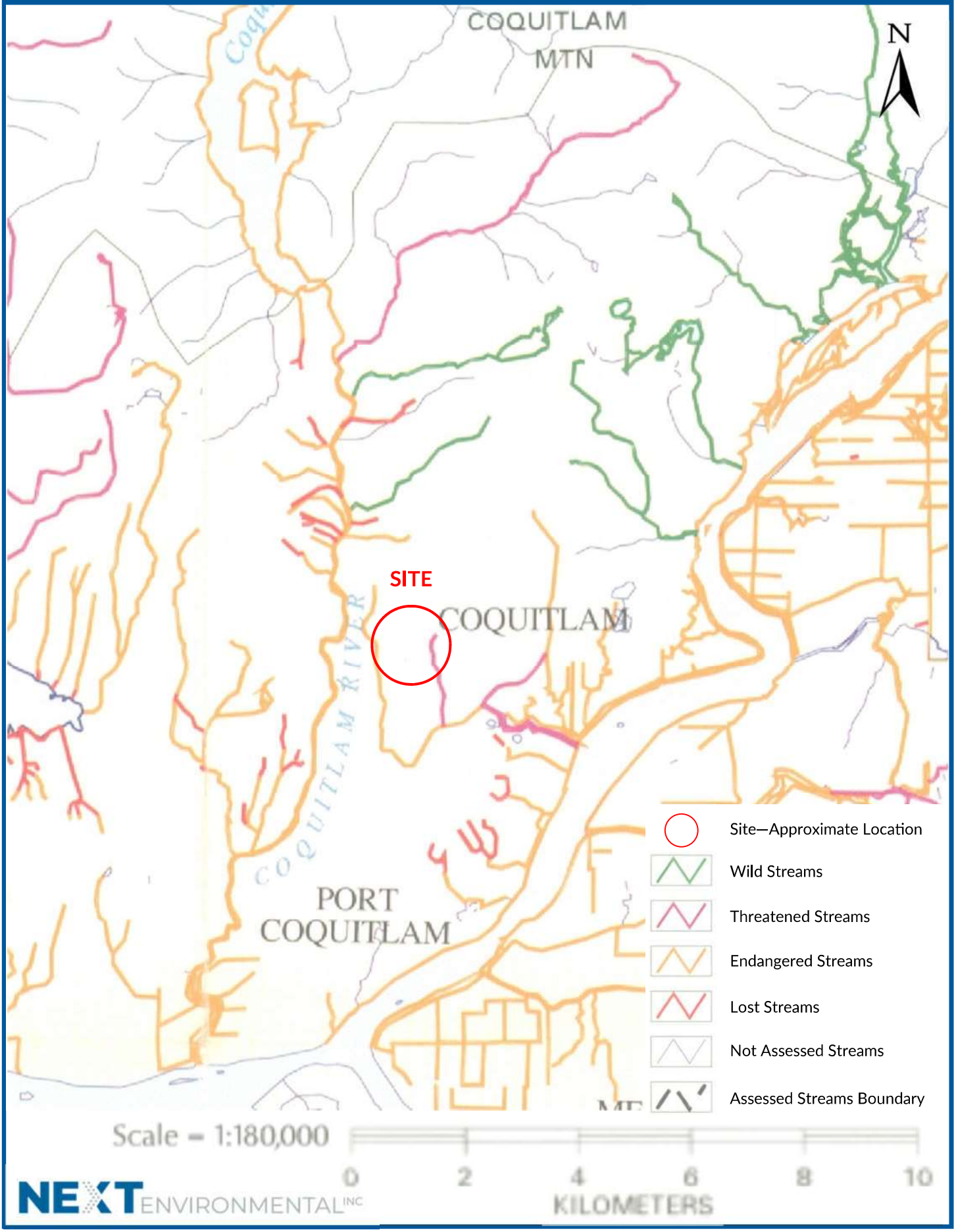
Historical Aerial Photograph —1949

Next Environmental Inc.
INVESTIGATION | REMEDIATION | RISK ASSESSMENT

Source: [UBC Historical Aerial Photograph Library or City GIS]

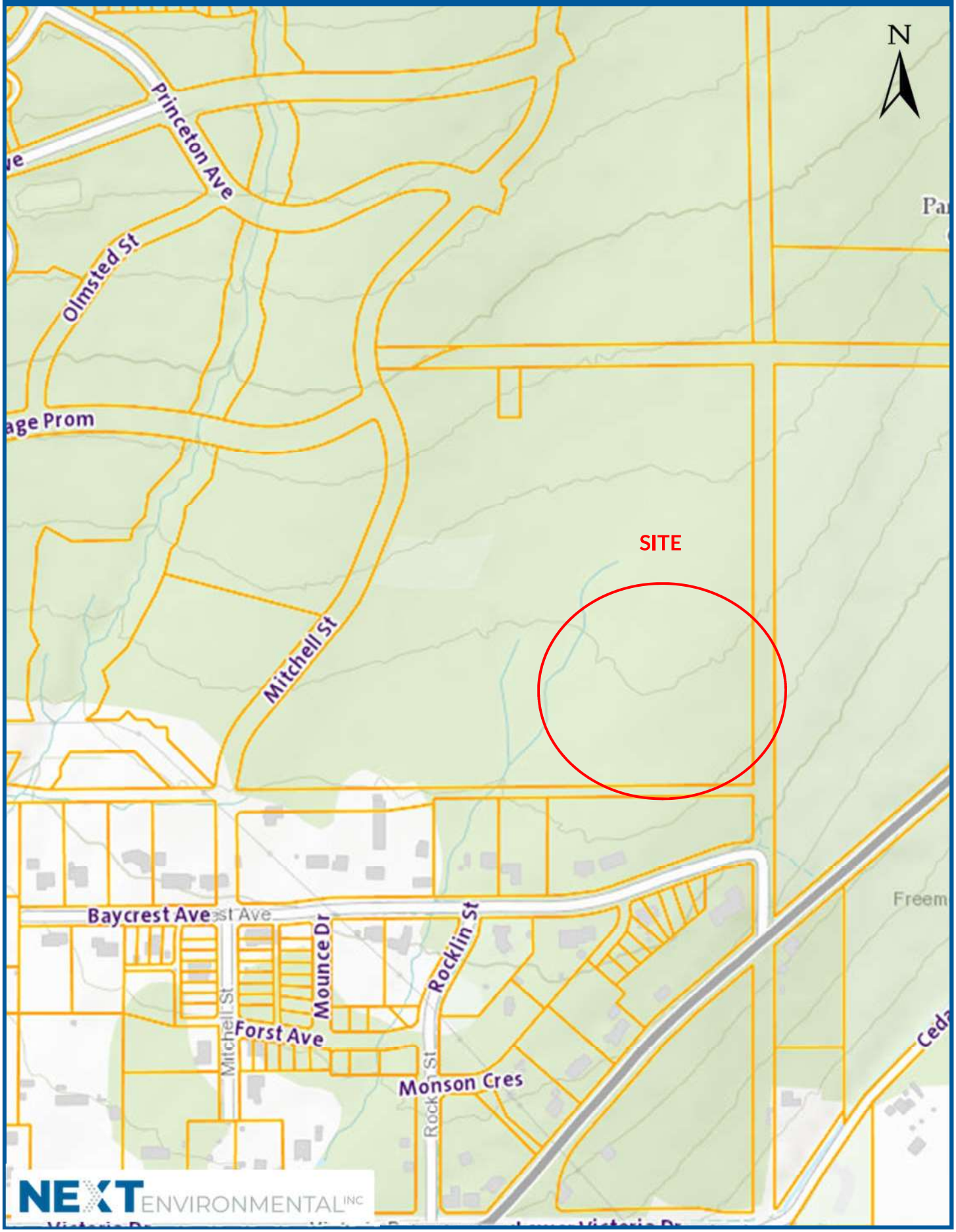
Waterway Maps

DFO Lost Streams of Lower Fraser Valley



NEXT ENVIRONMENTAL INC

City of Coquitlam GIS Map



Investigator & Reviewer Qualifications

Investigator

Jennifer Veitch, B.Sc., B.Eng., E.I.T.

Field Lead, Preliminary Site Investigations

Jennifer joined Next Environmental Inc. in February 2020. She is a graduate of the University of Guelph's Environmental Engineering program and also holds a Bachelor's degree in Life Sciences from McMaster University. From her undergraduate studies Jennifer has thorough experience with writing technical reports and is familiar with a wide variety of soil and groundwater sampling techniques.

Reviewer

Ryuji Marumo, B.Sc., P.Geo.

Manager, Field Investigations

Ryuji Marumo joined Next Environmental Inc. in July 2013. He has worked on hundreds of projects including Stage 1 and 2 PSIs, Phase I and II ESAs, Detailed Site Investigations, Remediation, as well as Hydrogeological Investigations. His role at NEXT involves supervising field work and reviews of Preliminary Site Investigations.